

# HIV

# SURVEILLANCE REPORT

SUPPLEMENTAL REPORT

Volume 24, Number 3

## **Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data United States and 6 Dependent Areas, 2017**

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of HIV/AIDS Prevention



This issue of the *HIV Surveillance Supplemental Report* is published by the Division of HIV/AIDS Prevention (DHAP), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, Georgia.

Data are presented for diagnoses of HIV infection reported to CDC through December 2018.

The *HIV Surveillance Supplemental Report* is not copyrighted and may be used and copied without permission. Citation of the source is, however, appreciated.

### **Suggested citation**

Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2017. *HIV Surveillance Supplemental Report* 2019;24(No. 3). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published June 2019. Accessed [date].

**On the Web:** <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>

### **Confidential information, referrals, and educational material on HIV infection and AIDS**

CDC-INFO

1-800-232-4636 (in English, en Español)

1-888-232-6348 (TTY)

<http://wwwn.cdc.gov/dcs/ContactUs/Form>

### **Acknowledgments**

Publication of this report was made possible by the contributions of the state and territorial health departments and the HIV surveillance programs that provided surveillance data to CDC.

This report was prepared by the following staff and contractors of the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC: Anna Satcher Johnson, Shacara Johnson, Sherry Hu, Jianmin Li, Chenchen Yu, Baohua Wu, Chan Jin, Norma Harris, Anne Peruski, Marie Morgan (editing), and Michael Friend (desktop publishing).

|                                                                                                                                                                                                                                          |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>Commentary</b>                                                                                                                                                                                                                        | 5  |
| <b>Technical Notes</b>                                                                                                                                                                                                                   | 12 |
| <b>References</b>                                                                                                                                                                                                                        | 17 |
| <b>Tables</b>                                                                                                                                                                                                                            |    |
| 1a Stage 3 (AIDS) at HIV diagnosis, among persons aged $\geq 13$ years, by year of diagnosis and selected characteristics, 2010–2017—United States                                                                                       | 18 |
| 1b Stage 3 (AIDS) at HIV diagnosis, among persons aged $\geq 13$ years, by year of diagnosis and selected characteristics, 2010–2017—United States and 6 dependent areas                                                                 | 19 |
| 1c Stage 3 (AIDS) at HIV diagnosis, among persons aged $\geq 13$ years, by year of diagnosis and area of residence, 2010–2017—United States and 6 dependent areas                                                                        | 20 |
| 1d Stage 3 (AIDS) at HIV diagnosis, among persons aged $\geq 13$ years, by race/ethnicity and area of residence, 2017—United States                                                                                                      | 22 |
| 2a Stage of disease at HIV diagnosis during 2017, among persons aged $\geq 13$ years, by selected characteristics—41 states and the District of Columbia                                                                                 | 23 |
| 2b Stage of disease at HIV diagnosis during 2017, among persons aged $\geq 13$ years, by area of residence—41 states and the District of Columbia                                                                                        | 24 |
| 2c Stage of disease at HIV diagnosis during 2017, among persons aged $\geq 13$ years, by race/ethnicity and selected characteristics—41 states and the District of Columbia                                                              | 25 |
| 2d Stage of disease at HIV diagnosis during 2017, among males aged $\geq 13$ years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia               | 29 |
| 3a Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged $\geq 13$ years, by selected characteristics—41 states and the District of Columbia                                                                   | 30 |
| 3b Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged $\geq 13$ years, by area of residence—41 states and the District of Columbia                                                                          | 31 |
| 3c Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged $\geq 13$ years, by race/ethnicity and selected characteristics—41 states and the District of Columbia                                                | 32 |
| 3d Linkage to HIV medical care after HIV diagnosis during 2017, among males aged $\geq 13$ years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia | 36 |
| 4a Receipt of HIV medical care among persons aged $\geq 13$ years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia                               | 37 |
| 4b Receipt of HIV medical care among persons aged $\geq 13$ years with infection diagnosed by year-end 2015 and alive at year-end 2016, by area of residence—41 states and the District of Columbia                                      | 38 |
| 4c Receipt of HIV medical care and viral suppression among persons aged $\geq 13$ years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia         | 39 |
| 4d Receipt of HIV medical care and viral suppression among males aged $\geq 13$ years with infection attributed to male-to-male sexual contact, by selected characteristics—41 states and the District of Columbia                       | 43 |
| 5a HIV viral suppression during 2016 among persons aged $\geq 13$ years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia                         | 44 |
| 5b HIV viral suppression during 2016 among persons aged $\geq 13$ years with infection diagnosed by year-end 2015 and alive at year-end 2016, by area of residence—41 states and the District of Columbia                                | 45 |
| 6a Deaths of persons aged $\geq 13$ years with diagnosed HIV infection, by year of death, 2010–2016—United States                                                                                                                        | 46 |
| 6b Deaths of persons aged $\geq 13$ years with diagnosed HIV infection, by year of death, 2010–2016—United States and 6 dependent areas                                                                                                  | 47 |
| 6c Deaths of persons aged $\geq 13$ years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas                                                                            | 48 |

|    |                                                                                                                                                                                              |    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 6d | Deaths of persons aged $\geq 13$ years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2016—United States                                             | 55 |
| 6e | Deaths of persons aged $\geq 13$ years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2016—United States and 6 dependent areas                       | 56 |
| 6f | Deaths of persons aged $\geq 13$ years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas | 57 |
| 7a | Persons surviving $> 3$ years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and selected characteristics—United States                                           | 64 |
| 7b | Persons surviving $> 3$ years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and selected characteristics—United States and 6 dependent areas                     | 65 |
| 7c | Persons surviving $> 3$ years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and area of residence—United States and 6 dependent areas                            | 66 |
| 7d | Persons with HIV surviving $> 3$ years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and selected characteristics—United States                                 | 67 |
| 7e | Persons with HIV surviving $> 3$ years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and selected characteristics—United States and 6 dependent areas           | 68 |
| 7f | Persons with HIV surviving $> 3$ years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and area of residence—United States and 6 dependent areas                  | 69 |
| 8a | Perinatally acquired HIV infection, by year of birth and mother’s race/ethnicity, 2010–2016—United States                                                                                    | 70 |
| 8b | Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother’s race/ethnicity, 2010–2016—United States                                            | 70 |
| 9  | Prevalence-based HIV care continuum for persons aged $\geq 13$ years living with HIV infection (diagnosed or undiagnosed) at year-end 2016, by selected characteristics—United States        | 71 |
| 10 | Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2018—50 states, District of Columbia, and U.S. dependent areas                                     | 72 |
| 11 | Monitoring national HIV prevention goals by using data from the National HIV Surveillance System and other surveillance systems                                                              | 74 |

The Centers for Disease Control and Prevention (CDC) collects data to monitor progress toward achieving national goals [1, 2] and the objectives set forth in other federal directives, including the updated strategic plan [3] of the Division of HIV/AIDS Prevention (DHAP). This surveillance supplemental report complements the 2017 *HIV Surveillance Report* [4] and presents the results of focused analyses of National HIV Surveillance System (NHSS) [5] data to measure progress toward achieving national goals [1]. Data in this report are also used to assess Department of Health and Human Services (HHS) core indicators [6, 7] and monitor progress toward attainment of HIV-related national objectives in Healthy People 2020 [8]. This report addresses the following objectives:

- Reduce the percentage of persons whose HIV infection is classified as stage 3 (AIDS) at diagnosis (DHAP strategic plan, HHS core indicator) (Tables 1a–d)
- Increase to 85% or more the percentage of persons linked to HIV medical care  $\leq 1$  month after diagnosis of HIV infection (NHAS 2020, DHAP strategic plan, HHS core indicator, Healthy People 2020) (Tables 3a–d)
- Increase to 90% or more the percentage of persons with HIV who are in continuous HIV medical care (i.e., retained in care) (NHAS 2020, DHAP strategic plan, HHS core indicator, Healthy People 2020) (Tables 4a–d)
- Increase to 80% or more the percentage of persons with diagnosed HIV infection who are virally suppressed (NHAS 2020, DHAP strategic plan, Healthy People 2020) (Tables 5a/b)
- Increase to 80% or more the percentage of youth with diagnosed HIV infection who are virally suppressed (NHAS 2020, Healthy People 2020) (Table 5a)
- Among persons with diagnosed HIV infection who inject drugs, increase to 80% or more the percentage who are virally suppressed (NHAS 2020, DHAP strategic plan, Healthy People 2020) (Table 5a)
- Reduce by 33% or more the death rate among persons with diagnosed HIV infection (NHAS 2020, Healthy People 2020) (Table 6c)
- Reduce the number of perinatally acquired HIV cases (Healthy People 2020) (Table 8a)
- Increase to 90% or more the percentage of persons living with HIV who know their HIV status (NHAS 2020, DHAP strategic plan, Healthy People 2020) (Table 11)
- Reduce the disparities in the rate of new diagnoses among gay and bisexual men, young black gay and bisexual men, black females, and persons living in the South (NHAS 2020, DHAP strategic plan) (Table 11)

Monitoring the stage of disease at diagnosis, linkage to HIV medical care, retention in HIV medical care, and viral suppression (on the basis of NHSS data) is dependent upon complete reporting of HIV-related laboratory results (including CD4+ T-lymphocyte [CD4] and viral load results) to HIV surveillance programs and CDC. Although most jurisdictions have regulations that require laboratories and providers to report at least a subset of CD4 and viral load test results to health departments, not all jurisdictions have mandatory reporting of all levels of CD4 and viral load (i.e., detectable and undetectable) results. As of December 2018, 42 jurisdictions (41 states and the District of Columbia) required reporting of all levels of CD4 and viral load test results and had reported to CDC  $\geq 95\%$  of the test results they had received by December 2018 (for specimens collected from at least January 2016 through September 2018). (For a list of the 42 jurisdictions, see Technical Notes.)

In this report, data from the 42 jurisdictions that reported complete CD4 and viral load laboratory results to CDC were used for the analyses that require laboratory data (Tables 2a–d, 3a–d, 4a–d, and 5a/b). Data from these 42 jurisdictions represent 89% of all persons aged  $\geq 13$  years living with diagnosed HIV infection at year-end 2016 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States. Data from the 50 states, the District of Columbia, and 6 U.S. dependent areas (where indicated) were used

for analyses of stage 3 (AIDS) at the time of diagnosis of HIV infection (Tables 1a–d), deaths and survival of persons with diagnosed HIV infection (Tables 6a–f and 7a–f), and diagnosed perinatally acquired HIV infection (Tables 8a/b).

For tables that include data by transmission category, the data were statistically adjusted to account for missing transmission category (see Technical Notes).

The term *diagnosis of HIV infection* refers to a diagnosis of HIV infection regardless of the person's stage of disease (stage 0, 1, 2, 3 [AIDS], or unknown) at the time of diagnosis. Please use caution when interpreting data on diagnosed HIV infection. HIV surveillance data on persons with diagnosed HIV infection may not represent all persons with HIV because not all infected persons have been (1) tested or (2) tested at a time when the infection could be detected and diagnosed. Also, some states offer anonymous HIV testing; the results of anonymous tests are not reported to the confidential name-based HIV registries of state and local health departments. Therefore, reports of confidential test results may not represent all persons who tested positive for HIV infection.

## REPORT CHANGES

Tables 2a–d, 3a–d, 4a–d, and 5a/b include data from 42 jurisdictions that reported complete CD4 and viral load data. The jurisdictions included in this report differ from those in previous reports. A jurisdiction's data are included only if that jurisdiction met CDC's criteria (see Technical Notes) for the collection and reporting of CD4 and viral load test results for all the data years examined. In comparison with the 2016 report, the 2017 report includes data from 2 additional states that met the criteria.

Tables 2a/b now display data on persons with infection classified as stage 0 at diagnosis. In previous reports, data on persons with infection classified as stage 0 were included in the unknown category (i.e., not displayed).

New to this report are the following:

- Tables 2c/d, 3c/d, and 4c/d display stage at diagnosis, linkage to care, receipt of care, and viral suppression data by race/ethnicity and selected characteristics (c tables) and for males with HIV infection attributed to male-to-male sexual contact by race/ethnicity and age group (d tables).

- Tables 7a/b display survival for >3 years after diagnosis of HIV infection; Tables 7d/e display survival after stage 3 (AIDS) classification by selected demographics for the United States and 6 dependent areas (where indicated).
- Table 9 displays prevalence-based (diagnosed and undiagnosed infection) estimates of HIV care outcomes (diagnosis, receipt of care, and viral suppression) for the United States.

## DEFINITIONS AND DATA SPECIFICATIONS

In 2014, the HIV surveillance case definition was revised to adapt to changes in diagnostic criteria used by laboratories and clinicians [9]. The laboratory criteria for defining a confirmed case of HIV infection were changed to accommodate multitest algorithms that did not include previously required tests (e.g., Western blot). New to the case definition is the inclusion of criteria for differentiating HIV-1 and HIV-2 infections and for recognizing early HIV infection (stage 0), during which viral loads may be high enough and CD4 T-lymphocyte counts low enough to be misclassified as stage 3 (AIDS). In addition, the revised definition consolidates the staging systems for adults/adolescents and children, simplifies surveillance criteria for opportunistic illnesses indicative of stage 3, and incorporates revisions of clinical criteria (i.e., medical record documentation) for reporting diagnoses without laboratory evidence. Because retroactive implementation of some features (e.g., the new staging system) of the 2014 case definition would be impractical, the following criteria were used to classify cases in this report:

- Cases diagnosed before 2014 were classified according to the 2008 HIV case definition [10].
- Cases diagnosed in 2014 and later were classified according to the 2014 HIV case definition.

## HIGHLIGHTS OF ANALYSES

Please read all table titles and footnotes carefully to ensure a complete understanding of the displayed data.

### Stage 3 (AIDS) classification at HIV diagnosis

Among persons with an HIV diagnosis during 2017, 20.9% of infections were classified as stage 3 (AIDS) at the time of diagnosis (Table 1a). The overall percentages decreased from 2010 through 2017.

The following percentages are for persons with stage 3 (AIDS) classification at the time of HIV diagnosis during 2017.

- **Age group:** The percentage increased as age increased (e.g., 9.1% of persons aged 13–24 years and 35.0% of persons aged  $\geq 55$  years).
- **Race/ethnicity:** The highest percentages were for Native Hawaiians/other Pacific Islanders (25.9%) and Asians (24.9%), followed by whites (21.5%), Hispanics/Latinos (21.4%), persons of multiple races (20.7%), American Indians/Alaska Natives (20.5%), and blacks/African Americans (20.1%). Please use caution when interpreting data on American Indians/Alaska Natives and Native Hawaiians/other Pacific Islanders: the numbers are small.
- **Transmission category:** The highest percentage was for males with infection attributed to heterosexual contact (34.7%), followed by males with infection attributed to injection drug use (27.0%), females with infection attributed to heterosexual contact (22.6%), females with infection attributed to injection drug use (19.8%), males with infection attributed to male-to-male sexual contact (19.0%), and males with infection attributed to male-to-male sexual contact *and* injection drug use (15.7%).

### Stage of disease at diagnosis of HIV infection

Stage of disease at diagnosis (i.e., HIV infection, stage 0, 1, 2, 3 [AIDS], or unknown) was based on data for persons with HIV infection diagnosed during 2017 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Among 33,955 persons, the stage of disease at diagnosis was classified as follows (Table 2a): stage 0 (6.2%), stage 1 (25.6%), stage 2 (30.4%), stage 3 (AIDS) (20.9%), stage unknown (17.0%).

- **Age group:** Among persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2), the highest percentages were for persons aged 13–24 (9.1% [stage 0]; 28.1% [stage 1]; 35.0% [stage 2]), followed by those for persons aged 25–34 (6.9% [stage 0]; 27.7% [stage 1]; 31.7% [stage 2]). In general, the percentages of early diagnosis decreased as age increased. Among persons with a stage 3 classification, the higher percentages were for persons in older age groups.

- **Race/ethnicity:** For all races/ethnicities,  $>60\%$  of infections were diagnosed at an earlier stage (stage 0, 1, or 2), except Native Hawaiian/Other Pacific Islanders. Among persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2), the highest percentages were for American Indians/Alaska Natives (7.6% [stage 0]; 30.4% [stage 1]; 27.8% [stage 2]), followed by those for persons of multiple races (8.3% [stage 0]; 26.6% [stage 1]; 30.8% [stage 2]), whites (6.9% [stage 0]; 29.8% [stage 1]; 27.7% [stage 2]), Hispanics/Latinos (6.4% [stage 0]; 25.4% [stage 1]; 31.4% [stage 2]), Asians (4.8% [stage 0]; 19.6% [stage 1]; 36.3% [stage 2]), and blacks/African Americans (5.7% [stage 0]; 23.4% [stage 1]; 31.0% [stage 2]). The stage-unknown percentages were slightly higher among blacks/African Americans, Hispanics/Latinos, and American Indians/Alaska Natives (19.7%, 15.3%, and 15.2%, respectively). Please use caution when interpreting data for American Indians/Alaska Natives and for Native Hawaiians/other Pacific Islanders: the numbers are small.
- **Transmission category:** Among persons whose infection was diagnosed at an earlier stage (stage 0, 1, or 2), the highest percentages were for males with infection attributed to male-to-male sexual contact *and* injection drug use (7.4% [stage 0]; 30.2% [stage 1]; 29.7% [stage 2]) and male-to-male sexual contact (7.0% [stage 0]; 25.6% [stage 1]; 31.5% [stage 2]). The lowest percentages were for males with infection attributed to heterosexual contact (3.1% [stage 0]; 17.8% [stage 1]; 27.4% [stage 2]) and for males with infection attributed to injection drug use (4.5% [stage 0]; 23.1% [stage 1]; 28.0% [stage 2]).

### Linkage to HIV medical care after diagnosis of HIV infection

Linkage to HIV medical care was based on data for persons with infection diagnosed during 2017 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Linkage to HIV medical care was measured by documentation of at least 1 CD4 or viral load test performed  $\leq 1$  month or  $\leq 3$  months after diagnosis. Of the 33,955 persons whose infection was diagnosed during 2017, 78.3% were linked to HIV medical care  $\leq 1$  month after diagnosis, and 86.8%

were linked to HIV medical care  $\leq 3$  months after diagnosis (Table 3a).

The following percentages are for persons who were linked to HIV medical care  $\leq 1$  month after diagnosis (Table 3a).

- **Age group:** Linkage to HIV medical care increased as age at diagnosis increased. The highest percentage was for persons aged  $\geq 55$  years (81.6%), followed by that for persons aged 45–54 years (81.4%). The lowest percentage was for persons aged 13–24 years (75.0%).
- **Race/ethnicity:** The highest percentage was for American Indians/Alaska Natives (84.8%). The percentages for other races/ethnicities were as follows: Native Hawaiians/other Pacific Islanders (83.7%), whites (81.3%), Asians (80.7%), persons of multiple races (80.3%), Hispanics/Latinos (79.3%), and blacks/African Americans (75.8%).
- **Transmission category:** The percentages were relatively similar for all transmission categories. The highest percentage was for females with infection attributed to heterosexual contact (79.3%), followed by males with infection attributed to male-to-male sexual contact (78.5%) and males with infection attributed to heterosexual contact (77.3%). The lowest percentage was for males with infection attributed to male-to-male sexual contact *and* injection drug use (75.3%).

The following percentages are for persons who were linked to HIV medical care  $\leq 3$  months after diagnosis (Table 3a).

- **Age group:** Linkage to HIV medical care increased as age at diagnosis increased. The highest percentage was for persons aged  $\geq 55$  years (89.3%), followed by that for persons aged 45–54 years (88.3%). The lowest percentage was for persons aged 13–24 years (85.1%).
- **Race/ethnicity:** The highest percentages were for Native Hawaiians/other Pacific Islanders (95.3%) and American Indians/Alaska Natives (89.9%). The percentages for other races/ethnicities were 89.6%, whites; 89.1%, persons of multiple races; 87.7%, Asians; 87.2%, Hispanics/Latinos; and 84.7%, blacks/African Americans.

- **Transmission category:** The percentages were relatively similar for all transmission categories. The highest percentage was for females with infection attributed to heterosexual contact (87.8%), followed by males with infection attributed to male-to-male sexual contact (86.8%) and males with infection attributed to heterosexual contact (86.2%). The lowest percentage was for males with infection attributed to injection drug use (84.9%).

### Receipt of HIV medical care

Receipt of HIV medical care was based on data for persons with HIV infection diagnosed by year-end 2015 and alive at year-end 2016 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Receipt of any HIV medical care was measured by documentation of  $\geq 1$  CD4 or viral load tests performed during 2016; retention in HIV medical care (receipt of continuous care) was measured by documentation of  $\geq 2$  CD4 or viral load tests performed at least 3 months apart during 2016. During 2016, 74.2% of 836,640 persons received HIV medical care, and 57.6% met the criteria for continuous HIV medical care (Table 4a).

The following percentages are for persons who received any HIV medical care.

- **Age group:** The highest percentage was for persons aged 13–24 years (76.3%). The lowest percentages were for persons aged 35–44 (73.2%) and persons aged  $\geq 55$  years (73.2%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (85.9%), followed by whites (77.8%), Asians (73.5%), American Indians/Alaska Natives (73.4%), Hispanics/Latinos (71.9%), blacks/African Americans (71.7%), and Native Hawaiians/other Pacific Islanders (71.4%).
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact *and* injection drug use (78.4%), followed by males with infection attributed to male-to-male sexual contact (75.8%). The lowest percentage was for males with infection attributed to injection drug use (63.6%).

The following percentages are for persons who were retained in continuous HIV medical care.



- **Age group:** The highest percentages were for persons aged  $\geq 55$  years (59.7%) and persons aged 45–54 years (58.9%). In general, the percentage increased as age increased; however, the lowest percentage was for persons aged 25–34 years (54.0%).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (67.5%), followed by whites (59.3%), Hispanics/Latinos (58.6%), Asians (58.2%), American Indians/Alaska Natives (56.2%), blacks/African Americans (54.9%), and Native Hawaiians/other Pacific Islanders (51.0%).
- **Transmission category:** The highest percentages were for males with infection attributed to male-to-male sexual contact *and* injection drug use (61.8%), males with infection attributed to male-to-male sexual contact (58.4%), and females with infection attributed to heterosexual contact (57.7%). The lowest percentage was for males with infection attributed to injection drug use (51.0%).
- **Age group:** The percentage increased as age increased (53.8% [persons aged 13–24 years]; 64.2% [persons aged  $\geq 55$  years]).
- **Race/ethnicity:** The highest percentage was for persons of multiple races (69.8%), followed by whites (67.8%), Asians (66.6%), Native Hawaiians/other Pacific Islanders (63.4%), Hispanics/Latinos (61.3%), American Indians/Alaska Natives (59.6%), and blacks/African Americans (56.1%).
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (64.4%), followed by males with infection attributed to male-to-male sexual contact *and* injection drug use (62.3%).

## Deaths

Annual rates of death were calculated per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS). Age-adjusted rates per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS) were also calculated and are presented by area of residence.

### *Deaths of persons with diagnosed HIV infection*

From 2010 through 2016 in the United States and 6 dependent areas, the annual rate of deaths per 100,000 population and the annual rate per 1,000 persons living with diagnosed HIV infection decreased (Table 6b). Trends in rates varied by area of residence at death (Table 6c). In 2016, the age-adjusted rates were 5.7 per 100,000 population and 14.2 per 1,000 persons living with diagnosed HIV infection.

### *Deaths of persons with stage 3 (AIDS) classification*

From 2010 through 2016 in the United States and 6 dependent areas, the annual rate of deaths per 100,000 population and the annual rate per 1,000 persons living with stage 3 (AIDS) decreased (Table 6e). Trends in rates varied by area of residence at death (Table 6f). In 2016, the age-adjusted rates were 4.5 per 100,000 population and 20.6 per 1,000 persons living with stage 3 (AIDS).

## Survival for >3 years after diagnosis of HIV infection

In the United States and 6 dependent areas, survival after a diagnosis of HIV infection increased

## Viral suppression

Viral suppression was measured for persons with HIV infection diagnosed by year-end 2015 and alive at year-end 2016 in the 42 jurisdictions that reported complete CD4 and viral load test results to CDC. Viral suppression was measured by a viral load result of  $< 200$  copies/mL at the most recent viral load test during 2016.

During 2016, 74.2% of 836,640 persons had at least 1 CD4 or viral load test (i.e., received any care in 2016), and 71.1% had at least 1 viral load test. At the most recent viral load test during 2016, viral load was suppressed in 82.9% of persons who received care (at least 1 CD4 or viral load test) in 2016 and in 86.4% of persons with a viral load test during 2016. The persons with suppressed viral load represented 61.5% of the total number of persons with an HIV diagnosis by year-end 2015 and alive at year-end 2016 in the 42 jurisdictions (Table 5a).

The following percentages are for persons whose most recent viral load test result in 2016 indicated viral suppression (denominator: persons who were alive at year-end 2016).

for diagnoses that were made during 2008–2013 (Table 7b). The following percentages are for persons who survived >3 years after receiving a diagnosis in 2013.

- **Age group:** The highest percentage was for persons aged 13–24 years (99%). The lowest percentage was for persons aged ≥55 years (80%).
- **Race/ethnicity:** The highest percentage was for Asians (96%), followed by blacks/African Americans (94%), Hispanics/Latinos (94%), persons of multiple races (94%), whites (93%), and American Indians/Alaska Natives (90%). Percentages for Native Hawaiians/other Pacific Islanders are not displayed because the number of cases was too small for the calculation of meaningful survival estimates.
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (95%), followed by males with infection attributed to male-to-male sexual contact *and* injection drug use (94%). The lowest percentage was for males with infection attributed to injection drug use (84%).
- By area of residence, at least 90% of persons survived >3 years after diagnosis in all but 1 area (Table 7c).

Survival after stage 3 (AIDS) classification increased over time (Table 7d). The following percentages are for persons who survived >3 years after receiving a stage 3 (AIDS) classification in 2013.

- **Age group:** The highest percentage was for persons aged 13–24 years (96%). The lowest percentage was for persons aged ≥55 years (71%).
- **Race/ethnicity:** The highest percentage was for Asians (91%), followed by persons of multiple races (88%), Hispanics/Latinos (88%), blacks/African Americans (86%), and whites (84%). Data for American Indians/Alaska Natives and Native Hawaiians/other Pacific Islanders are not displayed because the numbers of cases were too small for the calculation of meaningful survival estimates.
- **Transmission category:** The highest percentage was for males with infection attributed to male-to-male sexual contact (88%), followed by females with infection attributed to heterosexual contact (85%) and males with infection attributed to male-to-male sexual contact *and* injection drug use (84%).

The lowest percentage was for males with infection attributed to injection drug use (76%).

- By area of residence, at least 80% of persons survived >3 years after stage 3 (AIDS) classification in all but 2 areas (Table 7f).

## Perinatally acquired HIV infection

The overall annual rate of perinatally acquired HIV infections in the United States (regardless of place of birth) decreased from 2.7 per 100,000 live births in 2010 to 1.2 in 2016 (Table 8a). However, annual rates differed by race/ethnicity. Although the annual rate among blacks/African Americans decreased from 10.5 in 2010 to 5.4 in 2016, the 2016 rate among blacks/African Americans (5.4) was substantially higher than the 2016 rates among Hispanics/Latinos (1.3) and whites (0.1).

Among infants born in the United States, the overall annual rate of perinatally acquired HIV infections decreased from 1.8 per 100,000 live births in 2010 to 1.1 in 2016 (Table 8b). However, annual rates differed by race/ethnicity. Although the annual rate among blacks/African Americans decreased from 6.8 in 2010 to 5.0 in 2016, the 2016 rate among blacks/African Americans (5.0) was substantially higher than the 2016 rates among Hispanics/Latinos (1.1) and whites (0.1).

## SUGGESTED READINGS

- CDC [Dasgupta S, Oster A, Li J, Hall HI]. Disparities in consistent retention in HIV care—11 states and the District of Columbia, 2011–2013. *MMWR* 2016;65(4):77–82. <http://www.cdc.gov/mmwr/volumes/65/wr/mm6504a2.htm>. Accessed April 30, 2019.
- CDC. Establishing a holistic framework to reduce inequities in HIV, viral hepatitis, STDs, and tuberculosis in the United States: an NCHHSTP white paper on social determinants of health, 2010. <http://go.usa.gov/AH2z>. Accessed April 30, 2019.
- CDC. Estimated HIV incidence and prevalence in the United States, 2010–2016. *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published February 2019. Accessed April 30, 2019.
- CDC [Dailey AF, Satcher Johnson A, Wu B]. HIV care outcomes among blacks with diagnosed HIV—United States, 2014. *MMWR* 2017;66(4):97–103. <http://www.cdc.gov/mmwr/volumes/66/wr/mm6604a2.htm>. Accessed April 30, 2019.

- CDC [Gant Z, Dailey A, Hu X, Satcher Johnson A]. HIV care outcomes among Hispanics or Latinos with diagnosed HIV infection—United States, 2015. *MMWR* 2017;66(40):1065–1072. <http://www.cdc.gov/mmwr/volumes/66/wr/mm6640a2.htm>. Accessed April 30, 2019.
- CDC [Singh S, Mitsch A, Wu B]. HIV care outcomes among men who have sex with men with diagnosed HIV infection—United States, 2015. *MMWR* 2017;66(37):969–974. <http://www.cdc.gov/mmwr/volumes/66/wr/mm6637a2.htm>. Accessed April 30, 2019.
- CDC. *HIV Surveillance Report 2017*; vol. 29. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2018. Accessed April 30, 2019.
- CDC [Siddiqi A, Hu X, Hall HI]. Mortality among blacks or African Americans with HIV infection—United States, 2008–2012. *MMWR* 2015;64(04):81–86. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6404a2.htm>. Accessed April 30, 2019.
- CDC [Crepaz N, Dong X, Wang X, Hernandez AL, Hall HI]. Racial and ethnic disparities in sustained viral suppression and transmission risk potential among persons receiving HIV care—United States, 2014. *MMWR* 2018;67(04):113–118. <http://www.cdc.gov/mmwr/volumes/67/wr/mm6704a2.htm>. Accessed April 30, 2019.
- CDC [Branson BM, Handsfield HH, Lampe MA, et al]. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR* 2006;55(RR-14):1–17. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>. Accessed April 30, 2019.
- CDC [Selik RM, Mokotoff ED, Branson B, Owen SM, Whitmore S, Hall HI]. Revised surveillance case definition for HIV infection—United States, 2014. *MMWR* 2014;63(RR-03):1–10. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm>. Accessed May 16, 2018.
- CDC [Schneider E, Whitmore S, Glynn MK, Dominguez K, Mitsch A, McKenna MT]. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. *MMWR* 2008;57(RR-10):1–12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5710a1.htm>. Accessed April 30, 2019.
- Fauci AS, Redfield RR, Sigounas G, Weahkee MD, Giroir BP. Ending the HIV Epidemic: a plan for the United States. *JAMA* 2019;321(9):844–845. doi:10.1001/jama.2019.1343.
- Greenberg AE, Purcell DW, Gordon CM, Barasky RJ, del Rio C. Addressing the challenges of the HIV continuum of care in high-prevalence cities in the United States. *J Acquir Immune Defic Syndr* 2015;69(suppl 1):S1–S7. doi:10.1097/QAI.0000000000000569.
- Hess KL, Hall HI. HIV viral suppression, 37 states and the District of Columbia, 2014. *J Community Health* 2018;43(2):338–347. doi:10.1007/s10900-017-0427-3.
- Institute of Medicine. Monitoring HIV care in the United States: indicators and data systems [consensus report]. <http://www.nap.edu/read/13225/chapter/1>. Published March 15, 2012. Accessed April 30, 2019.
- Laffoon BT, Hall HI, Babu AS, Benbow N, Hsu LC, Hu YW; for Urban Areas HIV Surveillance Workgroup. HIV infection and linkage to HIV-related medical care in large urban areas in the United States, 2009. *J Acquir Immune Defic Syndr* 2015;69(4):487–492. doi:10.1097/QAI.0000000000000619.
- Mahle Gray K, Tang T, Shouse L, Li J, Mermin J, Hall HI. Using the HIV surveillance system to monitor the National HIV/AIDS Strategy. *Am J Public Health* 2013;103(1):141–147. doi:10.2105/AJPH.2012.300859.
- Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents living with HIV. <http://go.usa.gov/vdGA>. Updated October 25, 2018. Accessed April 30, 2019.
- Satcher Johnson A, Song R, Hall, HI. Estimated HIV incidence, prevalence, and undiagnosed infections in US states and Washington, DC, 2010–2014. *J Acquir Immune Defic Syndr* 2017;76(2):116–122. doi:10.1097/QAI.0000000000001495.
- Singh S, Song R, Johnson AS, McCray E, Hall HI. HIV incidence, prevalence, and undiagnosed infections in U.S. men who have sex with men. *Ann Intern Med* 2018;168(10):685–694. doi:10.7326/M17-2082.

## SURVEILLANCE OF HIV INFECTION

This report includes data reported to the Centers for Disease Control and Prevention (CDC) through December 31, 2018, from all 50 states, the District of Columbia, and 6 U.S. dependent areas (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands). After the removal of personally identifiable information, data were submitted to CDC.

Please use caution when interpreting data on diagnosed HIV infection. HIV surveillance data on persons with diagnosed HIV infection may not represent all persons with HIV because not all infected persons have been (1) tested or (2) tested at a time when the infection could be detected and diagnosed. Also, some states offer anonymous HIV testing; the results of anonymous tests are not reported to the confidential name-based HIV registries of state and local health departments. Therefore, reports of confidential test results may not represent all persons who tested positive for HIV infection.

Please also use caution when interpreting laboratory data for persons with diagnosed HIV infection. Laboratory data presented in this report are from 42 jurisdictions (41 states and the District of Columbia) that reported complete CD4+ T-lymphocyte (CD4) and viral load test results to CDC as of December 2018. Data from these 42 jurisdictions represent 89% of all persons aged  $\geq 13$  years living with diagnosed HIV infection at year-end 2016 in the United States and are therefore not representative of data on all persons living with diagnosed HIV infection in the United States.

### Areas with Complete Laboratory Reporting

As of December 2018, 42 jurisdictions (41 states and the District of Columbia) had met the following criteria for the collection and reporting of CD4 and viral load test results:

- The jurisdiction's laws/regulations required the reporting of all CD4 and viral load results to the state or local health department.
- Laboratories that perform HIV-related testing for the jurisdictions had reported a minimum of 95% of HIV-related test results to the state or local health department.

- By December 31, 2018, the jurisdiction had reported (to CDC) at least 95% of all CD4 and viral load test results received from January 2016 through September 2018.

The 41 states are Alabama, Alaska, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. Data from these states and the District of Columbia were used to populate Tables 2a–d, 3a–d, 4a–d, and 5a/b.

## TABULATION AND PRESENTATION OF DATA

### Stages of HIV Infection

Both the 2008 and 2014 HIV case definitions were used to classify HIV infection among adults and adolescents and among children [9, 10].

The 2008 case definition was used to classify cases diagnosed from the beginning of the epidemic through 2013. For adults and adolescents, this definition incorporates an HIV infection staging system that includes AIDS (HIV infection, stage 3). The 2008 stages of HIV infection are defined as follows:

- **HIV infection, stage 1:** No AIDS-defining condition and either a CD4 count of  $\geq 500$  cells/ $\mu\text{L}$  or a CD4 percentage of total lymphocytes of  $\geq 29$ .
- **HIV infection, stage 2:** No AIDS-defining condition and either a CD4 count of 200–499 cells/ $\mu\text{L}$  or a CD4 percentage of total lymphocytes of 14–28.
- **HIV infection, stage 3 (AIDS):** Documentation of an AIDS-defining condition or either a CD4 count of  $< 200$  cells/ $\mu\text{L}$  or a CD4 percentage of total lymphocytes of  $< 14$ . Documentation of an AIDS-defining condition supersedes a CD4 count or percentage that would not, by itself, be the basis for a stage 3 (AIDS) classification.
- **HIV infection, stage unknown:** No reported information on AIDS-defining conditions and no information available on CD4 count or percentage.

The 2014 case definition was used to classify cases diagnosed in 2014 and later. It is similar to the 2008 case definition except for the following: (1) inclusion of criteria for stage 0, (2) the inclusion of CD4 testing criteria for stage 3 in children, and (3) changes in the cutoffs for CD4 percentage of total lymphocytes used for classification of stages 1 and 2 in persons aged  $\geq 6$  years. The stages of HIV infection in the 2014 case definition are based on age-specific CD4 counts or percentages of total lymphocytes and are defined as follows:

- **HIV infection, stage 0:** First positive HIV test result within 6 months after a negative HIV test result. The stage remains stage 0 until 6 months after the first positive test result. After 6 months, the stage may be classified as 1, 2, 3, or unknown if based on a CD4 test result or the diagnosis of an opportunistic illness. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.
- **HIV infection, stages 1, 2, and 3:** Documentation of an AIDS-defining condition (excluding stage 0 as described above) is stage 3. Otherwise, the stage is determined by the lowest CD4 test result.
- **HIV infection, stage unknown:** No reported information on AIDS-defining conditions and no information available on CD4 count or percentage.

Data on persons with HIV infection, stage 3 (AIDS), include persons whose infection has ever been classified as stage 3 (AIDS). These data do not necessarily represent the current stage of disease.

Information on stage 3 (AIDS) is available for all 50 states, the District of Columbia, and 6 U.S. dependent areas, even when not all CD4 values are reportable; therefore, stage 3 (AIDS) at the time of HIV diagnosis was calculated for persons in all areas (Tables 1a–d). Because a complete assessment of stage of disease at HIV diagnosis relies on complete laboratory data (all CD4 values) so that earlier stages of disease (stage 0, 1, or 2) can be assessed, stage of disease at diagnosis was calculated for the 42 jurisdictions that reported complete laboratory data (Tables 2a/b).

Stage 3 (AIDS) at the time of HIV diagnosis (Tables 1a–d) and stage of disease at diagnosis (Tables 2a–d) were determined by using the first CD4 test result or documentation of an AIDS-defining condition  $\leq 3$  months after the HIV diagnosis date, unless documen-

tation indicated disease stage 0. If  $\geq 2$  events occurred during the same month and could thus qualify as “first,” the following conditions were applied:

- If an AIDS-defining condition was documented, the AIDS-defining condition was used; if a CD4 count or a CD4 percentage had been reported and an AIDS-defining condition was documented, the AIDS-defining condition was used.
- If an AIDS-defining condition was not documented, but a CD4 count and a CD4 percentage had been reported, the CD4 count was used.
- If an AIDS-defining condition was not documented, but  $> 1$  CD4 count had been reported, the lowest CD4 count (indicative of the most severe disease state) was used.
- If an AIDS-defining condition was not documented and a CD4 count had not been reported, but a CD4 percentage had been reported, the CD4 percentage was used. If  $> 1$  CD4 percentage was reported, the lowest CD4 percentage (indicative of the most severe disease state) was used.

For stage of disease at diagnosis, infections were classified as “stage unknown” if the month of HIV diagnosis was missing, or if,  $\leq 3$  months after HIV diagnosis, neither a CD4 count nor a CD4 percentage had been determined and no AIDS-defining condition was documented.

### Linkage to, and Receipt of, HIV Medical Care

National guidelines for the clinical care and treatment of adults and adolescents living with HIV [11] recommend CD4 and viral load testing during the first care visit after HIV diagnosis to direct the course of treatment. For patients who are not taking antiretroviral therapy (ART), CD4 count should be monitored every 3–6 months. For virally suppressed patients who have taken ART for  $\leq 2$  years, viral load testing is recommended every 3 to 4 months or as clinically indicated to confirm continuous viral suppression. For virally suppressed patients who have taken ART for  $> 2$  years, viral load testing at 6-month intervals may be considered. For virally suppressed patients whose CD4 counts have consistently ranged from 300 to 500 cells/ $\mu\text{L}$  for  $\geq 2$  years, annual monitoring of CD4 count is recommended. For virally suppressed patients whose CD4 counts have consistently been  $> 500$  cells/ $\mu\text{L}$  for  $\geq 2$  years, continued CD4 monitoring is optional.

Frequent monitoring of CD4 count, especially among persons with higher counts (>300 cells/ $\mu$ L) and consistently suppressed viral loads, is generally not required for patient management. However, if clinically indicated, the CD4 count should be monitored more frequently (e.g., when changes in a patient's clinical status decrease CD4 count and thus prompt the need for prophylaxis for opportunistic infection).

The data on linkage to HIV medical care were based on persons whose infection was diagnosed during 2017 and who resided in any of the 42 jurisdictions at the time of diagnosis (Tables 3a–d). Linkage to HIV medical care within 1 month after HIV diagnosis was measured by documentation of  $\geq 1$  CD4 (count or percentage) or viral load tests performed  $\leq 1$  month after HIV diagnosis, including tests performed on the same date as the date of diagnosis. Linkage to HIV medical care within 3 months after HIV diagnosis was measured by documentation of  $\geq 1$  CD4 (count or percentage) or viral load tests performed  $\leq 3$  months after HIV diagnosis, including tests performed on the same date as the date of diagnosis.

The data on receipt of HIV medical care were based on persons whose infection was diagnosed by year-end 2015, who resided in any of the 42 jurisdictions as of their most recent known address, and who were alive at year-end 2016 (Tables 4a–d). Receipt of any HIV medical care was measured by documentation of  $\geq 1$  CD4 or viral load tests performed during 2016. Retention in care (receipt of continuous HIV medical care) was measured by documentation of  $\geq 2$  CD4 or viral load tests performed  $\geq 3$  months apart during 2016.

For analyses of linkage to, and retention in, care, the month and the year of the earliest HIV-positive test result reported to the surveillance system were used to determine the diagnosis date. Test results were excluded if the month of the sample collection was missing. For linkage to care, data were excluded if the month of diagnosis was missing. For retention in care, data were excluded if the date of death (where applicable) was missing.

### **Viral Suppression**

Viral suppression was measured among persons whose infection was diagnosed by year-end 2015, who resided in any of the 42 jurisdictions as of their most recent known address during 2016, and who were alive at year-end 2016. Viral suppression was defined as a viral load result of <200 copies/mL at the

most recent viral load test during 2016. The cutoff value of <200 copies/mL was based on the following definition of virologic failure: viral load of  $\geq 200$  copies/mL. If multiple viral load tests were performed during the same month and could thus qualify as “most recent,” the highest viral load (most severe) was selected. If the numerical result was missing or the result was a logarithmic value, the interpretation of the result (e.g., below limit) was used to determine viral suppression. Virologic failure may indicate lack of adherence to ART.

### **Deaths**

Persons whose HIV infections are reported to the National HIV Surveillance System (NHSS) are assumed to be alive unless their deaths have been reported to CDC. Death data were based on deaths of persons with diagnosed HIV infection and of persons with infection ever classified as stage 3 (AIDS), regardless of the cause of death. Jurisdiction-level data were based on area of residence at death. If information on residence at death was not available, the state where a person's death occurred was used. Because of delays in the reporting of deaths, 7 years (2010–2016) of death data are displayed. The exclusion of data from the most recent year allowed  $\geq 18$  months for deaths to be reported to CDC. Please use caution when interpreting trend data on the numbers of deaths: the numbers for the most recent year are subject to uncertainty.

### **Survival Analyses**

The Kaplan-Meier method was used to estimate the probability of survival (Tables 7a–f) for > 3 years (36 months) for persons with diagnosed HIV infection and for persons whose infection had ever been classified as stage 3 (AIDS). To allow  $\geq 3$  years from the time of HIV diagnosis to a death date on or before December 31, 2016, tables were limited to data on persons whose diagnosis or stage 3 (AIDS) classification was made during 2008–2013. The results of survival analyses for areas with < 100 diagnoses per year (i.e., <600 during the 6-year period) were unstable and therefore are not presented in this report.

### **Perinatally Acquired HIV Infection**

Table 8a presents data for infants with infection attributed to perinatal transmission and reported to NHSS through December 2018. The data include all persons reported to NHSS with infection attributed to

perinatal exposure, regardless of place of birth. Table 8b presents a subset of data from Table 8a: the data include only the persons whose case record denoted the United States as place of birth or residence at birth. The data on persons with perinatally acquired infection that are presented in Table 8b do not include persons who were born in a U.S. dependent area or a foreign country or whose residence at birth was unknown or missing from the case record.

### Age

All tables in this report reflect data on persons aged  $\geq 13$  years, with the exception of Tables 8a/b (perinatally acquired HIV infection; birth years 2010–2016).

- Tables 4a–d and 5a/b (receipt of care and viral suppression): age was based on the person’s age at year-end 2015.
- Tables 6a–f (deaths): age was based on the person’s age at the time of death.
- Table 9 (prevalence): age was based on the person’s age at year-end 2016.
- All other tables: age was based on the person’s age at the time of HIV diagnosis.

### Race and Ethnicity

In the *Federal Register* for October 30, 1997 [12], the Office of Management and Budget (OMB) announced the Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and mandated implementation by January 1, 2003. At a minimum, data should be collected for the following race categories:

- American Indian or Alaska Native
- Asian
- black or African American
- Native Hawaiian or other Pacific Islander
- white

Additionally, systems must be able to retain information when multiple race categories are reported. In addition to data on race, data on 2 categories of ethnicity should be collected:

- Hispanic or Latino
- not Hispanic or Latino

The Asian or Pacific Islander category displayed in annual surveillance reports published prior to the 2007 surveillance report was split into 2 categories: (1) Asian and (2) Native Hawaiian or other Pacific

Islander. The Asian category (in tables where footnoted) includes persons categorized as Asian/Pacific Islander (referred to as legacy cases) that were reported before the new race categories were implemented in 2003 (e.g., diagnoses of HIV infection that were reported to CDC before 2003 but that were classified as stage 3 [AIDS] after 2003) and a small percentage of persons that were reported after 2003 but that were reported according to the old race category (Asian/Pacific Islander). In tables of diagnoses of HIV infection during 2008–2017, the Asian category does not include persons categorized as Asian/Pacific Islander because their diagnosis was made after 2003 and reported to CDC in accordance with OMB’s Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity [12].

This report also presents data for persons for whom multiple race categories are specified. In this report, persons categorized by race were not Hispanic or Latino. The number of persons reported in each race category may, however, include persons whose ethnicity was not reported.

Demographic information for the live birth registry is based on that of the mother [13]. Therefore, Tables 8a/b, which present estimated numbers and rates of perinatally acquired HIV infection, categorize race/ethnicity according to the mother’s race/ethnicity.

### Geographic Designation

Data by area of residence reflect the address at the time of diagnosis of HIV infection or at the time of stage 3 (AIDS) classification for Tables 1c/d, 2b, 3b, and 7c/f. In Tables 4a–d and 5a/b, area of residence is based on most recent known address as of December 31 of the specified year. For the death tables (6c and 6f), area of residence is based on residence at death. When information on residence at death is not available, the state where a person’s death occurred is used.

### Transmission Categories

*Transmission category* is the term used to summarize a person’s possible HIV risk factors; the summary classification results from selecting, from the presumed hierarchical order of probability, the 1 risk factor most likely to have been responsible for transmission. For surveillance purposes, a diagnosis of HIV infection is counted only once in the hierarchy of transmission categories. Persons with  $> 1$  reported risk



factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is the category for male-to-male sexual contact *and* injection drug use; this group makes up a separate transmission category.

Persons whose transmission category is classified as male-to-male sexual contact include men who have ever had sexual contact with other men (i.e., homosexual contact) and men who have ever had sexual contact with both men and women (i.e., bisexual contact). Persons whose transmission category is classified as heterosexual contact are persons who have ever had heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., a person who injects drugs).

Cases of HIV infection reported without a risk factor listed in the hierarchy of transmission categories are classified as “no risk factor reported or identified.” Cases classified as no identified risk factor (NIR) include cases that are being followed up by local health department staff; cases in persons whose risk-factor information is missing because they died, declined to be interviewed, or were lost to follow-up; and cases in persons who were interviewed or for whom other follow-up information was available but for whom no risk factor was identified.

Because a substantial proportion of cases of HIV infection are reported to CDC without an identified risk factor, multiple imputation is used to assign a transmission category [14]. Multiple imputation is a statistical approach in which each missing transmission category is replaced with a set of plausible values that represent the uncertainty about the true, but missing, value [15]. The plausible values are analyzed by using standard procedures, and the results of these analyses are then combined to produce the final results.

## Rates

In tables displaying data on deaths of persons with diagnosed HIV infection and deaths of persons with infection ever classified as stage 3 (AIDS) (Tables 6a–f), rates were calculated in 3 ways:

- **Rates of deaths per 100,000 population:** The population denominators used to compute the rates for the 50 states, the District of Columbia, and Puerto Rico were based on the Vintage 2017 file (for years 2010 to 2016) from the U.S. Census Bureau [16]. The population denominators for American Samoa, Guam, the Northern Mariana

Islands, the Republic of Palau, and the U.S. Virgin Islands were based on estimates and projections from the U.S. Census Bureau’s International Data Base [17]. Each rate was calculated by dividing the estimated total number of diagnoses (or deaths or prevalence) for the calendar year by the population for that calendar year and then multiplying the result by 100,000.

- **Rates of deaths per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Rates were calculated by dividing the estimated total number of deaths of persons with diagnosed HIV infection (or with infection classified as stage 3 [AIDS]) during the calendar year by the sum of the estimated number of persons living with a diagnosis of HIV infection (or with infection classified as stage 3 [AIDS]) at the end of the previous calendar year plus the number of diagnoses of HIV infection (or stage 3 [AIDS] classification) during the current calendar year; the result was then multiplied by 1,000.
- **Age-adjusted rates of deaths per 100,000 population and per 1,000 persons living with diagnosed HIV infection or living with infection ever classified as stage 3 (AIDS):** Tables 6c and 6f include age-adjusted rates by area of residence in addition to crude rates. A standard population distribution was used to adjust death rates per 100,000 population and per 1,000 persons living with diagnosed HIV infection (or with infection ever classified as stage 3 [AIDS]). The age-adjusted rates are rates that would have existed if the age distribution of the designated population and the age distribution of the standard population were the same. The use of the U.S. 2000 standard population in calculating age-adjusted rates was based on recommendations by the National Center for Health Statistics [18, 19].

In the tables displaying data on perinatally acquired HIV infection (Tables 8a/b), rates were calculated per 100,000 live births [13].



