2021 Final Pertussis Surveillance Report

Reported Pertussis Incidence and Cases

STATES	Incidence (per 100,000)	No. of Cases
ALABAMA	0.97	49
ALASKA	0.14	1
ARIZONA	2.58	188
ARKANSAS	0.53	16
CALIFORNIA	0.49	192
COLORADO	1.05	61
CONNECTICUT	0.19	7
DELAWARE	0.60	6
D.C.	0.75	5
FLORIDA	0.25	55
GEORGIA	0.65	70
HAWAII	0.35	5
IDAHO	0.26	5
ILLINOIS	0.43	55
INDIANA	0.69	47
IOWA	0.72	23
KANSAS	0.95	28
KENTUCKY	0.69	31
LOUISIANA	0.35	16
MAINE	1.17	16
MARYLAND	0.16	10
MASSACHUSETTS	0.07	5
MICHIGAN	0.69	69
MINNESOTA	0.53	30
MISSISSIPPI	0.03	1
MISSOURI	0.32	20
MONTANA	0.09	1
NEBRASKA	0.61	12
NEVADA	1.05	33
NEW HAMPSHIRE	0.29	4
NEW JERSEY	0.94	87
NEW MEXICO	1.47	31
NEW YORK	0.66	75
NEW YORK CITY	0.85	72
NORTH CAROLINA	0.49	52
NORTH DAKOTA	1.55	12
OHIO	0.97	114
OKLAHOMA	0.13	5
OREGON	0.07	3
PENNSYLVANIA	0.72	93
RHODE ISLAND	0.00	0
SOUTH CAROLINA	0.98	51
SOUTH DAKOTA	0.11	1
TENNESSEE	0.66	46
TEXAS	0.68	201
UTAH	3.98	133
VERMONT	0.00	0
VIRGINIA	0.58	