# References

1. National HIV/AIDS strategy for the United States: updated to 2020. <http://www.hiv.gov/federal-response/national-hiv-aids-strategy/nhas-update>. Published July 2015. Accessed April 30, 2019.
2. Fauci AS, Redfield RR, Sigounas G, Weahkee MD, Giroir BP. Ending the HIV Epidemic: a plan for the United States. *JAMA* 2019;321(9):844–845. doi:10.1001/jama.2019.1343.
3. CDC. Division of HIV/AIDS Prevention strategic plan 2017–2020. <http://www.cdc.gov/hiv/dhap/strategicplan/>. Updated July 2017. Accessed April 30, 2019.
4. CDC. *HIV Surveillance Report 2017*; vol. 29. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2018. Accessed April 30, 2019.
5. Cohen SM, Gray KM, Bañez Ocfemia MC, Satcher Johnson A, Hall HI. The status of the National HIV Surveillance System, United States, 2013. *Public Health Rep* 2014;129(4):335–341. doi:10.1177/003335491412900408.
6. Valdiserri RO, Forsyth AD, Yakovchenko V, Koh HK. Measuring what matters: development of standard HIV core indicators across the U.S. Department of Health and Human Services. *Public Health Rep* 2013;128(5):354–359. doi:10.1177/003335491312800504.
7. Health Resources and Services Administration, HIV/AIDS Bureau. The United States—performance indicators. <https://hab.hrsa.gov/stateprofiles2014/HHS-Indicators.aspx>. Updated February 2017. Accessed April 29, 2019.
8. Healthy People 2020. <http://www.healthypeople.gov/2020/topics-objectives/topic/hiv/objectives>. Updated 2019. Accessed April 30, 2019.
9. CDC [Selik RM, Mokotoff ED, Branson B, Owen SM, Whitmore S, Hall HI]. Revised surveillance case definition for HIV infection—United States, 2014. *MMWR* 2014;63(RR-03):1–10. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm> Accessed April 30, 2019.
10. CDC [Schneider E, Whitmore S, Glynn MK, Dominguez K, Mitsch A, McKenna MT]. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. *MMWR* 2008;57(RR-10):1–12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5710a1.htm>. Accessed April 30, 2019.
11. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents living with HIV. <http://go.usa.gov/vdGA>. Updated October 25, 2018. Accessed April 30, 2019.
12. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. *Federal Register* 1997;62(210):58782–58790. <http://go.usa.gov/xnV9T>. Accessed April 30, 2019.
13. Martin JA, Hamilton BE, Osterman MJK, Driscoll AK, Drake P. Births: final data for 2016. *Natl Vital Stat Rep* 2018;67(1):1–55.
14. Harrison KM, Kajese T, Hall HI, Song R. Risk factor redistribution of the national HIV/AIDS surveillance data: an alternative approach. *Public Health Rep* 2008;123(5):618–627. doi:10.1177/003335490812300512.
15. Rubin, DB. *Multiple Imputation for Nonresponse in Surveys*. New York: John Wiley & Sons Inc; 1987.
16. U.S. Census Bureau. Population and housing unit estimates datasets. <http://go.usa.gov/xn4cc>. Updated July 1, 2014. Accessed April 30, 2019.
17. U.S. Census Bureau. International Data Base. <http://www.census.gov/data-tools/demo/idb/informationGateway.php>. Updated August 2017. Accessed April 30, 2019.
18. Anderson RN, Rosenberg HM. Age standardization of death rates: implementation of the year 2000 standard. *Natl Vital Stat Rep* 1998;47(3):1–16, 20.
19. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. *Healthy People 2010 Statistical Notes* 2001;(20):1–9. <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>. Accessed April 30, 2019.



**Table 1b. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and selected characteristics, 2010–2017—United States and 6 dependent areas**

|                                                    | 2010                                     |               |             | 2011                                     |               |             | 2012                                     |               |             | 2013                                     |               |             | 2014                                     |              |             | 2015                                     |              |             | 2016                                     |              |             | 2017                                     |              |             |
|----------------------------------------------------|------------------------------------------|---------------|-------------|------------------------------------------|---------------|-------------|------------------------------------------|---------------|-------------|------------------------------------------|---------------|-------------|------------------------------------------|--------------|-------------|------------------------------------------|--------------|-------------|------------------------------------------|--------------|-------------|------------------------------------------|--------------|-------------|
|                                                    | Stage 3 (AIDS) at diagnosis <sup>a</sup> |               |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |               |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |               |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |               |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |              |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |              |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |              |             | Stage 3 (AIDS) at diagnosis <sup>a</sup> |              |             |
|                                                    | Total No.                                | No.           | %           | Total No.                                | No.           | %           | Total No.                                | No.           | %           | Total No.                                | No.           | %           | Total No.                                | No.          | %           | Total No.                                | No.          | %           | Total No.                                | No.          | %           | Total No.                                | No.          | %           |
| <b>Sex</b>                                         |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| Male                                               | 34,383                                   | 9,894         | 28.8        | 33,325                                   | 9,398         | 28.2        | 33,083                                   | 8,998         | 27.2        | 32,201                                   | 8,797         | 27.3        | 32,933                                   | 7,317        | 22.2        | 32,908                                   | 6,980        | 21.2        | 32,481                                   | 6,841        | 21.1        | 31,305                                   | 6,455        | 20.6        |
| Female                                             | 9,703                                    | 2,609         | 26.9        | 8,960                                    | 2,434         | 27.2        | 8,384                                    | 2,289         | 27.3        | 7,786                                    | 2,132         | 27.4        | 7,734                                    | 1,873        | 24.2        | 7,498                                    | 1,757        | 23.4        | 7,640                                    | 1,707        | 22.3        | 7,376                                    | 1,640        | 22.2        |
| <b>Age at diagnosis (yr)</b>                       |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| 13–24                                              | 9,236                                    | 1,211         | 13.1        | 9,190                                    | 1,219         | 13.3        | 9,207                                    | 1,146         | 12.4        | 8,878                                    | 1,217         | 13.7        | 9,266                                    | 814          | 8.8         | 9,126                                    | 773          | 8.5         | 8,728                                    | 770          | 8.8         | 8,282                                    | 754          | 9.1         |
| 25–34                                              | 11,966                                   | 2,727         | 22.8        | 11,731                                   | 2,641         | 22.5        | 12,051                                   | 2,706         | 22.5        | 12,016                                   | 2,602         | 21.7        | 12,797                                   | 2,205        | 17.2        | 13,211                                   | 2,194        | 16.6        | 13,749                                   | 2,259        | 16.4        | 13,446                                   | 2,178        | 16.2        |
| 35–44                                              | 10,410                                   | 3,528         | 33.9        | 9,377                                    | 3,146         | 33.6        | 8,722                                    | 2,806         | 32.2        | 8,020                                    | 2,691         | 33.6        | 8,168                                    | 2,377        | 29.1        | 7,803                                    | 2,171        | 27.8        | 7,633                                    | 2,079        | 27.2        | 7,364                                    | 1,897        | 25.8        |
| 45–54                                              | 8,450                                    | 3,317         | 39.3        | 8,048                                    | 3,114         | 38.7        | 7,607                                    | 2,963         | 39.0        | 7,035                                    | 2,685         | 38.2        | 6,610                                    | 2,288        | 34.6        | 6,456                                    | 2,183        | 33.8        | 6,093                                    | 2,012        | 33.0        | 5,704                                    | 1,911        | 33.5        |
| ≥55                                                | 4,024                                    | 1,720         | 42.7        | 3,939                                    | 1,712         | 43.5        | 3,880                                    | 1,666         | 42.9        | 4,038                                    | 1,734         | 42.9        | 3,826                                    | 1,506        | 39.4        | 3,810                                    | 1,416        | 37.2        | 3,918                                    | 1,428        | 36.4        | 3,885                                    | 1,355        | 34.9        |
| <b>Race/ethnicity</b>                              |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| American Indian/Alaska Native                      | 159                                      | 57            | 35.8        | 137                                      | 45            | 32.8        | 170                                      | 50            | 29.4        | 144                                      | 39            | 27.1        | 178                                      | 45           | 25.3        | 184                                      | 45           | 24.5        | 227                                      | 54           | 23.8        | 210                                      | 43           | 20.5        |
| Asian                                              | 675                                      | 213           | 31.6        | 721                                      | 205           | 28.4        | 769                                      | 221           | 28.7        | 778                                      | 232           | 29.8        | 911                                      | 223          | 24.5        | 925                                      | 207          | 22.4        | 964                                      | 221          | 22.9        | 951                                      | 238          | 25.0        |
| Black/African American                             | 19,663                                   | 5,265         | 26.8        | 18,708                                   | 4,932         | 26.4        | 17,961                                   | 4,738         | 26.4        | 17,133                                   | 4,427         | 25.8        | 17,369                                   | 3,784        | 21.8        | 17,321                                   | 3,525        | 20.4        | 17,176                                   | 3,489        | 20.3        | 16,528                                   | 3,320        | 20.1        |
| Hispanic/Latino <sup>b</sup>                       | 10,051                                   | 3,097         | 30.8        | 9,813                                    | 2,907         | 29.6        | 9,839                                    | 2,801         | 28.5        | 9,670                                    | 2,799         | 28.9        | 10,191                                   | 2,367        | 23.2        | 10,244                                   | 2,291        | 22.4        | 10,458                                   | 2,316        | 22.1        | 10,046                                   | 2,142        | 21.3        |
| Native Hawaiian/Other Pacific Islander             | 51                                       | 26            | 51.0        | 54                                       | 22            | 40.7        | 51                                       | 16            | 31.4        | 49                                       | 16            | 32.7        | 44                                       | 10           | 22.7        | 76                                       | 18           | 23.7        | 47                                       | 10           | 21.3        | 57                                       | 16           | 28.1        |
| White                                              | 11,534                                   | 3,340         | 29.0        | 11,042                                   | 3,234         | 29.3        | 10,916                                   | 3,048         | 27.9        | 10,546                                   | 3,003         | 28.5        | 10,502                                   | 2,443        | 23.3        | 10,344                                   | 2,368        | 22.9        | 10,056                                   | 2,220        | 22.1        | 9,923                                    | 2,136        | 21.5        |
| Multiple races                                     | 1,953                                    | 505           | 25.9        | 1,810                                    | 487           | 26.9        | 1,761                                    | 413           | 23.5        | 1,667                                    | 413           | 24.8        | 1,472                                    | 318          | 21.6        | 1,312                                    | 283          | 21.6        | 1,193                                    | 238          | 19.9        | 966                                      | 200          | 20.7        |
| <b>Transmission category<sup>c</sup></b>           |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| Male-to-male sexual contact                        | 26,340                                   | 6,973         | 26.5        | 26,068                                   | 6,816         | 26.1        | 26,339                                   | 6,607         | 25.1        | 25,863                                   | 6,567         | 25.4        | 26,803                                   | 5,392        | 20.1        | 26,773                                   | 5,167        | 19.3        | 26,437                                   | 5,070        | 19.2        | 25,678                                   | 4,868        | 19.0        |
| Injection drug use                                 |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| Male                                               | 2,067                                    | 785           | 38.0        | 1,702                                    | 642           | 37.7        | 1,521                                    | 548           | 36.0        | 1,430                                    | 507           | 35.5        | 1,347                                    | 467          | 34.7        | 1,374                                    | 395          | 28.8        | 1,261                                    | 354          | 28.0        | 1,348                                    | 361          | 26.8        |
| Female                                             | 1,431                                    | 380           | 26.5        | 1,303                                    | 372           | 28.5        | 1,177                                    | 309           | 26.3        | 1,025                                    | 281           | 27.4        | 976                                      | 226          | 23.2        | 1,019                                    | 202          | 19.8        | 985                                      | 202          | 20.6        | 1,023                                    | 201          | 19.7        |
| Male-to-male sexual contact and injection drug use | 1,724                                    | 443           | 25.7        | 1,595                                    | 378           | 23.7        | 1,520                                    | 370           | 24.3        | 1,399                                    | 295           | 21.1        | 1,353                                    | 231          | 17.1        | 1,373                                    | 260          | 19.0        | 1,350                                    | 237          | 17.6        | 1,301                                    | 204          | 15.7        |
| Heterosexual contact <sup>d</sup>                  |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| Male                                               | 4,205                                    | 1,675         | 39.8        | 3,917                                    | 1,546         | 39.5        | 3,657                                    | 1,455         | 39.8        | 3,469                                    | 1,412         | 40.7        | 3,394                                    | 1,213        | 35.7        | 3,354                                    | 1,145        | 34.1        | 3,408                                    | 1,171        | 34.4        | 2,944                                    | 1,010        | 34.3        |
| Female                                             | 8,238                                    | 2,216         | 26.9        | 7,618                                    | 2,047         | 26.9        | 7,174                                    | 1,972         | 27.5        | 6,715                                    | 1,840         | 27.4        | 6,726                                    | 1,637        | 24.3        | 6,450                                    | 1,548        | 24.0        | 6,609                                    | 1,496        | 22.6        | 6,306                                    | 1,432        | 22.7        |
| Other <sup>e</sup>                                 |                                          |               |             |                                          |               |             |                                          |               |             |                                          |               |             |                                          |              |             |                                          |              |             |                                          |              |             |                                          |              |             |
| Male                                               | 48                                       | 19            | 40.8        | 42                                       | 16            | 39.0        | 47                                       | 18            | 39.1        | 40                                       | 16            | 40.1        | 36                                       | 13           | 37.6        | 34                                       | 13           | 37.6        | 26                                       | 10           | 38.5        | 35                                       | 11           | 33.0        |
| Female                                             | 34                                       | 14            | 39.9        | 39                                       | 15            | 39.8        | 33                                       | 8             | 23.7        | 45                                       | 12            | 25.6        | 32                                       | 10           | 31.8        | 29                                       | 7            | 22.2        | 47                                       | 9            | 18.9        | 47                                       | 7            | 14.6        |
| <b>Total</b>                                       | <b>44,086</b>                            | <b>12,503</b> | <b>28.4</b> | <b>42,285</b>                            | <b>11,832</b> | <b>28.0</b> | <b>41,467</b>                            | <b>11,287</b> | <b>27.2</b> | <b>39,987</b>                            | <b>10,929</b> | <b>27.3</b> | <b>40,667</b>                            | <b>9,190</b> | <b>22.6</b> | <b>40,406</b>                            | <b>8,737</b> | <b>21.6</b> | <b>40,121</b>                            | <b>8,548</b> | <b>21.3</b> | <b>38,681</b>                            | <b>8,095</b> | <b>20.9</b> |

Abbreviation: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage [footnotes only].

Note. Data are based on residence at diagnosis.

<sup>a</sup> Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

<sup>b</sup> Hispanics/Latinos can be of any race.

<sup>c</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>d</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>e</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

**Table 1c. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and area of residence, 2010–2017—United States and 6 dependent areas**

|                      | 2010         |                                             |      | 2011         |                                             |      | 2012         |                                             |      | 2013         |                                             |      | 2014         |                                             |      | 2015         |                                             |      | 2016         |                                             |      | 2017         |                                             |      |
|----------------------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|--------------|---------------------------------------------|------|
|                      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      | Total<br>No. | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |      |
|                      |              | No.                                         | %    |              | No.                                         | %    |              | No.                                         | %    |              | No.                                         | %    |              | No.                                         | %    |              | No.                                         | %    |              | No.                                         | %    |              | No.                                         | %    |
| Alabama              | 681          | 144                                         | 21.1 | 682          | 160                                         | 23.5 | 666          | 164                                         | 24.6 | 633          | 165                                         | 26.1 | 673          | 147                                         | 21.8 | 664          | 160                                         | 24.1 | 664          | 144                                         | 21.7 | 653          | 142                                         | 21.7 |
| Alaska               | 35           | 12                                          | 34.3 | 24           | 8                                           | 33.3 | 28           | 10                                          | 35.7 | 23           | 7                                           | 30.4 | 38           | 4                                           | 10.5 | 25           | 5                                           | 20.0 | 37           | 6                                           | 16.2 | 29           | 7                                           | 24.1 |
| Arizona              | 619          | 218                                         | 35.2 | 565          | 169                                         | 29.9 | 623          | 155                                         | 24.9 | 691          | 193                                         | 27.9 | 744          | 153                                         | 20.6 | 693          | 149                                         | 21.5 | 717          | 144                                         | 20.1 | 727          | 137                                         | 18.8 |
| Arkansas             | 235          | 61                                          | 26.0 | 240          | 53                                          | 22.1 | 248          | 61                                          | 24.6 | 263          | 70                                          | 26.6 | 312          | 66                                          | 21.2 | 272          | 62                                          | 22.8 | 311          | 69                                          | 22.2 | 286          | 51                                          | 17.8 |
| California           | 5,281        | 1,485                                       | 28.1 | 5,061        | 1,352                                       | 26.7 | 5,064        | 1,364                                       | 26.9 | 4,714        | 1,223                                       | 25.9 | 5,167        | 1,016                                       | 19.7 | 5,116        | 948                                         | 18.5 | 5,148        | 961                                         | 18.7 | 4,767        | 908                                         | 19.0 |
| Colorado             | 421          | 142                                         | 33.7 | 363          | 108                                         | 29.8 | 371          | 101                                         | 27.2 | 312          | 92                                          | 29.5 | 379          | 102                                         | 26.9 | 378          | 99                                          | 26.2 | 424          | 84                                          | 19.8 | 441          | 80                                          | 18.1 |
| Connecticut          | 390          | 140                                         | 35.9 | 352          | 124                                         | 35.2 | 288          | 112                                         | 38.9 | 328          | 103                                         | 31.4 | 293          | 90                                          | 30.7 | 275          | 71                                          | 25.8 | 261          | 68                                          | 26.1 | 275          | 65                                          | 23.6 |
| Delaware             | 126          | 45                                          | 35.7 | 113          | 35                                          | 31.0 | 136          | 47                                          | 34.6 | 110          | 48                                          | 43.6 | 115          | 34                                          | 29.6 | 103          | 29                                          | 28.2 | 111          | 34                                          | 30.6 | 125          | 32                                          | 25.6 |
| District of Columbia | 802          | 176                                         | 21.9 | 642          | 150                                         | 23.4 | 573          | 116                                         | 20.2 | 492          | 102                                         | 20.7 | 418          | 72                                          | 17.2 | 370          | 55                                          | 14.9 | 344          | 59                                          | 17.2 | 305          | 40                                          | 13.1 |
| Florida              | 4,648        | 1,279                                       | 27.5 | 4,589        | 1,229                                       | 26.8 | 4,391        | 1,164                                       | 26.5 | 4,302        | 1,227                                       | 28.5 | 4,485        | 1,030                                       | 23.0 | 4,587        | 986                                         | 21.5 | 4,684        | 998                                         | 21.3 | 4,590        | 976                                         | 21.3 |
| Georgia              | 2,697        | 731                                         | 27.1 | 2,720        | 760                                         | 27.9 | 2,677        | 720                                         | 26.9 | 2,340        | 617                                         | 26.4 | 2,385        | 564                                         | 23.6 | 2,621        | 536                                         | 20.5 | 2,493        | 474                                         | 19.0 | 2,584        | 567                                         | 21.9 |
| Hawaii               | 105          | 33                                          | 31.4 | 82           | 28                                          | 34.1 | 81           | 28                                          | 34.6 | 97           | 35                                          | 36.1 | 99           | 31                                          | 31.3 | 120          | 23                                          | 19.2 | 78           | 11                                          | 14.1 | 78           | 13                                          | 16.7 |
| Idaho                | 44           | 20                                          | 45.5 | 35           | 10                                          | 28.6 | 36           | 11                                          | 30.6 | 26           | 8                                           | 30.8 | 22           | 7                                           | 31.8 | 40           | 14                                          | 35.0 | 45           | 7                                           | 15.6 | 45           | 11                                          | 24.4 |
| Illinois             | 1,676        | 495                                         | 29.5 | 1,632        | 455                                         | 27.9 | 1,675        | 443                                         | 26.4 | 1,603        | 410                                         | 25.6 | 1,538        | 326                                         | 21.2 | 1,556        | 331                                         | 21.3 | 1,489        | 309                                         | 20.8 | 1,354        | 274                                         | 20.2 |
| Indiana              | 486          | 131                                         | 27.0 | 467          | 140                                         | 30.0 | 491          | 132                                         | 26.9 | 474          | 118                                         | 24.9 | 465          | 116                                         | 24.9 | 632          | 121                                         | 19.1 | 483          | 109                                         | 22.6 | 516          | 124                                         | 24.0 |
| Iowa                 | 114          | 51                                          | 44.7 | 114          | 35                                          | 30.7 | 116          | 46                                          | 39.7 | 120          | 54                                          | 45.0 | 94           | 33                                          | 35.1 | 124          | 46                                          | 37.1 | 133          | 31                                          | 23.3 | 126          | 27                                          | 21.4 |
| Kansas               | 136          | 50                                          | 36.8 | 135          | 42                                          | 31.1 | 152          | 52                                          | 34.2 | 147          | 50                                          | 34.0 | 130          | 37                                          | 28.5 | 153          | 35                                          | 22.9 | 146          | 35                                          | 24.0 | 117          | 26                                          | 22.2 |
| Kentucky             | 332          | 99                                          | 29.8 | 309          | 103                                         | 33.3 | 360          | 96                                          | 26.7 | 354          | 99                                          | 28.0 | 344          | 90                                          | 26.2 | 339          | 79                                          | 23.3 | 336          | 109                                         | 32.4 | 365          | 86                                          | 23.6 |
| Louisiana            | 1,114        | 331                                         | 29.7 | 1,194        | 366                                         | 30.7 | 1,024        | 347                                         | 33.9 | 1,135        | 338                                         | 29.8 | 1,206        | 275                                         | 22.8 | 1,098        | 242                                         | 22.0 | 1,118        | 261                                         | 23.3 | 1,008        | 229                                         | 22.7 |
| Maine                | 55           | 16                                          | 29.1 | 49           | 15                                          | 30.6 | 48           | 11                                          | 22.9 | 35           | 14                                          | 40.0 | 55           | 7                                           | 12.7 | 46           | 13                                          | 28.3 | 53           | 12                                          | 22.6 | 31           | 12                                          | 38.7 |
| Maryland             | 1,761        | 422                                         | 24.0 | 1,436        | 367                                         | 25.6 | 1,336        | 321                                         | 24.0 | 1,311        | 350                                         | 26.7 | 1,238        | 283                                         | 22.9 | 1,185        | 260                                         | 21.9 | 1,105        | 229                                         | 20.7 | 1,020        | 249                                         | 24.4 |
| Massachusetts        | 705          | 220                                         | 31.2 | 690          | 225                                         | 32.6 | 700          | 205                                         | 29.3 | 670          | 191                                         | 28.5 | 641          | 146                                         | 22.8 | 597          | 136                                         | 22.8 | 634          | 138                                         | 21.8 | 597          | 121                                         | 20.3 |
| Michigan             | 762          | 225                                         | 29.5 | 769          | 199                                         | 25.9 | 787          | 196                                         | 24.9 | 747          | 224                                         | 30.0 | 777          | 176                                         | 22.7 | 723          | 161                                         | 22.3 | 744          | 178                                         | 23.9 | 761          | 149                                         | 19.6 |
| Minnesota            | 336          | 93                                          | 27.7 | 296          | 85                                          | 28.7 | 314          | 85                                          | 27.1 | 307          | 94                                          | 30.6 | 310          | 79                                          | 25.5 | 296          | 73                                          | 24.7 | 295          | 67                                          | 22.7 | 276          | 76                                          | 27.5 |
| Mississippi          | 457          | 150                                         | 32.8 | 524          | 161                                         | 30.7 | 445          | 116                                         | 26.1 | 471          | 141                                         | 29.9 | 477          | 130                                         | 27.3 | 508          | 119                                         | 23.4 | 422          | 118                                         | 28.0 | 426          | 115                                         | 27.0 |
| Missouri             | 571          | 124                                         | 21.7 | 524          | 152                                         | 29.0 | 529          | 139                                         | 26.3 | 464          | 120                                         | 25.9 | 467          | 110                                         | 23.6 | 461          | 95                                          | 20.6 | 510          | 120                                         | 23.5 | 504          | 84                                          | 16.7 |
| Montana              | 20           | 5                                           | 25.0 | 22           | 5                                           | 22.7 | 20           | 8                                           | 40.0 | 22           | 7                                           | 31.8 | 14           | 5                                           | 35.7 | 19           | 6                                           | 31.6 | 21           | 4                                           | 19.0 | 31           | 6                                           | 19.4 |
| Nebraska             | 115          | 40                                          | 34.8 | 79           | 27                                          | 34.2 | 82           | 25                                          | 30.5 | 79           | 29                                          | 36.7 | 88           | 28                                          | 31.8 | 79           | 22                                          | 27.8 | 76           | 18                                          | 23.7 | 88           | 13                                          | 14.8 |
| Nevada               | 376          | 124                                         | 33.0 | 382          | 124                                         | 32.5 | 363          | 117                                         | 32.2 | 433          | 134                                         | 30.9 | 429          | 113                                         | 26.3 | 477          | 108                                         | 22.6 | 514          | 113                                         | 22.0 | 491          | 107                                         | 21.8 |
| New Hampshire        | 50           | 11                                          | 22.0 | 39           | 13                                          | 33.3 | 47           | 20                                          | 42.6 | 35           | 10                                          | 28.6 | 41           | 9                                           | 22.0 | 25           | 3                                           | 12.0 | 41           | 11                                          | 26.8 | 35           | 5                                           | 14.3 |
| New Jersey           | 1,369        | 415                                         | 30.3 | 1,192        | 345                                         | 28.9 | 1,296        | 374                                         | 28.9 | 1,207        | 359                                         | 29.7 | 1,243        | 331                                         | 26.6 | 1,201        | 314                                         | 26.1 | 1,214        | 281                                         | 23.1 | 1,133        | 238                                         | 21.0 |
| New Mexico           | 148          | 53                                          | 35.8 | 137          | 41                                          | 29.9 | 118          | 38                                          | 32.2 | 142          | 38                                          | 26.8 | 134          | 39                                          | 29.1 | 135          | 32                                          | 23.7 | 144          | 30                                          | 20.8 | 135          | 29                                          | 21.5 |

Table 1c. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by year of diagnosis and area of residence, 2010–2017—United States and 6 dependent areas (cont)

|                             | 2010          |                                             |             | 2011          |                                             |             | 2012          |                                             |             | 2013          |                                             |             | 2014          |                                             |             | 2015          |                                             |             | 2016          |                                             |             | 2017          |                                             |             |
|-----------------------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|---------------|---------------------------------------------|-------------|
|                             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             | Total<br>No.  | Stage 3 (AIDS)<br>at diagnosis <sup>a</sup> |             |
|                             |               | No.                                         | %           |               | No.                                         | %           |               | No.                                         | %           |               | No.                                         | %           |               | No.                                         | %           |               | No.                                         | %           |               | No.                                         | %           |               | No.                                         | %           |
| New York                    | 3,942         | 1,073                                       | 27.2        | 3,787         | 991                                         | 26.2        | 3,547         | 891                                         | 25.1        | 3,253         | 818                                         | 25.1        | 3,329         | 720                                         | 21.6        | 3,063         | 657                                         | 21.4        | 2,829         | 578                                         | 20.4        | 2,744         | 580                                         | 21.1        |
| North Carolina              | 1,444         | 358                                         | 24.8        | 1,439         | 358                                         | 24.9        | 1,231         | 280                                         | 22.7        | 1,282         | 335                                         | 26.1        | 1,310         | 282                                         | 21.5        | 1,324         | 291                                         | 22.0        | 1,391         | 273                                         | 19.6        | 1,301         | 265                                         | 20.4        |
| North Dakota                | 13            | 3                                           | 23.1        | 12            | 1                                           | 8.3         | 11            | 4                                           | 36.4        | 19            | 7                                           | 36.8        | 21            | 5                                           | 23.8        | 21            | 9                                           | 42.9        | 46            | 11                                          | 23.9        | 37            | 10                                          | 27.0        |
| Ohio                        | 982           | 273                                         | 27.8        | 1,048         | 282                                         | 26.9        | 1,019         | 284                                         | 27.9        | 1,042         | 273                                         | 26.2        | 952           | 213                                         | 22.4        | 933           | 197                                         | 21.1        | 982           | 228                                         | 23.2        | 1,006         | 212                                         | 21.1        |
| Oklahoma                    | 285           | 71                                          | 24.9        | 314           | 82                                          | 26.1        | 285           | 78                                          | 27.4        | 332           | 66                                          | 19.9        | 304           | 71                                          | 23.4        | 314           | 68                                          | 21.7        | 293           | 74                                          | 25.3        | 299           | 63                                          | 21.1        |
| Oregon                      | 240           | 87                                          | 36.2        | 240           | 87                                          | 36.2        | 271           | 86                                          | 31.7        | 228           | 87                                          | 38.2        | 239           | 79                                          | 33.1        | 221           | 67                                          | 30.3        | 226           | 57                                          | 25.2        | 202           | 49                                          | 24.3        |
| Pennsylvania                | 1,486         | 474                                         | 31.9        | 1,385         | 412                                         | 29.7        | 1,420         | 449                                         | 31.6        | 1,296         | 362                                         | 27.9        | 1,200         | 313                                         | 26.1        | 1,177         | 304                                         | 25.8        | 1,130         | 274                                         | 24.2        | 1,083         | 261                                         | 24.1        |
| Rhode Island                | 115           | 36                                          | 31.3        | 100           | 40                                          | 40.0        | 78            | 27                                          | 34.6        | 78            | 32                                          | 41.0        | 89            | 24                                          | 27.0        | 64            | 19                                          | 29.7        | 70            | 19                                          | 27.1        | 83            | 24                                          | 28.9        |
| South Carolina              | 768           | 280                                         | 36.5        | 742           | 295                                         | 39.8        | 701           | 254                                         | 36.2        | 707           | 251                                         | 35.5        | 761           | 169                                         | 22.2        | 667           | 171                                         | 25.6        | 744           | 179                                         | 24.1        | 707           | 182                                         | 25.7        |
| South Dakota                | 32            | 6                                           | 18.8        | 21            | 10                                          | 47.6        | 25            | 8                                           | 32.0        | 31            | 11                                          | 35.5        | 29            | 7                                           | 24.1        | 23            | 11                                          | 47.8        | 43            | 12                                          | 27.9        | 38            | 6                                           | 15.8        |
| Tennessee                   | 856           | 234                                         | 27.3        | 847           | 201                                         | 23.7        | 853           | 194                                         | 22.7        | 770           | 226                                         | 29.4        | 757           | 158                                         | 20.9        | 742           | 129                                         | 17.4        | 709           | 114                                         | 16.1        | 713           | 121                                         | 17.0        |
| Texas                       | 4,453         | 1,259                                       | 28.3        | 4,274         | 1,218                                       | 28.5        | 4,317         | 1,167                                       | 27.0        | 4,336         | 1,123                                       | 25.9        | 4,416         | 948                                         | 21.5        | 4,505         | 967                                         | 21.5        | 4,519         | 961                                         | 21.3        | 4,309         | 860                                         | 20.0        |
| Utah                        | 85            | 26                                          | 30.6        | 106           | 29                                          | 27.4        | 122           | 46                                          | 37.7        | 110           | 27                                          | 24.5        | 114           | 23                                          | 20.2        | 120           | 25                                          | 20.8        | 139           | 25                                          | 18.0        | 115           | 22                                          | 19.1        |
| Vermont                     | 20            | 5                                           | 25.0        | 13            | 6                                           | 46.2        | 14            | 3                                           | 21.4        | 13            | 5                                           | 38.5        | 17            | 4                                           | 23.5        | 14            | 4                                           | 28.6        | 5             | 3                                           | 60.0        | 22            | 9                                           | 40.9        |
| Virginia                    | 994           | 291                                         | 29.3        | 903           | 245                                         | 27.1        | 937           | 255                                         | 27.2        | 952           | 238                                         | 25.0        | 902           | 197                                         | 21.8        | 955           | 184                                         | 19.3        | 903           | 192                                         | 21.3        | 864           | 171                                         | 19.8        |
| Washington                  | 539           | 165                                         | 30.6        | 481           | 160                                         | 33.3        | 497           | 139                                         | 28.0        | 445           | 118                                         | 26.5        | 439           | 103                                         | 23.5        | 452           | 105                                         | 23.2        | 428           | 104                                         | 24.3        | 438           | 97                                          | 22.1        |
| West Virginia               | 73            | 26                                          | 35.6        | 87            | 33                                          | 37.9        | 82            | 29                                          | 35.4        | 73            | 27                                          | 37.0        | 86            | 23                                          | 26.7        | 72            | 26                                          | 36.1        | 67            | 20                                          | 29.9        | 76            | 22                                          | 28.9        |
| Wisconsin                   | 252           | 63                                          | 25.0        | 244           | 77                                          | 31.6        | 217           | 78                                          | 35.9        | 242           | 75                                          | 31.0        | 217           | 56                                          | 25.8        | 225           | 46                                          | 20.4        | 229           | 47                                          | 20.5        | 258           | 50                                          | 19.4        |
| Wyoming                     | 19            | 8                                           | 42.1        | 15            | 10                                          | 66.7        | 7             | 3                                           | 42.9        | 15            | 7                                           | 46.7        | 10            | 1                                           | 10.0        | 17            | 3                                           | 17.6        | 21            | 8                                           | 38.1        | 10            | 4                                           | 40.0        |
| <b>Subtotal</b>             | <b>43,265</b> | <b>12,279</b>                               | <b>28.4</b> | <b>41,516</b> | <b>11,623</b>                               | <b>28.0</b> | <b>40,719</b> | <b>11,099</b>                               | <b>27.3</b> | <b>39,311</b> | <b>10,758</b>                               | <b>27.4</b> | <b>40,013</b> | <b>9,045</b>                                | <b>22.6</b> | <b>39,827</b> | <b>8,616</b>                                | <b>21.6</b> | <b>39,569</b> | <b>8,411</b>                                | <b>21.3</b> | <b>38,224</b> | <b>8,007</b>                                | <b>20.9</b> |
| <b>U.S. dependent areas</b> |               |                                             |             |               |                                             |             |               |                                             |             |               |                                             |             |               |                                             |             |               |                                             |             |               |                                             |             |               |                                             |             |
| American Samoa              | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         |
| Guam                        | 6             | 2                                           | 33.3        | 1             | 0                                           | 0.0         | 7             | 2                                           | 28.6        | 1             | 0                                           | 0.0         | 3             | 0                                           | 0.0         | 6             | 2                                           | 33.3        | 4             | 2                                           | 50.0        | 6             | 4                                           | 66.7        |
| Northern Mariana Islands    | 0             | 0                                           | 0.0         | 2             | 1                                           | 50.0        | 0             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 1             | 1                                           | 100         | 2             | 1                                           | 50.0        | 0             | 0                                           | 0.0         | 1             | 0                                           | 0.0         |
| Puerto Rico                 | 785           | 208                                         | 26.5        | 737           | 199                                         | 27.0        | 728           | 181                                         | 24.9        | 649           | 165                                         | 25.4        | 624           | 133                                         | 21.3        | 558           | 112                                         | 20.1        | 533           | 130                                         | 24.4        | 443           | 84                                          | 19.0        |
| Republic of Palau           | 0             | 0                                           | 0.0         | 1             | 1                                           | 100         | 0             | 0                                           | 0.0         | 1             | 0                                           | 0.0         | 0             | 0                                           | 0.0         | 1             | 0                                           | 0.0         | 2             | 0                                           | 0.0         | 0             | 0                                           | 0.0         |
| U.S. Virgin Islands         | 30            | 14                                          | 46.7        | 28            | 8                                           | 28.6        | 13            | 5                                           | 38.5        | 25            | 6                                           | 24.0        | 26            | 11                                          | 42.3        | 12            | 6                                           | 50.0        | 13            | 5                                           | 38.5        | 7             | 0                                           | 0.0         |
| <b>Subtotal</b>             | <b>821</b>    | <b>224</b>                                  | <b>27.3</b> | <b>769</b>    | <b>209</b>                                  | <b>27.2</b> | <b>748</b>    | <b>188</b>                                  | <b>25.1</b> | <b>676</b>    | <b>171</b>                                  | <b>25.3</b> | <b>654</b>    | <b>145</b>                                  | <b>22.2</b> | <b>579</b>    | <b>121</b>                                  | <b>20.9</b> | <b>552</b>    | <b>137</b>                                  | <b>24.8</b> | <b>457</b>    | <b>88</b>                                   | <b>19.3</b> |
| <b>Total</b>                | <b>44,086</b> | <b>12,503</b>                               | <b>28.4</b> | <b>42,285</b> | <b>11,832</b>                               | <b>28.0</b> | <b>41,467</b> | <b>11,287</b>                               | <b>27.2</b> | <b>39,987</b> | <b>10,929</b>                               | <b>27.3</b> | <b>40,667</b> | <b>9,190</b>                                | <b>22.6</b> | <b>40,406</b> | <b>8,737</b>                                | <b>21.6</b> | <b>40,121</b> | <b>8,548</b>                                | <b>21.3</b> | <b>38,681</b> | <b>8,095</b>                                | <b>20.9</b> |

Abbreviation: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage [footnotes only].

Note. Data are based on residence at diagnosis.

<sup>a</sup> Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

**Table 1d. Stage 3 (AIDS) at HIV diagnosis, among persons aged ≥13 years, by race/ethnicity and area of residence, 2017—United States**

|                      | Black/African American |                                          |             | Hispanic/Latino <sup>a</sup> |                                          |             | White        |                                          |             | Other <sup>b</sup> |                                          |             |
|----------------------|------------------------|------------------------------------------|-------------|------------------------------|------------------------------------------|-------------|--------------|------------------------------------------|-------------|--------------------|------------------------------------------|-------------|
|                      | Total No.              | Stage 3 (AIDS) at diagnosis <sup>c</sup> |             | Total No.                    | Stage 3 (AIDS) at diagnosis <sup>c</sup> |             | Total No.    | Stage 3 (AIDS) at diagnosis <sup>c</sup> |             | Total No.          | Stage 3 (AIDS) at diagnosis <sup>c</sup> |             |
|                      |                        | No.                                      | %           |                              | No.                                      | %           |              | No.                                      | %           |                    | No.                                      | %           |
| Alabama              | 430                    | 91                                       | 21.2        | 22                           | 7                                        | 31.8        | 180          | 39                                       | 21.7        | 21                 | 5                                        | 23.8        |
| Alaska               | 4                      | 1                                        | 25.0        | 3                            | 1                                        | 33.3        | 9            | 2                                        | 22.2        | 13                 | 3                                        | 23.1        |
| Arizona              | 116                    | 9                                        | 7.8         | 296                          | 60                                       | 20.3        | 246          | 49                                       | 19.9        | 69                 | 19                                       | 27.5        |
| Arkansas             | 145                    | 24                                       | 16.6        | 19                           | 6                                        | 31.6        | 113          | 20                                       | 17.7        | 9                  | 1                                        | 11.1        |
| California           | 794                    | 123                                      | 15.5        | 2,227                        | 451                                      | 20.3        | 1,234        | 228                                      | 18.5        | 512                | 106                                      | 20.7        |
| Colorado             | 56                     | 8                                        | 14.3        | 156                          | 32                                       | 20.5        | 209          | 36                                       | 17.2        | 20                 | 4                                        | 20.0        |
| Connecticut          | 109                    | 24                                       | 22.0        | 83                           | 15                                       | 18.1        | 77           | 22                                       | 28.6        | 6                  | 4                                        | 66.7        |
| Delaware             | 76                     | 20                                       | 26.3        | 20                           | 5                                        | 25.0        | 28           | 7                                        | 25.0        | 1                  | 0                                        | 0.0         |
| District of Columbia | 221                    | 30                                       | 13.6        | 43                           | 4                                        | 9.3         | 31           | 5                                        | 16.1        | 10                 | 1                                        | 10.0        |
| Florida              | 1,930                  | 425                                      | 22.0        | 1,452                        | 280                                      | 19.3        | 1,104        | 238                                      | 21.6        | 104                | 33                                       | 31.7        |
| Georgia              | 1,864                  | 392                                      | 21.0        | 193                          | 56                                       | 29.0        | 437          | 99                                       | 22.7        | 90                 | 20                                       | 22.2        |
| Hawaii               | 4                      | 1                                        | 25.0        | 13                           | 1                                        | 7.7         | 22           | 2                                        | 9.1         | 39                 | 9                                        | 23.1        |
| Idaho                | 4                      | 1                                        | 25.0        | 5                            | 1                                        | 20.0        | 33           | 8                                        | 24.2        | 3                  | 1                                        | 33.3        |
| Illinois             | 687                    | 130                                      | 18.9        | 275                          | 60                                       | 21.8        | 321          | 70                                       | 21.8        | 71                 | 14                                       | 19.7        |
| Indiana              | 235                    | 47                                       | 20.0        | 60                           | 22                                       | 36.7        | 191          | 50                                       | 26.2        | 30                 | 5                                        | 16.7        |
| Iowa                 | 37                     | 8                                        | 21.6        | 18                           | 3                                        | 16.7        | 63           | 15                                       | 23.8        | 8                  | 1                                        | 12.5        |
| Kansas               | 36                     | 6                                        | 16.7        | 23                           | 4                                        | 17.4        | 50           | 15                                       | 30.0        | 8                  | 1                                        | 12.5        |
| Kentucky             | 112                    | 22                                       | 19.6        | 23                           | 6                                        | 26.1        | 220          | 57                                       | 25.9        | 10                 | 1                                        | 10.0        |
| Louisiana            | 696                    | 150                                      | 21.6        | 71                           | 18                                       | 25.4        | 228          | 58                                       | 25.4        | 13                 | 3                                        | 23.1        |
| Maine                | 4                      | 2                                        | 50.0        | 1                            | 0                                        | 0.0         | 25           | 9                                        | 36.0        | 1                  | 1                                        | 100         |
| Maryland             | 715                    | 158                                      | 22.1        | 100                          | 32                                       | 32.0        | 150          | 42                                       | 28.0        | 55                 | 17                                       | 30.9        |
| Massachusetts        | 163                    | 53                                       | 32.5        | 180                          | 28                                       | 15.6        | 221          | 31                                       | 14.0        | 33                 | 9                                        | 27.3        |
| Michigan             | 438                    | 79                                       | 18.0        | 62                           | 10                                       | 16.1        | 241          | 60                                       | 24.9        | 20                 | 0                                        | 0.0         |
| Minnesota            | 129                    | 33                                       | 25.6        | 32                           | 10                                       | 31.3        | 95           | 25                                       | 26.3        | 20                 | 8                                        | 40.0        |
| Mississippi          | 340                    | 92                                       | 27.1        | 11                           | 3                                        | 27.3        | 68           | 20                                       | 29.4        | 7                  | 0                                        | 0.0         |
| Missouri             | 258                    | 37                                       | 14.3        | 39                           | 9                                        | 23.1        | 190          | 35                                       | 18.4        | 17                 | 3                                        | 17.6        |
| Montana              | 0                      | 0                                        | 0.0         | 4                            | 1                                        | 25.0        | 22           | 5                                        | 22.7        | 5                  | 0                                        | 0.0         |
| Nebraska             | 26                     | 4                                        | 15.4        | 15                           | 2                                        | 13.3        | 37           | 6                                        | 16.2        | 10                 | 1                                        | 10.0        |
| Nevada               | 146                    | 25                                       | 17.1        | 139                          | 38                                       | 27.3        | 172          | 36                                       | 20.9        | 34                 | 8                                        | 23.5        |
| New Hampshire        | 6                      | 0                                        | 0.0         | 5                            | 1                                        | 20.0        | 22           | 4                                        | 18.2        | 2                  | 0                                        | 0.0         |
| New Jersey           | 508                    | 105                                      | 20.7        | 397                          | 80                                       | 20.2        | 176          | 37                                       | 21.0        | 52                 | 16                                       | 30.8        |
| New Mexico           | 9                      | 3                                        | 33.3        | 62                           | 12                                       | 19.4        | 37           | 10                                       | 27.0        | 27                 | 4                                        | 14.8        |
| New York             | 1,081                  | 241                                      | 22.3        | 950                          | 188                                      | 19.8        | 456          | 94                                       | 20.6        | 257                | 57                                       | 22.2        |
| North Carolina       | 843                    | 162                                      | 19.2        | 121                          | 29                                       | 24.0        | 288          | 63                                       | 21.9        | 49                 | 11                                       | 22.4        |
| North Dakota         | 13                     | 4                                        | 30.8        | 3                            | 0                                        | 0.0         | 15           | 5                                        | 33.3        | 6                  | 1                                        | 16.7        |
| Ohio                 | 447                    | 94                                       | 21.0        | 69                           | 21                                       | 30.4        | 429          | 85                                       | 19.8        | 61                 | 12                                       | 19.7        |
| Oklahoma             | 80                     | 9                                        | 11.3        | 56                           | 16                                       | 28.6        | 121          | 27                                       | 22.3        | 42                 | 11                                       | 26.2        |
| Oregon               | 17                     | 3                                        | 17.6        | 44                           | 10                                       | 22.7        | 123          | 31                                       | 25.2        | 18                 | 5                                        | 27.8        |
| Pennsylvania         | 547                    | 124                                      | 22.7        | 181                          | 38                                       | 21.0        | 316          | 89                                       | 28.2        | 39                 | 10                                       | 25.6        |
| Rhode Island         | 16                     | 5                                        | 31.3        | 24                           | 4                                        | 16.7        | 39           | 14                                       | 35.9        | 4                  | 1                                        | 25.0        |
| South Carolina       | 442                    | 107                                      | 24.2        | 69                           | 25                                       | 36.2        | 165          | 43                                       | 26.1        | 31                 | 7                                        | 22.6        |
| South Dakota         | 7                      | 2                                        | 28.6        | 5                            | 1                                        | 20.0        | 16           | 1                                        | 6.3         | 10                 | 2                                        | 20.0        |
| Tennessee            | 404                    | 61                                       | 15.1        | 37                           | 12                                       | 32.4        | 256          | 45                                       | 17.6        | 16                 | 3                                        | 18.8        |
| Texas                | 1,585                  | 263                                      | 16.6        | 1,735                        | 398                                      | 22.9        | 816          | 164                                      | 20.1        | 173                | 35                                       | 20.2        |
| Utah                 | 12                     | 1                                        | 8.3         | 39                           | 11                                       | 28.2        | 54           | 7                                        | 13.0        | 10                 | 3                                        | 30.0        |
| Vermont              | 2                      | 2                                        | 100         | 2                            | 0                                        | 0.0         | 16           | 7                                        | 43.8        | 2                  | 0                                        | 0.0         |
| Virginia             | 492                    | 91                                       | 18.5        | 92                           | 23                                       | 25.0        | 211          | 42                                       | 19.9        | 69                 | 15                                       | 21.7        |
| Washington           | 112                    | 27                                       | 24.1        | 90                           | 16                                       | 17.8        | 188          | 40                                       | 21.3        | 48                 | 14                                       | 29.2        |
| West Virginia        | 20                     | 5                                        | 25.0        | 1                            | 0                                        | 0.0         | 49           | 14                                       | 28.6        | 6                  | 3                                        | 50.0        |
| Wisconsin            | 107                    | 16                                       | 15.0        | 34                           | 8                                        | 23.5        | 101          | 21                                       | 20.8        | 16                 | 5                                        | 31.3        |
| Wyoming              | 0                      | 0                                        | 0.0         | 1                            | 0                                        | 0.0         | 9            | 4                                        | 44.4        | 0                  | 0                                        | 0.0         |
| <b>Total</b>         | <b>16,525</b>          | <b>3,320</b>                             | <b>20.1</b> | <b>9,602</b>                 | <b>2,058</b>                             | <b>21.4</b> | <b>9,920</b> | <b>2,136</b>                             | <b>21.5</b> | <b>2,177</b>       | <b>493</b>                               | <b>22.6</b> |

Abbreviation: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage [footnotes only].

Note. Data are based on residence at diagnosis.

<sup>a</sup> Hispanics/Latinos can be of any race.

<sup>b</sup> Includes American Indian/Alaska Native, Asian, Native Hawaiian/other Pacific Islander, and multiple races.

<sup>c</sup> Based on first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection.

**Table 2a. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by selected characteristics—41 states and the District of Columbia**

|                                                       | Total No.     | Stage 0 <sup>a</sup> |            | Stage 1<br>(CD4 ≥500 cells/μL<br>or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 < 200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|-------------------------------------------------------|---------------|----------------------|------------|-------------------------------------------|-------------|----------------------------------------------|-------------|------------------------------------------------------|-------------|----------------------------|-------------|
|                                                       |               | No.                  | %          | No.                                       | %           | No.                                          | %           | No.                                                  | %           | No.                        | %           |
|                                                       |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| <b>Sex</b>                                            |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| Male                                                  | 27,505        | 1,812                | 6.6        | 6,873                                     | 25.0        | 8,503                                        | 30.9        | 5,652                                                | 20.5        | 4,665                      | 17.0        |
| Female                                                | 6,450         | 310                  | 4.8        | 1,805                                     | 28.0        | 1,806                                        | 28.0        | 1,429                                                | 22.2        | 1,100                      | 17.1        |
| <b>Age at diagnosis (yr)</b>                          |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| 13–24                                                 | 7,342         | 665                  | 9.1        | 2,062                                     | 28.1        | 2,570                                        | 35.0        | 671                                                  | 9.1         | 1,374                      | 18.7        |
| 25–34                                                 | 11,852        | 819                  | 6.9        | 3,287                                     | 27.7        | 3,761                                        | 31.7        | 1,924                                                | 16.2        | 2,061                      | 17.4        |
| 35–44                                                 | 6,463         | 294                  | 4.5        | 1,601                                     | 24.8        | 1,869                                        | 28.9        | 1,662                                                | 25.7        | 1,037                      | 16.0        |
| 45–54                                                 | 4,936         | 195                  | 4.0        | 1,054                                     | 21.4        | 1,263                                        | 25.6        | 1,665                                                | 33.7        | 759                        | 15.4        |
| ≥55                                                   | 3,362         | 149                  | 4.4        | 674                                       | 20.0        | 846                                          | 25.2        | 1,159                                                | 34.5        | 534                        | 15.9        |
| <b>Race/ethnicity</b>                                 |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| American Indian/Alaska Native                         | 158           | 12                   | 7.6        | 48                                        | 30.4        | 44                                           | 27.8        | 30                                                   | 19.0        | 24                         | 15.2        |
| Asian                                                 | 855           | 41                   | 4.8        | 168                                       | 19.6        | 310                                          | 36.3        | 212                                                  | 24.8        | 124                        | 14.5        |
| Black/African American                                | 14,909        | 855                  | 5.7        | 3,493                                     | 23.4        | 4,616                                        | 31.0        | 3,002                                                | 20.1        | 2,943                      | 19.7        |
| Hispanic/Latino <sup>c</sup>                          | 8,517         | 543                  | 6.4        | 2,166                                     | 25.4        | 2,676                                        | 31.4        | 1,825                                                | 21.4        | 1,307                      | 15.3        |
| Native Hawaiian/<br>Other Pacific Islander            | 43            | 5                    | 11.6       | 7                                         | 16.3        | 12                                           | 27.9        | 13                                                   | 30.2        | 6                          | 14.0        |
| White                                                 | 8,578         | 592                  | 6.9        | 2,558                                     | 29.8        | 2,375                                        | 27.7        | 1,818                                                | 21.2        | 1,235                      | 14.4        |
| Multiple races                                        | 895           | 74                   | 8.3        | 238                                       | 26.6        | 276                                          | 30.8        | 181                                                  | 20.2        | 126                        | 14.1        |
| <b>Transmission category<sup>d</sup></b>              |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| Male-to-male sexual contact                           | 22,752        | 1,600                | 7.0        | 5,833                                     | 25.6        | 7,170                                        | 31.5        | 4,309                                                | 18.9        | 3,840                      | 16.9        |
| Injection drug use                                    |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| Male                                                  | 1,078         | 49                   | 4.5        | 249                                       | 23.1        | 302                                          | 28.0        | 287                                                  | 26.7        | 190                        | 17.7        |
| Female                                                | 858           | 55                   | 6.4        | 250                                       | 29.1        | 212                                          | 24.7        | 175                                                  | 20.4        | 166                        | 19.4        |
| Male-to-male sexual contact and<br>injection drug use | 1,110         | 82                   | 7.4        | 336                                       | 30.2        | 330                                          | 29.7        | 171                                                  | 15.4        | 191                        | 17.2        |
| Heterosexual contact <sup>e</sup>                     |               |                      |            |                                           |             |                                              |             |                                                      |             |                            |             |
| Male                                                  | 2,533         | 79                   | 3.1        | 452                                       | 17.8        | 695                                          | 27.4        | 873                                                  | 34.5        | 435                        | 17.2        |
| Female                                                | 5,552         | 254                  | 4.6        | 1,540                                     | 27.7        | 1,581                                        | 28.5        | 1,248                                                | 22.5        | 929                        | 16.7        |
| <b>Total<sup>f</sup></b>                              | <b>33,955</b> | <b>2,122</b>         | <b>6.2</b> | <b>8,678</b>                              | <b>25.6</b> | <b>10,309</b>                                | <b>30.4</b> | <b>7,081</b>                                         | <b>20.9</b> | <b>5,765</b>               | <b>17.0</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at HIV diagnosis is based on the first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

<sup>b</sup> Includes persons with no CD4 information.

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes persons whose infection was attributed to hemophilia, blood transfusion, or perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

**Table 2b. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by area of residence—41 states and the District of Columbia**

|                      | Total No.     | Stage 0 <sup>a</sup> |            | Stage 1<br>(CD4 ≥500 cells/μL or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 <200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|----------------------|---------------|----------------------|------------|----------------------------------------|-------------|----------------------------------------------|-------------|-----------------------------------------------------|-------------|----------------------------|-------------|
|                      |               | No.                  | %          | No.                                    | %           | No.                                          | %           | No.                                                 | %           | No.                        | %           |
|                      |               |                      |            |                                        |             |                                              |             |                                                     |             |                            |             |
| Alabama              | 653           | 32                   | 4.9        | 164                                    | 25.1        | 175                                          | 26.8        | 142                                                 | 21.7        | 140                        | 21.4        |
| Alaska               | 29            | 3                    | 10.3       | 10                                     | 34.5        | 7                                            | 24.1        | 7                                                   | 24.1        | 2                          | 6.9         |
| California           | 4,767         | 392                  | 8.2        | 1,179                                  | 24.7        | 1,392                                        | 29.2        | 908                                                 | 19.0        | 896                        | 18.8        |
| Colorado             | 441           | 24                   | 5.4        | 125                                    | 28.3        | 159                                          | 36.1        | 80                                                  | 18.1        | 53                         | 12.0        |
| Connecticut          | 275           | 15                   | 5.5        | 72                                     | 26.2        | 83                                           | 30.2        | 65                                                  | 23.6        | 40                         | 14.5        |
| Delaware             | 125           | 6                    | 4.8        | 33                                     | 26.4        | 35                                           | 28.0        | 32                                                  | 25.6        | 19                         | 15.2        |
| District of Columbia | 305           | 14                   | 4.6        | 83                                     | 27.2        | 108                                          | 35.4        | 40                                                  | 13.1        | 60                         | 19.7        |
| Florida              | 4,590         | 121                  | 2.6        | 1,359                                  | 29.6        | 1,432                                        | 31.2        | 976                                                 | 21.3        | 702                        | 15.3        |
| Georgia              | 2,584         | 83                   | 3.2        | 637                                    | 24.7        | 795                                          | 30.8        | 567                                                 | 21.9        | 502                        | 19.4        |
| Hawaii               | 78            | 11                   | 14.1       | 25                                     | 32.1        | 21                                           | 26.9        | 13                                                  | 16.7        | 8                          | 10.3        |
| Illinois             | 1,354         | 55                   | 4.1        | 333                                    | 24.6        | 413                                          | 30.5        | 274                                                 | 20.2        | 279                        | 20.6        |
| Indiana              | 516           | 10                   | 1.9        | 122                                    | 23.6        | 143                                          | 27.7        | 124                                                 | 24.0        | 117                        | 22.7        |
| Iowa                 | 126           | 29                   | 23.0       | 20                                     | 15.9        | 45                                           | 35.7        | 27                                                  | 21.4        | 5                          | 4.0         |
| Louisiana            | 1,008         | 76                   | 7.5        | 269                                    | 26.7        | 302                                          | 30.0        | 229                                                 | 22.7        | 132                        | 13.1        |
| Maine                | 31            | 2                    | 6.5        | 11                                     | 35.5        | 4                                            | 12.9        | 12                                                  | 38.7        | 2                          | 6.5         |
| Maryland             | 1,020         | 79                   | 7.7        | 230                                    | 22.5        | 341                                          | 33.4        | 249                                                 | 24.4        | 121                        | 11.9        |
| Massachusetts        | 597           | 31                   | 5.2        | 191                                    | 32.0        | 189                                          | 31.7        | 121                                                 | 20.3        | 65                         | 10.9        |
| Michigan             | 761           | 62                   | 8.1        | 205                                    | 26.9        | 267                                          | 35.1        | 149                                                 | 19.6        | 78                         | 10.2        |
| Minnesota            | 276           | 22                   | 8.0        | 65                                     | 23.6        | 85                                           | 30.8        | 76                                                  | 27.5        | 28                         | 10.1        |
| Mississippi          | 426           | 20                   | 4.7        | 66                                     | 15.5        | 90                                           | 21.1        | 115                                                 | 27.0        | 135                        | 31.7        |
| Missouri             | 504           | 15                   | 3.0        | 130                                    | 25.8        | 127                                          | 25.2        | 84                                                  | 16.7        | 148                        | 29.4        |
| Montana              | 31            | 1                    | 3.2        | 12                                     | 38.7        | 9                                            | 29.0        | 6                                                   | 19.4        | 3                          | 9.7         |
| Nebraska             | 88            | 6                    | 6.8        | 24                                     | 27.3        | 32                                           | 36.4        | 13                                                  | 14.8        | 13                         | 14.8        |
| New Hampshire        | 35            | 3                    | 8.6        | 10                                     | 28.6        | 12                                           | 34.3        | 5                                                   | 14.3        | 5                          | 14.3        |
| New Mexico           | 135           | 6                    | 4.4        | 39                                     | 28.9        | 46                                           | 34.1        | 29                                                  | 21.5        | 15                         | 11.1        |
| New York             | 2,744         | 285                  | 10.4       | 692                                    | 25.2        | 912                                          | 33.2        | 580                                                 | 21.1        | 275                        | 10.0        |
| North Carolina       | 1,301         | 131                  | 10.1       | 286                                    | 22.0        | 311                                          | 23.9        | 265                                                 | 20.4        | 308                        | 23.7        |
| North Dakota         | 37            | 0                    | 0.0        | 11                                     | 29.7        | 14                                           | 37.8        | 10                                                  | 27.0        | 2                          | 5.4         |
| Ohio                 | 1,006         | 19                   | 1.9        | 288                                    | 28.6        | 316                                          | 31.4        | 212                                                 | 21.1        | 171                        | 17.0        |
| Oklahoma             | 299           | 26                   | 8.7        | 79                                     | 26.4        | 86                                           | 28.8        | 63                                                  | 21.1        | 45                         | 15.1        |
| Oregon               | 202           | 17                   | 8.4        | 53                                     | 26.2        | 59                                           | 29.2        | 49                                                  | 24.3        | 24                         | 11.9        |
| Rhode Island         | 83            | 8                    | 9.6        | 23                                     | 27.7        | 25                                           | 30.1        | 24                                                  | 28.9        | 3                          | 3.6         |
| South Carolina       | 707           | 39                   | 5.5        | 158                                    | 22.3        | 247                                          | 34.9        | 182                                                 | 25.7        | 81                         | 11.5        |
| South Dakota         | 38            | 0                    | 0.0        | 6                                      | 15.8        | 16                                           | 42.1        | 6                                                   | 15.8        | 10                         | 26.3        |
| Tennessee            | 713           | 9                    | 1.3        | 188                                    | 26.4        | 189                                          | 26.5        | 121                                                 | 17.0        | 206                        | 28.9        |
| Texas                | 4,309         | 324                  | 7.5        | 1,038                                  | 24.1        | 1,295                                        | 30.1        | 860                                                 | 20.0        | 792                        | 18.4        |
| Utah                 | 115           | 5                    | 4.3        | 30                                     | 26.1        | 40                                           | 34.8        | 22                                                  | 19.1        | 18                         | 15.7        |
| Virginia             | 864           | 58                   | 6.7        | 207                                    | 24.0        | 236                                          | 27.3        | 171                                                 | 19.8        | 192                        | 22.2        |
| Washington           | 438           | 44                   | 10.0       | 134                                    | 30.6        | 133                                          | 30.4        | 97                                                  | 22.1        | 30                         | 6.8         |
| West Virginia        | 76            | 2                    | 2.6        | 17                                     | 22.4        | 24                                           | 31.6        | 22                                                  | 28.9        | 11                         | 14.5        |
| Wisconsin            | 258           | 37                   | 14.3       | 52                                     | 20.2        | 91                                           | 35.3        | 50                                                  | 19.4        | 28                         | 10.9        |
| Wyoming              | 10            | 0                    | 0.0        | 2                                      | 20.0        | 3                                            | 30.0        | 4                                                   | 40.0        | 1                          | 10.0        |
| <b>Total</b>         | <b>33,955</b> | <b>2,122</b>         | <b>6.2</b> | <b>8,678</b>                           | <b>25.6</b> | <b>10,309</b>                                | <b>30.4</b> | <b>7,081</b>                                        | <b>20.9</b> | <b>5,765</b>               | <b>17.0</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at HIV diagnosis is based on the first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at diagnosis.

<sup>a</sup> First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

<sup>b</sup> Includes persons with no CD4 information.



**Table 2c. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia**

|                                                    | Total No.  | Stage 0 <sup>a</sup> |            | Stage 1<br>(CD4 ≥500 cells/μL<br>or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 <200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|----------------------------------------------------|------------|----------------------|------------|-------------------------------------------|-------------|----------------------------------------------|-------------|-----------------------------------------------------|-------------|----------------------------|-------------|
|                                                    |            | No.                  | %          | No.                                       | %           | No.                                          | %           | No.                                                 | %           | No.                        | %           |
| <b>American Indian/Alaska Native</b>               |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 121        | 11                   | 9.1        | 37                                        | 30.6        | 34                                           | 28.1        | 22                                                  | 18.2        | 17                         | 14.0        |
| Female                                             | 37         | 1                    | 2.7        | 11                                        | 29.7        | 10                                           | 27.0        | 8                                                   | 21.6        | 7                          | 18.9        |
| <b>Age at diagnosis (yr)</b>                       |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 20         | 2                    | 10.0       | 10                                        | 50.0        | 5                                            | 25.0        | 1                                                   | 5.0         | 2                          | 10.0        |
| 25–34                                              | 65         | 6                    | 9.2        | 24                                        | 36.9        | 21                                           | 32.3        | 7                                                   | 10.8        | 7                          | 10.8        |
| 35–44                                              | 35         | 2                    | 5.7        | 7                                         | 20.0        | 11                                           | 31.4        | 7                                                   | 20.0        | 8                          | 22.9        |
| 45–54                                              | 27         | 2                    | 7.4        | 6                                         | 22.2        | 5                                            | 18.5        | 12                                                  | 44.4        | 2                          | 7.4         |
| ≥55                                                | 11         | 0                    | 0.0        | 1                                         | 9.1         | 2                                            | 18.2        | 3                                                   | 27.3        | 5                          | 45.5        |
| <b>Transmission category<sup>c</sup></b>           |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 87         | 7                    | 8.0        | 32                                        | 36.4        | 26                                           | 29.7        | 15                                                  | 17.4        | 7                          | 8.5         |
| Injection drug use                                 |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 8          | 2                    | 26.0       | 1                                         | 13.0        | 1                                            | 15.6        | 2                                                   | 27.3        | 1                          | 18.2        |
| Female                                             | 13         | 0                    | 0.0        | 5                                         | 34.3        | 3                                            | 20.9        | 2                                                   | 17.2        | 4                          | 27.6        |
| Male-to-male sexual contact and injection drug use | 19         | 1                    | 5.4        | 4                                         | 22.6        | 4                                            | 23.1        | 4                                                   | 22.6        | 5                          | 26.3        |
| Heterosexual contact <sup>d</sup>                  |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 7          | 1                    | 13.9       | 0                                         | 0.0         | 2                                            | 33.3        | 1                                                   | 6.9         | 3                          | 45.8        |
| Female                                             | 24         | 1                    | 4.2        | 6                                         | 27.1        | 7                                            | 30.5        | 6                                                   | 24.2        | 3                          | 14.0        |
| <b>Total<sup>e</sup></b>                           | <b>158</b> | <b>12</b>            | <b>7.6</b> | <b>48</b>                                 | <b>30.4</b> | <b>44</b>                                    | <b>27.8</b> | <b>30</b>                                           | <b>19.0</b> | <b>24</b>                  | <b>15.2</b> |
| <b>Asian</b>                                       |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 756        | 38                   | 5.0        | 149                                       | 19.7        | 280                                          | 37.0        | 185                                                 | 24.5        | 104                        | 13.8        |
| Female                                             | 99         | 3                    | 3.0        | 19                                        | 19.2        | 30                                           | 30.3        | 27                                                  | 27.3        | 20                         | 20.2        |
| <b>Age at diagnosis (yr)</b>                       |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 179        | 11                   | 6.1        | 37                                        | 20.7        | 83                                           | 46.4        | 18                                                  | 10.1        | 30                         | 16.8        |
| 25–34                                              | 275        | 15                   | 5.5        | 54                                        | 19.6        | 108                                          | 39.3        | 61                                                  | 22.2        | 37                         | 13.5        |
| 35–44                                              | 202        | 8                    | 4.0        | 46                                        | 22.8        | 67                                           | 33.2        | 48                                                  | 23.8        | 33                         | 16.3        |
| 45–54                                              | 134        | 7                    | 5.2        | 24                                        | 17.9        | 30                                           | 22.4        | 58                                                  | 43.3        | 15                         | 11.2        |
| ≥55                                                | 65         | 0                    | 0.0        | 7                                         | 10.8        | 22                                           | 33.8        | 27                                                  | 41.5        | 9                          | 13.8        |
| <b>Transmission category<sup>c</sup></b>           |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 689        | 37                   | 5.3        | 136                                       | 19.8        | 256                                          | 37.1        | 164                                                 | 23.8        | 96                         | 14.0        |
| Injection drug use                                 |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 12         | 0                    | 1.6        | 3                                         | 20.2        | 5                                            | 41.1        | 3                                                   | 22.6        | 2                          | 14.5        |
| Female                                             | 4          | 0                    | 5.7        | 1                                         | 17.1        | 1                                            | 34.3        | 1                                                   | 20.0        | 1                          | 22.9        |
| Male-to-male sexual contact and injection drug use | 16         | 1                    | 6.2        | 4                                         | 27.3        | 7                                            | 44.1        | 3                                                   | 16.1        | 1                          | 6.2         |
| Heterosexual contact <sup>d</sup>                  |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 38         | 0                    | 0.3        | 6                                         | 15.8        | 11                                           | 30.3        | 16                                                  | 41.6        | 5                          | 12.1        |
| Female                                             | 95         | 3                    | 3.0        | 18                                        | 19.5        | 28                                           | 30.0        | 26                                                  | 27.6        | 19                         | 20.0        |
| <b>Total<sup>e</sup></b>                           | <b>855</b> | <b>41</b>            | <b>4.8</b> | <b>168</b>                                | <b>19.6</b> | <b>310</b>                                   | <b>36.3</b> | <b>212</b>                                          | <b>24.8</b> | <b>124</b>                 | <b>14.5</b> |

**Table 2c. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Total No.     | Stage 0 <sup>a</sup> |            | Stage 1<br>(CD4 ≥500 cells/μL<br>or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 <200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|----------------------------------------------------|---------------|----------------------|------------|-------------------------------------------|-------------|----------------------------------------------|-------------|-----------------------------------------------------|-------------|----------------------------|-------------|
|                                                    |               | No.                  | %          | No.                                       | %           | No.                                          | %           | No.                                                 | %           | No.                        | %           |
| <b>Black/African American</b>                      |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 10,998        | 694                  | 6.3        | 2,465                                     | 22.4        | 3,471                                        | 31.6        | 2,124                                               | 19.3        | 2,244                      | 20.4        |
| Female                                             | 3,911         | 161                  | 4.1        | 1,028                                     | 26.3        | 1,145                                        | 29.3        | 878                                                 | 22.4        | 699                        | 17.9        |
| <b>Age at diagnosis (yr)</b>                       |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 3,906         | 343                  | 8.8        | 983                                       | 25.2        | 1,398                                        | 35.8        | 388                                                 | 9.9         | 794                        | 20.3        |
| 25–34                                              | 5,179         | 320                  | 6.2        | 1,306                                     | 25.2        | 1,639                                        | 31.6        | 850                                                 | 16.4        | 1,064                      | 20.5        |
| 35–44                                              | 2,473         | 93                   | 3.8        | 529                                       | 21.4        | 726                                          | 29.4        | 657                                                 | 26.6        | 468                        | 18.9        |
| 45–54                                              | 1,835         | 52                   | 2.8        | 368                                       | 20.1        | 463                                          | 25.2        | 611                                                 | 33.3        | 341                        | 18.6        |
| ≥55                                                | 1,516         | 47                   | 3.1        | 307                                       | 20.3        | 390                                          | 25.7        | 496                                                 | 32.7        | 276                        | 18.2        |
| <b>Transmission category<sup>c</sup></b>           |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 8,810         | 623                  | 7.1        | 2,067                                     | 23.5        | 2,856                                        | 32.4        | 1,466                                               | 16.6        | 1,797                      | 20.4        |
| Injection drug use                                 |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 338           | 15                   | 4.5        | 56                                        | 16.5        | 96                                           | 28.6        | 92                                                  | 27.3        | 78                         | 23.1        |
| Female                                             | 293           | 19                   | 6.5        | 65                                        | 22.2        | 82                                           | 28.1        | 69                                                  | 23.4        | 58                         | 19.8        |
| Male-to-male sexual contact and injection drug use | 230           | 11                   | 4.9        | 52                                        | 22.5        | 64                                           | 28.0        | 43                                                  | 18.7        | 60                         | 26.0        |
| Heterosexual contact <sup>d</sup>                  |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 1,604         | 43                   | 2.7        | 288                                       | 18.0        | 451                                          | 28.1        | 518                                                 | 32.3        | 304                        | 18.9        |
| Female                                             | 3,590         | 142                  | 3.9        | 951                                       | 26.5        | 1,054                                        | 29.4        | 805                                                 | 22.4        | 638                        | 17.8        |
| <b>Total<sup>e</sup></b>                           | <b>14,909</b> | <b>855</b>           | <b>5.7</b> | <b>3,493</b>                              | <b>23.4</b> | <b>4,616</b>                                 | <b>31.0</b> | <b>3,002</b>                                        | <b>20.1</b> | <b>2,943</b>               | <b>19.7</b> |
| <b>Hispanic/Latino<sup>f</sup></b>                 |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 7,537         | 487                  | 6.5        | 1,884                                     | 25.0        | 2,389                                        | 31.7        | 1,612                                               | 21.4        | 1,165                      | 15.5        |
| Female                                             | 980           | 56                   | 5.7        | 282                                       | 28.8        | 287                                          | 29.3        | 213                                                 | 21.7        | 142                        | 14.5        |
| <b>Age at diagnosis (yr)</b>                       |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 1,710         | 158                  | 9.2        | 511                                       | 29.9        | 589                                          | 34.4        | 147                                                 | 8.6         | 305                        | 17.8        |
| 25–34                                              | 3,254         | 217                  | 6.7        | 884                                       | 27.2        | 1,077                                        | 33.1        | 599                                                 | 18.4        | 477                        | 14.7        |
| 35–44                                              | 1,847         | 89                   | 4.8        | 445                                       | 24.1        | 552                                          | 29.9        | 476                                                 | 25.8        | 285                        | 15.4        |
| 45–54                                              | 1,149         | 52                   | 4.5        | 228                                       | 19.8        | 308                                          | 26.8        | 398                                                 | 34.6        | 163                        | 14.2        |
| ≥55                                                | 557           | 27                   | 4.8        | 98                                        | 17.6        | 150                                          | 26.9        | 205                                                 | 36.8        | 77                         | 13.8        |
| <b>Transmission category<sup>c</sup></b>           |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 6,542         | 439                  | 6.7        | 1,691                                     | 25.8        | 2,100                                        | 32.1        | 1,311                                               | 20.0        | 1,001                      | 15.3        |
| Injection drug use                                 |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 267           | 11                   | 4.0        | 54                                        | 20.1        | 79                                           | 29.4        | 80                                                  | 29.8        | 45                         | 16.6        |
| Female                                             | 113           | 7                    | 5.8        | 38                                        | 33.9        | 26                                           | 22.7        | 21                                                  | 18.4        | 22                         | 19.2        |
| Male-to-male sexual contact and injection drug use | 269           | 16                   | 5.8        | 72                                        | 26.7        | 86                                           | 31.9        | 44                                                  | 16.3        | 52                         | 19.2        |
| Heterosexual contact <sup>d</sup>                  |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 452           | 21                   | 4.6        | 67                                        | 14.9        | 122                                          | 27.0        | 175                                                 | 38.6        | 67                         | 14.9        |
| Female                                             | 863           | 49                   | 5.7        | 241                                       | 27.9        | 260                                          | 30.2        | 192                                                 | 22.3        | 120                        | 13.9        |
| <b>Total<sup>e</sup></b>                           | <b>8,517</b>  | <b>543</b>           | <b>6.4</b> | <b>2,166</b>                              | <b>25.4</b> | <b>2,676</b>                                 | <b>31.4</b> | <b>1,825</b>                                        | <b>21.4</b> | <b>1,307</b>               | <b>15.3</b> |

**Table 2c. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Total No.    | Stage 0 <sup>a</sup> |             | Stage 1<br>(CD4 ≥500 cells/μL<br>or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 <200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|----------------------------------------------------|--------------|----------------------|-------------|-------------------------------------------|-------------|----------------------------------------------|-------------|-----------------------------------------------------|-------------|----------------------------|-------------|
|                                                    |              | No.                  | %           | No.                                       | %           | No.                                          | %           | No.                                                 | %           | No.                        | %           |
| <b>Native Hawaiian/Other Pacific Islander</b>      |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 33           | 4                    | 12.1        | 7                                         | 21.2        | 11                                           | 33.3        | 8                                                   | 24.2        | 3                          | 9.1         |
| Female                                             | 10           | 1                    | 10.0        | 0                                         | 0.0         | 1                                            | 10.0        | 5                                                   | 50.0        | 3                          | 30.0        |
| <b>Age at diagnosis (yr)</b>                       |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 8            | 1                    | 12.5        | 4                                         | 50.0        | 3                                            | 37.5        | 0                                                   | 0.0         | 0                          | 0.0         |
| 25–34                                              | 19           | 3                    | 15.8        | 2                                         | 10.5        | 6                                            | 31.6        | 5                                                   | 26.3        | 3                          | 15.8        |
| 35–44                                              | 10           | 1                    | 10.0        | 1                                         | 10.0        | 2                                            | 20.0        | 4                                                   | 40.0        | 2                          | 20.0        |
| 45–54                                              | 5            | 0                    | 0.0         | 0                                         | 0.0         | 1                                            | 20.0        | 3                                                   | 60.0        | 1                          | 20.0        |
| ≥55                                                | 1            | 0                    | 0.0         | 0                                         | 0.0         | 0                                            | 0.0         | 1                                                   | 100         | 0                          | 0.0         |
| <b>Transmission category<sup>c</sup></b>           |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 28           | 3                    | 10.5        | 7                                         | 25.4        | 10                                           | 35.5        | 6                                                   | 21.7        | 2                          | 6.9         |
| Injection drug use                                 |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 1            | 0                    | 0.0         | 0                                         | 0.0         | 0                                            | 9.1         | 0                                                   | 0.0         | 1                          | 90.9        |
| Female                                             |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact and injection drug use | 2            | 1                    | 52.4        | 0                                         | 0.0         | 0                                            | 0.0         | 1                                                   | 47.6        | 0                          | 0.0         |
| Heterosexual contact <sup>d</sup>                  |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 2            | 0                    | 0.0         | 0                                         | 0.0         | 1                                            | 50.0        | 1                                                   | 45.5        | 0                          | 4.5         |
| Female                                             | 10           | 1                    | 10.0        | 0                                         | 0.0         | 1                                            | 10.0        | 5                                                   | 50.0        | 3                          | 30.0        |
| <b>Total<sup>e</sup></b>                           | <b>43</b>    | <b>5</b>             | <b>11.6</b> | <b>7</b>                                  | <b>16.3</b> | <b>12</b>                                    | <b>27.9</b> | <b>13</b>                                           | <b>30.2</b> | <b>6</b>                   | <b>14.0</b> |
| <b>White</b>                                       |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 7,322        | 513                  | 7.0         | 2,143                                     | 29.3        | 2,081                                        | 28.4        | 1,560                                               | 21.3        | 1,025                      | 14.0        |
| Female                                             | 1,256        | 79                   | 6.3         | 415                                       | 33.0        | 294                                          | 23.4        | 258                                                 | 20.5        | 210                        | 16.7        |
| <b>Age at diagnosis (yr)</b>                       |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 1,286        | 127                  | 9.9         | 441                                       | 34.3        | 414                                          | 32.2        | 101                                                 | 7.9         | 203                        | 15.8        |
| 25–34                                              | 2,743        | 230                  | 8.4         | 921                                       | 33.6        | 810                                          | 29.5        | 356                                                 | 13.0        | 426                        | 15.5        |
| 35–44                                              | 1,735        | 93                   | 5.4         | 537                                       | 31.0        | 461                                          | 26.6        | 419                                                 | 24.1        | 225                        | 13.0        |
| 45–54                                              | 1,659        | 72                   | 4.3         | 407                                       | 24.5        | 419                                          | 25.3        | 537                                                 | 32.4        | 224                        | 13.5        |
| ≥55                                                | 1,155        | 70                   | 6.1         | 252                                       | 21.8        | 271                                          | 23.5        | 405                                                 | 35.1        | 157                        | 13.6        |
| <b>Transmission category<sup>c</sup></b>           |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 5,971        | 436                  | 7.3         | 1,744                                     | 29.2        | 1,716                                        | 28.7        | 1,237                                               | 20.7        | 839                        | 14.1        |
| Injection drug use                                 |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 426          | 19                   | 4.5         | 130                                       | 30.5        | 114                                          | 26.7        | 101                                                 | 23.8        | 62                         | 14.6        |
| Female                                             | 407          | 27                   | 6.6         | 134                                       | 32.8        | 94                                           | 23.0        | 75                                                  | 18.4        | 78                         | 19.1        |
| Male-to-male sexual contact and injection drug use | 534          | 48                   | 9.0         | 189                                       | 35.4        | 156                                          | 29.2        | 71                                                  | 13.2        | 70                         | 13.1        |
| Heterosexual contact <sup>d</sup>                  |              |                      |             |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 383          | 10                   | 2.6         | 79                                        | 20.7        | 94                                           | 24.5        | 147                                                 | 38.4        | 53                         | 13.7        |
| Female                                             | 846          | 52                   | 6.1         | 281                                       | 33.2        | 200                                          | 23.6        | 182                                                 | 21.6        | 131                        | 15.5        |
| <b>Total<sup>e</sup></b>                           | <b>8,578</b> | <b>592</b>           | <b>6.9</b>  | <b>2,558</b>                              | <b>29.8</b> | <b>2,375</b>                                 | <b>27.7</b> | <b>1,818</b>                                        | <b>21.2</b> | <b>1,235</b>               | <b>14.4</b> |

**Table 2c. Stage of disease at HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Total No.  | Stage 0 <sup>a</sup> |            | Stage 1<br>(CD4 ≥500 cells/μL<br>or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 <200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|----------------------------------------------------|------------|----------------------|------------|-------------------------------------------|-------------|----------------------------------------------|-------------|-----------------------------------------------------|-------------|----------------------------|-------------|
|                                                    |            | No.                  | %          | No.                                       | %           | No.                                          | %           | No.                                                 | %           | No.                        | %           |
| <b>Multiple races</b>                              |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| <b>Sex</b>                                         |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 738        | 65                   | 8.8        | 188                                       | 25.5        | 237                                          | 32.1        | 141                                                 | 19.1        | 107                        | 14.5        |
| Female                                             | 157        | 9                    | 5.7        | 50                                        | 31.8        | 39                                           | 24.8        | 40                                                  | 25.5        | 19                         | 12.1        |
| <b>Age at diagnosis (yr)</b>                       |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                              | 233        | 23                   | 9.9        | 76                                        | 32.6        | 78                                           | 33.5        | 16                                                  | 6.9         | 40                         | 17.2        |
| 25–34                                              | 317        | 28                   | 8.8        | 96                                        | 30.3        | 100                                          | 31.5        | 46                                                  | 14.5        | 47                         | 14.8        |
| 35–44                                              | 161        | 8                    | 5.0        | 36                                        | 22.4        | 50                                           | 31.1        | 51                                                  | 31.7        | 16                         | 9.9         |
| 45–54                                              | 127        | 10                   | 7.9        | 21                                        | 16.5        | 37                                           | 29.1        | 46                                                  | 36.2        | 13                         | 10.2        |
| ≥55                                                | 57         | 5                    | 8.8        | 9                                         | 15.8        | 11                                           | 19.3        | 22                                                  | 38.6        | 10                         | 17.5        |
| <b>Transmission category<sup>c</sup></b>           |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male-to-male sexual contact                        | 624        | 56                   | 8.9        | 156                                       | 25.0        | 205                                          | 32.9        | 110                                                 | 17.6        | 97                         | 15.6        |
| Injection drug use                                 |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 25         | 2                    | 5.9        | 6                                         | 24.1        | 7                                            | 26.1        | 9                                                   | 36.4        | 2                          | 7.5         |
| Female                                             | 29         | 2                    | 7.7        | 8                                         | 26.5        | 7                                            | 22.6        | 8                                                   | 28.6        | 4                          | 14.6        |
| Male-to-male sexual contact and injection drug use | 41         | 4                    | 10.3       | 14                                        | 35.2        | 13                                           | 30.8        | 6                                                   | 14.2        | 4                          | 9.5         |
| Heterosexual contact <sup>d</sup>                  |            |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| Male                                               | 47         | 4                    | 7.4        | 12                                        | 24.5        | 13                                           | 26.6        | 16                                                  | 34.0        | 4                          | 7.4         |
| Female                                             | 126        | 7                    | 5.3        | 42                                        | 33.5        | 30                                           | 24.2        | 32                                                  | 25.3        | 15                         | 11.6        |
| <b>Total<sup>e</sup></b>                           | <b>895</b> | <b>74</b>            | <b>8.3</b> | <b>238</b>                                | <b>26.6</b> | <b>276</b>                                   | <b>30.8</b> | <b>181</b>                                          | <b>20.2</b> | <b>126</b>                 | <b>14.1</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at HIV diagnosis is based on the first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

<sup>b</sup> Includes persons with no CD4 information.

<sup>c</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>d</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>e</sup> Includes persons whose infection was attributed to hemophilia, blood transfusion, or perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

<sup>f</sup> Hispanics/Latinos can be of any race.

**Table 2d. Stage of disease at HIV diagnosis during 2017, among males aged ≥13 years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia**

|                                               | Total No.     | Stage 0 <sup>a</sup> |            | Stage 1<br>(CD4 ≥500 cells/μL<br>or ≥26%) |             | Stage 2<br>(CD4 200–499 cells/μL or 14%–25%) |             | Stage 3 (AIDS)<br>(OI or CD4 <200 cells/μL or <14%) |             | Stage unknown <sup>b</sup> |             |
|-----------------------------------------------|---------------|----------------------|------------|-------------------------------------------|-------------|----------------------------------------------|-------------|-----------------------------------------------------|-------------|----------------------------|-------------|
|                                               |               | No.                  | %          | No.                                       | %           | No.                                          | %           | No.                                                 | %           | No.                        | %           |
| <b>American Indian/Alaska Native</b>          |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 15            | 2                    | 13.8       | 7                                         | 48.3        | 5                                            | 33.1        | 0                                                   | 0.0         | 1                          | 4.8         |
| 25–34                                         | 39            | 3                    | 7.6        | 18                                        | 45.3        | 11                                           | 27.0        | 5                                                   | 12.7        | 3                          | 7.4         |
| 35–44                                         | 19            | 1                    | 5.3        | 4                                         | 21.4        | 7                                            | 36.4        | 6                                                   | 30.5        | 1                          | 6.4         |
| 45–54                                         | 12            | 1                    | 8.1        | 3                                         | 24.4        | 4                                            | 30.9        | 4                                                   | 28.5        | 1                          | 8.1         |
| ≥55                                           | 3             | 0                    | 0.0        | 0                                         | 0.0         | 0                                            | 0.0         | 1                                                   | 38.5        | 2                          | 61.5        |
| <b>Asian</b>                                  |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 168           | 10                   | 5.9        | 36                                        | 21.4        | 77                                           | 46.0        | 17                                                  | 10.1        | 28                         | 16.6        |
| 25–34                                         | 240           | 13                   | 5.4        | 45                                        | 18.6        | 98                                           | 40.7        | 52                                                  | 21.7        | 33                         | 13.6        |
| 35–44                                         | 149           | 7                    | 4.7        | 34                                        | 22.9        | 51                                           | 34.3        | 36                                                  | 24.0        | 21                         | 14.1        |
| 45–54                                         | 98            | 7                    | 6.9        | 19                                        | 18.9        | 21                                           | 21.0        | 42                                                  | 42.5        | 11                         | 10.7        |
| ≥55                                           | 33            | 0                    | 0.0        | 3                                         | 7.6         | 9                                            | 27.4        | 17                                                  | 52.3        | 4                          | 12.8        |
| <b>Black/African American</b>                 |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 3,117         | 300                  | 9.6        | 743                                       | 23.8        | 1,148                                        | 36.8        | 300                                                 | 9.6         | 625                        | 20.1        |
| 25–34                                         | 3,575         | 244                  | 6.8        | 896                                       | 25.1        | 1,127                                        | 31.5        | 559                                                 | 15.6        | 749                        | 20.9        |
| 35–44                                         | 1,119         | 41                   | 3.7        | 244                                       | 21.8        | 331                                          | 29.6        | 283                                                 | 25.3        | 220                        | 19.7        |
| 45–54                                         | 636           | 23                   | 3.6        | 124                                       | 19.5        | 151                                          | 23.7        | 208                                                 | 32.6        | 131                        | 20.6        |
| ≥55                                           | 363           | 15                   | 4.1        | 60                                        | 16.6        | 100                                          | 27.4        | 116                                                 | 32.1        | 72                         | 19.8        |
| <b>Hispanic/Latino<sup>c</sup></b>            |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 1,454         | 135                  | 9.3        | 433                                       | 29.8        | 509                                          | 35.0        | 117                                                 | 8.0         | 260                        | 17.9        |
| 25–34                                         | 2,683         | 187                  | 7.0        | 719                                       | 26.8        | 901                                          | 33.6        | 481                                                 | 17.9        | 395                        | 14.7        |
| 35–44                                         | 1,348         | 68                   | 5.0        | 338                                       | 25.0        | 410                                          | 30.4        | 337                                                 | 25.0        | 197                        | 14.6        |
| 45–54                                         | 775           | 38                   | 5.0        | 151                                       | 19.4        | 208                                          | 26.9        | 263                                                 | 33.9        | 115                        | 14.8        |
| ≥55                                           | 283           | 11                   | 3.7        | 51                                        | 17.9        | 73                                           | 25.7        | 114                                                 | 40.2        | 35                         | 12.4        |
| <b>Native Hawaiian/Other Pacific Islander</b> |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 8             | 1                    | 11.4       | 4                                         | 50.6        | 3                                            | 38.0        | 0                                                   | 0.0         | 0                          | 0.0         |
| 25–34                                         | 13            | 2                    | 15.5       | 2                                         | 15.5        | 5                                            | 38.8        | 2                                                   | 15.5        | 2                          | 14.7        |
| 35–44                                         | 5             | 0                    | 0.0        | 1                                         | 20.8        | 2                                            | 37.5        | 2                                                   | 41.7        | 0                          | 0.0         |
| 45–54                                         | 2             | 0                    | 0.0        | 0                                         | 0.0         | 0                                            | 0.0         | 2                                                   | 100         | 0                          | 0.0         |
| ≥55                                           | 0             | 0                    | 0.0        | 0                                         | 0.0         | 0                                            | 0.0         | 0                                                   | 0.0         | 0                          | 0.0         |
| <b>White</b>                                  |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 995           | 97                   | 9.7        | 312                                       | 31.4        | 345                                          | 34.7        | 85                                                  | 8.5         | 156                        | 15.7        |
| 25–34                                         | 1,921         | 161                  | 8.4        | 637                                       | 33.1        | 579                                          | 30.1        | 255                                                 | 13.3        | 289                        | 15.0        |
| 35–44                                         | 1,132         | 68                   | 6.0        | 351                                       | 31.0        | 302                                          | 26.6        | 272                                                 | 24.0        | 141                        | 12.4        |
| 45–54                                         | 1,165         | 55                   | 4.7        | 281                                       | 24.1        | 308                                          | 26.4        | 370                                                 | 31.7        | 151                        | 12.9        |
| ≥55                                           | 758           | 55                   | 7.3        | 164                                       | 21.6        | 183                                          | 24.1        | 255                                                 | 33.6        | 102                        | 13.4        |
| <b>Multiple races</b>                         |               |                      |            |                                           |             |                                              |             |                                                     |             |                            |             |
| 13–24                                         | 187           | 20                   | 10.6       | 50                                        | 26.6        | 69                                           | 37.0        | 14                                                  | 7.4         | 34                         | 18.3        |
| 25–34                                         | 246           | 23                   | 9.1        | 70                                        | 28.3        | 76                                           | 31.0        | 39                                                  | 15.8        | 39                         | 15.8        |
| 35–44                                         | 98            | 6                    | 6.2        | 22                                        | 23.0        | 32                                           | 33.2        | 25                                                  | 25.6        | 12                         | 12.0        |
| 45–54                                         | 70            | 6                    | 7.9        | 13                                        | 18.0        | 23                                           | 32.1        | 22                                                  | 31.3        | 8                          | 10.7        |
| ≥55                                           | 24            | 2                    | 8.3        | 2                                         | 6.3         | 5                                            | 20.8        | 10                                                  | 42.9        | 5                          | 21.7        |
| <b>Total</b>                                  | <b>22,752</b> | <b>1,600</b>         | <b>7.0</b> | <b>5,833</b>                              | <b>25.6</b> | <b>7,170</b>                                 | <b>31.5</b> | <b>4,309</b>                                        | <b>18.9</b> | <b>3,840</b>               | <b>16.9</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; OI, opportunistic illness (i.e., AIDS-defining condition).

Note. Stage of disease at HIV diagnosis is based on the first CD4 test performed or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. Data are based on residence at diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>a</sup> First positive HIV test result is within 6 months after a negative HIV test result. The diagnosis of an AIDS-defining condition or a low CD4 test result before the 6 months have elapsed does not change the stage from stage 0 to stage 3.

<sup>b</sup> Includes persons with no CD4 information.

<sup>c</sup> Hispanics/Latinos can be of any race.

**Table 3a. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged  $\geq 13$  years, by selected characteristics—41 states and the District of Columbia**

|                                                    | Total         |                | $\leq 1$ month           |             |                   |             | $\leq 3$ months          |             |                   |             |
|----------------------------------------------------|---------------|----------------|--------------------------|-------------|-------------------|-------------|--------------------------|-------------|-------------------|-------------|
|                                                    |               |                | $\geq 1$ CD4 or VL tests |             | No CD4 or VL test |             | $\geq 1$ CD4 or VL tests |             | No CD4 or VL test |             |
|                                                    | No.           | % <sup>a</sup> | No.                      | %           | No.               | %           | No.                      | %           | No.               | %           |
| <b>Sex</b>                                         |               |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 27,505        | 81.0           | 21,505                   | 78.2        | 6,000             | 21.8        | 23,823                   | 86.6        | 3,682             | 13.4        |
| Female                                             | 6,450         | 19.0           | 5,097                    | 79.0        | 1,353             | 21.0        | 5,641                    | 87.5        | 809               | 12.5        |
| <b>Age at diagnosis (yr)</b>                       |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                              | 7,342         | 21.6           | 5,510                    | 75.0        | 1,832             | 25.0        | 6,248                    | 85.1        | 1,094             | 14.9        |
| 25–34                                              | 11,852        | 34.9           | 9,182                    | 77.5        | 2,670             | 22.5        | 10,224                   | 86.3        | 1,628             | 13.7        |
| 35–44                                              | 6,463         | 19.0           | 5,149                    | 79.7        | 1,314             | 20.3        | 5,632                    | 87.1        | 831               | 12.9        |
| 45–54                                              | 4,936         | 14.5           | 4,017                    | 81.4        | 919               | 18.6        | 4,359                    | 88.3        | 577               | 11.7        |
| $\geq 55$                                          | 3,362         | 9.9            | 2,744                    | 81.6        | 618               | 18.4        | 3,001                    | 89.3        | 361               | 10.7        |
| <b>Race/ethnicity</b>                              |               |                |                          |             |                   |             |                          |             |                   |             |
| American Indian/Alaska Native                      | 158           | 0.5            | 134                      | 84.8        | 24                | 15.2        | 142                      | 89.9        | 16                | 10.1        |
| Asian                                              | 855           | 2.5            | 690                      | 80.7        | 165               | 19.3        | 750                      | 87.7        | 105               | 12.3        |
| Black/African American                             | 14,909        | 43.9           | 11,295                   | 75.8        | 3,614             | 24.2        | 12,622                   | 84.7        | 2,287             | 15.3        |
| Hispanic/Latino <sup>b</sup>                       | 8,517         | 25.1           | 6,750                    | 79.3        | 1,767             | 20.7        | 7,429                    | 87.2        | 1,088             | 12.8        |
| Native Hawaiian/Other Pacific Islander             | 43            | 0.1            | 36                       | 83.7        | 7                 | 16.3        | 41                       | 95.3        | 2                 | 4.7         |
| White                                              | 8,578         | 25.3           | 6,978                    | 81.3        | 1,600             | 18.7        | 7,683                    | 89.6        | 895               | 10.4        |
| Multiple races                                     | 895           | 2.6            | 719                      | 80.3        | 176               | 19.7        | 797                      | 89.1        | 98                | 10.9        |
| <b>Transmission category<sup>c</sup></b>           |               |                |                          |             |                   |             |                          |             |                   |             |
| Male-to-male sexual contact                        | 22,752        | 67.0           | 17,862                   | 78.5        | 4,890             | 21.5        | 19,753                   | 86.8        | 2,999             | 13.2        |
| Injection drug use                                 |               |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 1,078         | 3.2            | 823                      | 76.4        | 255               | 23.6        | 915                      | 84.9        | 163               | 15.1        |
| Female                                             | 858           | 2.5            | 661                      | 77.1        | 197               | 22.9        | 731                      | 85.1        | 128               | 14.9        |
| Male-to-male sexual contact and injection drug use | 1,110         | 3.3            | 836                      | 75.3        | 274               | 24.7        | 945                      | 85.1        | 165               | 14.9        |
| Heterosexual contact <sup>d</sup>                  |               |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 2,533         | 7.5            | 1,959                    | 77.3        | 575               | 22.7        | 2,183                    | 86.2        | 350               | 13.8        |
| Female                                             | 5,552         | 16.4           | 4,402                    | 79.3        | 1,150             | 20.7        | 4,875                    | 87.8        | 677               | 12.2        |
| <b>Total<sup>e</sup></b>                           | <b>33,955</b> | <b>100</b>     | <b>26,602</b>            | <b>78.3</b> | <b>7,353</b>      | <b>21.7</b> | <b>29,464</b>            | <b>86.8</b> | <b>4,491</b>      | <b>13.2</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage; VL, viral load (copies/mL).

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of  $\geq 1$  CD4 or VL tests  $\leq 1$  month or  $\leq 3$  months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> Represents percentage of the total number for the column.

<sup>b</sup> Hispanics/Latinos can be of any race.

<sup>c</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>d</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>e</sup> Includes persons whose infection was attributed to hemophilia, blood transfusion, or perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

**Table 3b. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by area of residence—41 states and the District of Columbia**

|                      | Total         |                | ≤1 month           |             |                   |             | ≤3 months          |             |                   |             |
|----------------------|---------------|----------------|--------------------|-------------|-------------------|-------------|--------------------|-------------|-------------------|-------------|
|                      |               |                | ≥1 CD4 or VL tests |             | No CD4 or VL test |             | ≥1 CD4 or VL tests |             | No CD4 or VL test |             |
|                      | No.           | % <sup>a</sup> | No.                | %           | No.               | %           | No.                | %           | No.               | %           |
| Alabama              | 653           | 1.9            | 502                | 76.9        | 151               | 23.1        | 555                | 85.0        | 98                | 15.0        |
| Alaska               | 29            | 0.1            | 28                 | 96.6        | 1                 | 3.4         | 28                 | 96.6        | 1                 | 3.4         |
| California           | 4,767         | 14.0           | 3,588              | 75.3        | 1,179             | 24.7        | 3,975              | 83.4        | 792               | 16.6        |
| Colorado             | 441           | 1.3            | 370                | 83.9        | 71                | 16.1        | 408                | 92.5        | 33                | 7.5         |
| Connecticut          | 275           | 0.8            | 232                | 84.4        | 43                | 15.6        | 249                | 90.5        | 26                | 9.5         |
| Delaware             | 125           | 0.4            | 107                | 85.6        | 18                | 14.4        | 111                | 88.8        | 14                | 11.2        |
| District of Columbia | 305           | 0.9            | 245                | 80.3        | 60                | 19.7        | 257                | 84.3        | 48                | 15.7        |
| Florida              | 4,590         | 13.5           | 3,580              | 78.0        | 1,010             | 22.0        | 3,995              | 87.0        | 595               | 13.0        |
| Georgia              | 2,584         | 7.6            | 2,007              | 77.7        | 577               | 22.3        | 2,186              | 84.6        | 398               | 15.4        |
| Hawaii               | 78            | 0.2            | 67                 | 85.9        | 11                | 14.1        | 71                 | 91.0        | 7                 | 9.0         |
| Illinois             | 1,354         | 4.0            | 1,108              | 81.8        | 246               | 18.2        | 1,184              | 87.4        | 170               | 12.6        |
| Indiana              | 516           | 1.5            | 352                | 68.2        | 164               | 31.8        | 423                | 82.0        | 93                | 18.0        |
| Iowa                 | 126           | 0.4            | 116                | 92.1        | 10                | 7.9         | 122                | 96.8        | 4                 | 3.2         |
| Louisiana            | 1,008         | 3.0            | 801                | 79.5        | 207               | 20.5        | 891                | 88.4        | 117               | 11.6        |
| Maine                | 31            | 0.1            | 29                 | 93.5        | 2                 | 6.5         | 31                 | 100         | 0                 | 0.0         |
| Maryland             | 1,020         | 3.0            | 879                | 86.2        | 141               | 13.8        | 938                | 92.0        | 82                | 8.0         |
| Massachusetts        | 597           | 1.8            | 526                | 88.1        | 71                | 11.9        | 551                | 92.3        | 46                | 7.7         |
| Michigan             | 761           | 2.2            | 634                | 83.3        | 127               | 16.7        | 698                | 91.7        | 63                | 8.3         |
| Minnesota            | 276           | 0.8            | 243                | 88.0        | 33                | 12.0        | 259                | 93.8        | 17                | 6.2         |
| Mississippi          | 426           | 1.3            | 297                | 69.7        | 129               | 30.3        | 362                | 85.0        | 64                | 15.0        |
| Missouri             | 504           | 1.5            | 365                | 72.4        | 139               | 27.6        | 441                | 87.5        | 63                | 12.5        |
| Montana              | 31            | 0.1            | 27                 | 87.1        | 4                 | 12.9        | 28                 | 90.3        | 3                 | 9.7         |
| Nebraska             | 88            | 0.3            | 69                 | 78.4        | 19                | 21.6        | 78                 | 88.6        | 10                | 11.4        |
| New Hampshire        | 35            | 0.1            | 28                 | 80.0        | 7                 | 20.0        | 32                 | 91.4        | 3                 | 8.6         |
| New Mexico           | 135           | 0.4            | 116                | 85.9        | 19                | 14.1        | 125                | 92.6        | 10                | 7.4         |
| New York             | 2,744         | 8.1            | 2,330              | 84.9        | 414               | 15.1        | 2,495              | 90.9        | 249               | 9.1         |
| North Carolina       | 1,301         | 3.8            | 982                | 75.5        | 319               | 24.5        | 1,115              | 85.7        | 186               | 14.3        |
| North Dakota         | 37            | 0.1            | 33                 | 89.2        | 4                 | 10.8        | 35                 | 94.6        | 2                 | 5.4         |
| Ohio                 | 1,006         | 3.0            | 836                | 83.1        | 170               | 16.9        | 895                | 89.0        | 111               | 11.0        |
| Oklahoma             | 299           | 0.9            | 203                | 67.9        | 96                | 32.1        | 259                | 86.6        | 40                | 13.4        |
| Oregon               | 202           | 0.6            | 161                | 79.7        | 41                | 20.3        | 178                | 88.1        | 24                | 11.9        |
| Rhode Island         | 83            | 0.2            | 77                 | 92.8        | 6                 | 7.2         | 82                 | 98.8        | 1                 | 1.2         |
| South Carolina       | 707           | 2.1            | 608                | 86.0        | 99                | 14.0        | 650                | 91.9        | 57                | 8.1         |
| South Dakota         | 38            | 0.1            | 32                 | 84.2        | 6                 | 15.8        | 36                 | 94.7        | 2                 | 5.3         |
| Tennessee            | 713           | 2.1            | 429                | 60.2        | 284               | 39.8        | 551                | 77.3        | 162               | 22.7        |
| Texas                | 4,309         | 12.7           | 3,144              | 73.0        | 1,165             | 27.0        | 3,583              | 83.2        | 726               | 16.8        |
| Utah                 | 115           | 0.3            | 105                | 91.3        | 10                | 8.7         | 109                | 94.8        | 6                 | 5.2         |
| Virginia             | 864           | 2.5            | 661                | 76.5        | 203               | 23.5        | 750                | 86.8        | 114               | 13.2        |
| Washington           | 438           | 1.3            | 400                | 91.3        | 38                | 8.7         | 418                | 95.4        | 20                | 4.6         |
| West Virginia        | 76            | 0.2            | 59                 | 77.6        | 17                | 22.4        | 67                 | 88.2        | 9                 | 11.8        |
| Wisconsin            | 258           | 0.8            | 217                | 84.1        | 41                | 15.9        | 234                | 90.7        | 24                | 9.3         |
| Wyoming              | 10            | 0.0            | 9                  | 90.0        | 1                 | 10.0        | 9                  | 90.0        | 1                 | 10.0        |
| <b>Total</b>         | <b>33,955</b> | <b>100</b>     | <b>26,602</b>      | <b>78.3</b> | <b>7,353</b>      | <b>21.7</b> | <b>29,464</b>      | <b>86.8</b> | <b>4,491</b>      | <b>13.2</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL).

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months after HIV diagnosis.

<sup>a</sup> Represents percentage of the total number for the column.

**Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged  $\geq 13$  years, by race/ethnicity and selected characteristics—41 states and the District of Columbia**

|                                                    | Total      |                | $\leq 1$ month           |             |                   |             | $\leq 3$ months          |             |                   |             |
|----------------------------------------------------|------------|----------------|--------------------------|-------------|-------------------|-------------|--------------------------|-------------|-------------------|-------------|
|                                                    |            |                | $\geq 1$ CD4 or VL tests |             | No CD4 or VL test |             | $\geq 1$ CD4 or VL tests |             | No CD4 or VL test |             |
|                                                    | No.        | % <sup>a</sup> | No.                      | %           | No.               | %           | No.                      | %           | No.               | %           |
| <b>American Indian/Alaska Native</b>               |            |                |                          |             |                   |             |                          |             |                   |             |
| <b>Sex</b>                                         |            |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 121        | 76.6           | 101                      | 83.5        | 20                | 16.5        | 109                      | 90.1        | 12                | 9.9         |
| Female                                             | 37         | 23.4           | 33                       | 89.2        | 4                 | 10.8        | 33                       | 89.2        | 4                 | 10.8        |
| <b>Age at diagnosis (yr)</b>                       |            |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                              | 20         | 12.7           | 18                       | 90.0        | 2                 | 10.0        | 18                       | 90.0        | 2                 | 10.0        |
| 25–34                                              | 65         | 41.1           | 56                       | 86.2        | 9                 | 13.8        | 61                       | 93.8        | 4                 | 6.2         |
| 35–44                                              | 35         | 22.2           | 28                       | 80.0        | 7                 | 20.0        | 29                       | 82.9        | 6                 | 17.1        |
| 45–54                                              | 27         | 17.1           | 25                       | 92.6        | 2                 | 7.4         | 27                       | 100         | 0                 | 0.0         |
| $\geq 55$                                          | 11         | 7.0            | 7                        | 63.6        | 4                 | 36.4        | 7                        | 63.6        | 4                 | 36.4        |
| <b>Transmission category<sup>b</sup></b>           |            |                |                          |             |                   |             |                          |             |                   |             |
| Male-to-male sexual contact                        | 87         | 55.3           | 77                       | 88.3        | 10                | 11.7        | 82                       | 93.8        | 5                 | 6.2         |
| Injection drug use                                 |            |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 8          | 4.9            | 6                        | 81.8        | 1                 | 18.2        | 6                        | 81.8        | 1                 | 18.2        |
| Female                                             | 13         | 8.5            | 12                       | 90.3        | 1                 | 9.7         | 12                       | 90.3        | 1                 | 9.7         |
| Male-to-male sexual contact and injection drug use | 19         | 11.8           | 14                       | 72.6        | 5                 | 27.4        | 17                       | 89.8        | 2                 | 10.2        |
| Heterosexual contact <sup>c</sup>                  |            |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 7          | 4.6            | 4                        | 54.2        | 3                 | 45.8        | 4                        | 54.2        | 3                 | 45.8        |
| Female                                             | 24         | 14.9           | 21                       | 88.6        | 3                 | 11.4        | 21                       | 88.6        | 3                 | 11.4        |
| <b>Total<sup>d</sup></b>                           | <b>158</b> | <b>100</b>     | <b>134</b>               | <b>84.8</b> | <b>24</b>         | <b>15.2</b> | <b>142</b>               | <b>89.9</b> | <b>16</b>         | <b>10.1</b> |
| <b>Asian</b>                                       |            |                |                          |             |                   |             |                          |             |                   |             |
| <b>Sex</b>                                         |            |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 756        | 88.4           | 615                      | 81.3        | 141               | 18.7        | 670                      | 88.6        | 86                | 11.4        |
| Female                                             | 99         | 11.6           | 75                       | 75.8        | 24                | 24.2        | 80                       | 80.8        | 19                | 19.2        |
| <b>Age at diagnosis (yr)</b>                       |            |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                              | 179        | 20.9           | 141                      | 78.8        | 38                | 21.2        | 156                      | 87.2        | 23                | 12.8        |
| 25–34                                              | 275        | 32.2           | 232                      | 84.4        | 43                | 15.6        | 243                      | 88.4        | 32                | 11.6        |
| 35–44                                              | 202        | 23.6           | 155                      | 76.7        | 47                | 23.3        | 176                      | 87.1        | 26                | 12.9        |
| 45–54                                              | 134        | 15.7           | 110                      | 82.1        | 24                | 17.9        | 119                      | 88.8        | 15                | 11.2        |
| $\geq 55$                                          | 65         | 7.6            | 52                       | 80.0        | 13                | 20.0        | 56                       | 86.2        | 9                 | 13.8        |
| <b>Transmission category<sup>b</sup></b>           |            |                |                          |             |                   |             |                          |             |                   |             |
| Male-to-male sexual contact                        | 689        | 80.5           | 561                      | 81.5        | 127               | 18.5        | 608                      | 88.4        | 80                | 11.6        |
| Injection drug use                                 |            |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 12         | 1.5            | 9                        | 69.4        | 4                 | 30.6        | 11                       | 87.1        | 2                 | 12.9        |
| Female                                             | 4          | 0.4            | 3                        | 74.3        | 1                 | 25.7        | 3                        | 77.1        | 1                 | 22.9        |
| Male-to-male sexual contact and injection drug use | 16         | 1.9            | 14                       | 88.2        | 2                 | 11.8        | 15                       | 95.7        | 1                 | 4.3         |
| Heterosexual contact <sup>c</sup>                  |            |                |                          |             |                   |             |                          |             |                   |             |
| Male                                               | 38         | 4.4            | 30                       | 79.2        | 8                 | 20.8        | 35                       | 91.3        | 3                 | 8.7         |
| Female                                             | 95         | 11.1           | 72                       | 75.9        | 23                | 24.1        | 77                       | 81.1        | 18                | 18.9        |
| <b>Total<sup>d</sup></b>                           | <b>855</b> | <b>100</b>     | <b>690</b>               | <b>80.7</b> | <b>165</b>        | <b>19.3</b> | <b>750</b>               | <b>87.7</b> | <b>105</b>        | <b>12.3</b> |



**Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Total         |                | ≤1 month           |             |                   |             | ≤3 months          |             |                   |             |
|----------------------------------------------------|---------------|----------------|--------------------|-------------|-------------------|-------------|--------------------|-------------|-------------------|-------------|
|                                                    |               |                | ≥1 CD4 or VL tests |             | No CD4 or VL test |             | ≥1 CD4 or VL tests |             | No CD4 or VL test |             |
|                                                    | No.           | % <sup>a</sup> | No.                | %           | No.               | %           | No.                | %           | No.               | %           |
| <b>Black/African American</b>                      |               |                |                    |             |                   |             |                    |             |                   |             |
| <b>Sex</b>                                         |               |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 10,998        | 73.8           | 8,213              | 74.7        | 2,785             | 25.3        | 9,212              | 83.8        | 1,786             | 16.2        |
| Female                                             | 3,911         | 26.2           | 3,082              | 78.8        | 829               | 21.2        | 3,410              | 87.2        | 501               | 12.8        |
| <b>Age at diagnosis (yr)</b>                       |               |                |                    |             |                   |             |                    |             |                   |             |
| 13–24                                              | 3,906         | 26.2           | 2,880              | 73.7        | 1,026             | 26.3        | 3,270              | 83.7        | 636               | 16.3        |
| 25–34                                              | 5,179         | 34.7           | 3,880              | 74.9        | 1,299             | 25.1        | 4,348              | 84.0        | 831               | 16.0        |
| 35–44                                              | 2,473         | 16.6           | 1,902              | 76.9        | 571               | 23.1        | 2,100              | 84.9        | 373               | 15.1        |
| 45–54                                              | 1,835         | 12.3           | 1,429              | 77.9        | 406               | 22.1        | 1,572              | 85.7        | 263               | 14.3        |
| ≥55                                                | 1,516         | 10.2           | 1,204              | 79.4        | 312               | 20.6        | 1,332              | 87.9        | 184               | 12.1        |
| <b>Transmission category<sup>b</sup></b>           |               |                |                    |             |                   |             |                    |             |                   |             |
| Male-to-male sexual contact                        | 8,810         | 59.1           | 6,574              | 74.6        | 2,236             | 25.4        | 7,386              | 83.8        | 1,424             | 16.2        |
| Injection drug use                                 |               |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 338           | 2.3            | 247                | 73.3        | 90                | 26.7        | 272                | 80.4        | 66                | 19.6        |
| Female                                             | 293           | 2.0            | 230                | 78.5        | 63                | 21.5        | 250                | 85.5        | 42                | 14.5        |
| Male-to-male sexual contact and injection drug use | 230           | 1.5            | 161                | 70.1        | 69                | 29.9        | 179                | 77.9        | 51                | 22.1        |
| Heterosexual contact <sup>c</sup>                  |               |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 1,604         | 10.8           | 1,218              | 75.9        | 387               | 24.1        | 1,362              | 84.9        | 242               | 15.1        |
| Female                                             | 3,590         | 24.1           | 2,828              | 78.8        | 762               | 21.2        | 3,134              | 87.3        | 456               | 12.7        |
| <b>Total<sup>d</sup></b>                           | <b>14,909</b> | <b>100</b>     | <b>11,295</b>      | <b>75.8</b> | <b>3,614</b>      | <b>24.2</b> | <b>12,622</b>      | <b>84.7</b> | <b>2,287</b>      | <b>15.3</b> |
| <b>Hispanic/Latino<sup>e</sup></b>                 |               |                |                    |             |                   |             |                    |             |                   |             |
| <b>Sex</b>                                         |               |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 7,537         | 88.5           | 5,965              | 79.1        | 1,572             | 20.9        | 6,561              | 87.1        | 976               | 12.9        |
| Female                                             | 980           | 11.5           | 785                | 80.1        | 195               | 19.9        | 868                | 88.6        | 112               | 11.4        |
| <b>Age at diagnosis (yr)</b>                       |               |                |                    |             |                   |             |                    |             |                   |             |
| 13–24                                              | 1,710         | 20.1           | 1,271              | 74.3        | 439               | 25.7        | 1,449              | 84.7        | 261               | 15.3        |
| 25–34                                              | 3,254         | 38.2           | 2,582              | 79.3        | 672               | 20.7        | 2,854              | 87.7        | 400               | 12.3        |
| 35–44                                              | 1,847         | 21.7           | 1,496              | 81.0        | 351               | 19.0        | 1,607              | 87.0        | 240               | 13.0        |
| 45–54                                              | 1,149         | 13.5           | 943                | 82.1        | 206               | 17.9        | 1,022              | 88.9        | 127               | 11.1        |
| ≥55                                                | 557           | 6.5            | 458                | 82.2        | 99                | 17.8        | 497                | 89.2        | 60                | 10.8        |
| <b>Transmission category<sup>b</sup></b>           |               |                |                    |             |                   |             |                    |             |                   |             |
| Male-to-male sexual contact                        | 6,542         | 76.8           | 5,189              | 79.3        | 1,353             | 20.7        | 5,708              | 87.2        | 834               | 12.8        |
| Injection drug use                                 |               |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 267           | 3.1            | 214                | 79.9        | 54                | 20.1        | 229                | 85.8        | 38                | 14.2        |
| Female                                             | 113           | 1.3            | 84                 | 74.8        | 29                | 25.2        | 96                 | 84.7        | 17                | 15.3        |
| Male-to-male sexual contact and injection drug use | 269           | 3.2            | 200                | 74.3        | 69                | 25.7        | 224                | 83.5        | 44                | 16.5        |
| Heterosexual contact <sup>c</sup>                  |               |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 452           | 5.3            | 357                | 78.9        | 95                | 21.1        | 393                | 86.9        | 59                | 13.1        |
| Female                                             | 863           | 10.1           | 696                | 80.7        | 167               | 19.3        | 768                | 89.0        | 95                | 11.0        |
| <b>Total<sup>d</sup></b>                           | <b>8,517</b>  | <b>100</b>     | <b>6,750</b>       | <b>79.3</b> | <b>1,767</b>      | <b>20.7</b> | <b>7,429</b>       | <b>87.2</b> | <b>1,088</b>      | <b>12.8</b> |

**Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Total        |                | ≤1 month           |             |                   |             | ≤3 months          |             |                   |             |
|----------------------------------------------------|--------------|----------------|--------------------|-------------|-------------------|-------------|--------------------|-------------|-------------------|-------------|
|                                                    |              |                | ≥1 CD4 or VL tests |             | No CD4 or VL test |             | ≥1 CD4 or VL tests |             | No CD4 or VL test |             |
|                                                    | No.          | % <sup>a</sup> | No.                | %           | No.               | %           | No.                | %           | No.               | %           |
| <b>Native Hawaiian/Other Pacific Islander</b>      |              |                |                    |             |                   |             |                    |             |                   |             |
| <b>Sex</b>                                         |              |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 33           | 76.7           | 28                 | 84.8        | 5                 | 15.2        | 31                 | 93.9        | 2                 | 6.1         |
| Female                                             | 10           | 23.3           | 8                  | 80.0        | 2                 | 20.0        | 10                 | 100         | 0                 | 0.0         |
| <b>Age at diagnosis (yr)</b>                       |              |                |                    |             |                   |             |                    |             |                   |             |
| 13–24                                              | 8            | 18.6           | 7                  | 87.5        | 1                 | 12.5        | 8                  | 100         | 0                 | 0.0         |
| 25–34                                              | 19           | 44.2           | 16                 | 84.2        | 3                 | 15.8        | 18                 | 94.7        | 1                 | 5.3         |
| 35–44                                              | 10           | 23.3           | 9                  | 90.0        | 1                 | 10.0        | 10                 | 100         | 0                 | 0.0         |
| 45–54                                              | 5            | 11.6           | 3                  | 60.0        | 2                 | 40.0        | 4                  | 80.0        | 1                 | 20.0        |
| ≥55                                                | 1            | 2.3            | 1                  | 100         | 0                 | 0.0         | 1                  | 100         | 0                 | 0.0         |
| <b>Transmission category<sup>b</sup></b>           |              |                |                    |             |                   |             |                    |             |                   |             |
| Male-to-male sexual contact                        | 28           | 64.2           | 24                 | 85.9        | 4                 | 14.1        | 27                 | 96.4        | 1                 | 3.6         |
| Injection drug use                                 |              |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 1            | 2.6            | 0                  | 9.1         | 1                 | 90.9        | 0                  | 9.1         | 1                 | 90.9        |
| Female                                             | 0            | 0.0            | 0                  | 0.0         | 0                 | 0.0         | 0                  | 0.0         | 0                 | 0.0         |
| Male-to-male sexual contact and injection drug use | 2            | 4.9            | 2                  | 95.2        | 0                 | 4.8         | 2                  | 100         | 0                 | 0.0         |
| Heterosexual contact <sup>c</sup>                  |              |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 2            | 5.1            | 2                  | 100         | 0                 | 0.0         | 2                  | 100         | 0                 | 0.0         |
| Female                                             | 10           | 23.3           | 8                  | 80.0        | 2                 | 20.0        | 10                 | 100         | 0                 | 0.0         |
| <b>Total<sup>d</sup></b>                           | <b>43</b>    | <b>100</b>     | <b>36</b>          | <b>83.7</b> | <b>7</b>          | <b>16.3</b> | <b>41</b>          | <b>95.3</b> | <b>2</b>          | <b>4.7</b>  |
| <b>White</b>                                       |              |                |                    |             |                   |             |                    |             |                   |             |
| <b>Sex</b>                                         |              |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 7,322        | 85.4           | 5,992              | 81.8        | 1,330             | 18.2        | 6,588              | 90.0        | 734               | 10.0        |
| Female                                             | 1,256        | 14.6           | 986                | 78.5        | 270               | 21.5        | 1,095              | 87.2        | 161               | 12.8        |
| <b>Age at diagnosis (yr)</b>                       |              |                |                    |             |                   |             |                    |             |                   |             |
| 13–24                                              | 1,286        | 15.0           | 1,007              | 78.3        | 279               | 21.7        | 1,144              | 89.0        | 142               | 11.0        |
| 25–34                                              | 2,743        | 32.0           | 2,166              | 79.0        | 577               | 21.0        | 2,420              | 88.2        | 323               | 11.8        |
| 35–44                                              | 1,735        | 20.2           | 1,427              | 82.2        | 308               | 17.8        | 1,564              | 90.1        | 171               | 9.9         |
| 45–54                                              | 1,659        | 19.3           | 1,400              | 84.4        | 259               | 15.6        | 1,497              | 90.2        | 162               | 9.8         |
| ≥55                                                | 1,155        | 13.5           | 978                | 84.7        | 177               | 15.3        | 1,058              | 91.6        | 97                | 8.4         |
| <b>Transmission category<sup>b</sup></b>           |              |                |                    |             |                   |             |                    |             |                   |             |
| Male-to-male sexual contact                        | 5,971        | 69.6           | 4,936              | 82.7        | 1,035             | 17.3        | 5,394              | 90.3        | 578               | 9.7         |
| Injection drug use                                 |              |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 426          | 5.0            | 327                | 76.7        | 99                | 23.3        | 375                | 87.9        | 52                | 12.1        |
| Female                                             | 407          | 4.7            | 312                | 76.7        | 95                | 23.3        | 344                | 84.5        | 63                | 15.5        |
| Male-to-male sexual contact and injection drug use | 534          | 6.2            | 412                | 77.1        | 122               | 22.9        | 471                | 88.1        | 64                | 11.9        |
| Heterosexual contact <sup>c</sup>                  |              |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 383          | 4.5            | 311                | 81.2        | 72                | 18.8        | 343                | 89.5        | 40                | 10.5        |
| Female                                             | 846          | 9.9            | 672                | 79.4        | 174               | 20.6        | 749                | 88.5        | 97                | 11.5        |
| <b>Total<sup>d</sup></b>                           | <b>8,578</b> | <b>100</b>     | <b>6,978</b>       | <b>81.3</b> | <b>1,600</b>      | <b>18.7</b> | <b>7,683</b>       | <b>89.6</b> | <b>895</b>        | <b>10.4</b> |

**Table 3c. Linkage to HIV medical care after HIV diagnosis during 2017, among persons aged ≥13 years, by race/ethnicity and selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Total      |                | ≤1 month           |             |                   |             | ≤3 months          |             |                   |             |
|----------------------------------------------------|------------|----------------|--------------------|-------------|-------------------|-------------|--------------------|-------------|-------------------|-------------|
|                                                    |            |                | ≥1 CD4 or VL tests |             | No CD4 or VL test |             | ≥1 CD4 or VL tests |             | No CD4 or VL test |             |
|                                                    | No.        | % <sup>a</sup> | No.                | %           | No.               | %           | No.                | %           | No.               | %           |
| <b>Multiple races</b>                              |            |                |                    |             |                   |             |                    |             |                   |             |
| <b>Sex</b>                                         |            |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 738        | 82.5           | 591                | 80.1        | 147               | 19.9        | 652                | 88.3        | 86                | 11.7        |
| Female                                             | 157        | 17.5           | 128                | 81.5        | 29                | 18.5        | 145                | 92.4        | 12                | 7.6         |
| <b>Age at diagnosis (yr)</b>                       |            |                |                    |             |                   |             |                    |             |                   |             |
| 13–24                                              | 233        | 26.0           | 186                | 79.8        | 47                | 20.2        | 203                | 87.1        | 30                | 12.9        |
| 25–34                                              | 317        | 35.4           | 250                | 78.9        | 67                | 21.1        | 280                | 88.3        | 37                | 11.7        |
| 35–44                                              | 161        | 18.0           | 132                | 82.0        | 29                | 18.0        | 146                | 90.7        | 15                | 9.3         |
| 45–54                                              | 127        | 14.2           | 107                | 84.3        | 20                | 15.7        | 118                | 92.9        | 9                 | 7.1         |
| ≥55                                                | 57         | 6.4            | 44                 | 77.2        | 13                | 22.8        | 50                 | 87.7        | 7                 | 12.3        |
| <b>Transmission category<sup>b</sup></b>           |            |                |                    |             |                   |             |                    |             |                   |             |
| Male-to-male sexual contact                        | 624        | 69.8           | 500                | 80.0        | 125               | 20.0        | 548                | 87.8        | 76                | 12.2        |
| Injection drug use                                 |            |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 25         | 2.8            | 20                 | 79.1        | 5                 | 20.9        | 22                 | 87.7        | 3                 | 12.3        |
| Female                                             | 29         | 3.2            | 20                 | 71.1        | 8                 | 28.9        | 26                 | 89.5        | 3                 | 10.5        |
| Male-to-male sexual contact and injection drug use | 41         | 4.6            | 34                 | 82.6        | 7                 | 17.4        | 37                 | 91.2        | 4                 | 8.8         |
| Heterosexual contact <sup>c</sup>                  |            |                |                    |             |                   |             |                    |             |                   |             |
| Male                                               | 47         | 5.3            | 38                 | 79.8        | 10                | 20.2        | 44                 | 93.4        | 3                 | 6.6         |
| Female                                             | 126        | 14.0           | 105                | 83.7        | 21                | 16.3        | 117                | 93.0        | 9                 | 7.0         |
| <b>Total<sup>d</sup></b>                           | <b>895</b> | <b>100</b>     | <b>719</b>         | <b>80.3</b> | <b>176</b>        | <b>19.7</b> | <b>797</b>         | <b>89.1</b> | <b>98</b>         | <b>10.9</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL).

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of ≥1 CD4 or VL tests ≤1 month or ≤3 months after HIV diagnosis. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> Represents percentage of the total number for the column.

<sup>b</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>c</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>d</sup> Includes persons whose infection was attributed to hemophilia, blood transfusion, or perinatal exposure or whose risk factor was not reported or not identified. Data not displayed because the numbers were too small to be meaningful.

<sup>e</sup> Hispanics/Latinos can be of any race.

**Table 3d. Linkage to HIV medical care after HIV diagnosis during 2017, among males aged  $\geq 13$  years with infection attributed to male-to-male sexual contact, by race/ethnicity and age at diagnosis—41 states and the District of Columbia**

|                                               | Total         |                | $\leq 1$ month           |             |                   |             | $\leq 3$ months          |             |                   |             |
|-----------------------------------------------|---------------|----------------|--------------------------|-------------|-------------------|-------------|--------------------------|-------------|-------------------|-------------|
|                                               |               |                | $\geq 1$ CD4 or VL tests |             | No CD4 or VL test |             | $\geq 1$ CD4 or VL tests |             | No CD4 or VL test |             |
|                                               | No.           | % <sup>a</sup> | No.                      | %           | No.               | %           | No.                      | %           | No.               | %           |
| <b>American Indian/Alaska Native</b>          |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 15            | 16.6           | 14                       | 95.2        | 1                 | 4.8         | 14                       | 95.2        | 1                 | 4.8         |
| 25–34                                         | 39            | 45.0           | 35                       | 88.0        | 5                 | 12.0        | 37                       | 95.2        | 2                 | 4.8         |
| 35–44                                         | 19            | 21.4           | 18                       | 93.6        | 1                 | 6.4         | 18                       | 93.6        | 1                 | 6.4         |
| 45–54                                         | 12            | 14.1           | 10                       | 83.7        | 2                 | 16.3        | 12                       | 100         | 0                 | 0.0         |
| $\geq 55$                                     | 3             | 3.0            | 1                        | 38.5        | 2                 | 61.5        | 1                        | 38.5        | 2                 | 61.5        |
| <b>Asian</b>                                  |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 168           | 24.4           | 132                      | 78.6        | 36                | 21.4        | 147                      | 87.5        | 21                | 12.5        |
| 25–34                                         | 240           | 34.8           | 202                      | 84.3        | 38                | 15.7        | 211                      | 87.9        | 29                | 12.1        |
| 35–44                                         | 149           | 21.7           | 119                      | 79.5        | 31                | 20.5        | 134                      | 89.7        | 15                | 10.3        |
| 45–54                                         | 98            | 14.3           | 81                       | 82.5        | 17                | 17.5        | 88                       | 89.3        | 11                | 10.7        |
| $\geq 55$                                     | 33            | 4.8            | 27                       | 82.7        | 6                 | 17.3        | 29                       | 87.2        | 4                 | 12.8        |
| <b>Black/African American</b>                 |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 3,117         | 35.4           | 2,288                    | 73.4        | 829               | 26.6        | 2,606                    | 83.6        | 510               | 16.4        |
| 25–34                                         | 3,575         | 40.6           | 2,651                    | 74.1        | 924               | 25.9        | 2,986                    | 83.5        | 589               | 16.5        |
| 35–44                                         | 1,119         | 12.7           | 858                      | 76.7        | 261               | 23.3        | 937                      | 83.7        | 182               | 16.3        |
| 45–54                                         | 636           | 7.2            | 494                      | 77.6        | 143               | 22.4        | 541                      | 85.0        | 95                | 15.0        |
| $\geq 55$                                     | 363           | 4.1            | 284                      | 78.3        | 79                | 21.7        | 316                      | 87.0        | 47                | 13.0        |
| <b>Hispanic/Latino<sup>b</sup></b>            |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 1,454         | 22.2           | 1,075                    | 73.9        | 379               | 26.1        | 1,233                    | 84.8        | 221               | 15.2        |
| 25–34                                         | 2,683         | 41.0           | 2,140                    | 79.8        | 542               | 20.2        | 2,354                    | 87.7        | 329               | 12.3        |
| 35–44                                         | 1,348         | 20.6           | 1,105                    | 82.0        | 243               | 18.0        | 1,186                    | 88.0        | 162               | 12.0        |
| 45–54                                         | 775           | 11.8           | 632                      | 81.5        | 144               | 18.5        | 679                      | 87.7        | 96                | 12.3        |
| $\geq 55$                                     | 283           | 4.3            | 237                      | 83.8        | 46                | 16.2        | 255                      | 90.4        | 27                | 9.6         |
| <b>Native Hawaiian/Other Pacific Islander</b> |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 8             | 28.6           | 7                        | 88.6        | 1                 | 11.4        | 8                        | 100         | 0                 | 0.0         |
| 25–34                                         | 13            | 46.7           | 10                       | 76.7        | 3                 | 23.3        | 12                       | 92.2        | 1                 | 7.8         |
| 35–44                                         | 5             | 17.4           | 5                        | 100         | 0                 | 0.0         | 5                        | 100         | 0                 | 0.0         |
| 45–54                                         | 2             | 7.2            | 2                        | 100         | 0                 | 0.0         | 2                        | 100         | 0                 | 0.0         |
| $\geq 55$                                     | 0             | 0.0            | 0                        | 0.0         | 0                 | 0.0         | 0                        | 0.0         | 0                 | 0.0         |
| <b>White</b>                                  |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 995           | 16.7           | 784                      | 78.8        | 211               | 21.2        | 888                      | 89.2        | 107               | 10.8        |
| 25–34                                         | 1,921         | 32.2           | 1,548                    | 80.6        | 372               | 19.4        | 1,713                    | 89.2        | 207               | 10.8        |
| 35–44                                         | 1,132         | 19.0           | 957                      | 84.5        | 176               | 15.5        | 1,037                    | 91.5        | 96                | 8.5         |
| 45–54                                         | 1,165         | 19.5           | 1,001                    | 85.9        | 164               | 14.1        | 1,058                    | 90.8        | 107               | 9.2         |
| $\geq 55$                                     | 758           | 12.7           | 646                      | 85.1        | 113               | 14.9        | 698                      | 92.0        | 61                | 8.0         |
| <b>Multiple races</b>                         |               |                |                          |             |                   |             |                          |             |                   |             |
| 13–24                                         | 187           | 29.9           | 149                      | 79.7        | 38                | 20.3        | 162                      | 86.5        | 25                | 13.5        |
| 25–34                                         | 246           | 39.4           | 191                      | 77.5        | 55                | 22.5        | 215                      | 87.2        | 32                | 12.8        |
| 35–44                                         | 98            | 15.6           | 83                       | 84.9        | 15                | 15.1        | 86                       | 88.0        | 12                | 12.0        |
| 45–54                                         | 70            | 11.2           | 59                       | 84.4        | 11                | 15.6        | 66                       | 94.9        | 4                 | 5.1         |
| $\geq 55$                                     | 24            | 3.8            | 18                       | 75.0        | 6                 | 25.0        | 20                       | 83.3        | 4                 | 16.7        |
| <b>Total</b>                                  | <b>22,752</b> | <b>100</b>     | <b>17,862</b>            | <b>78.5</b> | <b>4,890</b>      | <b>21.5</b> | <b>19,753</b>            | <b>86.8</b> | <b>2,999</b>      | <b>13.2</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage; VL, viral load (copies/mL).

Note. Data are based on residence at diagnosis. Linkage to HIV medical care was measured by documentation of  $\geq 1$  CD4 or VL tests  $\leq 1$  month or  $\leq 3$  months after HIV diagnosis. Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> Represents percentage of the total number for the column.

<sup>b</sup> Hispanics/Latinos can be of any race.

**Table 4a. Receipt of HIV medical care among persons aged  $\geq 13$  years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia**

|                                                    | Persons alive at year-end 2016 | $\geq 1$ CD4 or VL tests |             | $\geq 2$ CD4 or VL tests <sup>a</sup> |             |
|----------------------------------------------------|--------------------------------|--------------------------|-------------|---------------------------------------|-------------|
|                                                    | Total No.                      | No.                      | %           | No.                                   | %           |
| <b>Sex</b>                                         |                                |                          |             |                                       |             |
| Male                                               | 638,354                        | 473,746                  | 74.2        | 367,431                               | 57.6        |
| Female                                             | 198,286                        | 146,682                  | 74.0        | 114,275                               | 57.6        |
| <b>Age at year-end 2015 (yr)</b>                   |                                |                          |             |                                       |             |
| 13–24                                              | 32,447                         | 24,762                   | 76.3        | 18,213                                | 56.1        |
| 25–34                                              | 126,264                        | 93,547                   | 74.1        | 68,201                                | 54.0        |
| 35–44                                              | 168,024                        | 122,997                  | 73.2        | 92,834                                | 55.3        |
| 45–54                                              | 271,830                        | 204,762                  | 75.3        | 160,229                               | 58.9        |
| $\geq 55$                                          | 238,075                        | 174,360                  | 73.2        | 142,229                               | 59.7        |
| <b>Race/ethnicity</b>                              |                                |                          |             |                                       |             |
| American Indian/Alaska Native                      | 2,021                          | 1,483                    | 73.4        | 1,136                                 | 56.2        |
| Asian <sup>b</sup>                                 | 11,289                         | 8,297                    | 73.5        | 6,567                                 | 58.2        |
| Black/African American                             | 350,852                        | 251,423                  | 71.7        | 192,519                               | 54.9        |
| Hispanic/Latino <sup>c</sup>                       | 181,145                        | 130,195                  | 71.9        | 106,101                               | 58.6        |
| Native Hawaiian/Other Pacific Islander             | 702                            | 501                      | 71.4        | 358                                   | 51.0        |
| White                                              | 252,832                        | 196,616                  | 77.8        | 149,933                               | 59.3        |
| Multiple races                                     | 37,079                         | 31,844                   | 85.9        | 25,034                                | 67.5        |
| <b>Transmission category<sup>d</sup></b>           |                                |                          |             |                                       |             |
| Male-to-male sexual contact                        | 461,965                        | 350,253                  | 75.8        | 269,746                               | 58.4        |
| Injection drug use                                 |                                |                          |             |                                       |             |
| Male                                               | 58,814                         | 37,394                   | 63.6        | 30,005                                | 51.0        |
| Female                                             | 41,293                         | 29,927                   | 72.5        | 23,585                                | 57.1        |
| Male-to-male sexual contact and injection drug use | 46,714                         | 36,645                   | 78.4        | 28,863                                | 61.8        |
| Heterosexual contact <sup>e</sup>                  |                                |                          |             |                                       |             |
| Male                                               | 64,430                         | 44,861                   | 69.6        | 35,328                                | 54.8        |
| Female                                             | 151,019                        | 112,269                  | 74.3        | 87,149                                | 57.7        |
| Other <sup>f</sup>                                 |                                |                          |             |                                       |             |
| Male                                               | 6,431                          | 4,593                    | 71.4        | 3,489                                 | 54.3        |
| Female                                             | 5,974                          | 4,486                    | 75.1        | 3,541                                 | 59.3        |
| <b>Total<sup>g</sup></b>                           | <b>836,640</b>                 | <b>620,428</b>           | <b>74.2</b> | <b>481,706</b>                        | <b>57.6</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage; VL, viral load (copies/mL).

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> Performed  $\geq 3$  months apart during 2016.

<sup>b</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>g</sup> Includes 720 persons of unknown race/ethnicity.

**Table 4b. Receipt of HIV medical care among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by area of residence—41 states and the District of Columbia**

|                      | Persons alive at year-end 2016<br>Total No. | ≥1 CD4 or VL tests |             | ≥2 CD4 or VL tests <sup>a</sup> |             |
|----------------------|---------------------------------------------|--------------------|-------------|---------------------------------|-------------|
|                      |                                             | No.                | %           | No.                             | %           |
| Alabama              | 11,946                                      | 8,891              | 74.4        | 6,881                           | 57.6        |
| Alaska               | 654                                         | 587                | 89.8        | 396                             | 60.6        |
| California           | 120,666                                     | 91,791             | 76.1        | 70,474                          | 58.4        |
| Colorado             | 11,765                                      | 7,596              | 64.6        | 5,389                           | 45.8        |
| Connecticut          | 9,912                                       | 7,883              | 79.5        | 6,097                           | 61.5        |
| Delaware             | 3,049                                       | 2,453              | 80.5        | 1,811                           | 59.4        |
| District of Columbia | 14,115                                      | 9,671              | 68.5        | 7,350                           | 52.1        |
| Florida              | 103,068                                     | 76,291             | 74.0        | 62,240                          | 60.4        |
| Georgia              | 48,718                                      | 34,854             | 71.5        | 27,614                          | 56.7        |
| Hawaii               | 2,530                                       | 1,874              | 74.1        | 1,353                           | 53.5        |
| Illinois             | 33,938                                      | 23,558             | 69.4        | 16,971                          | 50.0        |
| Indiana              | 10,420                                      | 7,871              | 75.5        | 5,810                           | 55.8        |
| Iowa                 | 2,427                                       | 2,107              | 86.8        | 1,562                           | 64.4        |
| Louisiana            | 18,938                                      | 14,586             | 77.0        | 11,544                          | 61.0        |
| Maine                | 1,454                                       | 1,227              | 84.4        | 944                             | 64.9        |
| Maryland             | 31,324                                      | 21,201             | 67.7        | 15,129                          | 48.3        |
| Massachusetts        | 19,364                                      | 15,344             | 79.2        | 12,074                          | 62.4        |
| Michigan             | 14,501                                      | 12,066             | 83.2        | 8,877                           | 61.2        |
| Minnesota            | 7,732                                       | 5,875              | 76.0        | 4,061                           | 52.5        |
| Mississippi          | 8,905                                       | 6,189              | 69.5        | 4,740                           | 53.2        |
| Missouri             | 11,551                                      | 9,091              | 78.7        | 6,853                           | 59.3        |
| Montana              | 566                                         | 512                | 90.5        | 391                             | 69.1        |
| Nebraska             | 2,008                                       | 1,523              | 75.8        | 1,014                           | 50.5        |
| New Hampshire        | 1,131                                       | 863                | 76.3        | 674                             | 59.6        |
| New Mexico           | 3,126                                       | 2,472              | 79.1        | 1,951                           | 62.4        |
| New York             | 123,789                                     | 90,326             | 73.0        | 76,315                          | 61.6        |
| North Carolina       | 28,743                                      | 21,417             | 74.5        | 15,401                          | 53.6        |
| North Dakota         | 328                                         | 273                | 83.2        | 201                             | 61.3        |
| Ohio                 | 20,282                                      | 12,912             | 63.7        | 8,753                           | 43.2        |
| Oklahoma             | 5,627                                       | 4,204              | 74.7        | 3,389                           | 60.2        |
| Oregon               | 6,501                                       | 5,736              | 88.2        | 4,069                           | 62.6        |
| Rhode Island         | 2,310                                       | 1,903              | 82.4        | 1,363                           | 59.0        |
| South Carolina       | 15,700                                      | 12,171             | 77.5        | 9,993                           | 63.6        |
| South Dakota         | 483                                         | 280                | 58.0        | 160                             | 33.1        |
| Tennessee            | 15,553                                      | 12,161             | 78.2        | 8,962                           | 57.6        |
| Texas                | 80,232                                      | 61,069             | 76.1        | 48,076                          | 59.9        |
| Utah                 | 2,591                                       | 1,786              | 68.9        | 1,152                           | 44.5        |
| Virginia             | 20,611                                      | 13,109             | 63.6        | 9,316                           | 45.2        |
| Washington           | 12,309                                      | 10,568             | 85.9        | 7,744                           | 62.9        |
| West Virginia        | 1,702                                       | 1,246              | 73.2        | 800                             | 47.0        |
| Wisconsin            | 5,783                                       | 4,657              | 80.5        | 3,630                           | 62.8        |
| Wyoming              | 288                                         | 234                | 81.3        | 182                             | 63.2        |
| <b>Total</b>         | <b>836,640</b>                              | <b>620,428</b>     | <b>74.2</b> | <b>481,706</b>                  | <b>57.6</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage; VL, viral load (copies/mL).

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address).

<sup>a</sup> Performed  $\geq 3$  months apart during 2016.

**Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia**

|                                                    | Persons alive at<br>year-end 2016<br>Total No. | ≥1 CD4 or VL tests |             | ≥2 CD4 or VL tests <sup>a</sup> |             | VL of <200 copies/mL <sup>b</sup> |             |
|----------------------------------------------------|------------------------------------------------|--------------------|-------------|---------------------------------|-------------|-----------------------------------|-------------|
|                                                    |                                                | No.                | %           | No.                             | %           | No.                               | %           |
| <b>American Indian/Alaska Native</b>               |                                                |                    |             |                                 |             |                                   |             |
| <b>Sex</b>                                         |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 1,440                                          | 1,038              | 72.1        | 806                             | 56.0        | 864                               | 60.0        |
| Female                                             | 581                                            | 445                | 76.6        | 330                             | 56.8        | 341                               | 58.7        |
| <b>Age at year-end 2015 (yr)</b>                   |                                                |                    |             |                                 |             |                                   |             |
| 13–24                                              | 79                                             | 64                 | 81.0        | 49                              | 62.0        | 45                                | 57.0        |
| 25–34                                              | 321                                            | 240                | 74.8        | 179                             | 55.8        | 186                               | 57.9        |
| 35–44                                              | 444                                            | 314                | 70.7        | 225                             | 50.7        | 245                               | 55.2        |
| 45–54                                              | 700                                            | 519                | 74.1        | 408                             | 58.3        | 426                               | 60.9        |
| ≥55                                                | 477                                            | 346                | 72.5        | 275                             | 57.7        | 303                               | 63.5        |
| <b>Transmission category<sup>c</sup></b>           |                                                |                    |             |                                 |             |                                   |             |
| Male-to-male sexual contact                        | 977                                            | 714                | 73.1        | 557                             | 57.0        | 608                               | 62.2        |
| Injection drug use                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 156                                            | 101                | 64.9        | 77                              | 49.0        | 82                                | 52.1        |
| Female                                             | 190                                            | 140                | 73.4        | 95                              | 49.7        | 100                               | 52.5        |
| Male-to-male sexual contact and injection drug use | 176                                            | 130                | 74.3        | 103                             | 58.5        | 104                               | 59.4        |
| Heterosexual contact <sup>d</sup>                  |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 118                                            | 82                 | 68.9        | 63                              | 53.5        | 61                                | 51.9        |
| Female                                             | 374                                            | 293                | 78.3        | 226                             | 60.5        | 232                               | 62.0        |
| Other <sup>e</sup>                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 13                                             | 10                 | 79.7        | 6                               | 48.4        | 9                                 | 71.9        |
| Female                                             | 17                                             | 12                 | 73.3        | 9                               | 54.5        | 9                                 | 55.2        |
| <b>Total</b>                                       | <b>2,021</b>                                   | <b>1,483</b>       | <b>73.4</b> | <b>1,136</b>                    | <b>56.2</b> | <b>1,205</b>                      | <b>59.6</b> |
| <b>Asian<sup>f</sup></b>                           |                                                |                    |             |                                 |             |                                   |             |
| <b>Sex</b>                                         |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 9,297                                          | 6,895              | 74.2        | 5,448                           | 58.6        | 6,265                             | 67.4        |
| Female                                             | 1,992                                          | 1,402              | 70.4        | 1,119                           | 56.2        | 1,256                             | 63.1        |
| <b>Age at year-end 2015 (yr)</b>                   |                                                |                    |             |                                 |             |                                   |             |
| 13–24                                              | 422                                            | 341                | 80.8        | 276                             | 65.4        | 300                               | 71.1        |
| 25–34                                              | 2,014                                          | 1,505              | 74.7        | 1,142                           | 56.7        | 1,344                             | 66.7        |
| 35–44                                              | 3,372                                          | 2,475              | 73.4        | 1,921                           | 57.0        | 2,231                             | 66.2        |
| 45–54                                              | 3,290                                          | 2,457              | 74.7        | 1,982                           | 60.2        | 2,242                             | 68.1        |
| ≥55                                                | 2,191                                          | 1,519              | 69.3        | 1,246                           | 56.9        | 1,404                             | 64.1        |
| <b>Transmission category<sup>c</sup></b>           |                                                |                    |             |                                 |             |                                   |             |
| Male-to-male sexual contact                        | 7,745                                          | 5,794              | 74.8        | 4,562                           | 58.9        | 5,280                             | 68.2        |
| Injection drug use                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 356                                            | 225                | 63.1        | 179                             | 50.4        | 201                               | 56.4        |
| Female                                             | 154                                            | 100                | 64.9        | 77                              | 50.1        | 86                                | 55.4        |
| Male-to-male sexual contact and injection drug use | 329                                            | 260                | 79.1        | 200                             | 60.9        | 224                               | 68.3        |
| Heterosexual contact <sup>d</sup>                  |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 779                                            | 557                | 71.5        | 458                             | 58.8        | 507                               | 65.1        |
| Female                                             | 1,769                                          | 1,260              | 71.2        | 1,007                           | 56.9        | 1,131                             | 63.9        |
| Other <sup>e</sup>                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 88                                             | 59                 | 67.2        | 48                              | 54.7        | 53                                | 59.8        |
| Female                                             | 69                                             | 42                 | 61.6        | 35                              | 50.3        | 40                                | 57.7        |
| <b>Total</b>                                       | <b>11,289</b>                                  | <b>8,297</b>       | <b>73.5</b> | <b>6,567</b>                    | <b>58.2</b> | <b>7,521</b>                      | <b>66.6</b> |

**Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Persons alive at<br>year-end 2016<br>Total No. | ≥1 CD4 or VL tests |             | ≥2 CD4 or VL tests <sup>a</sup> |             | VL of <200 copies/mL <sup>b</sup> |             |
|----------------------------------------------------|------------------------------------------------|--------------------|-------------|---------------------------------|-------------|-----------------------------------|-------------|
|                                                    |                                                | No.                | %           | No.                             | %           | No.                               | %           |
| <b>Black/African American</b>                      |                                                |                    |             |                                 |             |                                   |             |
| <b>Sex</b>                                         |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 231,029                                        | 163,880            | 70.9        | 125,049                         | 54.1        | 127,875                           | 55.4        |
| Female                                             | 119,823                                        | 87,543             | 73.1        | 67,470                          | 56.3        | 68,943                            | 57.5        |
| <b>Age at year-end 2015 (yr)</b>                   |                                                |                    |             |                                 |             |                                   |             |
| 13–24                                              | 19,179                                         | 14,250             | 74.3        | 10,247                          | 53.4        | 9,481                             | 49.4        |
| 25–34                                              | 62,611                                         | 44,959             | 71.8        | 32,116                          | 51.3        | 32,029                            | 51.2        |
| 35–44                                              | 71,037                                         | 50,741             | 71.4        | 37,691                          | 53.1        | 38,726                            | 54.5        |
| 45–54                                              | 103,790                                        | 75,719             | 73.0        | 59,216                          | 57.1        | 61,142                            | 58.9        |
| ≥55                                                | 94,235                                         | 65,754             | 69.8        | 53,249                          | 56.5        | 55,440                            | 58.8        |
| <b>Transmission category<sup>c</sup></b>           |                                                |                    |             |                                 |             |                                   |             |
| Male-to-male sexual contact                        | 143,512                                        | 104,434            | 72.8        | 78,329                          | 54.6        | 81,377                            | 56.7        |
| Injection drug use                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 29,111                                         | 18,262             | 62.7        | 14,491                          | 49.8        | 14,408                            | 49.5        |
| Female                                             | 20,849                                         | 14,839             | 71.2        | 11,651                          | 55.9        | 11,587                            | 55.6        |
| Male-to-male sexual contact and injection drug use | 13,816                                         | 10,354             | 74.9        | 8,179                           | 59.2        | 7,852                             | 56.8        |
| Heterosexual contact <sup>d</sup>                  |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 41,629                                         | 28,807             | 69.2        | 22,513                          | 54.1        | 22,936                            | 55.1        |
| Female                                             | 95,606                                         | 70,166             | 73.4        | 53,819                          | 56.3        | 55,743                            | 58.3        |
| Other <sup>e</sup>                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 2,961                                          | 2,022              | 68.3        | 1,538                           | 52.0        | 1,302                             | 44.0        |
| Female                                             | 3,367                                          | 2,537              | 75.4        | 2,000                           | 59.4        | 1,613                             | 47.9        |
| <b>Total</b>                                       | <b>350,852</b>                                 | <b>251,423</b>     | <b>71.7</b> | <b>192,519</b>                  | <b>54.9</b> | <b>196,818</b>                    | <b>56.1</b> |
| <b>Hispanic/Latino<sup>g</sup></b>                 |                                                |                    |             |                                 |             |                                   |             |
| <b>Sex</b>                                         |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 145,972                                        | 103,604            | 71.0        | 84,025                          | 57.6        | 89,007                            | 61.0        |
| Female                                             | 35,173                                         | 26,591             | 75.6        | 22,076                          | 62.8        | 22,100                            | 62.8        |
| <b>Age at year-end 2015 (yr)</b>                   |                                                |                    |             |                                 |             |                                   |             |
| 13–24                                              | 6,893                                          | 5,396              | 78.3        | 4,167                           | 60.5        | 4,036                             | 58.6        |
| 25–34                                              | 30,091                                         | 22,362             | 74.3        | 17,098                          | 56.8        | 18,105                            | 60.2        |
| 35–44                                              | 43,668                                         | 30,819             | 70.6        | 24,648                          | 56.4        | 25,923                            | 59.4        |
| 45–54                                              | 58,255                                         | 42,114             | 72.3        | 34,777                          | 59.7        | 36,598                            | 62.8        |
| ≥55                                                | 42,238                                         | 29,504             | 69.9        | 25,411                          | 60.2        | 26,445                            | 62.6        |
| <b>Transmission category<sup>c</sup></b>           |                                                |                    |             |                                 |             |                                   |             |
| Male-to-male sexual contact                        | 105,947                                        | 77,407             | 73.1        | 62,279                          | 58.8        | 67,421                            | 63.6        |
| Injection drug use                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 16,276                                         | 9,532              | 58.6        | 8,064                           | 49.5        | 7,839                             | 48.2        |
| Female                                             | 7,899                                          | 5,874              | 74.4        | 4,930                           | 62.4        | 4,691                             | 59.4        |
| Male-to-male sexual contact and injection drug use | 10,099                                         | 7,650              | 75.8        | 6,294                           | 62.3        | 6,139                             | 60.8        |
| Heterosexual contact <sup>d</sup>                  |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 12,281                                         | 8,034              | 65.4        | 6,608                           | 53.8        | 6,892                             | 56.1        |
| Female                                             | 25,983                                         | 19,720             | 75.9        | 16,321                          | 62.8        | 16,703                            | 64.3        |
| Other <sup>e</sup>                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 1,368                                          | 981                | 71.7        | 781                             | 57.1        | 716                               | 52.3        |
| Female                                             | 1,292                                          | 996                | 77.1        | 825                             | 63.9        | 707                               | 54.7        |
| <b>Total</b>                                       | <b>181,145</b>                                 | <b>130,195</b>     | <b>71.9</b> | <b>106,101</b>                  | <b>58.6</b> | <b>111,107</b>                    | <b>61.3</b> |



**Table 4c. Receipt of HIV medical care and viral suppression among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Persons alive at<br>year-end 2016<br>Total No. | ≥1 CD4 or VL tests |             | ≥2 CD4 or VL tests <sup>a</sup> |             | VL of <200 copies/mL <sup>b</sup> |             |
|----------------------------------------------------|------------------------------------------------|--------------------|-------------|---------------------------------|-------------|-----------------------------------|-------------|
|                                                    |                                                | No.                | %           | No.                             | %           | No.                               | %           |
| <b>Native Hawaiian/Other Pacific Islander</b>      |                                                |                    |             |                                 |             |                                   |             |
| <b>Sex</b>                                         |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 582                                            | 419                | 72.0        | 296                             | 50.9        | 370                               | 63.6        |
| Female                                             | 120                                            | 82                 | 68.3        | 62                              | 51.7        | 75                                | 62.5        |
| <b>Age at year-end 2015 (yr)</b>                   |                                                |                    |             |                                 |             |                                   |             |
| 13–24                                              | 28                                             | 18                 | 64.3        | 11                              | 39.3        | 16                                | 57.1        |
| 25–34                                              | 132                                            | 87                 | 65.9        | 63                              | 47.7        | 77                                | 58.3        |
| 35–44                                              | 188                                            | 136                | 72.3        | 95                              | 50.5        | 118                               | 62.8        |
| 45–54                                              | 208                                            | 153                | 73.6        | 104                             | 50.0        | 134                               | 64.4        |
| ≥55                                                | 146                                            | 107                | 73.3        | 85                              | 58.2        | 100                               | 68.5        |
| <b>Transmission category<sup>c</sup></b>           |                                                |                    |             |                                 |             |                                   |             |
| Male-to-male sexual contact                        | 500                                            | 353                | 70.5        | 250                             | 50.1        | 312                               | 62.4        |
| Injection drug use                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 20                                             | 15                 | 74.8        | 13                              | 62.4        | 15                                | 74.8        |
| Female                                             | 19                                             | 11                 | 60.2        | 8                               | 43.5        | 11                                | 60.2        |
| Male-to-male sexual contact and injection drug use | 34                                             | 29                 | 85.5        | 19                              | 55.2        | 23                                | 67.6        |
| Heterosexual contact <sup>d</sup>                  |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 26                                             | 20                 | 78.1        | 13                              | 50.8        | 18                                | 70.4        |
| Female                                             | 100                                            | 70                 | 69.8        | 53                              | 52.9        | 63                                | 62.9        |
| Other <sup>e</sup>                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 2                                              | 2                  | 95.5        | 1                               | 50.0        | 2                                 | 95.5        |
| Female                                             | 2                                              | 1                  | 70.6        | 1                               | 70.6        | 1                                 | 64.7        |
| <b>Total</b>                                       | <b>702</b>                                     | <b>501</b>         | <b>71.4</b> | <b>358</b>                      | <b>51.0</b> | <b>445</b>                        | <b>63.4</b> |
| <b>Whites</b>                                      |                                                |                    |             |                                 |             |                                   |             |
| <b>Sex</b>                                         |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 221,047                                        | 173,403            | 78.4        | 132,594                         | 60.0        | 152,223                           | 68.9        |
| Female                                             | 31,785                                         | 23,213             | 73.0        | 17,339                          | 54.6        | 19,234                            | 60.5        |
| <b>Age at year-end 2015 (yr)</b>                   |                                                |                    |             |                                 |             |                                   |             |
| 13–24                                              | 4,177                                          | 3,321              | 79.5        | 2,404                           | 57.6        | 2,644                             | 63.3        |
| 25–34                                              | 24,758                                         | 19,191             | 77.5        | 13,787                          | 55.7        | 15,767                            | 63.7        |
| 35–44                                              | 41,600                                         | 32,106             | 77.2        | 23,380                          | 56.2        | 26,937                            | 64.8        |
| 45–54                                              | 93,244                                         | 73,187             | 78.5        | 55,322                          | 59.3        | 64,101                            | 68.7        |
| ≥55                                                | 89,053                                         | 68,811             | 77.3        | 55,040                          | 61.8        | 62,008                            | 69.6        |
| <b>Transmission category<sup>c</sup></b>           |                                                |                    |             |                                 |             |                                   |             |
| Male-to-male sexual contact                        | 182,404                                        | 143,950            | 78.9        | 110,087                         | 60.4        | 127,836                           | 70.1        |
| Injection drug use                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 10,656                                         | 7,381              | 69.3        | 5,657                           | 53.1        | 6,072                             | 57.0        |
| Female                                             | 9,832                                          | 6,969              | 70.9        | 5,214                           | 53.0        | 5,549                             | 56.4        |
| Male-to-male sexual contact and injection drug use | 18,936                                         | 15,289             | 80.7        | 11,721                          | 61.9        | 12,506                            | 66.0        |
| Heterosexual contact <sup>d</sup>                  |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 7,417                                          | 5,568              | 75.1        | 4,247                           | 57.3        | 4,782                             | 64.5        |
| Female                                             | 21,055                                         | 15,619             | 74.2        | 11,671                          | 55.4        | 13,172                            | 62.6        |
| Other <sup>e</sup>                                 |                                                |                    |             |                                 |             |                                   |             |
| Male                                               | 1,633                                          | 1,214              | 74.4        | 881                             | 54.0        | 1,026                             | 62.8        |
| Female                                             | 897                                            | 625                | 69.7        | 454                             | 50.6        | 513                               | 57.2        |
| <b>Total</b>                                       | <b>252,832</b>                                 | <b>196,616</b>     | <b>77.8</b> | <b>149,933</b>                  | <b>59.3</b> | <b>171,457</b>                    | <b>67.8</b> |

**Table 4c. Receipt of HIV medical care and viral suppression among persons aged  $\geq 13$  years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia (cont)**

|                                                    | Persons alive at year-end 2016 |               | $\geq 1$ CD4 or VL tests |               | $\geq 2$ CD4 or VL tests <sup>a</sup> |               | VL of $< 200$ copies/mL <sup>b</sup> |  |
|----------------------------------------------------|--------------------------------|---------------|--------------------------|---------------|---------------------------------------|---------------|--------------------------------------|--|
|                                                    | Total No.                      | No.           | %                        | No.           | %                                     | No.           | %                                    |  |
| <b>Multiple races</b>                              |                                |               |                          |               |                                       |               |                                      |  |
| <b>Sex</b>                                         |                                |               |                          |               |                                       |               |                                      |  |
| Male                                               | 28,476                         | 24,451        | 85.9                     | 19,165        | 67.3                                  | 20,104        | 70.6                                 |  |
| Female                                             | 8,603                          | 7,393         | 85.9                     | 5,869         | 68.2                                  | 5,795         | 67.4                                 |  |
| <b>Age at year-end 2015 (yr)</b>                   |                                |               |                          |               |                                       |               |                                      |  |
| 13–24                                              | 1,658                          | 1,370         | 82.6                     | 1,057         | 63.8                                  | 938           | 56.6                                 |  |
| 25–34                                              | 6,327                          | 5,203         | 82.2                     | 3,816         | 60.3                                  | 3,951         | 62.4                                 |  |
| 35–44                                              | 7,653                          | 6,400         | 83.6                     | 4,868         | 63.6                                  | 5,052         | 66.0                                 |  |
| 45–54                                              | 12,086                         | 10,590        | 87.6                     | 8,400         | 69.5                                  | 8,748         | 72.4                                 |  |
| $\geq 55$                                          | 9,355                          | 8,281         | 88.5                     | 6,893         | 73.7                                  | 7,210         | 77.1                                 |  |
| <b>Transmission category<sup>c</sup></b>           |                                |               |                          |               |                                       |               |                                      |  |
| Male-to-male sexual contact                        | 20,515                         | 17,558        | 85.6                     | 13,645        | 66.5                                  | 14,671        | 71.5                                 |  |
| Injection drug use                                 |                                |               |                          |               |                                       |               |                                      |  |
| Male                                               | 2,174                          | 1,870         | 86.0                     | 1,519         | 69.9                                  | 1,501         | 69.1                                 |  |
| Female                                             | 2,285                          | 1,990         | 87.1                     | 1,609         | 70.4                                  | 1,530         | 66.9                                 |  |
| Male-to-male sexual contact and injection drug use | 3,285                          | 2,930         | 89.2                     | 2,345         | 71.4                                  | 2,251         | 68.5                                 |  |
| Heterosexual contact <sup>d</sup>                  |                                |               |                          |               |                                       |               |                                      |  |
| Male                                               | 2,147                          | 1,791         | 83.4                     | 1,423         | 66.3                                  | 1,462         | 68.1                                 |  |
| Female                                             | 6,002                          | 5,132         | 85.5                     | 4,044         | 67.4                                  | 4,083         | 68.0                                 |  |
| Other <sup>e</sup>                                 |                                |               |                          |               |                                       |               |                                      |  |
| Male                                               | 355                            | 303           | 85.3                     | 233           | 65.6                                  | 219           | 61.6                                 |  |
| Female                                             | 315                            | 271           | 85.9                     | 216           | 68.4                                  | 183           | 57.9                                 |  |
| <b>Total</b>                                       | <b>37,079</b>                  | <b>31,844</b> | <b>85.9</b>              | <b>25,034</b> | <b>67.5</b>                           | <b>25,899</b> | <b>69.8</b>                          |  |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/ $\mu$ L) or percentage; VL, viral load (copies/mL).

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting.

<sup>a</sup> Performed  $\geq 3$  months apart during 2016.

<sup>b</sup> VL test results are from the most recent test during 2016.

<sup>c</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>d</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>e</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>f</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>g</sup> Hispanics/Latinos can be of any race.

**Table 4d. Receipt of HIV medical care and viral suppression among males aged ≥13 years with infection attributed to male-to-male sexual contact, by selected characteristics—41 states and the District of Columbia**

|                                               | Males alive at year-end 2016 |                | ≥1 CD4 or VL tests |                | ≥2 CD4 or VL tests <sup>a</sup> |                | VL of <200 copies/mL <sup>b</sup> |  |
|-----------------------------------------------|------------------------------|----------------|--------------------|----------------|---------------------------------|----------------|-----------------------------------|--|
|                                               | Total No.                    | No.            | %                  | No.            | %                               | No.            | %                                 |  |
| <b>American Indian/Alaska Native</b>          |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 51                           | 42             | 83.0               | 33             | 65.3                            | 31             | 61.6                              |  |
| 25–34                                         | 190                          | 146            | 76.8               | 104            | 54.8                            | 118            | 61.8                              |  |
| 35–44                                         | 211                          | 144            | 68.2               | 108            | 51.1                            | 125            | 59.0                              |  |
| 45–54                                         | 336                          | 245            | 73.0               | 202            | 60.3                            | 212            | 63.2                              |  |
| ≥55                                           | 189                          | 138            | 72.6               | 110            | 57.9                            | 122            | 64.6                              |  |
| <b>Asian<sup>c</sup></b>                      |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 317                          | 261            | 82.4               | 207            | 65.1                            | 229            | 72.1                              |  |
| 25–34                                         | 1,540                        | 1,157          | 75.1               | 866            | 56.3                            | 1,039          | 67.5                              |  |
| 35–44                                         | 2,246                        | 1,662          | 74.0               | 1,279          | 57.0                            | 1,506          | 67.1                              |  |
| 45–54                                         | 2,298                        | 1,736          | 75.5               | 1,409          | 61.3                            | 1,592          | 69.3                              |  |
| ≥55                                           | 1,344                        | 978            | 72.7               | 801            | 59.6                            | 914            | 68.0                              |  |
| <b>Black/African American</b>                 |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 11,882                       | 8,952          | 75.3               | 6,297          | 53.0                            | 6,192          | 52.1                              |  |
| 25–34                                         | 40,133                       | 29,527         | 73.6               | 21,002         | 52.3                            | 21,461         | 53.5                              |  |
| 35–44                                         | 29,054                       | 21,174         | 72.9               | 15,809         | 54.4                            | 16,421         | 56.5                              |  |
| 45–54                                         | 37,686                       | 27,501         | 73.0               | 21,364         | 56.7                            | 22,570         | 59.9                              |  |
| ≥55                                           | 24,758                       | 17,281         | 69.8               | 13,857         | 56.0                            | 14,733         | 59.5                              |  |
| <b>Hispanic/Latino<sup>d</sup></b>            |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 4,568                        | 3,631          | 79.5               | 2,780          | 60.9                            | 2,801          | 61.3                              |  |
| 25–34                                         | 22,109                       | 16,724         | 75.6               | 12,694         | 57.4                            | 13,855         | 62.7                              |  |
| 35–44                                         | 27,550                       | 19,586         | 71.1               | 15,694         | 57.0                            | 16,982         | 61.6                              |  |
| 45–54                                         | 33,210                       | 24,272         | 73.1               | 19,869         | 59.8                            | 21,690         | 65.3                              |  |
| ≥55                                           | 18,511                       | 13,194         | 71.3               | 11,241         | 60.7                            | 12,094         | 65.3                              |  |
| <b>Native Hawaiian/Other Pacific Islander</b> |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 18                           | 11             | 61.5               | 7              | 39.1                            | 9              | 50.3                              |  |
| 25–34                                         | 105                          | 68             | 64.4               | 49             | 46.6                            | 61             | 57.8                              |  |
| 35–44                                         | 132                          | 97             | 73.6               | 68             | 51.2                            | 85             | 63.9                              |  |
| 45–54                                         | 151                          | 109            | 72.4               | 73             | 48.6                            | 95             | 63.1                              |  |
| ≥55                                           | 94                           | 67             | 71.8               | 54             | 57.1                            | 62             | 66.5                              |  |
| <b>Whites</b>                                 |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 2,633                        | 2,132          | 81.0               | 1,538          | 58.4                            | 1,796          | 68.2                              |  |
| 25–34                                         | 17,647                       | 13,885         | 78.7               | 9,951          | 56.4                            | 11,783         | 66.8                              |  |
| 35–44                                         | 28,162                       | 22,053         | 78.3               | 16,068         | 57.1                            | 19,066         | 67.7                              |  |
| 45–54                                         | 67,846                       | 53,922         | 79.5               | 40,823         | 60.2                            | 48,008         | 70.8                              |  |
| ≥55                                           | 66,117                       | 51,959         | 78.6               | 41,707         | 63.1                            | 47,183         | 71.4                              |  |
| <b>Multiple races</b>                         |                              |                |                    |                |                                 |                |                                   |  |
| 13–24                                         | 1,011                        | 826            | 81.7               | 635            | 62.8                            | 604            | 59.7                              |  |
| 25–34                                         | 4,402                        | 3,635          | 82.6               | 2,646          | 60.1                            | 2,851          | 64.8                              |  |
| 35–44                                         | 4,340                        | 3,648          | 84.1               | 2,776          | 64.0                            | 2,985          | 68.8                              |  |
| 45–54                                         | 6,537                        | 5,711          | 87.4               | 4,482          | 68.6                            | 4,902          | 75.0                              |  |
| ≥55                                           | 4,224                        | 3,738          | 88.5               | 3,106          | 73.5                            | 3,330          | 78.8                              |  |
| <b>Total</b>                                  | <b>461,965</b>               | <b>350,253</b> | <b>75.8</b>        | <b>269,746</b> | <b>58.4</b>                     | <b>297,546</b> | <b>64.4</b>                       |  |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL).

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total. See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. Ages are as of year-end 2015.

<sup>a</sup> Performed ≥3 months apart during 2016.

<sup>b</sup> VL test results are from the most recent test during 2016.

<sup>c</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>d</sup> Hispanics/Latinos can be of any race.

**Table 5a. HIV viral suppression during 2016 among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by selected characteristics—41 states and the District of Columbia**

|                                                    | Persons alive at year-end 2016 |                | Persons with ≥1 CD4 or VL tests |             | Persons with ≥1 VL tests |             | VL of <200 copies/mL                 |             |                                       |             |
|----------------------------------------------------|--------------------------------|----------------|---------------------------------|-------------|--------------------------|-------------|--------------------------------------|-------------|---------------------------------------|-------------|
|                                                    |                                |                |                                 |             |                          |             | Among persons alive at year-end 2016 |             | Among persons with ≥1 CD4 or VL tests |             |
|                                                    | No.                            | % <sup>a</sup> | No.                             | %           | No.                      | %           | No.                                  | %           | %                                     | %           |
| <b>Sex</b>                                         |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| Male                                               | 638,354                        | 76.3           | 473,746                         | 74.2        | 453,953                  | 71.1        | 396,762                              | 62.2        | 83.7                                  | 87.4        |
| Female                                             | 198,286                        | 23.7           | 146,682                         | 74.0        | 141,246                  | 71.2        | 117,757                              | 59.4        | 80.3                                  | 83.4        |
| <b>Age at year-end 2015 (yr)</b>                   |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| 13–24                                              | 32,447                         | 3.9            | 24,762                          | 76.3        | 23,807                   | 73.4        | 17,462                               | 53.8        | 70.5                                  | 73.3        |
| 25–34                                              | 126,264                        | 15.1           | 93,547                          | 74.1        | 90,244                   | 71.5        | 71,459                               | 56.6        | 76.4                                  | 79.2        |
| 35–44                                              | 168,024                        | 20.1           | 122,997                         | 73.2        | 118,330                  | 70.4        | 99,238                               | 59.1        | 80.7                                  | 83.9        |
| 45–54                                              | 271,830                        | 32.5           | 204,762                         | 75.3        | 196,472                  | 72.3        | 173,413                              | 63.8        | 84.7                                  | 88.3        |
| ≥55                                                | 238,075                        | 28.5           | 174,360                         | 73.2        | 166,346                  | 69.9        | 152,947                              | 64.2        | 87.7                                  | 91.9        |
| <b>Race/ethnicity</b>                              |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| American Indian/Alaska Native                      | 2,021                          | 0.2            | 1,483                           | 73.4        | 1,425                    | 70.5        | 1,205                                | 59.6        | 81.3                                  | 84.6        |
| Asian <sup>b</sup>                                 | 11,289                         | 1.3            | 8,297                           | 73.5        | 8,009                    | 70.9        | 7,521                                | 66.6        | 90.6                                  | 93.9        |
| Black/African American                             | 350,852                        | 41.9           | 251,423                         | 71.7        | 241,270                  | 68.8        | 196,818                              | 56.1        | 78.3                                  | 81.6        |
| Hispanic/Latino <sup>c</sup>                       | 181,145                        | 21.7           | 130,195                         | 71.9        | 126,720                  | 70.0        | 111,107                              | 61.3        | 85.3                                  | 87.7        |
| Native Hawaiian/Other Pacific Islander             | 702                            | 0.1            | 501                             | 71.4        | 485                      | 69.1        | 445                                  | 63.4        | 88.8                                  | 91.8        |
| White                                              | 252,832                        | 30.2           | 196,616                         | 77.8        | 186,540                  | 73.8        | 171,457                              | 67.8        | 87.2                                  | 91.9        |
| Multiple races                                     | 37,079                         | 4.4            | 31,844                          | 85.9        | 30,681                   | 82.7        | 25,899                               | 69.8        | 81.3                                  | 84.4        |
| <b>Transmission category<sup>d</sup></b>           |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| Male-to-male sexual contact                        | 461,965                        | 55.2           | 350,253                         | 75.8        | 335,994                  | 72.7        | 297,546                              | 64.4        | 85.0                                  | 88.6        |
| Injection drug use                                 |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| Male                                               | 58,814                         | 7.0            | 37,394                          | 63.6        | 35,486                   | 60.3        | 30,124                               | 51.2        | 80.6                                  | 84.9        |
| Female                                             | 41,293                         | 4.9            | 29,927                          | 72.5        | 28,773                   | 69.7        | 23,556                               | 57.0        | 78.7                                  | 81.9        |
| Male-to-male sexual contact and injection drug use | 46,714                         | 5.6            | 36,645                          | 78.4        | 35,053                   | 75.0        | 29,103                               | 62.3        | 79.4                                  | 83.0        |
| Heterosexual contact <sup>e</sup>                  |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| Male                                               | 64,430                         | 7.7            | 44,861                          | 69.6        | 43,020                   | 66.8        | 36,662                               | 56.9        | 81.7                                  | 85.2        |
| Female                                             | 151,019                        | 18.1           | 112,269                         | 74.3        | 108,135                  | 71.6        | 91,135                               | 60.3        | 81.2                                  | 84.3        |
| Other <sup>f</sup>                                 |                                |                |                                 |             |                          |             |                                      |             |                                       |             |
| Male                                               | 6,431                          | 0.8            | 4,593                           | 71.4        | 4,400                    | 68.4        | 3,327                                | 51.7        | 72.4                                  | 75.6        |
| Female                                             | 5,974                          | 0.7            | 4,486                           | 75.1        | 4,338                    | 72.6        | 3,066                                | 51.3        | 68.4                                  | 70.7        |
| <b>Total<sup>g</sup></b>                           | <b>836,640</b>                 | <b>100</b>     | <b>620,428</b>                  | <b>74.2</b> | <b>595,199</b>           | <b>71.1</b> | <b>514,519</b>                       | <b>61.5</b> | <b>82.9</b>                           | <b>86.4</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL).

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). See Technical Notes for the list of areas that met the criteria for complete laboratory reporting. A VL test result of <200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2016.

<sup>a</sup> Represents percentage of the total number for the column.

<sup>b</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>g</sup> Includes 720 persons of unknown race/ethnicity.

**Table 5b. HIV viral suppression during 2016 among persons aged ≥13 years with infection diagnosed by year-end 2015 and alive at year-end 2016, by area of residence—41 states and the District of Columbia**

|                      | Persons alive at year-end 2016 |                | Persons with ≥1 CD4 or VL tests |             | Persons with ≥1 VL tests |             | VL of <200 copies/mL                 |             |                                       |             |
|----------------------|--------------------------------|----------------|---------------------------------|-------------|--------------------------|-------------|--------------------------------------|-------------|---------------------------------------|-------------|
|                      |                                |                |                                 |             |                          |             | Among persons alive at year-end 2016 |             | Among persons with ≥1 CD4 or VL tests |             |
|                      | No.                            | % <sup>a</sup> | No.                             | %           | No.                      | %           | No.                                  | %           | %                                     | %           |
| Alabama              | 11,946                         | 1.4            | 8,891                           | 74.4        | 8,654                    | 72.4        | 7,297                                | 61.1        | 82.1                                  | 84.3        |
| Alaska               | 654                            | 0.1            | 587                             | 89.8        | 572                      | 87.5        | 501                                  | 76.6        | 85.3                                  | 87.6        |
| California           | 120,666                        | 14.4           | 91,791                          | 76.1        | 88,934                   | 73.7        | 79,917                               | 66.2        | 87.1                                  | 89.9        |
| Colorado             | 11,765                         | 1.4            | 7,596                           | 64.6        | 7,402                    | 62.9        | 6,640                                | 56.4        | 87.4                                  | 89.7        |
| Connecticut          | 9,912                          | 1.2            | 7,883                           | 79.5        | 7,312                    | 73.8        | 6,435                                | 64.9        | 81.6                                  | 88.0        |
| Delaware             | 3,049                          | 0.4            | 2,453                           | 80.5        | 2,393                    | 78.5        | 2,052                                | 67.3        | 83.7                                  | 85.8        |
| District of Columbia | 14,115                         | 1.7            | 9,671                           | 68.5        | 9,328                    | 66.1        | 7,787                                | 55.2        | 80.5                                  | 83.5        |
| Florida              | 103,068                        | 12.3           | 76,291                          | 74.0        | 74,059                   | 71.9        | 63,746                               | 61.8        | 83.6                                  | 86.1        |
| Georgia              | 48,718                         | 5.8            | 34,854                          | 71.5        | 33,633                   | 69.0        | 27,827                               | 57.1        | 79.8                                  | 82.7        |
| Hawaii               | 2,530                          | 0.3            | 1,874                           | 74.1        | 1,843                    | 72.8        | 1,707                                | 67.5        | 91.1                                  | 92.6        |
| Illinois             | 33,938                         | 4.1            | 23,558                          | 69.4        | 21,104                   | 62.2        | 18,141                               | 53.5        | 77.0                                  | 86.0        |
| Indiana              | 10,420                         | 1.2            | 7,871                           | 75.5        | 7,387                    | 70.9        | 6,440                                | 61.8        | 81.8                                  | 87.2        |
| Iowa                 | 2,427                          | 0.3            | 2,107                           | 86.8        | 2,085                    | 85.9        | 1,914                                | 78.9        | 90.8                                  | 91.8        |
| Louisiana            | 18,938                         | 2.3            | 14,586                          | 77.0        | 14,378                   | 75.9        | 11,862                               | 62.6        | 81.3                                  | 82.5        |
| Maine                | 1,454                          | 0.2            | 1,227                           | 84.4        | 1,206                    | 82.9        | 1,109                                | 76.3        | 90.4                                  | 92.0        |
| Maryland             | 31,324                         | 3.7            | 21,201                          | 67.7        | 20,533                   | 65.6        | 17,081                               | 54.5        | 80.6                                  | 83.2        |
| Massachusetts        | 19,364                         | 2.3            | 15,344                          | 79.2        | 14,627                   | 75.5        | 13,234                               | 68.3        | 86.2                                  | 90.5        |
| Michigan             | 14,501                         | 1.7            | 12,066                          | 83.2        | 11,725                   | 80.9        | 10,256                               | 70.7        | 85.0                                  | 87.5        |
| Minnesota            | 7,732                          | 0.9            | 5,875                           | 76.0        | 5,770                    | 74.6        | 5,265                                | 68.1        | 89.6                                  | 91.2        |
| Mississippi          | 8,905                          | 1.1            | 6,189                           | 69.5        | 5,797                    | 65.1        | 4,747                                | 53.3        | 76.7                                  | 81.9        |
| Missouri             | 11,551                         | 1.4            | 9,091                           | 78.7        | 8,238                    | 71.3        | 7,198                                | 62.3        | 79.2                                  | 87.4        |
| Montana              | 566                            | 0.1            | 512                             | 90.5        | 495                      | 87.5        | 451                                  | 79.7        | 88.1                                  | 91.1        |
| Nebraska             | 2,008                          | 0.2            | 1,523                           | 75.8        | 1,418                    | 70.6        | 1,268                                | 63.1        | 83.3                                  | 89.4        |
| New Hampshire        | 1,131                          | 0.1            | 863                             | 76.3        | 853                      | 75.4        | 773                                  | 68.3        | 89.6                                  | 90.6        |
| New Mexico           | 3,126                          | 0.4            | 2,472                           | 79.1        | 2,440                    | 78.1        | 2,200                                | 70.4        | 89.0                                  | 90.2        |
| New York             | 123,789                        | 14.8           | 90,326                          | 73.0        | 89,513                   | 72.3        | 77,823                               | 62.9        | 86.2                                  | 86.9        |
| North Carolina       | 28,743                         | 3.4            | 21,417                          | 74.5        | 20,777                   | 72.3        | 17,861                               | 62.1        | 83.4                                  | 86.0        |
| North Dakota         | 328                            | 0.0            | 273                             | 83.2        | 264                      | 80.5        | 238                                  | 72.6        | 87.2                                  | 90.2        |
| Ohio                 | 20,282                         | 2.4            | 12,912                          | 63.7        | 12,265                   | 60.5        | 10,481                               | 51.7        | 81.2                                  | 85.5        |
| Oklahoma             | 5,627                          | 0.7            | 4,204                           | 74.7        | 3,902                    | 69.3        | 3,305                                | 58.7        | 78.6                                  | 84.7        |
| Oregon               | 6,501                          | 0.8            | 5,736                           | 88.2        | 4,106                    | 63.2        | 3,640                                | 56.0        | 63.5                                  | 88.7        |
| Rhode Island         | 2,310                          | 0.3            | 1,903                           | 82.4        | 1,886                    | 81.6        | 1,731                                | 74.9        | 91.0                                  | 91.8        |
| South Carolina       | 15,700                         | 1.9            | 12,171                          | 77.5        | 11,498                   | 73.2        | 9,696                                | 61.8        | 79.7                                  | 84.3        |
| South Dakota         | 483                            | 0.1            | 280                             | 58.0        | 259                      | 53.6        | 218                                  | 45.1        | 77.9                                  | 84.2        |
| Tennessee            | 15,553                         | 1.9            | 12,161                          | 78.2        | 10,378                   | 66.7        | 8,552                                | 55.0        | 70.3                                  | 82.4        |
| Texas                | 80,232                         | 9.6            | 61,069                          | 76.1        | 58,321                   | 72.7        | 48,519                               | 60.5        | 79.4                                  | 83.2        |
| Utah                 | 2,591                          | 0.3            | 1,786                           | 68.9        | 1,750                    | 67.5        | 1,340                                | 51.7        | 75.0                                  | 76.6        |
| Virginia             | 20,611                         | 2.5            | 13,109                          | 63.6        | 12,155                   | 59.0        | 10,675                               | 51.8        | 81.4                                  | 87.8        |
| Washington           | 12,309                         | 1.5            | 10,568                          | 85.9        | 10,161                   | 82.5        | 9,418                                | 76.5        | 89.1                                  | 92.7        |
| West Virginia        | 1,702                          | 0.2            | 1,246                           | 73.2        | 1,107                    | 65.0        | 978                                  | 57.5        | 78.5                                  | 88.3        |
| Wisconsin            | 5,783                          | 0.7            | 4,657                           | 80.5        | 4,442                    | 76.8        | 3,999                                | 69.2        | 85.9                                  | 90.0        |
| Wyoming              | 288                            | 0.0            | 234                             | 81.3        | 229                      | 79.5        | 197                                  | 68.4        | 84.2                                  | 86.0        |
| <b>Total</b>         | <b>836,640</b>                 | <b>100</b>     | <b>620,428</b>                  | <b>74.2</b> | <b>595,199</b>           | <b>71.1</b> | <b>514,519</b>                       | <b>61.5</b> | <b>82.9</b>                           | <b>86.4</b> |

Abbreviations: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage; VL, viral load (copies/mL).

Note. Data are based on address of residence as of December 31, 2016 (i.e., most recent known address). A VL test result of &lt;200 copies/mL indicates HIV viral suppression. VL test results are from the most recent test during 2016.

<sup>a</sup> Represents percentage of the total number for the column.

**Table 6a. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, 2010–2016—United States**

|                                                    | 2010          |            |             | 2011          |            |             | 2012          |            |             | 2013          |            |             | 2014          |            |             | 2015          |            |             | 2016          |            |             |         |
|----------------------------------------------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------|
|                                                    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    |         |
|                                                    |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       | 100,000 |
| <b>Sex</b>                                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 12,480        | 10.0       | 19.6        | 12,173        | 9.6        | 18.5        | 11,897        | 9.3        | 17.5        | 11,940        | 9.3        | 17.1        | 12,025        | 9.3        | 16.7        | 12,026        | 9.2        | 16.2        | 12,241        | 9.3        | 16.1        |         |
| Female                                             | 4,409         | 3.4        | 20.7        | 4,264         | 3.2        | 19.6        | 4,242         | 3.2        | 19.1        | 4,086         | 3.0        | 18.1        | 4,202         | 3.1        | 18.3        | 3,913         | 2.9        | 16.8        | 3,970         | 2.9        | 16.7        |         |
| <b>Age at death (yr)</b>                           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| 13–24                                              | 242           | 0.5        | 5.4         | 228           | 0.4        | 4.9         | 195           | 0.4        | 4.1         | 180           | 0.3        | 3.8         | 188           | 0.4        | 3.9         | 160           | 0.3        | 3.4         | 164           | 0.3        | 3.6         |         |
| 25–34                                              | 1,173         | 2.8        | 9.4         | 1,101         | 2.6        | 8.6         | 1,112         | 2.6        | 8.4         | 1,058         | 2.5        | 7.7         | 1,006         | 2.3        | 7.1         | 992           | 2.3        | 6.7         | 1,097         | 2.5        | 7.1         |         |
| 35–44                                              | 3,260         | 8.0        | 13.5        | 2,894         | 7.1        | 12.6        | 2,569         | 6.3        | 11.6        | 2,322         | 5.7        | 10.9        | 2,251         | 5.6        | 10.9        | 2,055         | 5.1        | 10.2        | 1,950         | 4.8        | 9.9         |         |
| 45–54                                              | 6,303         | 14.0       | 21.6        | 5,992         | 13.4       | 19.7        | 5,738         | 13.0       | 18.3        | 5,527         | 12.6       | 17.4        | 5,185         | 11.9       | 16.2        | 4,977         | 11.5       | 15.5        | 4,614         | 10.8       | 14.5        |         |
| ≥55                                                | 5,911         | 7.7        | 39.8        | 6,222         | 7.8        | 37.2        | 6,525         | 8.0        | 34.8        | 6,939         | 8.3        | 33.1        | 7,597         | 8.8        | 32.7        | 7,755         | 8.8        | 30.2        | 8,386         | 9.2        | 29.6        |         |
| <b>Race/ethnicity</b>                              |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| American Indian/Alaska Native                      | 73            | 4.0        | 32.0        | 57            | 3.1        | 24.3        | 53            | 2.9        | 21.6        | 64            | 3.4        | 25.1        | 62            | 3.3        | 23.3        | 62            | 3.2        | 22.2        | 47            | 2.4        | 15.9        |         |
| Asian <sup>b</sup>                                 | 69            | 0.6        | 8.1         | 85            | 0.7        | 9.2         | 71            | 0.5        | 7.2         | 74            | 0.5        | 6.9         | 63            | 0.4        | 5.5         | 82            | 0.6        | 6.6         | 101           | 0.7        | 7.5         |         |
| Black/African American                             | 8,171         | 26.6       | 23.1        | 7,835         | 25.2       | 21.5        | 7,622         | 24.2       | 20.3        | 7,464         | 23.4       | 19.4        | 7,416         | 23.0       | 18.8        | 7,198         | 22.0       | 17.8        | 7,176         | 21.7       | 17.2        |         |
| Hispanic/Latino <sup>c</sup>                       | 2,646         | 7.0        | 15.2        | 2,706         | 6.9        | 15.0        | 2,458         | 6.1        | 13.1        | 2,551         | 6.2        | 13.1        | 2,659         | 6.3        | 13.2        | 2,505         | 5.8        | 12.0        | 2,606         | 5.9        | 12.0        |         |
| Native Hawaiian/Other Pacific Islander             | 7             | 1.8        | 12.3        | 7             | 1.7        | 11.3        | 7             | 1.7        | 10.6        | 10            | 2.3        | 14.3        | 9             | 2.0        | 12.3        | 6             | 1.3        | 7.5         | 13            | 2.8        | 15.6        |         |
| White                                              | 5,061         | 3.0        | 18.7        | 4,922         | 2.9        | 17.8        | 5,051         | 3.0        | 17.9        | 4,918         | 2.9        | 17.1        | 5,058         | 3.0        | 17.2        | 5,087         | 3.0        | 17.0        | 5,291         | 3.1        | 17.4        |         |
| Multiple races                                     | 857           | 24.1       | 21.1        | 823           | 22.3       | 19.8        | 856           | 22.4       | 20.1        | 941           | 23.7       | 21.7        | 956           | 23.3       | 21.7        | 993           | 23.4       | 22.4        | 975           | 22.2       | 21.8        |         |
| <b>Transmission category<sup>d</sup></b>           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male-to-male sexual contact                        | 6,487         | —          | 15.2        | 6,370         | —          | 14.3        | 6,327         | —          | 13.6        | 6,448         | —          | 13.3        | 6,574         | —          | 13.0        | 6,635         | —          | 12.6        | 6,865         | —          | 12.6        |         |
| Injection drug use                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 2,821         | —          | 34.9        | 2,624         | —          | 33.0        | 2,516         | —          | 32.0        | 2,405         | —          | 31.1        | 2,441         | —          | 32.0        | 2,309         | —          | 30.7        | 2,237         | —          | 30.1        |         |
| Female                                             | 1,605         | —          | 29.9        | 1,592         | —          | 29.8        | 1,491         | —          | 28.2        | 1,504         | —          | 28.7        | 1,464         | —          | 28.2        | 1,350         | —          | 26.2        | 1,360         | —          | 26.6        |         |
| Male-to-male sexual contact and injection drug use | 1,341         | —          | 24.4        | 1,324         | —          | 24.0        | 1,281         | —          | 23.1        | 1,333         | —          | 24.0        | 1,333         | —          | 24.0        | 1,389         | —          | 25.0        | 1,362         | —          | 24.5        |         |
| Heterosexual contact <sup>e</sup>                  |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 1,716         | —          | 25.1        | 1,732         | —          | 24.6        | 1,657         | —          | 23.0        | 1,643         | —          | 22.2        | 1,583         | —          | 20.9        | 1,587         | —          | 20.5        | 1,673         | —          | 21.1        |         |
| Female                                             | 2,744         | —          | 17.9        | 2,591         | —          | 16.4        | 2,673         | —          | 16.4        | 2,521         | —          | 15.1        | 2,674         | —          | 15.6        | 2,489         | —          | 14.2        | 2,536         | —          | 14.1        |         |
| Other <sup>f</sup>                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 115           | —          | 16.9        | 122           | —          | 17.4        | 116           | —          | 16.2        | 111           | —          | 15.2        | 93            | —          | 12.7        | 106           | —          | 14.2        | 104           | —          | 13.7        |         |
| Female                                             | 60            | —          | 10.5        | 82            | —          | 13.6        | 78            | —          | 12.5        | 62            | —          | 9.6         | 64            | —          | 9.7         | 73            | —          | 10.8        | 74            | —          | 10.6        |         |
| <b>Region of residence</b>                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Northeast                                          | 4,333         | 9.3        | 19.9        | 4,163         | 8.9        | 18.8        | 3,832         | 8.1        | 17.1        | 3,884         | 8.2        | 17.1        | 3,761         | 7.9        | 16.3        | 3,606         | 7.5        | 15.5        | 3,714         | 7.7        | 15.6        |         |
| Midwest                                            | 1,944         | 3.5        | 19.4        | 1,886         | 3.4        | 18.2        | 1,913         | 3.4        | 17.9        | 1,794         | 3.2        | 16.3        | 1,847         | 3.3        | 16.4        | 1,814         | 3.2        | 15.7        | 1,830         | 3.2        | 15.4        |         |
| South                                              | 8,172         | 8.6        | 22.1        | 7,896         | 8.2        | 20.6        | 7,915         | 8.1        | 19.9        | 7,794         | 7.9        | 19.0        | 8,022         | 8.1        | 19.0        | 7,907         | 7.8        | 18.1        | 7,939         | 7.8        | 17.7        |         |
| West                                               | 2,440         | 4.1        | 14.9        | 2,492         | 4.2        | 14.8        | 2,479         | 4.1        | 14.3        | 2,554         | 4.2        | 14.4        | 2,597         | 4.2        | 14.2        | 2,612         | 4.1        | 13.8        | 2,728         | 4.3        | 13.9        |         |
| <b>Total<sup>g</sup></b>                           | <b>16,889</b> | <b>6.6</b> | <b>19.9</b> | <b>16,437</b> | <b>6.4</b> | <b>18.8</b> | <b>16,139</b> | <b>6.2</b> | <b>17.9</b> | <b>16,026</b> | <b>6.1</b> | <b>17.3</b> | <b>16,227</b> | <b>6.1</b> | <b>17.1</b> | <b>15,939</b> | <b>5.9</b> | <b>16.3</b> | <b>16,211</b> | <b>6.0</b> | <b>16.2</b> |         |

Abbreviation: PLWDH, persons living with diagnosed HIV infection.

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used.

<sup>a</sup> Denominator was calculated as (No. PLWDH at the end of [year X–1]) + (No. new diagnoses during year X).

<sup>b</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>g</sup> Includes persons of unknown race/ethnicity.

**Table 6b. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death, 2010–2016—United States and 6 dependent areas**

|                                                    | 2010          |            |             | 2011          |            |             | 2012          |            |             | 2013          |            |             | 2014          |            |             | 2015          |            |             | 2016          |            |             |
|----------------------------------------------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|
|                                                    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    |
|                                                    |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |
| <b>Sex</b>                                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 12,891        | 10.2       | 19.8        | 12,576        | 9.8        | 18.8        | 12,238        | 9.5        | 17.7        | 12,279        | 9.4        | 17.3        | 12,365        | 9.4        | 16.9        | 12,324        | 9.3        | 16.4        | 12,559        | 9.4        | 16.2        |
| Female                                             | 4,555         | 3.4        | 20.9        | 4,398         | 3.3        | 19.7        | 4,362         | 3.2        | 19.2        | 4,209         | 3.1        | 18.2        | 4,334         | 3.1        | 18.4        | 4,020         | 2.9        | 16.8        | 4,064         | 2.9        | 16.7        |
| <b>Age at death (yr)</b>                           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| 13–24                                              | 248           | 0.5        | 5.5         | 233           | 0.4        | 4.9         | 200           | 0.4        | 4.2         | 185           | 0.3        | 3.8         | 190           | 0.4        | 3.9         | 162           | 0.3        | 3.4         | 169           | 0.3        | 3.7         |
| 25–34                                              | 1,221         | 2.9        | 9.7         | 1,135         | 2.7        | 8.7         | 1,155         | 2.7        | 8.6         | 1,091         | 2.5        | 7.9         | 1,029         | 2.3        | 7.1         | 1,018         | 2.3        | 6.8         | 1,112         | 2.5        | 7.1         |
| 35–44                                              | 3,391         | 8.2        | 13.7        | 3,010         | 7.3        | 12.8        | 2,662         | 6.5        | 11.8        | 2,388         | 5.8        | 11.0        | 2,309         | 5.6        | 10.9        | 2,111         | 5.1        | 10.3        | 2,012         | 4.9        | 10.0        |
| 45–54                                              | 6,516         | 14.3       | 21.9        | 6,201         | 13.7       | 20.0        | 5,898         | 13.2       | 18.5        | 5,704         | 12.9       | 17.6        | 5,345         | 12.2       | 16.4        | 5,126         | 11.8       | 15.7        | 4,735         | 10.9       | 14.6        |
| ≥55                                                | 6,070         | 7.7        | 39.9        | 6,395         | 7.9        | 37.4        | 6,685         | 8.1        | 34.8        | 7,120         | 8.4        | 33.2        | 7,826         | 9.0        | 33.0        | 7,927         | 8.8        | 30.3        | 8,595         | 9.4        | 29.8        |
| <b>Race/ethnicity</b>                              |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| American Indian/Alaska Native                      | 73            | —          | 32.0        | 57            | —          | 24.3        | 53            | —          | 21.6        | 64            | —          | 25.1        | 62            | —          | 23.3        | 62            | —          | 22.2        | 47            | —          | 15.9        |
| Asian <sup>b</sup>                                 | 70            | —          | 8.2         | 87            | —          | 9.4         | 73            | —          | 7.3         | 74            | —          | 6.9         | 65            | —          | 5.6         | 83            | —          | 6.6         | 101           | —          | 7.5         |
| Black/African American                             | 8,177         | —          | 23.1        | 7,842         | —          | 21.5        | 7,633         | —          | 20.4        | 7,470         | —          | 19.4        | 7,425         | —          | 18.8        | 7,204         | —          | 17.8        | 7,185         | —          | 17.3        |
| Hispanic/Latino <sup>c</sup>                       | 3,193         | —          | 16.7        | 3,230         | —          | 16.4        | 2,904         | —          | 14.2        | 3,001         | —          | 14.2        | 3,120         | —          | 14.3        | 2,901         | —          | 12.8        | 3,005         | —          | 12.8        |
| Native Hawaiian/Other Pacific Islander             | 8             | —          | 13.5        | 10            | —          | 15.6        | 7             | —          | 10.3        | 12            | —          | 16.6        | 9             | —          | 11.9        | 7             | —          | 8.5         | 15            | —          | 17.3        |
| White                                              | 5,062         | —          | 18.7        | 4,922         | —          | 17.8        | 5,052         | —          | 17.9        | 4,920         | —          | 17.1        | 5,058         | —          | 17.2        | 5,087         | —          | 17.0        | 5,292         | —          | 17.4        |
| Multiple races                                     | 858           | —          | 21.1        | 824           | —          | 19.8        | 857           | —          | 20.1        | 943           | —          | 21.7        | 956           | —          | 21.7        | 994           | —          | 22.4        | 976           | —          | 21.8        |
| <b>Transmission category<sup>d</sup></b>           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male-to-male sexual contact                        | 6,559         | —          | 15.2        | 6,453         | —          | 14.3        | 6,386         | —          | 13.6        | 6,530         | —          | 13.3        | 6,660         | —          | 13.1        | 6,711         | —          | 12.7        | 6,940         | —          | 12.6        |
| Injection drug use                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 3,029         | —          | 35.5        | 2,830         | —          | 33.7        | 2,679         | —          | 32.4        | 2,545         | —          | 31.2        | 2,586         | —          | 32.2        | 2,444         | —          | 30.8        | 2,367         | —          | 30.3        |
| Female                                             | 1,647         | —          | 30.0        | 1,637         | —          | 30.0        | 1,525         | —          | 28.2        | 1,546         | —          | 28.8        | 1,505         | —          | 28.3        | 1,375         | —          | 26.1        | 1,395         | —          | 26.7        |
| Male-to-male sexual contact and injection drug use | 1,384         | —          | 24.7        | 1,361         | —          | 24.2        | 1,311         | —          | 23.3        | 1,363         | —          | 24.1        | 1,361         | —          | 24.1        | 1,416         | —          | 25.1        | 1,394         | —          | 24.7        |
| Heterosexual contact <sup>e</sup>                  |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 1,802         | —          | 25.5        | 1,808         | —          | 24.8        | 1,743         | —          | 23.3        | 1,728         | —          | 22.6        | 1,664         | —          | 21.3        | 1,645         | —          | 20.6        | 1,748         | —          | 21.4        |
| Female                                             | 2,845         | —          | 18.1        | 2,676         | —          | 16.5        | 2,757         | —          | 16.5        | 2,600         | —          | 15.2        | 2,764         | —          | 15.8        | 2,571         | —          | 14.3        | 2,592         | —          | 14.1        |
| Other <sup>f</sup>                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 116           | —          | 16.7        | 123           | —          | 17.2        | 119           | —          | 16.2        | 113           | —          | 15.2        | 95            | —          | 12.7        | 109           | —          | 14.2        | 110           | —          | 14.2        |
| Female                                             | 62            | —          | 10.6        | 85            | —          | 13.8        | 81            | —          | 12.7        | 63            | —          | 9.6         | 65            | —          | 9.7         | 74            | —          | 10.7        | 77            | —          | 10.9        |
| <b>Region of residence</b>                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Northeast                                          | 4,333         | 9.3        | 19.9        | 4,163         | 8.9        | 18.8        | 3,832         | 8.1        | 17.1        | 3,884         | 8.2        | 17.1        | 3,761         | 7.9        | 16.3        | 3,606         | 7.5        | 15.5        | 3,714         | 7.7        | 15.6        |
| Midwest                                            | 1,944         | 3.5        | 19.4        | 1,886         | 3.4        | 18.2        | 1,913         | 3.4        | 17.9        | 1,794         | 3.2        | 16.3        | 1,847         | 3.3        | 16.4        | 1,814         | 3.2        | 15.7        | 1,830         | 3.2        | 15.4        |
| South                                              | 8,172         | 8.6        | 22.1        | 7,896         | 8.2        | 20.6        | 7,915         | 8.1        | 19.9        | 7,794         | 7.9        | 19.0        | 8,022         | 8.1        | 19.0        | 7,907         | 7.8        | 18.1        | 7,939         | 7.8        | 17.7        |
| West                                               | 2,440         | 4.1        | 14.9        | 2,492         | 4.2        | 14.8        | 2,479         | 4.1        | 14.3        | 2,554         | 4.2        | 14.4        | 2,597         | 4.2        | 14.2        | 2,612         | 4.1        | 13.8        | 2,728         | 4.3        | 13.9        |
| U.S. dependent areas                               | 557           | 16.3       | 32.4        | 537           | 15.8       | 31.2        | 461           | 13.7       | 26.8        | 462           | 13.8       | 26.7        | 472           | 14.2       | 27.2        | 405           | 12.3       | 23.3        | 412           | 12.7       | 23.7        |
| <b>Total<sup>g</sup></b>                           | <b>17,446</b> | <b>6.7</b> | <b>20.1</b> | <b>16,974</b> | <b>6.5</b> | <b>19.0</b> | <b>16,600</b> | <b>6.3</b> | <b>18.1</b> | <b>16,488</b> | <b>6.2</b> | <b>17.5</b> | <b>16,699</b> | <b>6.2</b> | <b>17.3</b> | <b>16,344</b> | <b>6.0</b> | <b>16.5</b> | <b>16,623</b> | <b>6.1</b> | <b>16.3</b> |

Abbreviation: PLWDH, persons living with diagnosed HIV infection.

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used.

<sup>a</sup> Denominator was calculated as (No. PLWDH at the end of [year X–1]) + (No. new diagnoses during year X).

<sup>b</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>g</sup> Includes persons of unknown race/ethnicity.

**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWDH <sup>a</sup> | Age-adjusted rate per 1,000 PLWDH |
|-----------------------------|---------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>2010</b>                 |               |                      |                                   |                                   |                                   |
| Alabama                     | 274           | 6.9                  | 7.0                               | 24.9                              | 25.5                              |
| Alaska                      | 16            | 2.8                  | 2.7                               | 24.2                              | 25.5                              |
| Arizona                     | 202           | 3.9                  | 3.9                               | 16.2                              | 15.5                              |
| Arkansas                    | 114           | 4.7                  | 4.8                               | 25.9                              | 26.0                              |
| California                  | 1,546         | 5.0                  | 5.0                               | 14.3                              | 13.8                              |
| Colorado                    | 140           | 3.4                  | 3.3                               | 14.0                              | 11.9                              |
| Connecticut                 | 210           | 7.0                  | 6.4                               | 20.4                              | 19.0                              |
| Delaware                    | 77            | 10.2                 | 9.9                               | 25.4                              | 26.1                              |
| District of Columbia        | 259           | 48.8                 | 54.1                              | 18.0                              | 17.1                              |
| Florida                     | 2,031         | 12.7                 | 12.2                              | 22.3                              | 21.9                              |
| Georgia                     | 911           | 11.5                 | 11.5                              | 22.0                              | 23.8                              |
| Hawaii                      | 36            | 3.1                  | 3.0                               | 14.6                              | 12.1                              |
| Idaho                       | 15            | 1.2                  | 1.3                               | 16.9                              | 15.0                              |
| Illinois                    | 665           | 6.3                  | 6.2                               | 21.2                              | 22.8                              |
| Indiana                     | 171           | 3.2                  | 3.3                               | 19.2                              | 17.7                              |
| Iowa                        | 28            | 1.1                  | 1.0                               | 13.9                              | 13.8                              |
| Kansas                      | 49            | 2.1                  | 2.1                               | 18.4                              | 22.7                              |
| Kentucky                    | 119           | 3.3                  | 3.3                               | 21.9                              | 22.5                              |
| Louisiana                   | 461           | 12.3                 | 12.7                              | 28.4                              | 28.7                              |
| Maine                       | 22            | 1.9                  | 1.8                               | 17.3                              | 14.9                              |
| Maryland                    | 615           | 12.7                 | 12.2                              | 21.7                              | 21.0                              |
| Massachusetts               | 282           | 5.1                  | 4.9                               | 16.2                              | 14.9                              |
| Michigan                    | 313           | 3.8                  | 3.8                               | 23.0                              | 23.5                              |
| Minnesota                   | 77            | 1.8                  | 1.7                               | 11.7                              | 12.5                              |
| Mississippi                 | 208           | 8.6                  | 8.9                               | 25.6                              | 27.0                              |
| Missouri                    | 210           | 4.2                  | 4.3                               | 20.3                              | 20.3                              |
| Montana                     | 11            | 1.3                  | 1.3                               | 25.6                              | 24.1                              |
| Nebraska                    | 31            | 2.1                  | 2.1                               | 17.3                              | 19.2                              |
| Nevada                      | 126           | 5.7                  | 5.6                               | 18.1                              | 17.0                              |
| New Hampshire               | 18            | 1.6                  | 1.4                               | 16.2                              | 15.8                              |
| New Jersey                  | 811           | 11.0                 | 10.3                              | 23.4                              | 21.6                              |
| New Mexico                  | 63            | 3.7                  | 3.8                               | 21.5                              | 19.4                              |
| New York                    | 2,235         | 13.7                 | 13.1                              | 18.7                              | 16.6                              |
| North Carolina              | 582           | 7.3                  | 7.2                               | 23.4                              | 23.0                              |
| North Dakota                | 6             | 1.1                  | 1.2                               | 28.7                              | 29.3                              |
| Ohio                        | 288           | 3.0                  | 3.0                               | 16.7                              | 16.9                              |
| Oklahoma                    | 108           | 3.5                  | 3.6                               | 21.8                              | 21.6                              |
| Oregon                      | 97            | 3.0                  | 3.0                               | 16.8                              | 15.4                              |
| Pennsylvania                | 703           | 6.5                  | 6.3                               | 22.6                              | 21.7                              |
| Rhode Island                | 37            | 4.1                  | 4.2                               | 17.5                              | 17.4                              |
| South Carolina              | 336           | 8.7                  | 8.8                               | 23.5                              | 22.8                              |
| South Dakota                | 12            | 1.8                  | 1.8                               | 31.9                              | 29.4                              |
| Tennessee                   | 377           | 7.1                  | 7.2                               | 25.1                              | 27.1                              |
| Texas                       | 1,356         | 6.7                  | 6.9                               | 20.4                              | 21.3                              |
| Utah                        | 24            | 1.1                  | 1.3                               | 11.1                              | 8.4                               |
| Vermont                     | 15            | 2.8                  | 2.3                               | 32.2                              | 26.6                              |
| Virginia                    | 316           | 4.7                  | 4.6                               | 17.1                              | 16.9                              |
| Washington                  | 156           | 2.8                  | 2.7                               | 14.7                              | 14.3                              |
| West Virginia               | 28            | 1.8                  | 1.7                               | 17.7                              | 16.6                              |
| Wisconsin                   | 94            | 2.0                  | 1.9                               | 18.9                              | 19.7                              |
| Wyoming                     | 8             | 1.7                  | 1.7                               | 29.9                              | 40.0                              |
| <b>Subtotal</b>             | <b>16,889</b> | <b>6.6</b>           | <b>6.5</b>                        | <b>19.9</b>                       | <b>19.4</b>                       |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                   |                                   |
| American Samoa              | 1             | 2.6                  | 2.8                               | 1,000.0                           | 199.8                             |
| Guam                        | 3             | 2.5                  | 2.6                               | 36.1                              | 18.3                              |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Puerto Rico                 | 546           | 17.6                 | 18.3                              | 33.0                              | 29.4                              |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| U.S. Virgin Islands         | 7             | 8.0                  | 8.6                               | 12.2                              | 10.5                              |
| <b>Subtotal</b>             | <b>557</b>    | <b>16.3</b>          | <b>17.0</b>                       | <b>32.4</b>                       | <b>28.8</b>                       |
| <b>Total</b>                | <b>17,446</b> | <b>6.7</b>           | <b>6.6</b>                        | <b>20.1</b>                       | <b>19.6</b>                       |



**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWDH <sup>a</sup> | Age-adjusted rate per 1,000 PLWDH |
|-----------------------------|---------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>2011</b>                 |               |                      |                                   |                                   |                                   |
| Alabama                     | 256           | 6.4                  | 6.4                               | 22.3                              | 23.9                              |
| Alaska                      | 12            | 2.1                  | 2.0                               | 17.8                              | 13.3                              |
| Arizona                     | 192           | 3.6                  | 3.7                               | 14.9                              | 14.0                              |
| Arkansas                    | 113           | 4.7                  | 4.9                               | 25.1                              | 25.9                              |
| California                  | 1,615         | 5.2                  | 5.2                               | 14.6                              | 13.7                              |
| Colorado                    | 127           | 3.0                  | 2.9                               | 12.3                              | 10.6                              |
| Connecticut                 | 219           | 7.2                  | 6.7                               | 21.3                              | 18.8                              |
| Delaware                    | 70            | 9.2                  | 8.6                               | 22.5                              | 18.9                              |
| District of Columbia        | 279           | 51.4                 | 56.2                              | 19.3                              | 18.3                              |
| Florida                     | 2,023         | 12.4                 | 12.0                              | 21.7                              | 20.7                              |
| Georgia                     | 824           | 10.3                 | 10.3                              | 19.3                              | 20.6                              |
| Hawaii                      | 41            | 3.5                  | 3.3                               | 16.5                              | 13.9                              |
| Idaho                       | 15            | 1.2                  | 1.3                               | 16.2                              | 12.6                              |
| Illinois                    | 575           | 5.4                  | 5.3                               | 17.8                              | 17.7                              |
| Indiana                     | 201           | 3.7                  | 3.8                               | 21.7                              | 22.3                              |
| Iowa                        | 37            | 1.5                  | 1.4                               | 17.6                              | 20.0                              |
| Kansas                      | 47            | 2.0                  | 2.1                               | 17.2                              | 13.9                              |
| Kentucky                    | 110           | 3.0                  | 3.0                               | 19.5                              | 18.8                              |
| Louisiana                   | 473           | 12.6                 | 12.7                              | 27.7                              | 28.9                              |
| Maine                       | 24            | 2.1                  | 1.9                               | 18.6                              | 17.6                              |
| Maryland                    | 585           | 12.0                 | 11.4                              | 20.0                              | 18.8                              |
| Massachusetts               | 262           | 4.7                  | 4.5                               | 14.5                              | 13.1                              |
| Michigan                    | 306           | 3.7                  | 3.6                               | 21.9                              | 21.6                              |
| Minnesota                   | 89            | 2.0                  | 2.0                               | 13.0                              | 13.1                              |
| Mississippi                 | 211           | 8.7                  | 8.7                               | 24.7                              | 26.3                              |
| Missouri                    | 184           | 3.7                  | 3.6                               | 17.2                              | 17.1                              |
| Montana                     | 8             | 1.0                  | 0.9                               | 16.6                              | 19.6                              |
| Nebraska                    | 24            | 1.6                  | 1.6                               | 13.1                              | 17.0                              |
| Nevada                      | 132           | 5.9                  | 5.9                               | 18.3                              | 16.8                              |
| New Hampshire               | 14            | 1.2                  | 1.1                               | 12.4                              | 16.8                              |
| New Jersey                  | 767           | 10.4                 | 9.7                               | 22.1                              | 19.3                              |
| New Mexico                  | 51            | 3.0                  | 3.1                               | 16.9                              | 14.7                              |
| New York                    | 2,168         | 13.2                 | 12.6                              | 17.9                              | 16.2                              |
| North Carolina              | 543           | 6.8                  | 6.6                               | 21.1                              | 21.4                              |
| North Dakota                | 4             | 0.7                  | 0.6                               | 18.3                              | 29.2                              |
| Ohio                        | 314           | 3.3                  | 3.2                               | 17.5                              | 18.0                              |
| Oklahoma                    | 122           | 3.9                  | 4.1                               | 23.7                              | 23.9                              |
| Oregon                      | 99            | 3.0                  | 2.9                               | 16.6                              | 15.5                              |
| Pennsylvania                | 657           | 6.1                  | 5.8                               | 20.7                              | 19.8                              |
| Rhode Island                | 46            | 5.1                  | 4.7                               | 21.6                              | 23.1                              |
| South Carolina              | 327           | 8.4                  | 8.4                               | 19.3                              | 19.4                              |
| South Dakota                | 7             | 1.0                  | 1.0                               | 17.8                              | 14.1                              |
| Tennessee                   | 323           | 6.1                  | 6.0                               | 20.9                              | 22.0                              |
| Texas                       | 1,285         | 6.2                  | 6.4                               | 18.5                              | 19.3                              |
| Utah                        | 24            | 1.1                  | 1.3                               | 10.6                              | 8.4                               |
| Vermont                     | 6             | 1.1                  | 0.9                               | 12.1                              | 8.9                               |
| Virginia                    | 315           | 4.7                  | 4.5                               | 16.6                              | 15.6                              |
| Washington                  | 170           | 3.0                  | 2.9                               | 15.7                              | 13.8                              |
| West Virginia               | 37            | 2.3                  | 2.3                               | 21.9                              | 19.9                              |
| Wisconsin                   | 98            | 2.1                  | 2.0                               | 19.1                              | 17.5                              |
| Wyoming                     | 6             | 1.3                  | 1.1                               | 23.4                              | 27.7                              |
| <b>Subtotal</b>             | <b>16,437</b> | <b>6.4</b>           | <b>6.2</b>                        | <b>18.8</b>                       | <b>18.0</b>                       |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                   |                                   |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Guam                        | 5             | 4.1                  | 4.5                               | 63.3                              | 30.3                              |
| Northern Mariana Islands    | 1             | 2.5                  | 1.8                               | 100                               | 165.7                             |
| Puerto Rico                 | 522           | 16.9                 | 17.4                              | 31.6                              | 27.4                              |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| U.S. Virgin Islands         | 9             | 10.2                 | 9.7                               | 15.8                              | 12.5                              |
| <b>Subtotal</b>             | <b>537</b>    | <b>15.8</b>          | <b>16.3</b>                       | <b>31.2</b>                       | <b>27.0</b>                       |
| <b>Total</b>                | <b>16,974</b> | <b>6.5</b>           | <b>6.4</b>                        | <b>19.0</b>                       | <b>18.2</b>                       |

**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per<br>100,000 pop | Age-adjusted rate<br>per 100,000 pop | Rate per<br>1,000 PLWDH <sup>a</sup> | Age-adjusted rate<br>per 1,000 PLWDH |
|-----------------------------|---------------|-------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <b>2012</b>                 |               |                         |                                      |                                      |                                      |
| Alabama                     | 282           | 7.0                     | 7.0                                  | 23.9                                 | 24.6                                 |
| Alaska                      | 11            | 1.9                     | 1.9                                  | 16.6                                 | 12.8                                 |
| Arizona                     | 212           | 3.9                     | 3.9                                  | 15.8                                 | 15.5                                 |
| Arkansas                    | 90            | 3.7                     | 3.8                                  | 19.3                                 | 17.7                                 |
| California                  | 1,558         | 5.0                     | 4.9                                  | 13.7                                 | 12.4                                 |
| Colorado                    | 112           | 2.6                     | 2.5                                  | 10.6                                 | 8.5                                  |
| Connecticut                 | 193           | 6.3                     | 5.7                                  | 18.8                                 | 16.3                                 |
| Delaware                    | 77            | 10.0                    | 9.4                                  | 24.3                                 | 21.9                                 |
| District of Columbia        | 231           | 41.7                    | 46.6                                 | 15.3                                 | 14.1                                 |
| Florida                     | 1,980         | 12.0                    | 11.5                                 | 20.3                                 | 19.0                                 |
| Georgia                     | 846           | 10.4                    | 10.4                                 | 18.8                                 | 19.8                                 |
| Hawaii                      | 50            | 4.3                     | 4.0                                  | 20.1                                 | 15.5                                 |
| Idaho                       | 24            | 1.9                     | 1.9                                  | 24.3                                 | 24.3                                 |
| Illinois                    | 559           | 5.2                     | 5.1                                  | 16.9                                 | 16.5                                 |
| Indiana                     | 169           | 3.1                     | 3.1                                  | 17.7                                 | 18.1                                 |
| Iowa                        | 43            | 1.7                     | 1.8                                  | 19.5                                 | 15.8                                 |
| Kansas                      | 44            | 1.9                     | 1.8                                  | 15.8                                 | 15.8                                 |
| Kentucky                    | 118           | 3.2                     | 3.2                                  | 20.1                                 | 19.8                                 |
| Louisiana                   | 470           | 12.4                    | 12.6                                 | 27.1                                 | 27.2                                 |
| Maine                       | 19            | 1.7                     | 1.4                                  | 14.6                                 | 12.7                                 |
| Maryland                    | 637           | 12.9                    | 12.3                                 | 21.3                                 | 19.9                                 |
| Massachusetts               | 267           | 4.7                     | 4.4                                  | 14.2                                 | 11.8                                 |
| Michigan                    | 340           | 4.1                     | 4.1                                  | 23.5                                 | 22.3                                 |
| Minnesota                   | 86            | 1.9                     | 1.8                                  | 12.0                                 | 12.5                                 |
| Mississippi                 | 199           | 8.1                     | 8.4                                  | 22.9                                 | 23.7                                 |
| Missouri                    | 191           | 3.8                     | 3.8                                  | 17.3                                 | 17.0                                 |
| Montana                     | 5             | 0.6                     | 0.7                                  | 10.1                                 | 5.7                                  |
| Nebraska                    | 32            | 2.1                     | 2.1                                  | 17.1                                 | 16.5                                 |
| Nevada                      | 160           | 7.0                     | 7.0                                  | 21.4                                 | 22.3                                 |
| New Hampshire               | 22            | 1.9                     | 1.8                                  | 19.1                                 | 15.9                                 |
| New Jersey                  | 658           | 8.8                     | 8.1                                  | 18.8                                 | 16.5                                 |
| New Mexico                  | 58            | 3.4                     | 3.5                                  | 19.3                                 | 18.3                                 |
| New York                    | 2,043         | 12.3                    | 11.6                                 | 16.7                                 | 14.3                                 |
| North Carolina              | 525           | 6.5                     | 6.2                                  | 19.5                                 | 19.0                                 |
| North Dakota                | 3             | 0.5                     | 0.5                                  | 12.2                                 | 16.9                                 |
| Ohio                        | 350           | 3.6                     | 3.5                                  | 18.8                                 | 18.9                                 |
| Oklahoma                    | 115           | 3.7                     | 3.7                                  | 21.7                                 | 19.6                                 |
| Oregon                      | 111           | 3.4                     | 3.3                                  | 18.0                                 | 16.0                                 |
| Pennsylvania                | 581           | 5.4                     | 5.1                                  | 17.8                                 | 16.2                                 |
| Rhode Island                | 43            | 4.8                     | 4.4                                  | 19.9                                 | 19.6                                 |
| South Carolina              | 317           | 8.0                     | 7.9                                  | 20.2                                 | 19.2                                 |
| South Dakota                | 10            | 1.5                     | 1.8                                  | 23.9                                 | 18.0                                 |
| Tennessee                   | 343           | 6.4                     | 6.4                                  | 21.3                                 | 20.7                                 |
| Texas                       | 1,312         | 6.3                     | 6.4                                  | 18.0                                 | 18.8                                 |
| Utah                        | 25            | 1.1                     | 1.3                                  | 10.8                                 | 9.5                                  |
| Vermont                     | 6             | 1.1                     | 1.0                                  | 10.8                                 | 8.3                                  |
| Virginia                    | 334           | 4.9                     | 4.7                                  | 16.7                                 | 15.5                                 |
| Washington                  | 151           | 2.6                     | 2.5                                  | 13.5                                 | 12.2                                 |
| West Virginia               | 39            | 2.5                     | 2.2                                  | 22.0                                 | 20.2                                 |
| Wisconsin                   | 86            | 1.8                     | 1.7                                  | 16.4                                 | 15.2                                 |
| Wyoming                     | 2             | 0.4                     | 0.4                                  | 7.8                                  | 3.7                                  |
| <b>Subtotal</b>             | <b>16,139</b> | <b>6.2</b>              | <b>6.0</b>                           | <b>17.9</b>                          | <b>16.7</b>                          |
| <b>U.S. dependent areas</b> |               |                         |                                      |                                      |                                      |
| American Samoa              | 0             | 0.0                     | 0.0                                  | 0.0                                  | 0.0                                  |
| Guam                        | 1             | 0.8                     | 0.9                                  | 12.0                                 | 7.7                                  |
| Northern Mariana Islands    | 0             | 0.0                     | 0.0                                  | 0.0                                  | 0.0                                  |
| Puerto Rico                 | 445           | 14.5                    | 14.9                                 | 26.9                                 | 23.6                                 |
| Republic of Palau           | 0             | 0.0                     | 0.0                                  | 0.0                                  | 0.0                                  |
| U.S. Virgin Islands         | 15            | 17.0                    | 15.6                                 | 26.9                                 | 36.1                                 |
| <b>Subtotal</b>             | <b>461</b>    | <b>13.7</b>             | <b>13.9</b>                          | <b>26.8</b>                          | <b>23.8</b>                          |
| <b>Total</b>                | <b>16,600</b> | <b>6.3</b>              | <b>6.1</b>                           | <b>18.1</b>                          | <b>16.9</b>                          |

**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWDH <sup>a</sup> | Age-adjusted rate per 1,000 PLWDH |
|-----------------------------|---------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>2013</b>                 |               |                      |                                   |                                   |                                   |
| Alabama                     | 243           | 6.0                  | 6.1                               | 20.0                              | 19.5                              |
| Alaska                      | 16            | 2.7                  | 2.7                               | 24.1                              | 23.2                              |
| Arizona                     | 221           | 4.1                  | 4.1                               | 15.8                              | 14.4                              |
| Arkansas                    | 123           | 5.0                  | 5.3                               | 25.3                              | 23.2                              |
| California                  | 1,616         | 5.1                  | 5.0                               | 13.8                              | 12.3                              |
| Colorado                    | 115           | 2.6                  | 2.6                               | 10.7                              | 9.2                               |
| Connecticut                 | 174           | 5.7                  | 5.2                               | 16.6                              | 13.2                              |
| Delaware                    | 72            | 9.2                  | 8.5                               | 22.7                              | 19.7                              |
| District of Columbia        | 202           | 35.8                 | 39.5                              | 13.4                              | 12.9                              |
| Florida                     | 2,006         | 12.0                 | 11.2                              | 20.1                              | 18.1                              |
| Georgia                     | 848           | 10.3                 | 10.2                              | 17.5                              | 17.7                              |
| Hawaii                      | 40            | 3.4                  | 3.1                               | 15.8                              | 10.3                              |
| Idaho                       | 14            | 1.1                  | 1.1                               | 13.7                              | 11.9                              |
| Illinois                    | 517           | 4.8                  | 4.6                               | 15.3                              | 14.5                              |
| Indiana                     | 181           | 3.3                  | 3.3                               | 18.3                              | 18.4                              |
| Iowa                        | 43            | 1.7                  | 1.6                               | 18.8                              | 17.9                              |
| Kansas                      | 56            | 2.4                  | 2.4                               | 19.9                              | 19.1                              |
| Kentucky                    | 120           | 3.3                  | 3.3                               | 18.8                              | 16.7                              |
| Louisiana                   | 418           | 10.9                 | 11.3                              | 23.1                              | 22.5                              |
| Maine                       | 30            | 2.6                  | 2.5                               | 22.2                              | 18.4                              |
| Maryland                    | 619           | 12.5                 | 11.7                              | 20.4                              | 18.2                              |
| Massachusetts               | 269           | 4.7                  | 4.3                               | 14.0                              | 11.7                              |
| Michigan                    | 281           | 3.4                  | 3.2                               | 19.0                              | 18.4                              |
| Minnesota                   | 78            | 1.7                  | 1.6                               | 10.6                              | 11.7                              |
| Mississippi                 | 229           | 9.3                  | 9.4                               | 25.9                              | 25.6                              |
| Missouri                    | 186           | 3.7                  | 3.6                               | 16.5                              | 16.4                              |
| Montana                     | 13            | 1.5                  | 1.6                               | 24.2                              | 19.8                              |
| Nebraska                    | 33            | 2.2                  | 2.3                               | 17.3                              | 15.2                              |
| Nevada                      | 146           | 6.3                  | 6.1                               | 18.9                              | 16.9                              |
| New Hampshire               | 15            | 1.3                  | 1.2                               | 12.9                              | 10.8                              |
| New Jersey                  | 739           | 9.9                  | 9.0                               | 20.6                              | 17.8                              |
| New Mexico                  | 46            | 2.7                  | 2.7                               | 15.5                              | 12.8                              |
| New York                    | 1,981         | 11.9                 | 11.1                              | 16.1                              | 13.4                              |
| North Carolina              | 534           | 6.5                  | 6.3                               | 19.2                              | 17.8                              |
| North Dakota                | 5             | 0.8                  | 0.8                               | 19.3                              | 22.1                              |
| Ohio                        | 313           | 3.2                  | 3.2                               | 16.3                              | 15.0                              |
| Oklahoma                    | 126           | 4.0                  | 4.1                               | 22.8                              | 21.7                              |
| Oregon                      | 112           | 3.4                  | 3.3                               | 18.1                              | 14.8                              |
| Pennsylvania                | 634           | 5.8                  | 5.4                               | 19.1                              | 17.3                              |
| Rhode Island                | 34            | 3.8                  | 3.5                               | 15.5                              | 12.9                              |
| South Carolina              | 320           | 8.0                  | 8.0                               | 20.4                              | 18.7                              |
| South Dakota                | 9             | 1.3                  | 1.3                               | 20.0                              | 11.8                              |
| Tennessee                   | 336           | 6.2                  | 6.1                               | 20.5                              | 20.1                              |
| Texas                       | 1,230         | 5.8                  | 5.9                               | 16.2                              | 16.5                              |
| Utah                        | 44            | 2.0                  | 2.2                               | 17.4                              | 15.2                              |
| Vermont                     | 8             | 1.5                  | 1.2                               | 13.3                              | 9.5                               |
| Virginia                    | 326           | 4.7                  | 4.5                               | 16.1                              | 14.6                              |
| Washington                  | 165           | 2.8                  | 2.7                               | 14.2                              | 12.7                              |
| West Virginia               | 42            | 2.7                  | 2.6                               | 24.0                              | 20.4                              |
| Wisconsin                   | 92            | 1.9                  | 1.8                               | 16.0                              | 14.4                              |
| Wyoming                     | 6             | 1.2                  | 1.3                               | 22.9                              | 17.5                              |
| <b>Subtotal</b>             | <b>16,026</b> | <b>6.1</b>           | <b>5.9</b>                        | <b>17.3</b>                       | <b>15.8</b>                       |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                   |                                   |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Guam                        | 2             | 1.6                  | 1.7                               | 24.1                              | 14.0                              |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Puerto Rico                 | 449           | 14.8                 | 14.6                              | 26.9                              | 22.8                              |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| U.S. Virgin Islands         | 11            | 12.5                 | 11.1                              | 19.5                              | 25.1                              |
| <b>Subtotal</b>             | <b>462</b>    | <b>13.8</b>          | <b>13.7</b>                       | <b>26.7</b>                       | <b>22.8</b>                       |
| <b>Total</b>                | <b>16,488</b> | <b>6.2</b>           | <b>6.0</b>                        | <b>17.5</b>                       | <b>15.9</b>                       |

**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWDH <sup>a</sup> | Age-adjusted rate per 1,000 PLWDH |
|-----------------------------|---------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>2014</b>                 |               |                      |                                   |                                   |                                   |
| Alabama                     | 279           | 6.9                  | 6.8                               | 22.1                              | 21.8                              |
| Alaska                      | 12            | 2.0                  | 2.0                               | 18.8                              | 17.6                              |
| Arizona                     | 220           | 4.0                  | 4.0                               | 15.0                              | 13.8                              |
| Arkansas                    | 120           | 4.9                  | 5.0                               | 23.2                              | 21.8                              |
| California                  | 1,641         | 5.1                  | 5.0                               | 13.7                              | 12.1                              |
| Colorado                    | 148           | 3.3                  | 3.3                               | 13.3                              | 12.1                              |
| Connecticut                 | 186           | 6.1                  | 5.4                               | 18.2                              | 14.5                              |
| Delaware                    | 88            | 11.2                 | 10.2                              | 27.8                              | 23.5                              |
| District of Columbia        | 211           | 36.9                 | 39.9                              | 14.5                              | 13.2                              |
| Florida                     | 1,972         | 11.6                 | 10.8                              | 19.0                              | 16.7                              |
| Georgia                     | 923           | 11.1                 | 10.9                              | 19.0                              | 19.3                              |
| Hawaii                      | 44            | 3.7                  | 3.6                               | 17.1                              | 11.4                              |
| Idaho                       | 21            | 1.6                  | 1.6                               | 20.4                              | 29.4                              |
| Illinois                    | 526           | 4.9                  | 4.6                               | 15.2                              | 14.7                              |
| Indiana                     | 180           | 3.3                  | 3.3                               | 17.5                              | 16.9                              |
| Iowa                        | 54            | 2.1                  | 2.0                               | 22.6                              | 19.6                              |
| Kansas                      | 46            | 1.9                  | 2.0                               | 16.0                              | 15.0                              |
| Kentucky                    | 119           | 3.2                  | 3.2                               | 18.1                              | 16.5                              |
| Louisiana                   | 424           | 11.0                 | 11.2                              | 22.3                              | 22.5                              |
| Maine                       | 19            | 1.7                  | 1.2                               | 13.5                              | 10.3                              |
| Maryland                    | 595           | 11.9                 | 11.1                              | 18.8                              | 16.4                              |
| Massachusetts               | 266           | 4.6                  | 4.2                               | 13.6                              | 11.4                              |
| Michigan                    | 288           | 3.4                  | 3.3                               | 19.4                              | 18.3                              |
| Minnesota                   | 97            | 2.1                  | 2.0                               | 12.8                              | 12.8                              |
| Mississippi                 | 238           | 9.7                  | 9.6                               | 26.0                              | 26.5                              |
| Missouri                    | 172           | 3.4                  | 3.4                               | 14.8                              | 13.4                              |
| Montana                     | 10            | 1.2                  | 1.1                               | 18.1                              | 16.7                              |
| Nebraska                    | 30            | 1.9                  | 2.0                               | 15.0                              | 14.2                              |
| Nevada                      | 131           | 5.6                  | 5.6                               | 15.8                              | 14.7                              |
| New Hampshire               | 13            | 1.1                  | 1.1                               | 10.7                              | 7.9                               |
| New Jersey                  | 667           | 8.9                  | 8.0                               | 18.5                              | 15.3                              |
| New Mexico                  | 67            | 3.9                  | 3.9                               | 21.4                              | 18.5                              |
| New York                    | 1,921         | 11.5                 | 10.6                              | 15.2                              | 12.6                              |
| North Carolina              | 550           | 6.6                  | 6.4                               | 19.1                              | 17.6                              |
| North Dakota                | 7             | 1.1                  | 1.2                               | 23.0                              | 27.0                              |
| Ohio                        | 348           | 3.6                  | 3.5                               | 17.4                              | 16.3                              |
| Oklahoma                    | 140           | 4.4                  | 4.5                               | 24.6                              | 22.4                              |
| Oregon                      | 103           | 3.1                  | 2.9                               | 16.4                              | 14.2                              |
| Pennsylvania                | 649           | 6.0                  | 5.5                               | 19.2                              | 16.3                              |
| Rhode Island                | 37            | 4.1                  | 3.6                               | 16.1                              | 13.5                              |
| South Carolina              | 332           | 8.2                  | 7.8                               | 20.7                              | 19.8                              |
| South Dakota                | 9             | 1.3                  | 1.4                               | 18.1                              | 11.8                              |
| Tennessee                   | 334           | 6.1                  | 5.9                               | 20.6                              | 21.0                              |
| Texas                       | 1,348         | 6.2                  | 6.3                               | 16.9                              | 16.7                              |
| Utah                        | 22            | 1.0                  | 1.1                               | 8.5                               | 6.7                               |
| Vermont                     | 3             | 0.6                  | 0.4                               | 4.7                               | 3.2                               |
| Virginia                    | 311           | 4.5                  | 4.2                               | 14.9                              | 13.7                              |
| Washington                  | 173           | 2.9                  | 2.8                               | 14.3                              | 12.6                              |
| West Virginia               | 38            | 2.4                  | 2.3                               | 21.2                              | 21.3                              |
| Wisconsin                   | 90            | 1.9                  | 1.8                               | 15.3                              | 14.6                              |
| Wyoming                     | 5             | 1.0                  | 1.1                               | 18.7                              | 13.7                              |
| <b>Subtotal</b>             | <b>16,227</b> | <b>6.1</b>           | <b>5.9</b>                        | <b>17.1</b>                       | <b>15.4</b>                       |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                   |                                   |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Guam                        | 2             | 1.6                  | 1.9                               | 24.1                              | 32.8                              |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Puerto Rico                 | 459           | 15.2                 | 14.6                              | 27.5                              | 22.4                              |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| U.S. Virgin Islands         | 11            | 12.5                 | 10.9                              | 19.1                              | 16.0                              |
| <b>Subtotal</b>             | <b>472</b>    | <b>14.2</b>          | <b>13.6</b>                       | <b>27.2</b>                       | <b>22.1</b>                       |
| <b>Total</b>                | <b>16,699</b> | <b>6.2</b>           | <b>6.0</b>                        | <b>17.3</b>                       | <b>15.5</b>                       |

**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWDH <sup>a</sup> | Age-adjusted rate per 1,000 PLWDH |
|-----------------------------|---------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>2015</b>                 |               |                      |                                   |                                   |                                   |
| Alabama                     | 277           | 6.8                  | 6.7                               | 22.3                              | 21.0                              |
| Alaska                      | 12            | 2.0                  | 2.1                               | 18.1                              | 17.3                              |
| Arizona                     | 214           | 3.8                  | 3.7                               | 14.0                              | 12.4                              |
| Arkansas                    | 110           | 4.5                  | 4.6                               | 20.7                              | 18.8                              |
| California                  | 1,706         | 5.3                  | 5.1                               | 13.8                              | 11.8                              |
| Colorado                    | 124           | 2.7                  | 2.7                               | 10.8                              | 8.1                               |
| Connecticut                 | 184           | 6.0                  | 5.2                               | 17.8                              | 13.9                              |
| Delaware                    | 70            | 8.8                  | 7.8                               | 22.0                              | 16.6                              |
| District of Columbia        | 254           | 43.8                 | 47.4                              | 17.4                              | 15.2                              |
| Florida                     | 2,089         | 12.0                 | 11.1                              | 19.5                              | 16.9                              |
| Georgia                     | 831           | 9.9                  | 9.7                               | 16.5                              | 16.0                              |
| Hawaii                      | 32            | 2.7                  | 2.4                               | 12.1                              | 8.9                               |
| Idaho                       | 14            | 1.0                  | 1.1                               | 13.3                              | 10.1                              |
| Illinois                    | 549           | 5.1                  | 4.8                               | 15.5                              | 13.9                              |
| Indiana                     | 177           | 3.2                  | 3.2                               | 16.5                              | 16.9                              |
| Iowa                        | 36            | 1.4                  | 1.2                               | 14.7                              | 13.6                              |
| Kansas                      | 52            | 2.2                  | 2.1                               | 18.2                              | 17.0                              |
| Kentucky                    | 123           | 3.3                  | 3.3                               | 18.2                              | 16.9                              |
| Louisiana                   | 423           | 10.9                 | 11.0                              | 21.4                              | 20.9                              |
| Maine                       | 19            | 1.7                  | 1.4                               | 13.2                              | 8.2                               |
| Maryland                    | 553           | 11.0                 | 10.1                              | 16.7                              | 14.0                              |
| Massachusetts               | 298           | 5.1                  | 4.6                               | 14.9                              | 11.6                              |
| Michigan                    | 298           | 3.6                  | 3.3                               | 20.3                              | 19.6                              |
| Minnesota                   | 97            | 2.1                  | 2.0                               | 12.4                              | 12.9                              |
| Mississippi                 | 217           | 8.8                  | 8.8                               | 23.1                              | 22.9                              |
| Missouri                    | 171           | 3.4                  | 3.2                               | 14.3                              | 13.5                              |
| Montana                     | 13            | 1.5                  | 1.4                               | 22.4                              | 19.5                              |
| Nebraska                    | 28            | 1.8                  | 1.9                               | 13.7                              | 13.3                              |
| Nevada                      | 128           | 5.3                  | 5.1                               | 14.6                              | 13.6                              |
| New Hampshire               | 29            | 2.5                  | 2.2                               | 24.6                              | 19.0                              |
| New Jersey                  | 652           | 8.6                  | 7.8                               | 18.1                              | 14.7                              |
| New Mexico                  | 75            | 4.3                  | 4.4                               | 22.9                              | 20.3                              |
| New York                    | 1,804         | 10.7                 | 9.8                               | 14.2                              | 11.4                              |
| North Carolina              | 562           | 6.7                  | 6.3                               | 18.9                              | 16.5                              |
| North Dakota                | 8             | 1.3                  | 1.6                               | 23.6                              | 25.1                              |
| Ohio                        | 307           | 3.2                  | 3.0                               | 14.8                              | 13.4                              |
| Oklahoma                    | 143           | 4.5                  | 4.5                               | 24.3                              | 22.2                              |
| Oregon                      | 111           | 3.3                  | 3.1                               | 16.7                              | 13.2                              |
| Pennsylvania                | 589           | 5.4                  | 4.9                               | 17.2                              | 14.1                              |
| Rhode Island                | 26            | 2.9                  | 2.5                               | 11.2                              | 9.9                               |
| South Carolina              | 292           | 7.1                  | 6.8                               | 17.9                              | 16.5                              |
| South Dakota                | 7             | 1.0                  | 0.9                               | 13.5                              | 13.7                              |
| Tennessee                   | 341           | 6.2                  | 6.2                               | 20.4                              | 18.9                              |
| Texas                       | 1,312         | 5.9                  | 6.0                               | 15.8                              | 15.3                              |
| Utah                        | 31            | 1.3                  | 1.5                               | 11.6                              | 9.7                               |
| Vermont                     | 5             | 0.9                  | 0.7                               | 7.7                               | 5.2                               |
| Virginia                    | 280           | 4.0                  | 3.7                               | 13.1                              | 11.2                              |
| Washington                  | 148           | 2.5                  | 2.3                               | 11.8                              | 10.9                              |
| West Virginia               | 30            | 1.9                  | 1.6                               | 17.1                              | 15.3                              |
| Wisconsin                   | 84            | 1.7                  | 1.6                               | 14.1                              | 12.4                              |
| Wyoming                     | 4             | 0.8                  | 0.8                               | 13.8                              | 10.9                              |
| <b>Subtotal</b>             | <b>15,939</b> | <b>5.9</b>           | <b>5.7</b>                        | <b>16.3</b>                       | <b>14.3</b>                       |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                   |                                   |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Guam                        | 2             | 1.6                  | 1.8                               | 22.2                              | 13.5                              |
| Northern Mariana Islands    | 1             | 2.5                  | 3.7                               | 83.3                              | 23.8                              |
| Puerto Rico                 | 393           | 13.2                 | 12.9                              | 23.5                              | 18.9                              |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| U.S. Virgin Islands         | 9             | 10.2                 | 9.8                               | 16.2                              | 11.4                              |
| <b>Subtotal</b>             | <b>405</b>    | <b>12.3</b>          | <b>12.0</b>                       | <b>23.3</b>                       | <b>18.7</b>                       |
| <b>Total</b>                | <b>16,344</b> | <b>6.0</b>           | <b>5.7</b>                        | <b>16.5</b>                       | <b>14.4</b>                       |

**Table 6c. Deaths of persons aged ≥13 years with diagnosed HIV infection, by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWDH <sup>a</sup> | Age-adjusted rate per 1,000 PLWDH |
|-----------------------------|---------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>2016</b>                 |               |                      |                                   |                                   |                                   |
| Alabama                     | 265           | 6.5                  | 6.2                               | 20.6                              | 19.5                              |
| Alaska                      | 12            | 2.0                  | 1.9                               | 17.1                              | 16.2                              |
| Arizona                     | 241           | 4.2                  | 4.0                               | 15.3                              | 13.1                              |
| Arkansas                    | 92            | 3.7                  | 3.6                               | 16.6                              | 15.0                              |
| California                  | 1,770         | 5.4                  | 5.2                               | 13.9                              | 11.7                              |
| Colorado                    | 124           | 2.7                  | 2.6                               | 10.1                              | 8.0                               |
| Connecticut                 | 196           | 6.4                  | 5.5                               | 18.9                              | 13.4                              |
| Delaware                    | 54            | 6.7                  | 5.9                               | 16.8                              | 15.8                              |
| District of Columbia        | 246           | 41.7                 | 45.4                              | 16.7                              | 13.9                              |
| Florida                     | 2,166         | 12.2                 | 11.2                              | 19.7                              | 16.9                              |
| Georgia                     | 824           | 9.7                  | 9.4                               | 15.8                              | 15.2                              |
| Hawaii                      | 35            | 2.9                  | 2.7                               | 13.3                              | 9.6                               |
| Idaho                       | 11            | 0.8                  | 0.8                               | 10.0                              | 9.2                               |
| Illinois                    | 523           | 4.9                  | 4.6                               | 14.5                              | 13.1                              |
| Indiana                     | 198           | 3.6                  | 3.5                               | 17.9                              | 16.5                              |
| Iowa                        | 32            | 1.2                  | 1.2                               | 12.4                              | 10.5                              |
| Kansas                      | 46            | 1.9                  | 1.9                               | 15.5                              | 13.2                              |
| Kentucky                    | 122           | 3.3                  | 3.2                               | 17.5                              | 15.6                              |
| Louisiana                   | 422           | 10.9                 | 10.9                              | 20.6                              | 19.3                              |
| Maine                       | 23            | 2.0                  | 1.8                               | 14.9                              | 10.1                              |
| Maryland                    | 522           | 10.3                 | 9.5                               | 15.8                              | 13.6                              |
| Massachusetts               | 291           | 5.0                  | 4.4                               | 14.3                              | 10.3                              |
| Michigan                    | 285           | 3.4                  | 3.1                               | 18.4                              | 17.0                              |
| Minnesota                   | 75            | 1.6                  | 1.5                               | 9.2                               | 9.1                               |
| Mississippi                 | 206           | 8.3                  | 8.2                               | 21.6                              | 20.6                              |
| Missouri                    | 198           | 3.9                  | 3.7                               | 16.2                              | 14.7                              |
| Montana                     | 13            | 1.5                  | 1.6                               | 21.7                              | 14.6                              |
| Nebraska                    | 29            | 1.9                  | 1.8                               | 13.8                              | 13.3                              |
| Nevada                      | 150           | 6.1                  | 5.9                               | 16.2                              | 15.1                              |
| New Hampshire               | 19            | 1.6                  | 1.7                               | 16.0                              | 12.9                              |
| New Jersey                  | 666           | 8.8                  | 7.8                               | 18.4                              | 14.4                              |
| New Mexico                  | 48            | 2.8                  | 2.5                               | 14.4                              | 12.4                              |
| New York                    | 1,868         | 11.1                 | 10.0                              | 14.5                              | 11.6                              |
| North Carolina              | 520           | 6.1                  | 5.7                               | 17.0                              | 15.5                              |
| North Dakota                | 4             | 0.6                  | 0.7                               | 10.6                              | 7.6                               |
| Ohio                        | 343           | 3.5                  | 3.4                               | 15.9                              | 14.3                              |
| Oklahoma                    | 122           | 3.8                  | 3.7                               | 20.2                              | 18.3                              |
| Oregon                      | 98            | 2.8                  | 2.7                               | 14.4                              | 12.0                              |
| Pennsylvania                | 602           | 5.5                  | 5.0                               | 16.5                              | 14.0                              |
| Rhode Island                | 39            | 4.3                  | 3.7                               | 16.1                              | 11.8                              |
| South Carolina              | 337           | 8.1                  | 7.5                               | 20.1                              | 17.8                              |
| South Dakota                | 11            | 1.6                  | 1.5                               | 20.6                              | 19.7                              |
| Tennessee                   | 325           | 5.8                  | 5.5                               | 19.7                              | 18.8                              |
| Texas                       | 1,359         | 6.0                  | 6.1                               | 15.8                              | 15.4                              |
| Utah                        | 47            | 2.0                  | 2.2                               | 16.9                              | 16.3                              |
| Vermont                     | 10            | 1.8                  | 1.4                               | 15.0                              | 9.5                               |
| Virginia                    | 318           | 4.5                  | 4.2                               | 14.6                              | 12.9                              |
| Washington                  | 174           | 2.9                  | 2.7                               | 13.5                              | 12.5                              |
| West Virginia               | 39            | 2.5                  | 2.3                               | 21.6                              | 20.4                              |
| Wisconsin                   | 86            | 1.8                  | 1.6                               | 14.1                              | 11.7                              |
| Wyoming                     | 5             | 1.0                  | 1.1                               | 15.9                              | 12.0                              |
| <b>Subtotal</b>             | <b>16,211</b> | <b>6.0</b>           | <b>5.6</b>                        | <b>16.2</b>                       | <b>14.1</b>                       |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                   |                                   |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Guam                        | 3             | 2.4                  | 2.9                               | 31.3                              | 31.3                              |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| Puerto Rico                 | 398           | 13.6                 | 12.8                              | 23.9                              | 19.3                              |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                               | 0.0                               |
| U.S. Virgin Islands         | 11            | 12.5                 | 10.2                              | 19.8                              | 48.2                              |
| <b>Subtotal</b>             | <b>412</b>    | <b>12.7</b>          | <b>12.0</b>                       | <b>23.7</b>                       | <b>19.8</b>                       |
| <b>Total</b>                | <b>16,623</b> | <b>6.1</b>           | <b>5.7</b>                        | <b>16.3</b>                       | <b>14.2</b>                       |

Abbreviations: PLWDH, persons living with diagnosed HIV infection; pop, population.

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used.

<sup>a</sup> Denominator was calculated as (No. PLWDH at the end of [year X–1]) + (No. new diagnoses during year X).

**Table 6d. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2016—United States**

|                                                    | 2010          |            |             | 2011          |            |             | 2012          |            |             | 2013          |            |             | 2014          |            |             | 2015          |            |             | 2016          |            |             |         |
|----------------------------------------------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------|
|                                                    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    |         |
|                                                    |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       | 100,000 |
| <b>Sex</b>                                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 10,269        | 8.2        | 27.9        | 9,963         | 7.9        | 26.4        | 9,754         | 7.7        | 25.3        | 9,721         | 7.6        | 24.6        | 9,772         | 7.5        | 24.5        | 9,732         | 7.4        | 24.1        | 9,719         | 7.3        | 23.8        |         |
| Female                                             | 3,558         | 2.7        | 31          | 3,502         | 2.6        | 29.7        | 3,403         | 2.5        | 28.2        | 3,340         | 2.5        | 27.2        | 3,348         | 2.5        | 26.9        | 3,118         | 2.3        | 24.8        | 3,117         | 2.3        | 24.6        |         |
| <b>Age at death (yr)</b>                           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| 13–24                                              | 179           | 0.3        | 14.3        | 169           | 0.3        | 13.2        | 145           | 0.3        | 11.3        | 129           | 0.2        | 10.1        | 127           | 0.2        | 10.9        | 115           | 0.2        | 11.0        | 93            | 0.2        | 10.0        |         |
| 25–34                                              | 923           | 2.2        | 19.0        | 863           | 2.1        | 17.5        | 874           | 2.1        | 17.5        | 829           | 1.9        | 16.4        | 765           | 1.8        | 15.2        | 756           | 1.7        | 15.1        | 768           | 1.7        | 15.3        |         |
| 35–44                                              | 2,755         | 6.7        | 20.3        | 2,420         | 6.0        | 19.0        | 2,115         | 5.2        | 17.7        | 1,917         | 4.7        | 16.9        | 1,827         | 4.5        | 17.0        | 1,645         | 4.1        | 16.2        | 1,528         | 3.8        | 15.9        |         |
| 45–54                                              | 5,238         | 11.6       | 28.1        | 5,029         | 11.2       | 25.9        | 4,798         | 10.8       | 24.1        | 4,598         | 10.5       | 22.9        | 4,319         | 10.0       | 21.6        | 4,147         | 9.6        | 21.0        | 3,787         | 8.8        | 19.6        |         |
| ≥55                                                | 4,732         | 6.1        | 47.4        | 4,984         | 6.3        | 44.5        | 5,225         | 6.4        | 41.6        | 5,588         | 6.7        | 39.9        | 6,082         | 7.1        | 39.4        | 6,187         | 7.0        | 36.5        | 6,660         | 7.3        | 35.8        |         |
| <b>Race/ethnicity</b>                              |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| American Indian/Alaska Native                      | 56            | 3.1        | 44.6        | 47            | 2.6        | 36.3        | 41            | 2.2        | 30.6        | 52            | 2.8        | 37.7        | 44            | 2.3        | 31.2        | 51            | 2.7        | 35.1        | 37            | 1.9        | 24.6        |         |
| Asian <sup>b</sup>                                 | 55            | 0.4        | 11.8        | 68            | 0.5        | 13.8        | 61            | 0.5        | 11.7        | 65            | 0.5        | 11.8        | 48            | 0.3        | 8.3         | 64            | 0.4        | 10.6        | 81            | 0.5        | 12.8        |         |
| Black/African American                             | 6,674         | 21.7       | 34.0        | 6,367         | 20.5       | 31.6        | 6,192         | 19.6       | 29.9        | 6,027         | 18.9       | 28.4        | 5,978         | 18.5       | 27.8        | 5,751         | 17.6       | 26.4        | 5,675         | 17.2       | 25.7        |         |
| Hispanic/Latino <sup>c</sup>                       | 2,284         | 6.0        | 21.5        | 2,308         | 5.9        | 21.1        | 2,109         | 5.3        | 18.8        | 2,180         | 5.3        | 19.0        | 2,248         | 5.3        | 19.2        | 2,119         | 4.9        | 17.8        | 2,152         | 4.9        | 17.8        |         |
| Native Hawaiian/Other Pacific Islander             | 6             | 1.5        | 18.8        | 6             | 1.5        | 17.5        | 6             | 1.4        | 16.8        | 7             | 1.6        | 18.8        | 6             | 1.4        | 15.7        | 4             | 0.9        | 10.1        | 9             | 2.0        | 22.0        |         |
| White                                              | 4,013         | 2.4        | 26.7        | 3,948         | 2.3        | 25.9        | 4,015         | 2.4        | 25.9        | 3,910         | 2.3        | 25.0        | 3,982         | 2.3        | 25.3        | 4,012         | 2.3        | 25.4        | 4,066         | 2.4        | 25.6        |         |
| Multiple races                                     | 739           | 20.7       | 30.1        | 721           | 19.5       | 28.7        | 733           | 19.2       | 28.6        | 819           | 20.7       | 31.3        | 814           | 19.8       | 30.9        | 849           | 20.0       | 32.2        | 816           | 18.6       | 31.0        |         |
| <b>Transmission category<sup>d</sup></b>           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male-to-male sexual contact                        | 5,270         | —          | 22.7        | 5,178         | —          | 21.6        | 5,135         | —          | 20.7        | 5,197         | —          | 20.3        | 5,262         | —          | 20.2        | 5,298         | —          | 19.9        | 5,339         | —          | 19.7        |         |
| Injection drug use                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 2,324         | —          | 42.7        | 2,145         | —          | 39.9        | 2,074         | —          | 39.0        | 1,989         | —          | 37.9        | 2,001         | —          | 38.8        | 1,911         | —          | 37.8        | 1,824         | —          | 36.8        |         |
| Female                                             | 1,319         | —          | 40.1        | 1,331         | —          | 40.5        | 1,232         | —          | 37.7        | 1,260         | —          | 38.7        | 1,200         | —          | 37.4        | 1,100         | —          | 34.7        | 1,102         | —          | 35.1        |         |
| Male-to-male sexual contact and injection drug use | 1,164         | —          | 32.4        | 1,140         | —          | 31.6        | 1,098         | —          | 30.4        | 1,129         | —          | 31.3        | 1,141         | —          | 31.9        | 1,171         | —          | 33.1        | 1,133         | —          | 32.3        |         |
| Heterosexual contact <sup>e</sup>                  |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 1,410         | —          | 33.8        | 1,392         | —          | 32.3        | 1,346         | —          | 30.2        | 1,319         | —          | 28.8        | 1,289         | —          | 27.7        | 1,261         | —          | 26.6        | 1,339         | —          | 27.7        |         |
| Female                                             | 2,186         | —          | 27.9        | 2,100         | —          | 25.8        | 2,100         | —          | 25.0        | 2,023         | —          | 23.4        | 2,092         | —          | 23.7        | 1,950         | —          | 21.7        | 1,950         | —          | 21.3        |         |
| Other <sup>f</sup>                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Male                                               | 101           | —          | 23.3        | 107           | —          | 24.2        | 101           | —          | 22.6        | 87            | —          | 19.4        | 80            | —          | 17.6        | 91            | —          | 20.0        | 84            | —          | 18.4        |         |
| Female                                             | 54            | —          | 15.7        | 71            | —          | 20.1        | 71            | —          | 19.5        | 57            | —          | 15.3        | 55            | —          | 14.6        | 68            | —          | 17.6        | 66            | —          | 16.7        |         |
| <b>Region of residence</b>                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |         |
| Northeast                                          | 3,577         | 7.7        | 27.1        | 3,429         | 7.3        | 25.8        | 3,188         | 6.7        | 23.8        | 3,203         | 6.7        | 23.8        | 3,031         | 6.3        | 22.4        | 2,909         | 6.1        | 21.6        | 2,924         | 6.1        | 21.5        |         |
| Midwest                                            | 1,576         | 2.8        | 29.5        | 1,523         | 2.7        | 27.6        | 1,506         | 2.7        | 26.7        | 1,427         | 2.5        | 24.7        | 1,447         | 2.6        | 24.7        | 1,427         | 2.5        | 24.1        | 1,424         | 2.5        | 23.6        |         |
| South                                              | 6,656         | 7.0        | 33.1        | 6,448         | 6.7        | 30.9        | 6,403         | 6.6        | 29.6        | 6,321         | 6.4        | 28.4        | 6,490         | 6.5        | 28.6        | 6,361         | 6.3        | 27.6        | 6,282         | 6.2        | 27.0        |         |
| West                                               | 2,018         | 3.4        | 20.8        | 2,065         | 3.4        | 20.9        | 2,060         | 3.4        | 20.5        | 2,110         | 3.4        | 20.6        | 2,152         | 3.5        | 20.8        | 2,153         | 3.4        | 20.6        | 2,206         | 3.5        | 20.8        |         |
| <b>Total<sup>g</sup></b>                           | <b>13,827</b> | <b>5.4</b> | <b>28.6</b> | <b>13,465</b> | <b>5.2</b> | <b>27.2</b> | <b>13,157</b> | <b>5.0</b> | <b>26.0</b> | <b>13,061</b> | <b>5.0</b> | <b>25.2</b> | <b>13,120</b> | <b>4.9</b> | <b>25.0</b> | <b>12,850</b> | <b>4.8</b> | <b>24.3</b> | <b>12,836</b> | <b>4.7</b> | <b>24.0</b> |         |

Abbreviation: PLWA, persons living with diagnosed HIV infection ever classified as stage 3 (AIDS).

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used.

<sup>a</sup> Denominator was calculated as (No. PLWDH at the end of [year X–1]) + (No. new diagnoses during year X).

<sup>b</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>g</sup> Includes persons of unknown race/ethnicity.

**Table 6e. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death, 2010–2016—United States and 6 dependent areas**

|                                                    | 2010          |            |             | 2011          |            |             | 2012          |            |             | 2013          |            |             | 2014          |            |             | 2015          |            |             | 2016          |            |             |
|----------------------------------------------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|---------------|------------|-------------|
|                                                    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    | No.           | Rate per   | Rate per    |
|                                                    |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |               | 100,000    | 1,000       |
| <b>Sex</b>                                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 10,582        | 8.4        | 28.2        | 10,275        | 8.0        | 26.7        | 10,001        | 7.7        | 25.5        | 9,968         | 7.7        | 24.8        | 10,021        | 7.6        | 24.7        | 9,958         | 7.5        | 24.3        | 9,944         | 7.4        | 24.0        |
| Female                                             | 3,676         | 2.8        | 31.2        | 3,604         | 2.7        | 29.9        | 3,491         | 2.6        | 28.3        | 3,423         | 2.5        | 27.2        | 3,454         | 2.5        | 27.1        | 3,195         | 2.3        | 24.9        | 3,180         | 2.3        | 24.5        |
| <b>Age at death (yr)</b>                           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| 13–24                                              | 182           | 0.3        | 14.3        | 172           | 0.3        | 13.3        | 149           | 0.3        | 11.5        | 134           | 0.3        | 10.3        | 129           | 0.2        | 10.9        | 117           | 0.2        | 11.0        | 98            | 0.2        | 10.4        |
| 25–34                                              | 952           | 2.3        | 19.3        | 887           | 2.1        | 17.8        | 899           | 2.1        | 17.8        | 846           | 2.0        | 16.6        | 781           | 1.8        | 15.4        | 776           | 1.7        | 15.3        | 776           | 1.7        | 15.3        |
| 35–44                                              | 2,850         | 6.9        | 20.6        | 2,504         | 6.1        | 19.3        | 2,180         | 5.3        | 17.9        | 1,961         | 4.8        | 17.0        | 1,868         | 4.6        | 17.1        | 1,682         | 4.1        | 16.3        | 1,570         | 3.8        | 16.1        |
| 45–54                                              | 5,418         | 11.9       | 28.4        | 5,204         | 11.5       | 26.3        | 4,923         | 11.0       | 24.3        | 4,727         | 10.7       | 23.1        | 4,437         | 10.1       | 21.8        | 4,261         | 9.8        | 21.2        | 3,875         | 8.9        | 19.7        |
| ≥55                                                | 4,856         | 6.2        | 47.5        | 5,112         | 6.3        | 44.6        | 5,341         | 6.4        | 41.6        | 5,723         | 6.7        | 40.0        | 6,260         | 7.2        | 39.7        | 6,317         | 7.0        | 36.5        | 6,805         | 7.4        | 35.9        |
| <b>Race/ethnicity</b>                              |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| American Indian/Alaska Native                      | 56            | —          | 44.6        | 47            | —          | 36.3        | 41            | —          | 30.6        | 52            | —          | 37.7        | 44            | —          | 31.2        | 51            | —          | 35.0        | 37            | —          | 24.6        |
| Asian <sup>b</sup>                                 | 56            | —          | 12.0        | 70            | —          | 14.1        | 62            | —          | 11.8        | 65            | —          | 11.7        | 49            | —          | 8.5         | 64            | —          | 10.6        | 81            | —          | 12.8        |
| Black/African American                             | 6,680         | —          | 34.0        | 6,374         | —          | 31.6        | 6,201         | —          | 29.9        | 6,030         | —          | 28.4        | 5,982         | —          | 27.8        | 5,755         | —          | 26.4        | 5,684         | —          | 25.7        |
| Hispanic/Latino <sup>c</sup>                       | 2,706         | —          | 23.5        | 2,709         | —          | 22.9        | 2,432         | —          | 20.0        | 2,501         | —          | 20.1        | 2,598         | —          | 20.6        | 2,416         | —          | 18.9        | 2,427         | —          | 18.7        |
| Native Hawaiian/Other Pacific Islander             | 7             | —          | 20.9        | 9             | —          | 25.2        | 6             | —          | 16.2        | 9             | —          | 23.4        | 6             | —          | 15.3        | 5             | —          | 12.1        | 11            | —          | 25.8        |
| White                                              | 4,014         | —          | 26.7        | 3,948         | —          | 25.9        | 4,016         | —          | 25.9        | 3,912         | —          | 25.0        | 3,982         | —          | 25.3        | 4,012         | —          | 25.3        | 4,067         | —          | 25.6        |
| Multiple races                                     | 739           | —          | 30.1        | 722           | —          | 28.7        | 734           | —          | 28.6        | 821           | —          | 31.3        | 814           | —          | 30.9        | 850           | —          | 32.2        | 817           | —          | 31.1        |
| <b>Transmission category<sup>d</sup></b>           |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male-to-male sexual contact                        | 5,330         | —          | 22.8        | 5,249         | —          | 21.7        | 5,175         | —          | 20.7        | 5,262         | —          | 20.4        | 5,322         | —          | 20.2        | 5,357         | —          | 20.0        | 5,392         | —          | 19.8        |
| Injection drug use                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 2,481         | —          | 43.4        | 2,295         | —          | 40.7        | 2,195         | —          | 39.4        | 2,083         | —          | 37.9        | 2,111         | —          | 39.1        | 2,010         | —          | 38.0        | 1,914         | —          | 36.9        |
| Female                                             | 1,353         | —          | 40.2        | 1,371         | —          | 40.8        | 1,258         | —          | 37.6        | 1,290         | —          | 38.8        | 1,237         | —          | 37.7        | 1,116         | —          | 34.4        | 1,127         | —          | 35.2        |
| Male-to-male sexual contact and injection drug use | 1,198         | —          | 32.8        | 1,173         | —          | 32.0        | 1,125         | —          | 30.7        | 1,154         | —          | 31.5        | 1,164         | —          | 32.1        | 1,195         | —          | 33.2        | 1,162         | —          | 32.7        |
| Heterosexual contact <sup>e</sup>                  |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 1,471         | —          | 34.2        | 1,450         | —          | 32.6        | 1,402         | —          | 30.6        | 1,380         | —          | 29.3        | 1,342         | —          | 27.9        | 1,303         | —          | 26.7        | 1,387         | —          | 27.9        |
| Female                                             | 2,267         | —          | 28.2        | 2,160         | —          | 25.9        | 2,160         | —          | 25.0        | 2,075         | —          | 23.4        | 2,161         | —          | 23.9        | 2,010         | —          | 21.8        | 1,986         | —          | 21.2        |
| Other <sup>f</sup>                                 |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Male                                               | 102           | —          | 23.1        | 108           | —          | 23.9        | 104           | —          | 22.8        | 89            | —          | 19.4        | 82            | —          | 17.7        | 92            | —          | 19.8        | 88            | —          | 18.9        |
| Female                                             | 56            | —          | 15.9        | 73            | —          | 20.1        | 74            | —          | 19.8        | 58            | —          | 15.2        | 56            | —          | 14.5        | 69            | —          | 17.5        | 68            | —          | 16.8        |
| <b>Region of residence</b>                         |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |               |            |             |
| Northeast                                          | 3,577         | 7.7        | 27.1        | 3,429         | 7.3        | 25.8        | 3,188         | 6.7        | 23.8        | 3,203         | 6.7        | 23.8        | 3,031         | 6.3        | 22.4        | 2,909         | 6.1        | 21.6        | 2,924         | 6.1        | 21.5        |
| Midwest                                            | 1,576         | 2.8        | 29.5        | 1,523         | 2.7        | 27.6        | 1,506         | 2.7        | 26.7        | 1,427         | 2.5        | 24.7        | 1,447         | 2.6        | 24.7        | 1,427         | 2.5        | 24.1        | 1,424         | 2.5        | 23.6        |
| South                                              | 6,656         | 7.0        | 33.1        | 6,448         | 6.7        | 30.9        | 6,403         | 6.6        | 29.6        | 6,321         | 6.4        | 28.4        | 6,490         | 6.5        | 28.6        | 6,361         | 6.3        | 27.6        | 6,282         | 6.2        | 27.0        |
| West                                               | 2,018         | 3.4        | 20.8        | 2,065         | 3.4        | 20.9        | 2,060         | 3.4        | 20.5        | 2,110         | 3.4        | 20.6        | 2,152         | 3.5        | 20.8        | 2,153         | 3.4        | 20.6        | 2,206         | 3.5        | 20.8        |
| U.S. dependent areas                               | 431           | 12.6       | 44.7        | 414           | 12.2       | 43.1        | 335           | 9.9        | 35.2        | 330           | 9.8        | 34.3        | 355           | 10.7       | 36.9        | 303           | 9.2        | 31.8        | 288           | 8.9        | 30.6        |
| <b>Total<sup>g</sup></b>                           | <b>14,258</b> | <b>5.5</b> | <b>28.9</b> | <b>13,879</b> | <b>5.3</b> | <b>27.5</b> | <b>13,492</b> | <b>5.1</b> | <b>26.1</b> | <b>13,391</b> | <b>5.0</b> | <b>25.4</b> | <b>13,475</b> | <b>5.0</b> | <b>25.3</b> | <b>13,153</b> | <b>4.8</b> | <b>24.4</b> | <b>13,124</b> | <b>4.8</b> | <b>24.1</b> |

Abbreviation: PLWA, persons living with diagnosed HIV infection ever classified as stage 3 (AIDS).

Note. Deaths of persons with diagnosed HIV infection may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used.

<sup>a</sup> Denominator was calculated as (No. PLWDH at the end of [year X–1]) + (No. new diagnoses during year X).

<sup>b</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>c</sup> Hispanics/Latinos can be of any race.

<sup>d</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>e</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>f</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

<sup>g</sup> Includes persons of unknown race/ethnicity.



**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2010</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 188           | 4.7                  | 4.8                               | 40.0                             | 41.1                             |
| Alaska                      | 12            | 2.1                  | 2.1                               | 31.3                             | 35.2                             |
| Arizona                     | 170           | 3.3                  | 3.3                               | 25.9                             | 23.6                             |
| Arkansas                    | 87            | 3.6                  | 3.7                               | 39.9                             | 42.7                             |
| California                  | 1,280         | 4.2                  | 4.2                               | 19.3                             | 19.1                             |
| Colorado                    | 115           | 2.8                  | 2.7                               | 25.4                             | 22.6                             |
| Connecticut                 | 183           | 6.1                  | 5.6                               | 26.9                             | 22.6                             |
| Delaware                    | 62            | 8.2                  | 8.0                               | 32.3                             | 31.8                             |
| District of Columbia        | 221           | 41.6                 | 46.2                              | 26.7                             | 24.7                             |
| Florida                     | 1,721         | 10.7                 | 10.4                              | 32.8                             | 31.6                             |
| Georgia                     | 742           | 9.4                  | 9.4                               | 32.6                             | 33.1                             |
| Hawaii                      | 33            | 2.9                  | 2.8                               | 21.3                             | 16.6                             |
| Idaho                       | 12            | 1.0                  | 1.1                               | 26.5                             | 22.5                             |
| Illinois                    | 541           | 5.1                  | 5.1                               | 31.5                             | 34.0                             |
| Indiana                     | 148           | 2.8                  | 2.8                               | 30.4                             | 27.3                             |
| Iowa                        | 23            | 0.9                  | 0.9                               | 18.9                             | 17.2                             |
| Kansas                      | 40            | 1.7                  | 1.7                               | 26.3                             | 34.5                             |
| Kentucky                    | 95            | 2.6                  | 2.6                               | 31.9                             | 29.7                             |
| Louisiana                   | 370           | 9.9                  | 10.2                              | 41.6                             | 40.5                             |
| Maine                       | 18            | 1.6                  | 1.5                               | 25.4                             | 19.8                             |
| Maryland                    | 511           | 10.6                 | 10.1                              | 31.9                             | 30.0                             |
| Massachusetts               | 229           | 4.1                  | 3.9                               | 21.8                             | 19.4                             |
| Michigan                    | 253           | 3.1                  | 3.1                               | 33.9                             | 32.2                             |
| Minnesota                   | 67            | 1.5                  | 1.5                               | 21.2                             | 19.7                             |
| Mississippi                 | 156           | 6.4                  | 6.6                               | 40.5                             | 41.4                             |
| Missouri                    | 175           | 3.5                  | 3.6                               | 30.6                             | 30.8                             |
| Montana                     | 10            | 1.2                  | 1.2                               | 37.3                             | 31.5                             |
| Nebraska                    | 26            | 1.7                  | 1.8                               | 26.8                             | 28.8                             |
| Nevada                      | 101           | 4.5                  | 4.5                               | 27.5                             | 25.2                             |
| New Hampshire               | 18            | 1.6                  | 1.4                               | 28.7                             | 25.9                             |
| New Jersey                  | 650           | 8.8                  | 8.3                               | 34.4                             | 30.8                             |
| New Mexico                  | 47            | 2.8                  | 2.8                               | 25.9                             | 23.8                             |
| New York                    | 1,870         | 11.4                 | 11.0                              | 25.1                             | 21.1                             |
| North Carolina              | 418           | 5.3                  | 5.2                               | 38.0                             | 34.3                             |
| North Dakota                | 5             | 0.9                  | 1.0                               | 47.6                             | 54.2                             |
| Ohio                        | 218           | 2.3                  | 2.3                               | 25.5                             | 26.4                             |
| Oklahoma                    | 84            | 2.7                  | 2.8                               | 32.6                             | 28.3                             |
| Oregon                      | 80            | 2.5                  | 2.5                               | 22.3                             | 19.2                             |
| Pennsylvania                | 563           | 5.2                  | 5.0                               | 30.8                             | 29.1                             |
| Rhode Island                | 33            | 3.7                  | 3.7                               | 25.5                             | 27.8                             |
| South Carolina              | 288           | 7.5                  | 7.5                               | 35.4                             | 32.3                             |
| South Dakota                | 6             | 0.9                  | 1.0                               | 36.8                             | 34.5                             |
| Tennessee                   | 297           | 5.6                  | 5.6                               | 38.8                             | 43.1                             |
| Texas                       | 1,154         | 5.7                  | 5.9                               | 30.8                             | 30.5                             |
| Utah                        | 21            | 1.0                  | 1.2                               | 17.0                             | 11.8                             |
| Vermont                     | 13            | 2.4                  | 2.0                               | 48.0                             | 31.1                             |
| Virginia                    | 240           | 3.6                  | 3.5                               | 26.3                             | 23.8                             |
| Washington                  | 130           | 2.3                  | 2.3                               | 20.7                             | 18.4                             |
| West Virginia               | 22            | 1.4                  | 1.4                               | 23.8                             | 22.5                             |
| Wisconsin                   | 74            | 1.6                  | 1.5                               | 29.2                             | 28.8                             |
| Wyoming                     | 7             | 1.5                  | 1.5                               | 49.0                             | 75.7                             |
| <b>Subtotal</b>             | <b>13,827</b> | <b>5.4</b>           | <b>5.3</b>                        | <b>28.6</b>                      | <b>27.3</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 1             | 2.6                  | 2.8                               | 1,000.0                          | 199.8                            |
| Guam                        | 2             | 1.6                  | 1.7                               | 58.8                             | 31.7                             |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Puerto Rico                 | 422           | 13.6                 | 14.1                              | 45.5                             | 39.3                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 6             | 6.8                  | 7.5                               | 18.6                             | 18.2                             |
| <b>Subtotal</b>             | <b>431</b>    | <b>12.6</b>          | <b>13.1</b>                       | <b>44.7</b>                      | <b>38.7</b>                      |
| <b>Total</b>                | <b>14,258</b> | <b>5.5</b>           | <b>5.4</b>                        | <b>28.9</b>                      | <b>27.5</b>                      |

**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2011</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 184           | 4.6                  | 4.6                               | 36.2                             | 39.6                             |
| Alaska                      | 9             | 1.5                  | 1.5                               | 23.2                             | 17.5                             |
| Arizona                     | 157           | 3.0                  | 3.0                               | 23.3                             | 22.2                             |
| Arkansas                    | 92            | 3.8                  | 4.0                               | 41.5                             | 46.3                             |
| California                  | 1,341         | 4.3                  | 4.3                               | 19.9                             | 18.1                             |
| Colorado                    | 107           | 2.5                  | 2.5                               | 22.8                             | 19.8                             |
| Connecticut                 | 181           | 6.0                  | 5.5                               | 26.8                             | 23.4                             |
| Delaware                    | 56            | 7.4                  | 6.9                               | 28.7                             | 20.8                             |
| District of Columbia        | 228           | 42.0                 | 46.2                              | 27.8                             | 25.9                             |
| Florida                     | 1,729         | 10.6                 | 10.3                              | 32.2                             | 31.2                             |
| Georgia                     | 667           | 8.3                  | 8.3                               | 28.7                             | 29.6                             |
| Hawaii                      | 32            | 2.8                  | 2.6                               | 20.9                             | 16.7                             |
| Idaho                       | 12            | 0.9                  | 1.0                               | 25.2                             | 17.3                             |
| Illinois                    | 459           | 4.3                  | 4.2                               | 26.1                             | 23.2                             |
| Indiana                     | 171           | 3.2                  | 3.2                               | 33.6                             | 32.7                             |
| Iowa                        | 29            | 1.1                  | 1.1                               | 23.1                             | 29.8                             |
| Kansas                      | 41            | 1.8                  | 1.8                               | 26.3                             | 19.0                             |
| Kentucky                    | 92            | 2.5                  | 2.5                               | 30.0                             | 27.6                             |
| Louisiana                   | 406           | 10.8                 | 10.9                              | 43.4                             | 42.3                             |
| Maine                       | 15            | 1.3                  | 1.1                               | 21.2                             | 17.9                             |
| Maryland                    | 486           | 10.0                 | 9.5                               | 29.6                             | 25.9                             |
| Massachusetts               | 222           | 3.9                  | 3.8                               | 20.5                             | 18.5                             |
| Michigan                    | 244           | 3.0                  | 2.9                               | 32.0                             | 27.0                             |
| Minnesota                   | 70            | 1.6                  | 1.6                               | 21.2                             | 23.2                             |
| Mississippi                 | 156           | 6.4                  | 6.4                               | 38.1                             | 37.7                             |
| Missouri                    | 156           | 3.1                  | 3.0                               | 26.4                             | 25.8                             |
| Montana                     | 7             | 0.8                  | 0.8                               | 23.3                             | 23.7                             |
| Nebraska                    | 20            | 1.3                  | 1.4                               | 20.0                             | 22.5                             |
| Nevada                      | 111           | 5.0                  | 5.0                               | 29.5                             | 26.2                             |
| New Hampshire               | 13            | 1.2                  | 1.0                               | 20.6                             | 33.4                             |
| New Jersey                  | 606           | 8.2                  | 7.7                               | 32.0                             | 26.6                             |
| New Mexico                  | 44            | 2.6                  | 2.6                               | 23.8                             | 20.5                             |
| New York                    | 1,829         | 11.1                 | 10.6                              | 24.4                             | 21.8                             |
| North Carolina              | 372           | 4.6                  | 4.5                               | 32.6                             | 31.5                             |
| North Dakota                | 4             | 0.7                  | 0.6                               | 37.4                             | 40.4                             |
| Ohio                        | 246           | 2.6                  | 2.5                               | 27.7                             | 28.0                             |
| Oklahoma                    | 94            | 3.0                  | 3.2                               | 35.6                             | 36.6                             |
| Oregon                      | 84            | 2.6                  | 2.5                               | 22.8                             | 22.6                             |
| Pennsylvania                | 519           | 4.8                  | 4.6                               | 28.0                             | 25.5                             |
| Rhode Island                | 38            | 4.2                  | 3.8                               | 29.3                             | 25.8                             |
| South Carolina              | 283           | 7.3                  | 7.2                               | 28.5                             | 28.3                             |
| South Dakota                | 5             | 0.7                  | 0.7                               | 27.3                             | 28.6                             |
| Tennessee                   | 242           | 4.5                  | 4.5                               | 30.9                             | 29.4                             |
| Texas                       | 1,093         | 5.3                  | 5.4                               | 28.0                             | 27.7                             |
| Utah                        | 16            | 0.7                  | 0.9                               | 12.6                             | 8.8                              |
| Vermont                     | 6             | 1.1                  | 0.9                               | 21.3                             | 13.0                             |
| Virginia                    | 238           | 3.5                  | 3.4                               | 25.5                             | 23.6                             |
| Washington                  | 140           | 2.5                  | 2.4                               | 22.0                             | 17.6                             |
| West Virginia               | 30            | 1.9                  | 1.8                               | 30.6                             | 24.8                             |
| Wisconsin                   | 78            | 1.6                  | 1.6                               | 29.5                             | 25.6                             |
| Wyoming                     | 5             | 1.1                  | 0.9                               | 34.7                             | 36.2                             |
| <b>Subtotal</b>             | <b>13,465</b> | <b>5.2</b>           | <b>5.1</b>                        | <b>27.2</b>                      | <b>25.4</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Guam                        | 5             | 4.1                  | 4.5                               | 151.5                            | 66.6                             |
| Northern Mariana Islands    | 1             | 2.5                  | 1.8                               | 333.3                            | 0.0                              |
| Puerto Rico                 | 399           | 12.9                 | 13.3                              | 43.1                             | 37.1                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 9             | 10.2                 | 9.7                               | 28.7                             | 20.1                             |
| <b>Subtotal</b>             | <b>414</b>    | <b>12.2</b>          | <b>12.5</b>                       | <b>43.1</b>                      | <b>36.9</b>                      |
| <b>Total</b>                | <b>13,879</b> | <b>5.3</b>           | <b>5.2</b>                        | <b>27.5</b>                      | <b>25.6</b>                      |

**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2012</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 202           | 5.0                  | 5.1                               | 38.1                             | 38.4                             |
| Alaska                      | 8             | 1.3                  | 1.3                               | 21.0                             | 11.6                             |
| Arizona                     | 168           | 3.1                  | 3.1                               | 24.0                             | 24.8                             |
| Arkansas                    | 73            | 3.0                  | 3.1                               | 32.3                             | 30.9                             |
| California                  | 1,308         | 4.2                  | 4.2                               | 19.1                             | 17.6                             |
| Colorado                    | 86            | 2.0                  | 2.0                               | 17.9                             | 14.8                             |
| Connecticut                 | 171           | 5.6                  | 5.1                               | 25.4                             | 23.4                             |
| Delaware                    | 70            | 9.1                  | 8.5                               | 35.4                             | 28.9                             |
| District of Columbia        | 191           | 34.5                 | 38.6                              | 22.7                             | 20.8                             |
| Florida                     | 1,682         | 10.2                 | 9.8                               | 30.0                             | 27.9                             |
| Georgia                     | 677           | 8.3                  | 8.3                               | 27.7                             | 28.3                             |
| Hawaii                      | 44            | 3.8                  | 3.6                               | 28.8                             | 21.4                             |
| Idaho                       | 17            | 1.3                  | 1.3                               | 33.5                             | 50.1                             |
| Illinois                    | 435           | 4.1                  | 4.0                               | 24.3                             | 21.5                             |
| Indiana                     | 145           | 2.7                  | 2.6                               | 27.8                             | 28.3                             |
| Iowa                        | 36            | 1.4                  | 1.5                               | 27.4                             | 22.2                             |
| Kansas                      | 39            | 1.7                  | 1.6                               | 24.9                             | 22.8                             |
| Kentucky                    | 88            | 2.4                  | 2.4                               | 28.0                             | 27.0                             |
| Louisiana                   | 393           | 10.4                 | 10.6                              | 41.0                             | 38.6                             |
| Maine                       | 17            | 1.5                  | 1.3                               | 23.7                             | 23.8                             |
| Maryland                    | 508           | 10.3                 | 9.8                               | 30.4                             | 27.5                             |
| Massachusetts               | 222           | 3.9                  | 3.7                               | 19.8                             | 17.2                             |
| Michigan                    | 274           | 3.3                  | 3.3                               | 35.1                             | 31.8                             |
| Minnesota                   | 68            | 1.5                  | 1.4                               | 19.7                             | 18.8                             |
| Mississippi                 | 145           | 5.9                  | 6.2                               | 34.7                             | 31.8                             |
| Missouri                    | 154           | 3.1                  | 3.1                               | 25.4                             | 22.8                             |
| Montana                     | 4             | 0.5                  | 0.6                               | 13.2                             | 7.5                              |
| Nebraska                    | 24            | 1.6                  | 1.5                               | 23.8                             | 19.4                             |
| Nevada                      | 136           | 6.0                  | 5.9                               | 35.1                             | 40.5                             |
| New Hampshire               | 16            | 1.4                  | 1.2                               | 25.1                             | 18.2                             |
| New Jersey                  | 538           | 7.2                  | 6.6                               | 28.4                             | 24.9                             |
| New Mexico                  | 42            | 2.5                  | 2.6                               | 22.8                             | 19.1                             |
| New York                    | 1,714         | 10.3                 | 9.7                               | 22.8                             | 19.1                             |
| North Carolina              | 364           | 4.5                  | 4.3                               | 29.8                             | 27.3                             |
| North Dakota                | 3             | 0.5                  | 0.5                               | 25.9                             | 29.7                             |
| Ohio                        | 254           | 2.6                  | 2.5                               | 27.8                             | 25.4                             |
| Oklahoma                    | 93            | 3.0                  | 3.0                               | 34.1                             | 29.1                             |
| Oregon                      | 90            | 2.7                  | 2.7                               | 24.1                             | 19.3                             |
| Pennsylvania                | 473           | 4.4                  | 4.2                               | 25.1                             | 21.7                             |
| Rhode Island                | 34            | 3.8                  | 3.5                               | 26.0                             | 23.5                             |
| South Carolina              | 266           | 6.7                  | 6.6                               | 29.5                             | 27.3                             |
| South Dakota                | 7             | 1.0                  | 1.3                               | 35.9                             | 26.8                             |
| Tennessee                   | 259           | 4.8                  | 4.9                               | 31.6                             | 28.3                             |
| Texas                       | 1,105         | 5.3                  | 5.4                               | 27.2                             | 26.4                             |
| Utah                        | 24            | 1.1                  | 1.2                               | 18.3                             | 14.6                             |
| Vermont                     | 3             | 0.6                  | 0.6                               | 9.8                              | 7.8                              |
| Virginia                    | 255           | 3.7                  | 3.6                               | 25.6                             | 23.5                             |
| Washington                  | 132           | 2.3                  | 2.2                               | 20.4                             | 16.5                             |
| West Virginia               | 32            | 2.0                  | 1.8                               | 30.9                             | 25.8                             |
| Wisconsin                   | 67            | 1.4                  | 1.3                               | 24.8                             | 20.2                             |
| Wyoming                     | 1             | 0.2                  | 0.2                               | 6.7                              | 2.6                              |
| <b>Subtotal</b>             | <b>13,157</b> | <b>5.0</b>           | <b>4.9</b>                        | <b>26.0</b>                      | <b>23.7</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Guam                        | 1             | 0.8                  | 0.9                               | 33.3                             | 25.0                             |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Puerto Rico                 | 321           | 10.5                 | 10.7                              | 35.0                             | 32.3                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 13            | 14.7                 | 13.8                              | 41.7                             | 63.0                             |
| <b>Subtotal</b>             | <b>335</b>    | <b>9.9</b>           | <b>10.1</b>                       | <b>35.2</b>                      | <b>33.4</b>                      |
| <b>Total</b>                | <b>13,492</b> | <b>5.1</b>           | <b>5.0</b>                        | <b>26.1</b>                      | <b>23.8</b>                      |

**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2013</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 186           | 4.6                  | 4.7                               | 34.0                             | 32.5                             |
| Alaska                      | 13            | 2.2                  | 2.2                               | 34.3                             | 34.4                             |
| Arizona                     | 179           | 3.3                  | 3.3                               | 24.8                             | 22.1                             |
| Arkansas                    | 93            | 3.8                  | 4.1                               | 39.3                             | 36.7                             |
| California                  | 1,347         | 4.2                  | 4.2                               | 19.3                             | 17.2                             |
| Colorado                    | 96            | 2.2                  | 2.1                               | 19.6                             | 19.1                             |
| Connecticut                 | 156           | 5.1                  | 4.6                               | 22.9                             | 17.5                             |
| Delaware                    | 62            | 8.0                  | 7.2                               | 31.2                             | 27.4                             |
| District of Columbia        | 166           | 29.4                 | 32.4                              | 19.8                             | 18.5                             |
| Florida                     | 1,678         | 10.0                 | 9.4                               | 29.3                             | 26.0                             |
| Georgia                     | 658           | 8.0                  | 8.0                               | 24.8                             | 23.7                             |
| Hawaii                      | 29            | 2.5                  | 2.3                               | 18.7                             | 11.5                             |
| Idaho                       | 11            | 0.8                  | 0.8                               | 21.0                             | 16.5                             |
| Illinois                    | 402           | 3.7                  | 3.6                               | 22.2                             | 19.0                             |
| Indiana                     | 152           | 2.8                  | 2.8                               | 28.6                             | 27.7                             |
| Iowa                        | 38            | 1.5                  | 1.4                               | 28.1                             | 23.3                             |
| Kansas                      | 42            | 1.8                  | 1.8                               | 26.8                             | 24.6                             |
| Kentucky                    | 90            | 2.5                  | 2.5                               | 26.7                             | 23.2                             |
| Louisiana                   | 357           | 9.3                  | 9.7                               | 35.8                             | 34.3                             |
| Maine                       | 24            | 2.1                  | 1.9                               | 32.2                             | 25.1                             |
| Maryland                    | 500           | 10.1                 | 9.4                               | 29.5                             | 24.4                             |
| Massachusetts               | 220           | 3.8                  | 3.5                               | 19.4                             | 16.1                             |
| Michigan                    | 230           | 2.8                  | 2.7                               | 28.9                             | 25.3                             |
| Minnesota                   | 65            | 1.4                  | 1.4                               | 18.5                             | 18.4                             |
| Mississippi                 | 178           | 7.2                  | 7.4                               | 40.6                             | 39.0                             |
| Missouri                    | 153           | 3.0                  | 3.0                               | 24.9                             | 24.3                             |
| Montana                     | 12            | 1.4                  | 1.4                               | 36.6                             | 25.9                             |
| Nebraska                    | 27            | 1.8                  | 1.9                               | 26.2                             | 22.2                             |
| Nevada                      | 118           | 5.1                  | 5.0                               | 29.8                             | 25.9                             |
| New Hampshire               | 12            | 1.1                  | 1.0                               | 18.8                             | 13.4                             |
| New Jersey                  | 565           | 7.6                  | 6.9                               | 29.1                             | 25.6                             |
| New Mexico                  | 39            | 2.3                  | 2.3                               | 21.5                             | 17.7                             |
| New York                    | 1,677         | 10.1                 | 9.4                               | 22.4                             | 17.7                             |
| North Carolina              | 395           | 4.8                  | 4.7                               | 31.0                             | 28.5                             |
| North Dakota                | 3             | 0.5                  | 0.5                               | 23.3                             | 22.1                             |
| Ohio                        | 234           | 2.4                  | 2.4                               | 24.9                             | 21.7                             |
| Oklahoma                    | 107           | 3.4                  | 3.4                               | 38.0                             | 35.9                             |
| Oregon                      | 95            | 2.9                  | 2.8                               | 25.6                             | 19.9                             |
| Pennsylvania                | 511           | 4.7                  | 4.4                               | 26.9                             | 23.3                             |
| Rhode Island                | 31            | 3.4                  | 3.1                               | 23.4                             | 16.3                             |
| South Carolina              | 253           | 6.3                  | 6.3                               | 28.3                             | 25.2                             |
| South Dakota                | 5             | 0.7                  | 0.8                               | 24.9                             | 13.9                             |
| Tennessee                   | 258           | 4.8                  | 4.7                               | 30.4                             | 27.5                             |
| Texas                       | 1,049         | 4.9                  | 5.0                               | 24.9                             | 24.9                             |
| Utah                        | 31            | 1.4                  | 1.6                               | 22.0                             | 17.3                             |
| Vermont                     | 7             | 1.3                  | 1.0                               | 21.5                             | 12.8                             |
| Virginia                    | 260           | 3.8                  | 3.6                               | 26.1                             | 22.6                             |
| Washington                  | 134           | 2.3                  | 2.2                               | 20.2                             | 15.8                             |
| West Virginia               | 31            | 2.0                  | 1.9                               | 30.5                             | 22.9                             |
| Wisconsin                   | 76            | 1.6                  | 1.5                               | 25.1                             | 21.5                             |
| Wyoming                     | 6             | 1.2                  | 1.3                               | 39.2                             | 35.2                             |
| <b>Subtotal</b>             | <b>13,061</b> | <b>5.0</b>           | <b>4.8</b>                        | <b>25.2</b>                      | <b>22.4</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Guam                        | 2             | 1.6                  | 1.7                               | 66.7                             | 44.3                             |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Puerto Rico                 | 320           | 10.5                 | 10.3                              | 34.5                             | 31.3                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 8             | 9.1                  | 8.3                               | 25.9                             | 45.0                             |
| <b>Subtotal</b>             | <b>330</b>    | <b>9.8</b>           | <b>9.7</b>                        | <b>34.3</b>                      | <b>32.0</b>                      |
| <b>Total</b>                | <b>13,391</b> | <b>5.0</b>           | <b>4.9</b>                        | <b>25.4</b>                      | <b>22.6</b>                      |

**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2014</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 210           | 5.2                  | 5.1                               | 37.0                             | 36.3                             |
| Alaska                      | 10            | 1.7                  | 1.7                               | 28.2                             | 24.9                             |
| Arizona                     | 172           | 3.1                  | 3.1                               | 23.1                             | 22.1                             |
| Arkansas                    | 96            | 3.9                  | 4.0                               | 38.8                             | 34.6                             |
| California                  | 1,387         | 4.3                  | 4.2                               | 19.9                             | 17.5                             |
| Colorado                    | 121           | 2.7                  | 2.7                               | 24.0                             | 28.5                             |
| Connecticut                 | 161           | 5.2                  | 4.7                               | 24.5                             | 20.0                             |
| Delaware                    | 70            | 8.9                  | 8.0                               | 35.4                             | 27.6                             |
| District of Columbia        | 173           | 30.3                 | 32.8                              | 21.8                             | 19.5                             |
| Florida                     | 1,659         | 9.7                  | 9.1                               | 28.2                             | 24.7                             |
| Georgia                     | 740           | 8.9                  | 8.8                               | 28.5                             | 26.7                             |
| Hawaii                      | 36            | 3.0                  | 3.0                               | 23.1                             | 15.0                             |
| Idaho                       | 16            | 1.2                  | 1.2                               | 30.4                             | 25.2                             |
| Illinois                    | 425           | 4.0                  | 3.7                               | 23.2                             | 20.4                             |
| Indiana                     | 142           | 2.6                  | 2.6                               | 26.3                             | 25.1                             |
| Iowa                        | 49            | 1.9                  | 1.9                               | 35.2                             | 27.0                             |
| Kansas                      | 35            | 1.5                  | 1.5                               | 21.9                             | 20.4                             |
| Kentucky                    | 87            | 2.4                  | 2.4                               | 25.3                             | 22.8                             |
| Louisiana                   | 342           | 8.9                  | 9.1                               | 33.2                             | 33.3                             |
| Maine                       | 15            | 1.3                  | 0.9                               | 19.8                             | 13.2                             |
| Maryland                    | 483           | 9.6                  | 8.9                               | 27.7                             | 22.0                             |
| Massachusetts               | 215           | 3.7                  | 3.4                               | 18.8                             | 15.8                             |
| Michigan                    | 219           | 2.6                  | 2.5                               | 27.5                             | 23.4                             |
| Minnesota                   | 70            | 1.5                  | 1.5                               | 19.3                             | 19.4                             |
| Mississippi                 | 192           | 7.8                  | 7.8                               | 42.0                             | 38.6                             |
| Missouri                    | 135           | 2.7                  | 2.6                               | 21.6                             | 18.6                             |
| Montana                     | 7             | 0.8                  | 0.8                               | 21.3                             | 17.5                             |
| Nebraska                    | 23            | 1.5                  | 1.6                               | 21.7                             | 16.1                             |
| Nevada                      | 107           | 4.5                  | 4.6                               | 25.4                             | 25.8                             |
| New Hampshire               | 9             | 0.8                  | 0.7                               | 13.9                             | 12.5                             |
| New Jersey                  | 514           | 6.8                  | 6.1                               | 26.6                             | 23.1                             |
| New Mexico                  | 52            | 3.0                  | 3.1                               | 28.0                             | 24.1                             |
| New York                    | 1,579         | 9.4                  | 8.7                               | 20.9                             | 16.8                             |
| North Carolina              | 402           | 4.8                  | 4.7                               | 30.4                             | 26.9                             |
| North Dakota                | 6             | 1.0                  | 1.1                               | 39.7                             | 38.0                             |
| Ohio                        | 260           | 2.7                  | 2.6                               | 26.9                             | 24.0                             |
| Oklahoma                    | 116           | 3.6                  | 3.7                               | 40.1                             | 31.2                             |
| Oregon                      | 81            | 2.4                  | 2.3                               | 21.7                             | 21.0                             |
| Pennsylvania                | 502           | 4.6                  | 4.3                               | 26.2                             | 21.7                             |
| Rhode Island                | 33            | 3.6                  | 3.1                               | 24.6                             | 19.1                             |
| South Carolina              | 275           | 6.8                  | 6.5                               | 30.9                             | 29.2                             |
| South Dakota                | 6             | 0.9                  | 0.9                               | 26.4                             | 19.5                             |
| Tennessee                   | 262           | 4.8                  | 4.6                               | 31.2                             | 29.9                             |
| Texas                       | 1,117         | 5.1                  | 5.3                               | 25.8                             | 23.6                             |
| Utah                        | 17            | 0.7                  | 0.9                               | 12.0                             | 8.1                              |
| Vermont                     | 3             | 0.6                  | 0.4                               | 8.8                              | 5.0                              |
| Virginia                    | 237           | 3.4                  | 3.2                               | 23.4                             | 21.7                             |
| Washington                  | 141           | 2.4                  | 2.3                               | 20.6                             | 16.8                             |
| West Virginia               | 29            | 1.8                  | 1.7                               | 28.2                             | 28.8                             |
| Wisconsin                   | 77            | 1.6                  | 1.5                               | 25.3                             | 27.5                             |
| Wyoming                     | 5             | 1.0                  | 1.1                               | 32.9                             | 22.0                             |
| <b>Subtotal</b>             | <b>13,120</b> | <b>4.9</b>           | <b>4.7</b>                        | <b>25.0</b>                      | <b>22.1</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Guam                        | 1             | 0.8                  | 0.9                               | 34.5                             | 37.5                             |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Puerto Rico                 | 349           | 11.6                 | 11.0                              | 37.6                             | 31.7                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 5             | 5.7                  | 4.4                               | 16.0                             | 10.6                             |
| <b>Subtotal</b>             | <b>355</b>    | <b>10.7</b>          | <b>10.1</b>                       | <b>36.9</b>                      | <b>30.9</b>                      |
| <b>Total</b>                | <b>13,475</b> | <b>5.0</b>           | <b>4.8</b>                        | <b>25.3</b>                      | <b>22.2</b>                      |

**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2015</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 211           | 5.2                  | 5.2                               | 37.3                             | 33.4                             |
| Alaska                      | 9             | 1.5                  | 1.6                               | 24.2                             | 20.8                             |
| Arizona                     | 174           | 3.1                  | 3.0                               | 22.9                             | 20.5                             |
| Arkansas                    | 83            | 3.4                  | 3.5                               | 33.2                             | 30.9                             |
| California                  | 1,415         | 4.4                  | 4.3                               | 20.1                             | 16.7                             |
| Colorado                    | 103           | 2.3                  | 2.2                               | 19.9                             | 14.6                             |
| Connecticut                 | 159           | 5.2                  | 4.5                               | 24.2                             | 21.9                             |
| Delaware                    | 57            | 7.1                  | 6.4                               | 28.8                             | 19.9                             |
| District of Columbia        | 191           | 32.9                 | 35.9                              | 24.1                             | 22.2                             |
| Florida                     | 1,737         | 10.0                 | 9.3                               | 29.0                             | 25.7                             |
| Georgia                     | 654           | 7.8                  | 7.6                               | 24.8                             | 22.4                             |
| Hawaii                      | 27            | 2.3                  | 2.1                               | 17.6                             | 12.4                             |
| Idaho                       | 7             | 0.5                  | 0.5                               | 13.3                             | 10.0                             |
| Illinois                    | 453           | 4.2                  | 4.0                               | 24.6                             | 20.5                             |
| Indiana                     | 138           | 2.5                  | 2.5                               | 25.0                             | 28.8                             |
| Iowa                        | 29            | 1.1                  | 1.0                               | 20.9                             | 17.2                             |
| Kansas                      | 44            | 1.8                  | 1.8                               | 28.7                             | 23.6                             |
| Kentucky                    | 93            | 2.5                  | 2.5                               | 26.8                             | 23.8                             |
| Louisiana                   | 350           | 9.1                  | 9.1                               | 33.4                             | 32.8                             |
| Maine                       | 15            | 1.3                  | 1.2                               | 19.7                             | 10.9                             |
| Maryland                    | 460           | 9.1                  | 8.4                               | 25.3                             | 19.9                             |
| Massachusetts               | 225           | 3.9                  | 3.5                               | 19.6                             | 14.9                             |
| Michigan                    | 238           | 2.8                  | 2.6                               | 30.5                             | 28.0                             |
| Minnesota                   | 68            | 1.5                  | 1.4                               | 18.2                             | 23.7                             |
| Mississippi                 | 175           | 7.1                  | 7.1                               | 37.7                             | 34.9                             |
| Missouri                    | 127           | 2.5                  | 2.4                               | 19.8                             | 18.1                             |
| Montana                     | 11            | 1.3                  | 1.2                               | 32.0                             | 27.3                             |
| Nebraska                    | 22            | 1.4                  | 1.4                               | 20.3                             | 26.3                             |
| Nevada                      | 104           | 4.3                  | 4.2                               | 23.8                             | 22.7                             |
| New Hampshire               | 24            | 2.1                  | 1.8                               | 38.2                             | 28.2                             |
| New Jersey                  | 524           | 6.9                  | 6.3                               | 27.3                             | 22.6                             |
| New Mexico                  | 68            | 3.9                  | 3.9                               | 35.9                             | 37.3                             |
| New York                    | 1,477         | 8.8                  | 8.0                               | 19.6                             | 15.8                             |
| North Carolina              | 407           | 4.8                  | 4.6                               | 29.8                             | 23.9                             |
| North Dakota                | 7             | 1.1                  | 1.3                               | 40.5                             | 39.3                             |
| Ohio                        | 230           | 2.4                  | 2.3                               | 23.1                             | 20.6                             |
| Oklahoma                    | 122           | 3.8                  | 3.9                               | 41.5                             | 39.1                             |
| Oregon                      | 88            | 2.6                  | 2.4                               | 22.7                             | 16.5                             |
| Pennsylvania                | 464           | 4.3                  | 3.9                               | 24.1                             | 18.0                             |
| Rhode Island                | 18            | 2.0                  | 1.6                               | 13.4                             | 10.4                             |
| South Carolina              | 232           | 5.6                  | 5.4                               | 25.8                             | 24.7                             |
| South Dakota                | 6             | 0.9                  | 0.7                               | 25.6                             | 26.0                             |
| Tennessee                   | 252           | 4.6                  | 4.6                               | 29.6                             | 28.2                             |
| Texas                       | 1,089         | 4.9                  | 5.0                               | 24.6                             | 21.9                             |
| Utah                        | 27            | 1.2                  | 1.3                               | 18.7                             | 13.4                             |
| Vermont                     | 3             | 0.6                  | 0.4                               | 8.5                              | 5.1                              |
| Virginia                    | 220           | 3.1                  | 2.9                               | 21.5                             | 17.9                             |
| Washington                  | 119           | 2.0                  | 1.9                               | 17.1                             | 16.4                             |
| West Virginia               | 28            | 1.8                  | 1.5                               | 28.1                             | 22.0                             |
| Wisconsin                   | 65            | 1.3                  | 1.2                               | 21.6                             | 18.9                             |
| Wyoming                     | 1             | 0.2                  | 0.2                               | 6.5                              | 2.8                              |
| <b>Subtotal</b>             | <b>12,850</b> | <b>4.8</b>           | <b>4.6</b>                        | <b>24.3</b>                      | <b>21.1</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Guam                        | 2             | 1.6                  | 1.8                               | 60.6                             | 32.6                             |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Puerto Rico                 | 295           | 9.9                  | 9.6                               | 32.2                             | 29.0                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 6             | 6.8                  | 6.2                               | 19.4                             | 13.2                             |
| <b>Subtotal</b>             | <b>303</b>    | <b>9.2</b>           | <b>8.9</b>                        | <b>31.8</b>                      | <b>28.4</b>                      |
| <b>Total</b>                | <b>13,153</b> | <b>4.8</b>           | <b>4.6</b>                        | <b>24.4</b>                      | <b>21.2</b>                      |

**Table 6f. Deaths of persons aged ≥13 years with diagnosed HIV infection ever classified as stage 3 (AIDS), by year of death and area of residence, 2010–2016—United States and 6 dependent areas (cont)**

|                             | No.           | Rate per 100,000 pop | Age-adjusted rate per 100,000 pop | Rate per 1,000 PLWA <sup>a</sup> | Age-adjusted rate per 1,000 PLWA |
|-----------------------------|---------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|
| <b>2016</b>                 |               |                      |                                   |                                  |                                  |
| Alabama                     | 198           | 4.9                  | 4.7                               | 34.3                             | 32.4                             |
| Alaska                      | 7             | 1.2                  | 1.1                               | 18.0                             | 14.2                             |
| Arizona                     | 193           | 3.4                  | 3.2                               | 25.0                             | 19.8                             |
| Arkansas                    | 66            | 2.7                  | 2.5                               | 25.8                             | 20.2                             |
| California                  | 1,453         | 4.4                  | 4.3                               | 20.4                             | 17.5                             |
| Colorado                    | 96            | 2.1                  | 2.0                               | 17.5                             | 13.4                             |
| Connecticut                 | 161           | 5.2                  | 4.6                               | 24.7                             | 16.8                             |
| Delaware                    | 46            | 5.7                  | 5.0                               | 23.2                             | 25.7                             |
| District of Columbia        | 189           | 32.1                 | 35.0                              | 23.9                             | 19.3                             |
| Florida                     | 1,762         | 10                   | 9.1                               | 29.2                             | 24.8                             |
| Georgia                     | 645           | 7.6                  | 7.4                               | 24.1                             | 22.0                             |
| Hawaii                      | 28            | 2.3                  | 2.2                               | 18.5                             | 12.9                             |
| Idaho                       | 8             | 0.6                  | 0.5                               | 14.4                             | 10.9                             |
| Illinois                    | 409           | 3.8                  | 3.6                               | 22.2                             | 18.6                             |
| Indiana                     | 159           | 2.9                  | 2.8                               | 28.4                             | 24.6                             |
| Iowa                        | 28            | 1.1                  | 1.0                               | 19.1                             | 15.3                             |
| Kansas                      | 34            | 1.4                  | 1.4                               | 21.9                             | 16.6                             |
| Kentucky                    | 94            | 2.5                  | 2.4                               | 26.5                             | 22.6                             |
| Louisiana                   | 333           | 8.6                  | 8.6                               | 31.2                             | 29.4                             |
| Maine                       | 16            | 1.4                  | 1.2                               | 20.2                             | 11.7                             |
| Maryland                    | 423           | 8.4                  | 7.7                               | 23.9                             | 19.9                             |
| Massachusetts               | 216           | 3.7                  | 3.2                               | 18.8                             | 12.2                             |
| Michigan                    | 224           | 2.7                  | 2.5                               | 27.5                             | 22.8                             |
| Minnesota                   | 58            | 1.3                  | 1.2                               | 15.2                             | 14.8                             |
| Mississippi                 | 164           | 6.6                  | 6.5                               | 34.8                             | 30.5                             |
| Missouri                    | 165           | 3.2                  | 3.0                               | 25.6                             | 22.0                             |
| Montana                     | 9             | 1.0                  | 1.1                               | 26.0                             | 15.7                             |
| Nebraska                    | 26            | 1.7                  | 1.6                               | 24.0                             | 21.4                             |
| Nevada                      | 117           | 4.8                  | 4.6                               | 25.6                             | 25.9                             |
| New Hampshire               | 14            | 1.2                  | 1.2                               | 22.4                             | 17.7                             |
| New Jersey                  | 484           | 6.4                  | 5.7                               | 25.7                             | 21.2                             |
| New Mexico                  | 41            | 2.4                  | 2.1                               | 21.8                             | 17.6                             |
| New York                    | 1,535         | 9.1                  | 8.2                               | 20.4                             | 16.3                             |
| North Carolina              | 381           | 4.5                  | 4.2                               | 27.4                             | 25.6                             |
| North Dakota                | 3             | 0.5                  | 0.5                               | 16.2                             | 10.2                             |
| Ohio                        | 246           | 2.5                  | 2.5                               | 23.8                             | 19.3                             |
| Oklahoma                    | 93            | 2.9                  | 2.8                               | 31.2                             | 25.7                             |
| Oregon                      | 78            | 2.3                  | 2.1                               | 19.9                             | 13.9                             |
| Pennsylvania                | 454           | 4.2                  | 3.8                               | 22.2                             | 18.9                             |
| Rhode Island                | 34            | 3.7                  | 3.2                               | 24.7                             | 14.7                             |
| South Carolina              | 276           | 6.6                  | 6.2                               | 30.3                             | 25.1                             |
| South Dakota                | 6             | 0.9                  | 0.8                               | 24.9                             | 23.6                             |
| Tennessee                   | 242           | 4.3                  | 4.2                               | 28.9                             | 25.3                             |
| Texas                       | 1,089         | 4.8                  | 4.9                               | 24.2                             | 21.9                             |
| Utah                        | 36            | 1.5                  | 1.7                               | 24.6                             | 19.3                             |
| Vermont                     | 10            | 1.8                  | 1.4                               | 27.7                             | 14.8                             |
| Virginia                    | 248           | 3.5                  | 3.3                               | 23.9                             | 21.8                             |
| Washington                  | 136           | 2.2                  | 2.0                               | 19.3                             | 17.5                             |
| West Virginia               | 33            | 2.1                  | 1.9                               | 32.4                             | 25.8                             |
| Wisconsin                   | 66            | 1.4                  | 1.2                               | 21.7                             | 17.0                             |
| Wyoming                     | 4             | 0.8                  | 0.9                               | 22.7                             | 12.5                             |
| <b>Subtotal</b>             | <b>12,836</b> | <b>4.7</b>           | <b>4.5</b>                        | <b>24.0</b>                      | <b>20.4</b>                      |
| <b>U.S. dependent areas</b> |               |                      |                                   |                                  |                                  |
| American Samoa              | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Guam                        | 3             | 2.4                  | 2.9                               | 81.1                             | 69.1                             |
| Northern Mariana Islands    | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| Puerto Rico                 | 274           | 9.3                  | 8.8                               | 30.2                             | 27.5                             |
| Republic of Palau           | 0             | 0.0                  | 0.0                               | 0.0                              | 0.0                              |
| U.S. Virgin Islands         | 11            | 12.5                 | 10.2                              | 35.3                             | 99.5                             |
| <b>Subtotal</b>             | <b>288</b>    | <b>8.9</b>           | <b>8.4</b>                        | <b>30.6</b>                      | <b>30.5</b>                      |
| <b>Total</b>                | <b>13,124</b> | <b>4.8</b>           | <b>4.5</b>                        | <b>24.1</b>                      | <b>20.6</b>                      |

Abbreviations: PLWA, persons living with diagnosed HIV infection ever classified as stage 3 (AIDS); pop, population.

Note. Deaths of persons with diagnosed HIV infection ever classified as stage 3 (AIDS) may be due to any cause. Data are based on residence at death. When information on residence at death was not available, state at death (where a person's death occurred) was used.

<sup>a</sup> Denominator was calculated as (No. PLWA at the end of [year X–1]) + (No. new diagnoses during year X).

**Table 7a. Persons surviving >3 years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and selected characteristics—United States**

|                                                       | No.            | Proportion survived >3 years |             |             |             |             |             |
|-------------------------------------------------------|----------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                                                       |                | 2008                         | 2009        | 2010        | 2011        | 2012        | 2013        |
| <b>Sex</b>                                            |                |                              |             |             |             |             |             |
| Male                                                  | 199,874        | 0.92                         | 0.93        | 0.94        | 0.94        | 0.94        | 0.94        |
| Female                                                | 55,379         | 0.92                         | 0.92        | 0.93        | 0.93        | 0.93        | 0.93        |
| <b>Age at diagnosis (yr)</b>                          |                |                              |             |             |             |             |             |
| 13–24                                                 | 52,955         | 0.98                         | 0.98        | 0.99        | 0.99        | 0.99        | 0.99        |
| 25–34                                                 | 70,896         | 0.96                         | 0.97        | 0.97        | 0.97        | 0.97        | 0.97        |
| 35–44                                                 | 59,549         | 0.93                         | 0.93        | 0.94        | 0.94        | 0.95        | 0.94        |
| 45–54                                                 | 48,358         | 0.88                         | 0.88        | 0.89        | 0.89        | 0.90        | 0.90        |
| ≥55                                                   | 23,495         | 0.76                         | 0.78        | 0.79        | 0.8         | 0.81        | 0.81        |
| <b>Race/ethnicity</b>                                 |                |                              |             |             |             |             |             |
| American Indian/Alaska Native                         | 901            | 0.89                         | 0.87        | 0.88        | 0.91        | 0.92        | 0.90        |
| Asian                                                 | 4,150          | 0.93                         | 0.94        | 0.95        | 0.96        | 0.97        | 0.96        |
| Black/African American                                | 115,310        | 0.91                         | 0.92        | 0.93        | 0.94        | 0.94        | 0.94        |
| Hispanic/Latino <sup>a</sup>                          | 55,055         | 0.94                         | 0.94        | 0.95        | 0.95        | 0.95        | 0.95        |
| Native Hawaiian/Other<br>Pacific Islander             | 292            | *                            | *           | *           | *           | *           | *           |
| White                                                 | 68,280         | 0.92                         | 0.93        | 0.93        | 0.93        | 0.94        | 0.93        |
| Multiple races                                        | 11,265         | 0.94                         | 0.94        | 0.94        | 0.95        | 0.95        | 0.94        |
| <b>Transmission category<sup>b</sup></b>              |                |                              |             |             |             |             |             |
| Male-to-male sexual contact                           | 154,963        | 0.94                         | 0.94        | 0.95        | 0.95        | 0.96        | 0.95        |
| Injection drug use                                    |                |                              |             |             |             |             |             |
| Male                                                  | 11,017         | 0.84                         | 0.85        | 0.85        | 0.86        | 0.86        | 0.85        |
| Female                                                | 8,344          | 0.89                         | 0.88        | 0.89        | 0.89        | 0.89        | 0.88        |
| Male-to-male sexual contact<br>and injection drug use | 9,819          | 0.93                         | 0.94        | 0.93        | 0.95        | 0.94        | 0.94        |
| Heterosexual contact <sup>c</sup>                     |                |                              |             |             |             |             |             |
| Male                                                  | 23,805         | 0.88                         | 0.88        | 0.90        | 0.90        | 0.90        | 0.89        |
| Female                                                | 46,798         | 0.93                         | 0.93        | 0.94        | 0.93        | 0.94        | 0.93        |
| <b>Total<sup>d</sup></b>                              | <b>255,253</b> | <b>0.92</b>                  | <b>0.93</b> | <b>0.93</b> | <b>0.94</b> | <b>0.94</b> | <b>0.94</b> |

Abbreviation: asterisk (\*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. Data are based on residence at diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

<sup>a</sup> Hispanics/Latinos can be of any race.

<sup>b</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>c</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>d</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



**Table 7b. Persons surviving >3 years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and selected characteristics—United States and 6 dependent areas**

|                                                       | No.            | Proportion survived >3 years |             |             |             |             |             |
|-------------------------------------------------------|----------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                                                       |                | 2008                         | 2009        | 2010        | 2011        | 2012        | 2013        |
| <b>Sex</b>                                            |                |                              |             |             |             |             |             |
| Male                                                  | 203,389        | 0.92                         | 0.93        | 0.93        | 0.94        | 0.94        | 0.94        |
| Female                                                | 56,680         | 0.92                         | 0.92        | 0.93        | 0.92        | 0.93        | 0.92        |
| <b>Age at diagnosis (yr)</b>                          |                |                              |             |             |             |             |             |
| 13–24                                                 | 53,593         | 0.98                         | 0.98        | 0.99        | 0.99        | 0.99        | 0.99        |
| 25–34                                                 | 72,125         | 0.96                         | 0.96        | 0.97        | 0.97        | 0.97        | 0.97        |
| 35–44                                                 | 60,783         | 0.93                         | 0.93        | 0.94        | 0.94        | 0.95        | 0.94        |
| 45–54                                                 | 49,438         | 0.88                         | 0.88        | 0.89        | 0.89        | 0.90        | 0.90        |
| ≥55                                                   | 24,130         | 0.75                         | 0.77        | 0.78        | 0.80        | 0.81        | 0.80        |
| <b>Race/ethnicity</b>                                 |                |                              |             |             |             |             |             |
| American Indian/Alaska Native                         | 901            | 0.89                         | 0.87        | 0.88        | 0.91        | 0.92        | 0.90        |
| Asian                                                 | 4,155          | 0.93                         | 0.94        | 0.95        | 0.96        | 0.97        | 0.96        |
| Black/African American                                | 115,402        | 0.91                         | 0.92        | 0.93        | 0.94        | 0.94        | 0.94        |
| Hispanic/Latino <sup>a</sup>                          | 59,740         | 0.93                         | 0.93        | 0.94        | 0.94        | 0.94        | 0.94        |
| Native Hawaiian/Other<br>Pacific Islander             | 304            | *                            | *           | *           | *           | *           | *           |
| White                                                 | 68,296         | 0.92                         | 0.93        | 0.93        | 0.93        | 0.94        | 0.93        |
| Multiple races                                        | 11,271         | 0.94                         | 0.94        | 0.94        | 0.95        | 0.95        | 0.94        |
| <b>Transmission category<sup>b</sup></b>              |                |                              |             |             |             |             |             |
| Male-to-male sexual contact                           | 156,643        | 0.94                         | 0.94        | 0.95        | 0.95        | 0.96        | 0.95        |
| Injection drug use                                    |                |                              |             |             |             |             |             |
| Male                                                  | 11,816         | 0.84                         | 0.84        | 0.84        | 0.84        | 0.85        | 0.84        |
| Female                                                | 8,536          | 0.89                         | 0.88        | 0.89        | 0.89        | 0.89        | 0.88        |
| Male-to-male sexual contact<br>and injection drug use | 9,984          | 0.93                         | 0.94        | 0.93        | 0.95        | 0.94        | 0.94        |
| Heterosexual contact <sup>c</sup>                     |                |                              |             |             |             |             |             |
| Male                                                  | 24,670         | 0.87                         | 0.88        | 0.89        | 0.89        | 0.90        | 0.89        |
| Female                                                | 47,904         | 0.93                         | 0.93        | 0.93        | 0.93        | 0.94        | 0.93        |
| <b>Total<sup>d</sup></b>                              | <b>260,069</b> | <b>0.92</b>                  | <b>0.93</b> | <b>0.93</b> | <b>0.93</b> | <b>0.94</b> | <b>0.94</b> |

Abbreviation: asterisk (\*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. Data are based on residence at diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

<sup>a</sup> Hispanics/Latinos can be of any race.

<sup>b</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>c</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>d</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

**Table 7c. Persons surviving >3 years after a diagnosis of HIV infection during 2008–2013, by year of diagnosis and area of residence—United States and 6 dependent areas**

|                             | No.            | Proportion survived >3 years |             |             |             |             |             |
|-----------------------------|----------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                             |                | 2008                         | 2009        | 2010        | 2011        | 2012        | 2013        |
| Alabama                     | 4,064          | 0.92                         | 0.90        | 0.93        | 0.93        | 0.93        | 0.93        |
| Alaska                      | 169            | *                            | *           | *           | *           | *           | *           |
| Arizona                     | 3,803          | 0.92                         | 0.91        | 0.94        | 0.93        | 0.92        | 0.94        |
| Arkansas                    | 1,502          | 0.88                         | 0.88        | 0.94        | 0.91        | 0.96        | 0.92        |
| California                  | 30,790         | 0.94                         | 0.94        | 0.94        | 0.94        | 0.95        | 0.94        |
| Colorado                    | 2,271          | 0.95                         | 0.94        | 0.96        | 0.95        | 0.97        | 0.97        |
| Connecticut                 | 2,034          | 0.96                         | 0.95        | 0.96        | 0.93        | 0.95        | 0.94        |
| Delaware                    | 784            | 0.91                         | 0.89        | 0.91        | 0.94        | 0.93        | 0.96        |
| District of Columbia        | 4,328          | 0.93                         | 0.93        | 0.95        | 0.95        | 0.96        | 0.97        |
| Florida                     | 28,673         | 0.91                         | 0.92        | 0.93        | 0.92        | 0.94        | 0.93        |
| Georgia                     | 16,509         | 0.91                         | 0.92        | 0.93        | 0.93        | 0.93        | 0.94        |
| Hawaii                      | 531            | *                            | *           | *           | *           | *           | *           |
| Idaho                       | 239            | *                            | *           | *           | *           | *           | *           |
| Illinois                    | 10,114         | 0.93                         | 0.93        | 0.93        | 0.95        | 0.96        | 0.95        |
| Indiana                     | 2,832          | 0.92                         | 0.92        | 0.93        | 0.94        | 0.95        | 0.93        |
| Iowa                        | 681            | 0.93                         | 0.90        | 0.89        | 0.95        | 0.93        | 0.92        |
| Kansas                      | 860            | 0.93                         | 0.93        | 0.95        | 0.96        | 0.95        | 0.90        |
| Kentucky                    | 2,049          | 0.90                         | 0.93        | 0.92        | 0.93        | 0.93        | 0.92        |
| Louisiana                   | 6,703          | 0.89                         | 0.91        | 0.93        | 0.93        | 0.92        | 0.94        |
| Maine                       | 285            | *                            | *           | *           | *           | *           | *           |
| Maryland                    | 9,501          | 0.91                         | 0.92        | 0.94        | 0.94        | 0.95        | 0.94        |
| Massachusetts               | 4,141          | 0.95                         | 0.96        | 0.97        | 0.96        | 0.98        | 0.97        |
| Michigan                    | 4,627          | 0.93                         | 0.93        | 0.94        | 0.93        | 0.95        | 0.93        |
| Minnesota                   | 1,949          | 0.96                         | 0.97        | 0.97        | 0.96        | 0.97        | 0.93        |
| Mississippi                 | 2,907          | 0.90                         | 0.89        | 0.92        | 0.91        | 0.94        | 0.92        |
| Missouri                    | 3,149          | 0.95                         | 0.96        | 0.95        | 0.95        | 0.95        | 0.94        |
| Montana                     | 136            | *                            | *           | *           | *           | *           | *           |
| Nebraska                    | 558            | *                            | *           | *           | *           | *           | *           |
| Nevada                      | 2,302          | 0.89                         | 0.93        | 0.91        | 0.92        | 0.92        | 0.94        |
| New Hampshire               | 251            | *                            | *           | *           | *           | *           | *           |
| New Jersey                  | 7,891          | 0.92                         | 0.90        | 0.93        | 0.91        | 0.93        | 0.91        |
| New Mexico                  | 854            | 0.89                         | 0.86        | 0.90        | 0.95        | 0.97        | 0.94        |
| New York                    | 22,857         | 0.92                         | 0.94        | 0.93        | 0.94        | 0.95        | 0.95        |
| North Carolina              | 8,661          | 0.92                         | 0.94        | 0.93        | 0.93        | 0.94        | 0.95        |
| North Dakota                | 81             | *                            | *           | *           | *           | *           | *           |
| Ohio                        | 6,170          | 0.94                         | 0.94        | 0.96        | 0.95        | 0.95        | 0.95        |
| Oklahoma                    | 1,795          | 0.91                         | 0.92        | 0.93        | 0.91        | 0.94        | 0.92        |
| Oregon                      | 1,480          | 0.95                         | 0.94        | 0.93        | 0.94        | 0.93        | 0.96        |
| Pennsylvania                | 8,988          | 0.91                         | 0.93        | 0.91        | 0.93        | 0.93        | 0.93        |
| Rhode Island                | 603            | 0.92                         | 0.97        | 0.93        | 0.99        | 1.00        | 0.99        |
| South Carolina              | 4,380          | 0.91                         | 0.92        | 0.94        | 0.93        | 0.95        | 0.93        |
| South Dakota                | 160            | *                            | *           | *           | *           | *           | *           |
| Tennessee                   | 5,251          | 0.92                         | 0.91        | 0.92        | 0.94        | 0.92        | 0.92        |
| Texas                       | 25,746         | 0.92                         | 0.93        | 0.93        | 0.94        | 0.94        | 0.94        |
| Utah                        | 675            | 0.98                         | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        |
| Vermont                     | 92             | *                            | *           | *           | *           | *           | *           |
| Virginia                    | 5,786          | 0.92                         | 0.94        | 0.95        | 0.94        | 0.94        | 0.95        |
| Washington                  | 3,005          | 0.94                         | 0.93        | 0.95        | 0.94        | 0.97        | 0.95        |
| West Virginia               | 471            | *                            | *           | *           | *           | *           | *           |
| Wisconsin                   | 1,466          | 0.95                         | 0.95        | 0.97        | 0.95        | 0.96        | 0.95        |
| Wyoming                     | 99             | *                            | *           | *           | *           | *           | *           |
| <b>Subtotal</b>             | <b>255,253</b> | <b>0.92</b>                  | <b>0.93</b> | <b>0.93</b> | <b>0.94</b> | <b>0.94</b> | <b>0.94</b> |
| <b>U.S. dependent areas</b> |                |                              |             |             |             |             |             |
| American Samoa              | 0              | *                            | *           | *           | *           | *           | *           |
| Guam                        | 22             | *                            | *           | *           | *           | *           | *           |
| Northern Mariana Islands    | 4              | *                            | *           | *           | *           | *           | *           |
| Puerto Rico                 | 4,622          | 0.83                         | 0.81        | 0.86        | 0.86        | 0.88        | 0.86        |
| Republic of Palau           | 3              | *                            | *           | *           | *           | *           | *           |
| U.S. Virgin Islands         | 165            | *                            | *           | *           | *           | *           | *           |
| <b>Subtotal</b>             | <b>4,816</b>   | <b>0.83</b>                  | <b>0.82</b> | <b>0.86</b> | <b>0.86</b> | <b>0.88</b> | <b>0.86</b> |
| <b>Total</b>                | <b>260,069</b> | <b>0.92</b>                  | <b>0.93</b> | <b>0.93</b> | <b>0.93</b> | <b>0.94</b> | <b>0.94</b> |

Abbreviation: asterisk (\*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.  
 Note. Data are based on residence at diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

**Table 7d. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and selected characteristics—United States**

|                                                       | No.            | Proportion survived >3 years |             |             |             |             |             |
|-------------------------------------------------------|----------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                                                       |                | 2008                         | 2009        | 2010        | 2011        | 2012        | 2013        |
| <b>Sex</b>                                            |                |                              |             |             |             |             |             |
| Male                                                  | 121,985        | 0.85                         | 0.86        | 0.86        | 0.86        | 0.87        | 0.86        |
| Female                                                | 41,103         | 0.84                         | 0.85        | 0.85        | 0.85        | 0.85        | 0.85        |
| <b>Age at year-end 2015 (yr)</b>                      |                |                              |             |             |             |             |             |
| 13–24                                                 | 14,339         | 0.94                         | 0.95        | 0.95        | 0.96        | 0.95        | 0.96        |
| 25–34                                                 | 37,407         | 0.90                         | 0.92        | 0.92        | 0.92        | 0.93        | 0.92        |
| 35–44                                                 | 46,814         | 0.87                         | 0.88        | 0.89        | 0.89        | 0.89        | 0.89        |
| 45–54                                                 | 43,345         | 0.81                         | 0.82        | 0.83        | 0.82        | 0.83        | 0.83        |
| ≥55                                                   | 21,183         | 0.68                         | 0.70        | 0.69        | 0.70        | 0.72        | 0.71        |
| <b>Race/ethnicity</b>                                 |                |                              |             |             |             |             |             |
| American Indian/Alaska Native                         | 582            | *                            | *           | *           | *           | *           | *           |
| Asian                                                 | 2,096          | 0.90                         | 0.90        | 0.91        | 0.92        | 0.94        | 0.91        |
| Black/African American                                | 76,600         | 0.83                         | 0.84        | 0.85        | 0.85        | 0.86        | 0.86        |
| Hispanic/Latino <sup>a</sup>                          | 34,200         | 0.88                         | 0.88        | 0.88        | 0.88        | 0.89        | 0.88        |
| Native Hawaiian/Other<br>Pacific Islander             | 153            | *                            | *           | *           | *           | *           | *           |
| White                                                 | 40,844         | 0.84                         | 0.86        | 0.85        | 0.85        | 0.85        | 0.84        |
| Multiple races                                        | 8,613          | 0.88                         | 0.87        | 0.87        | 0.88        | 0.88        | 0.88        |
| <b>Transmission category<sup>b</sup></b>              |                |                              |             |             |             |             |             |
| Male-to-male sexual contact                           | 83,258         | 0.87                         | 0.88        | 0.88        | 0.88        | 0.89        | 0.88        |
| Injection drug use                                    |                |                              |             |             |             |             |             |
| Male                                                  | 11,067         | 0.77                         | 0.77        | 0.78        | 0.77        | 0.77        | 0.76        |
| Female                                                | 8,405          | 0.79                         | 0.80        | 0.80        | 0.80        | 0.80        | 0.79        |
| Male-to-male sexual contact<br>and injection drug use | 8,622          | 0.86                         | 0.87        | 0.86        | 0.86        | 0.86        | 0.84        |
| Heterosexual contact <sup>c</sup>                     |                |                              |             |             |             |             |             |
| Male                                                  | 18,297         | 0.81                         | 0.82        | 0.83        | 0.83        | 0.84        | 0.83        |
| Female                                                | 31,982         | 0.85                         | 0.86        | 0.86        | 0.86        | 0.86        | 0.85        |
| <b>Total<sup>d</sup></b>                              | <b>163,088</b> | <b>0.85</b>                  | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> |

Abbreviation: asterisk (\*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. Data are based on residence at diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

<sup>a</sup> Hispanics/Latinos can be of any race.

<sup>b</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>c</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>d</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

**Table 7e. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and selected characteristics—United States and 6 dependent areas**

|                                                       | No.            | Proportion survived >3 years |             |             |             |             |             |
|-------------------------------------------------------|----------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                                                       |                | 2008                         | 2009        | 2010        | 2011        | 2012        | 2013        |
| <b>Sex</b>                                            |                |                              |             |             |             |             |             |
| Male                                                  | 124,300        | 0.85                         | 0.86        | 0.86        | 0.86        | 0.87        | 0.86        |
| Female                                                | 42,080         | 0.83                         | 0.84        | 0.85        | 0.85        | 0.85        | 0.84        |
| <b>Age at year-end 2015 (yr)</b>                      |                |                              |             |             |             |             |             |
| 13–24                                                 | 14,487         | 0.94                         | 0.95        | 0.95        | 0.96        | 0.95        | 0.96        |
| 25–34                                                 | 37,982         | 0.90                         | 0.92        | 0.92        | 0.92        | 0.93        | 0.92        |
| 35–44                                                 | 47,784         | 0.87                         | 0.88        | 0.88        | 0.89        | 0.89        | 0.89        |
| 45–54                                                 | 44,386         | 0.81                         | 0.82        | 0.82        | 0.82        | 0.83        | 0.83        |
| ≥55                                                   | 21,741         | 0.67                         | 0.70        | 0.69        | 0.70        | 0.71        | 0.71        |
| <b>Race/ethnicity</b>                                 |                |                              |             |             |             |             |             |
| American Indian/Alaska Native                         | 582            | *                            | *           | *           | *           | *           | *           |
| Asian                                                 | 2,102          | 0.90                         | 0.90        | 0.91        | 0.91        | 0.94        | 0.91        |
| Black/African American                                | 76,658         | 0.83                         | 0.84        | 0.85        | 0.85        | 0.86        | 0.86        |
| Hispanic/Latino <sup>a</sup>                          | 37,405         | 0.86                         | 0.87        | 0.87        | 0.87        | 0.88        | 0.87        |
| Native Hawaiian/Other<br>Pacific Islander             | 161            | *                            | *           | *           | *           | *           | *           |
| White                                                 | 40,855         | 0.84                         | 0.86        | 0.85        | 0.85        | 0.85        | 0.84        |
| Multiple races                                        | 8,617          | 0.88                         | 0.87        | 0.87        | 0.88        | 0.88        | 0.88        |
| <b>Transmission category<sup>b</sup></b>              |                |                              |             |             |             |             |             |
| Male-to-male sexual contact                           | 84,042         | 0.87                         | 0.88        | 0.88        | 0.88        | 0.89        | 0.88        |
| Injection drug use                                    |                |                              |             |             |             |             |             |
| Male                                                  | 11,828         | 0.76                         | 0.76        | 0.77        | 0.77        | 0.76        | 0.75        |
| Female                                                | 8,609          | 0.78                         | 0.80        | 0.80        | 0.80        | 0.79        | 0.79        |
| Male-to-male sexual contact<br>and injection drug use | 8,786          | 0.86                         | 0.87        | 0.85        | 0.86        | 0.86        | 0.84        |
| Heterosexual contact <sup>c</sup>                     |                |                              |             |             |             |             |             |
| Male                                                  | 18,881         | 0.80                         | 0.82        | 0.83        | 0.82        | 0.84        | 0.82        |
| Female                                                | 32,745         | 0.85                         | 0.86        | 0.86        | 0.86        | 0.86        | 0.85        |
| <b>Total<sup>d</sup></b>                              | <b>166,380</b> | <b>0.84</b>                  | <b>0.85</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> |

Abbreviation: asterisk (\*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.

Note. Data are based on residence at diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

<sup>a</sup> Hispanics/Latinos can be of any race.

<sup>b</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column total.

<sup>c</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>d</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

**Table 7f. Persons with HIV surviving >3 years after stage 3 (AIDS) classification during 2008–2013, by year of diagnosis and area of residence—United States and 6 dependent areas**

|                             | No.            | Proportion survived >3 years |             |             |             |             |             |
|-----------------------------|----------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                             |                | 2008                         | 2009        | 2010        | 2011        | 2012        | 2013        |
| Alabama                     | 2,182          | 0.82                         | 0.79        | 0.81        | 0.84        | 0.81        | 0.82        |
| Alaska                      | 120            | *                            | *           | *           | *           | *           | *           |
| Arizona                     | 2,512          | 0.83                         | 0.87        | 0.87        | 0.85        | 0.82        | 0.84        |
| Arkansas                    | 852            | 0.76                         | 0.80        | 0.78        | 0.78        | 0.87        | 0.87        |
| California                  | 18,357         | 0.88                         | 0.88        | 0.88        | 0.88        | 0.87        | 0.87        |
| Colorado                    | 1,491          | 0.91                         | 0.88        | 0.90        | 0.87        | 0.91        | 0.89        |
| Connecticut                 | 1,540          | 0.83                         | 0.88        | 0.91        | 0.90        | 0.89        | 0.88        |
| Delaware                    | 582            | *                            | *           | *           | *           | *           | *           |
| District of Columbia        | 2,416          | 0.83                         | 0.87        | 0.87        | 0.88        | 0.88        | 0.89        |
| Florida                     | 19,831         | 0.82                         | 0.84        | 0.83        | 0.82        | 0.85        | 0.82        |
| Georgia                     | 10,364         | 0.83                         | 0.84        | 0.85        | 0.85        | 0.85        | 0.86        |
| Hawaii                      | 363            | *                            | *           | *           | *           | *           | *           |
| Idaho                       | 161            | *                            | *           | *           | *           | *           | *           |
| Illinois                    | 6,024          | 0.85                         | 0.87        | 0.85        | 0.88        | 0.89        | 0.89        |
| Indiana                     | 1,860          | 0.87                         | 0.81        | 0.85        | 0.86        | 0.87        | 0.85        |
| Iowa                        | 458            | *                            | *           | *           | *           | *           | *           |
| Kansas                      | 537            | *                            | *           | *           | *           | *           | *           |
| Kentucky                    | 1,188          | 0.83                         | 0.85        | 0.83        | 0.85        | 0.84        | 0.81        |
| Louisiana                   | 4,667          | 0.80                         | 0.83        | 0.83        | 0.83        | 0.83        | 0.84        |
| Maine                       | 183            | *                            | *           | *           | *           | *           | *           |
| Maryland                    | 5,560          | 0.83                         | 0.84        | 0.86        | 0.88        | 0.87        | 0.88        |
| Massachusetts               | 2,624          | 0.90                         | 0.92        | 0.90        | 0.91        | 0.93        | 0.91        |
| Michigan                    | 2,905          | 0.85                         | 0.83        | 0.85        | 0.87        | 0.86        | 0.85        |
| Minnesota                   | 1,139          | 0.89                         | 0.90        | 0.91        | 0.90        | 0.91        | 0.90        |
| Mississippi                 | 1,999          | 0.80                         | 0.79        | 0.84        | 0.86        | 0.82        | 0.84        |
| Missouri                    | 2,012          | 0.87                         | 0.87        | 0.86        | 0.88        | 0.91        | 0.86        |
| Montana                     | 97             | *                            | *           | *           | *           | *           | *           |
| Nebraska                    | 373            | *                            | *           | *           | *           | *           | *           |
| Nevada                      | 1,408          | 0.80                         | 0.81        | 0.81        | 0.80        | 0.80        | 0.87        |
| New Hampshire               | 163            | *                            | *           | *           | *           | *           | *           |
| New Jersey                  | 5,529          | 0.82                         | 0.83        | 0.85        | 0.81        | 0.85        | 0.84        |
| New Mexico                  | 569            | *                            | *           | *           | *           | *           | *           |
| New York                    | 16,462         | 0.86                         | 0.88        | 0.89        | 0.88        | 0.88        | 0.88        |
| North Carolina              | 5,077          | 0.83                         | 0.86        | 0.85        | 0.85        | 0.86        | 0.87        |
| North Dakota                | 47             | *                            | *           | *           | *           | *           | *           |
| Ohio                        | 3,560          | 0.88                         | 0.87        | 0.87        | 0.91        | 0.86        | 0.89        |
| Oklahoma                    | 1,011          | 0.85                         | 0.83        | 0.84        | 0.81        | 0.81        | 0.76        |
| Oregon                      | 1,049          | 0.90                         | 0.87        | 0.88        | 0.86        | 0.87        | 0.89        |
| Pennsylvania                | 5,624          | 0.85                         | 0.86        | 0.84        | 0.86        | 0.88        | 0.85        |
| Rhode Island                | 393            | *                            | *           | *           | *           | *           | *           |
| South Carolina              | 3,375          | 0.85                         | 0.84        | 0.85        | 0.85        | 0.88        | 0.84        |
| South Dakota                | 85             | *                            | *           | *           | *           | *           | *           |
| Tennessee                   | 3,410          | 0.82                         | 0.83        | 0.86        | 0.83        | 0.85        | 0.85        |
| Texas                       | 16,054         | 0.84                         | 0.86        | 0.86        | 0.87        | 0.86        | 0.86        |
| Utah                        | 399            | *                            | *           | *           | *           | *           | *           |
| Vermont                     | 44             | *                            | *           | *           | *           | *           | *           |
| Virginia                    | 3,229          | 0.85                         | 0.84        | 0.89        | 0.85        | 0.84        | 0.90        |
| Washington                  | 1,873          | 0.89                         | 0.88        | 0.90        | 0.86        | 0.92        | 0.91        |
| West Virginia               | 322            | *                            | *           | *           | *           | *           | *           |
| Wisconsin                   | 927            | 0.88                         | 0.85        | 0.90        | 0.89        | 0.91        | 0.86        |
| Wyoming                     | 81             | *                            | *           | *           | *           | *           | *           |
| <b>Subtotal</b>             | <b>163,088</b> | <b>0.85</b>                  | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> |
| <b>U.S. dependent areas</b> |                |                              |             |             |             |             |             |
| American Samoa              | 0              | *                            | *           | *           | *           | *           | *           |
| Guam                        | 16             | *                            | *           | *           | *           | *           | *           |
| Northern Mariana Islands    | 3              | *                            | *           | *           | *           | *           | *           |
| Puerto Rico                 | 3,173          | 0.70                         | 0.71        | 0.70        | 0.74        | 0.74        | 0.76        |
| Republic of Palau           | 2              | *                            | *           | *           | *           | *           | *           |
| U.S. Virgin Islands         | 98             | *                            | *           | *           | *           | *           | *           |
| <b>Subtotal</b>             | <b>3,292</b>   | <b>0.69</b>                  | <b>0.71</b> | <b>0.71</b> | <b>0.74</b> | <b>0.74</b> | <b>0.77</b> |
| <b>Total</b>                | <b>166,380</b> | <b>0.84</b>                  | <b>0.85</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> | <b>0.86</b> |

Abbreviation: asterisk (\*) indicates sample too small (<600 diagnoses during the 6-year period) for the calculation of meaningful survival estimates.  
 Note. Data are based on residence at diagnosis. Data exclude persons whose month of diagnosis or month of death is unknown.

**Table 8a. Perinatally acquired HIV infection, by year of birth and mother's race/ethnicity, 2010–2016—United States**

| Race/ethnicity <sup>a</sup>  | 2010       |            | 2011      |            | 2012       |            | 2013      |            | 2014      |            | 2015      |            | 2016      |            |
|------------------------------|------------|------------|-----------|------------|------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
|                              | No.        | Rate       | No.       | Rate       | No.        | Rate       | No.       | Rate       | No.       | Rate       | No.       | Rate       | No.       | Rate       |
| Black/African American       | 62         | 10.5       | 62        | 10.6       | 72         | 12.3       | 38        | 6.5        | 39        | 6.6        | 36        | 6.1        | 30        | 5.4        |
| Hispanic/Latino <sup>b</sup> | 19         | 2.0        | 20        | 2.2        | 9          | 1.0        | 9         | 1.0        | 8         | 0.9        | 8         | 0.9        | 12        | 1.3        |
| White                        | 15         | 0.7        | 4         | 0.2        | 7          | 0.3        | 5         | 0.2        | 5         | 0.2        | 8         | 0.4        | 3         | 0.1        |
| Other                        | 12         | 4.4        | 11        | 3.9        | 14         | 4.7        | 7         | 2.4        | 5         | 1.6        | 5         | 1.7        | 3         | 0.7        |
| <b>Total</b>                 | <b>108</b> | <b>2.7</b> | <b>97</b> | <b>2.5</b> | <b>102</b> | <b>2.6</b> | <b>59</b> | <b>1.5</b> | <b>57</b> | <b>1.4</b> | <b>57</b> | <b>1.4</b> | <b>48</b> | <b>1.2</b> |

Note. Rates are per 100,000 live births.

<sup>a</sup> Live-birth data reflect race/ethnicity of the infant's mother.

<sup>b</sup> Hispanics/Latinos can be of any race.

**Table 8b. Perinatally acquired HIV infection among persons born in the United States, by year of birth and mother's race/ethnicity, 2010–2016—United States**

| Race/ethnicity <sup>a</sup>  | 2010      |            | 2011      |            | 2012      |            | 2013      |            | 2014      |            | 2015      |            | 2016      |            |
|------------------------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
|                              | No.       | Rate       | No.       | Rate       | No.       | Rate       | No.       | Rate       | No.       | Rate       | No.       | Rate       | No.       | Rate       |
| Black/African American       | 40        | 6.8        | 38        | 6.5        | 51        | 8.7        | 26        | 4.5        | 34        | 5.8        | 33        | 5.6        | 28        | 5.0        |
| Hispanic/Latino <sup>b</sup> | 16        | 1.7        | 14        | 1.5        | 8         | 0.9        | 8         | 0.9        | 6         | 0.7        | 8         | 0.9        | 10        | 1.1        |
| White                        | 8         | 0.4        | 1         | 0.0        | 4         | 0.2        | 5         | 0.2        | 5         | 0.2        | 8         | 0.4        | 3         | 0.1        |
| Other                        | 6         | 2.2        | 7         | 2.5        | 8         | 2.7        | 6         | 2.1        | 3         | 1.0        | 5         | 1.7        | 3         | 0.7        |
| <b>Total</b>                 | <b>70</b> | <b>1.8</b> | <b>60</b> | <b>1.5</b> | <b>71</b> | <b>1.8</b> | <b>45</b> | <b>1.1</b> | <b>48</b> | <b>1.2</b> | <b>54</b> | <b>1.4</b> | <b>44</b> | <b>1.1</b> |

Note. Rates are per 100,000 live births.

<sup>a</sup> Live-birth data reflect race/ethnicity of the infant's mother.

<sup>b</sup> Hispanics/Latinos can be of any race.

**Table 9. Prevalence-based HIV care continuum for persons aged ≥13 years living with HIV infection (diagnosed or undiagnosed) at year-end 2016, by selected characteristics—United States**

|                                                    | Persons with HIV infection alive at year-end 2016 <sup>a</sup> | Persons with diagnosed HIV infection alive at year-end 2016 <sup>b</sup> |             | Receipt of care <sup>c</sup> |           | Retention in care <sup>c</sup> |           | Viral suppression <sup>c</sup> |           |
|----------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------|-------------|------------------------------|-----------|--------------------------------|-----------|--------------------------------|-----------|
|                                                    | Total No.                                                      | No.                                                                      | %           | No.                          | %         | No.                            | %         | No.                            | %         |
| <b>Sex</b>                                         |                                                                |                                                                          |             |                              |           |                                |           |                                |           |
| Male                                               | 882,300                                                        | 748,652                                                                  | 84.8        | 555,500                      | 63        | 431,200                        | 49        | 465,700                        | 53        |
| Female                                             | 258,000                                                        | 229,231                                                                  | 88.8        | 169,600                      | 66        | 132,000                        | 51        | 136,200                        | 53        |
| <b>Age at year-end 2016 (yr)</b>                   |                                                                |                                                                          |             |                              |           |                                |           |                                |           |
| 13–24                                              | 50,900                                                         | 28,485                                                                   | 56.0        | 21,700                       | 43        | 16,000                         | 31        | 15,300                         | 30        |
| 25–34                                              | 203,300                                                        | 144,049                                                                  | 70.9        | 106,700                      | 53        | 77,800                         | 38        | 81,500                         | 40        |
| 35–44                                              | 223,000                                                        | 188,796                                                                  | 84.6        | 138,200                      | 62        | 104,400                        | 47        | 111,600                        | 50        |
| 45–54                                              | 336,100                                                        | 308,597                                                                  | 91.8        | 232,400                      | 69        | 181,800                        | 54        | 196,900                        | 59        |
| ≥55                                                | 327,000                                                        | 307,956                                                                  | 94.2        | 225,400                      | 69        | 183,800                        | 56        | 197,700                        | 60        |
| <b>Race/ethnicity</b>                              |                                                                |                                                                          |             |                              |           |                                |           |                                |           |
| American Indian/Alaska Native                      | 3,600                                                          | 2,930                                                                    | 81.6        | 2,200                        | 60        | 1,600                          | 46        | 1,700                          | 49        |
| Asian <sup>d</sup>                                 | 16,600                                                         | 13,411                                                                   | 80.9        | 9,900                        | 59        | 7,800                          | 47        | 8,900                          | 54        |
| Black/African American                             | 476,100                                                        | 405,738                                                                  | 85.2        | 290,900                      | 61        | 222,800                        | 47        | 227,600                        | 48        |
| Hispanic/Latino <sup>e</sup>                       | 254,600                                                        | 211,956                                                                  | 83.3        | 152,400                      | 60        | 124,200                        | 49        | 129,900                        | 51        |
| Native Hawaiian/Other Pacific Islander             | 1,000                                                          | 845                                                                      | 82.4        | 600                          | 60        | 430                            | 43        | 540                            | 54        |
| White                                              | 339,400                                                        | 300,483                                                                  | 88.5        | 233,800                      | 69        | 178,200                        | 53        | 203,700                        | 60        |
| Multiple races                                     | 48,200                                                         | 41,647                                                                   | 86.4        | 35,800                       | 74        | 28,100                         | 58        | 29,100                         | 60        |
| <b>Transmission category<sup>f</sup></b>           |                                                                |                                                                          |             |                              |           |                                |           |                                |           |
| Male-to-male sexual contact                        | 648,500                                                        | 542,000                                                                  | 83.6        | 410,800                      | 63        | 316,500                        | 49        | 349,000                        | 54        |
| Injection drug use                                 |                                                                |                                                                          |             |                              |           |                                |           |                                |           |
| Male                                               | 78,000                                                         | 72,956                                                                   | 93.5        | 46,400                       | 59        | 37,200                         | 48        | 37,400                         | 48        |
| Female                                             | 52,900                                                         | 50,155                                                                   | 94.7        | 36,400                       | 69        | 28,600                         | 54        | 28,600                         | 54        |
| Male-to-male sexual contact and injection drug use | 58,600                                                         | 54,138                                                                   | 92.3        | 42,400                       | 72        | 33,500                         | 57        | 33,700                         | 58        |
| Heterosexual contact <sup>g</sup>                  |                                                                |                                                                          |             |                              |           |                                |           |                                |           |
| Male                                               | 95,000                                                         | 77,510                                                                   | 81.6        | 53,900                       | 57        | 42,500                         | 45        | 44,100                         | 46        |
| Female                                             | 203,700                                                        | 177,783                                                                  | 87.3        | 132,100                      | 65        | 102,600                        | 50        | 107,200                        | 53        |
| <b>Total<sup>h</sup></b>                           | <b>1,140,400</b>                                               | <b>977,883</b>                                                           | <b>85.8</b> | <b>725,600</b>               | <b>64</b> | <b>563,300</b>                 | <b>49</b> | <b>601,400</b>                 | <b>53</b> |

<sup>a</sup> Estimates derived by using HIV surveillance and CD4 data for persons aged ≥13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty. Data previously published in *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. 2019. Accessed April 29, 2019. Rates are per 100,000 population.

<sup>b</sup> Reported to National HIV Surveillance System. Data previously published in *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. 2019. Accessed April 29, 2019.

<sup>c</sup> Estimates are the result of extrapolating data from the 42 jurisdictions with complete CD4 and viral load reporting by applying the percentage in the 42 jurisdictions (found in Tables 4a and 5a) to the total number of people living with diagnosed HIV in the United States. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤1,000 to reflect model uncertainty.

<sup>d</sup> Includes Asian/Pacific Islander legacy cases (see Technical Notes).

<sup>e</sup> Hispanics/Latinos can be of any race.

<sup>f</sup> Data have been statistically adjusted to account for missing transmission category; therefore, values may not sum to column subtotals and total.

<sup>g</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>h</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified. Includes persons whose race/ethnicity is unknown.

**Table 10. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2018—50 states, District of Columbia, and U.S. dependent areas**

|                                | CD4 count (cells/ $\mu$ L) or CD4 percentage |                               | Viral load                          |                               |
|--------------------------------|----------------------------------------------|-------------------------------|-------------------------------------|-------------------------------|
|                                | Lab reporting required <sup>a</sup>          | Reportable level <sup>b</sup> | Lab reporting required <sup>a</sup> | Reportable level <sup>b</sup> |
| Alabama                        | Yes                                          | All values                    | Yes                                 | Any result                    |
| Alaska                         | Yes                                          | All values                    | Yes                                 | Any result                    |
| American Samoa                 | No                                           | —                             | No                                  | —                             |
| Arizona                        | Yes                                          | All values                    | Yes                                 | Any result                    |
| Arkansas                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| California                     | Yes                                          | All values                    | Yes                                 | Any result                    |
| Colorado                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| Connecticut                    | Yes                                          | All values                    | Yes                                 | Any result                    |
| Delaware                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| District of Columbia           | Yes                                          | All values                    | Yes                                 | Any result                    |
| Federated States of Micronesia | No                                           | —                             | No                                  | —                             |
| Florida                        | Yes                                          | All values                    | Yes                                 | Any result                    |
| Georgia                        | Yes                                          | All values                    | Yes                                 | Any result                    |
| Guam                           | Yes                                          | All values                    | Yes                                 | Any result                    |
| Hawaii                         | Yes                                          | All values                    | Yes                                 | Any result                    |
| Idaho                          | Yes                                          | <200 or <14%                  | Yes                                 | Detectable                    |
| Illinois                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| Indiana                        | Yes                                          | All values                    | Yes                                 | Any result                    |
| Iowa                           | Yes                                          | All values                    | Yes                                 | Any result                    |
| Kansas                         | Yes                                          | All values                    | Yes                                 | Any result                    |
| Kentucky                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| Louisiana                      | Yes                                          | All values                    | Yes                                 | Any result                    |
| Maine                          | Yes                                          | All values                    | Yes                                 | Any result                    |
| Marshall Islands               | No                                           | —                             | No                                  | —                             |
| Maryland                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| Massachusetts                  | Yes                                          | All values                    | Yes                                 | Any result                    |
| Michigan                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| Minnesota                      | Yes                                          | All values                    | Yes                                 | Any result                    |
| Mississippi                    | Yes                                          | All values                    | Yes                                 | Any result                    |
| Missouri                       | Yes                                          | All values                    | Yes                                 | Any result                    |
| Montana                        | Yes                                          | All values                    | Yes                                 | Any result                    |
| Nebraska                       | Yes                                          | All values                    | Yes                                 | Any result                    |



**Table 10. Status of CD4 and viral load reporting by HIV surveillance reporting area, as of December 2018—50 states, District of Columbia, and U.S. dependent areas (cont)**

|                          | CD4 count (cells/μL) or CD4 percentage |                               | Viral load                          |                               |
|--------------------------|----------------------------------------|-------------------------------|-------------------------------------|-------------------------------|
|                          | Lab reporting required <sup>a</sup>    | Reportable level <sup>b</sup> | Lab reporting required <sup>a</sup> | Reportable level <sup>b</sup> |
| Nevada                   | Yes                                    | All values                    | Yes                                 | Any result                    |
| New Hampshire            | Yes                                    | All values                    | Yes                                 | Any result                    |
| New Jersey               | Yes                                    | <200 or < 14%                 | Yes                                 | Any result                    |
| New Mexico               | Yes                                    | All values                    | Yes                                 | Any result                    |
| New York                 | Yes                                    | All values                    | Yes                                 | Any result                    |
| North Carolina           | Yes                                    | All values                    | Yes                                 | Any result                    |
| North Dakota             | Yes                                    | All values                    | Yes                                 | Any result                    |
| Northern Mariana Islands | No                                     | —                             | No                                  | —                             |
| Ohio                     | Yes                                    | All values                    | Yes                                 | Any result                    |
| Oklahoma                 | Yes                                    | All values                    | Yes                                 | Any result                    |
| Oregon                   | Yes                                    | All values                    | Yes                                 | Any result                    |
| Pennsylvania             | Yes                                    | <200 or < 14%                 | Yes                                 | Detectable                    |
| Puerto Rico              | Yes                                    | All values                    | Yes                                 | Any result                    |
| Republic of Palau        | No                                     | —                             | No                                  | —                             |
| Rhode Island             | Yes                                    | All values                    | Yes                                 | Any result                    |
| South Carolina           | Yes                                    | All values                    | Yes                                 | Any result                    |
| South Dakota             | Yes                                    | All values                    | Yes                                 | Any result                    |
| Tennessee                | Yes                                    | All values                    | Yes                                 | Any result                    |
| Texas                    | Yes                                    | All values                    | Yes                                 | Any result                    |
| U.S. Virgin Islands      | Yes                                    | <200 or < 14%                 | Yes                                 | Detectable                    |
| Utah                     | Yes                                    | All values                    | Yes                                 | Any result                    |
| Vermont                  | Yes                                    | <200 or < 14%                 | Yes                                 | Any result                    |
| Virginia                 | Yes                                    | All values                    | Yes                                 | Any result                    |
| Washington               | Yes                                    | All values                    | Yes                                 | Any result                    |
| West Virginia            | Yes                                    | All values                    | Yes                                 | Any result                    |
| Wisconsin                | Yes                                    | All values                    | Yes                                 | Any result                    |
| Wyoming                  | Yes                                    | All values                    | Yes                                 | Any result                    |

Abbreviation: CD4, CD4+ T-lymphocyte count (cells/μL) or percentage.

<sup>a</sup> Laws, regulations, or statutes in most areas require laboratories to report, but in some instances, the language is not specific.

<sup>b</sup> Level at which CD4 or viral load reporting is required by laws, regulations, or statutes.

**Table 11. Monitoring national HIV prevention goals by using data from the National HIV Surveillance System and other surveillance systems**

| Indicator                                                                                                                                                    | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|---------------------|
| Increase the percentage of persons living with HIV who know their serostatus to at least 90 percent <sup>a</sup>                                             | 82.8%  | 83.4%  | 83.9%  | 84.3%  | 84.8%  | 85.3%  | 85.8%  | n/a                 |
| Reduce the number of new diagnoses by at least 25 percent                                                                                                    | 43,806 | 42,218 | 42,616 | 40,628 | 40,873 | 40,442 | 40,142 | 38,739 <sup>b</sup> |
| Reduce the percentage of young gay and bisexual males who have engaged in HIV risk behaviors by at least 10 percent <sup>c</sup>                             | n/a    | n/a    | n/a    | 34.1%  | n/a    | 35.2%  | n/a    | 29.1%               |
| Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of diagnosis to at least 85 percent                           | 70.2%  | 70.4%  | 71.4%  | 72.6%  | 74.5%  | 75.0%  | 75.9%  | 78.3%               |
| Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent                                  | 54.7%  | 53.6%  | 55.3%  | 56.5%  | 56.9%  | 57.2%  | 57.6%  | n/a                 |
| Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent                                            | 46.0%  | 48.5%  | 51.6%  | 54.7%  | 57.9%  | 59.8%  | 61.5%  | n/a                 |
| Reduce the percentage of persons in HIV medical care who are homeless to no more than 5 percent <sup>d</sup>                                                 | 7.7%   | 8.1%   | 8.3%   | 7.9%   | 9.0%   | 8.4%   | 8.4%   | n/a                 |
| Reduce the death rate among persons with diagnosed HIV infection by at least 33 percent <sup>e</sup>                                                         | 19.4   | 18.0   | 16.7   | 15.8   | 15.4   | 14.3   | 14.1   | n/a                 |
| Reduce disparities in the rate of new diagnoses by at least 15 percent among gay and bisexual men <sup>f</sup>                                               | 20.5   | 21.2   | 21.9   | 22.1   | 22.5   | 22.6   | 22.4   | 22.6 <sup>b</sup>   |
| Reduce disparities in the rate of new diagnoses by at least 15 percent among young black gay and bisexual men <sup>f</sup>                                   | 109.4  | 112.4  | 112.9  | 117.2  | 118.5  | 118.0  | 115.7  | 112.3 <sup>b</sup>  |
| Reduce disparities in the rate of new diagnoses by at least 15 percent among black females <sup>f</sup>                                                      | 1.7    | 1.5    | 1.4    | 1.3    | 1.2    | 1.1    | 1.1    | 1.1 <sup>b</sup>    |
| Reduce disparities in the rate of new diagnoses by at least 15 percent among persons living in the southern United States <sup>f</sup>                       | 0.33   | 0.35   | 0.33   | 0.35   | 0.35   | 0.36   | 0.36   | 0.37 <sup>b</sup>   |
| Increase the percentage of youth with diagnosed HIV infection who are virally suppressed to at least 80 percent                                              | 30.9%  | 34.3%  | 38.9%  | 43.7%  | 48.1%  | 51.2%  | 53.8%  | n/a                 |
| Increase the percentage of persons who inject drugs with diagnosed HIV infection who are virally suppressed to at least 80 percent                           | 39.6%  | 40.6%  | 44.1%  | 47.1%  | 50.3%  | 52.1%  | 53.6%  | n/a                 |
| Increase the percentage of transgender women in HIV medical care who are virally suppressed to at least 90 percent (developmental) <sup>g</sup>              | 62.2%  | 65.3%  | 68.5%  | 72.0%  | 73.9%  | 77.0%  | 79.0%  | 80.5%               |
| Increase the number of adults prescribed preexposure prophylaxis (PrEP) by at least 500 percent (developmental) <sup>h</sup>                                 | n/a    | n/a    | n/a    | n/a    | 7,972  | 33,273 | 64,763 | 99,647              |
| Decrease stigma among persons with diagnosed HIV infection by at least 25 percent, from a baseline median score of 38.3 to 28.7 (developmental) <sup>i</sup> | n/a    | n/a    | n/a    | n/a    | n/a    | 38.3   | 39.0   | n/a                 |

Abbreviation: n/a, not available.

Note. National-level indicators adapted from National HIV/AIDS Strategy for the United States: Updated to 2020 [NHAS 2020]—Indicator Supplement. For the list of NHAS 2020 indicators and information on the rationale, data sources, and measures for each indicator, see <http://www.hiv.gov/sites/default/files/nhas-indicators-supplement-dec-2016.pdf>.

<sup>a</sup> CDC. Estimated HIV incidence and prevalence in the United States, 2010–2016. *HIV Surveillance Supplemental Report* 2019;24(No. 1). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published February 2019.

<sup>b</sup> Preliminary data.

<sup>c</sup> The 2013 estimate is based on data from 15 large urban school districts; the 2015 estimate is a national estimate. For more information about the Youth Risk Behavior Surveillance System (YRBSS), see <http://www.cdc.gov/yrbs>.

<sup>d</sup> Prior to 2015, the Medical Monitoring Project (MMP) used 3-stage sampling to collect data from a representative sample of adults receiving HIV medical care during 2010–2014 in the United States and Puerto Rico. Starting in 2015, MMP samples HIV diagnoses from the National HIV Surveillance System. The homelessness estimate provided is subset to persons receiving HIV medical care in the past 12 months. For more information about MMP, see <http://www.cdc.gov/hiv/statistics/systems/mmp/>.

<sup>e</sup> Death rate is age-adjusted and measured per 1,000 persons with diagnosed HIV infection in the United States.

<sup>f</sup> Measures shown are ratios of the disparity rate in the specified group to the overall rate. Population data from Vintage 2014 Census data were used to calculate rates for 2010–2013; Vintage 2015 Census data were used for 2014; Vintage 2016 Census data were used for 2015; Vintage 2017 Census data were used for 2016 and 2017.

<sup>g</sup> Health Resources and Services Administration. Ryan White HIV/AIDS Program annual client-level data report 2016. <http://hab.hrsa.gov/data/data-reports>. Published December 2018. Accessed April 23, 2019. For 2010 baseline data, see <http://www.hiv.gov/sites/default/files/nhas-indicators-supplement-dec-2016.pdf>.

<sup>h</sup> Data licensed from MarketScan Commercial Claims and Encounter Database (Truven Health Analytics, Ann Arbor, MI) are analyzed by CDC. Estimates are for persons aged ≥16 years.

<sup>i</sup> The stigma scale used for this indicator is a 10-item scale, ranging from 0 (no stigma) to 100 (high stigma) and measured among persons aged >18 years with diagnosed HIV infection living in the United States and Puerto Rico. The scale used for this indicator is discussed in Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98. Data are collected through MMP. The 2015 median score is weighted. The previously published median score was unweighted.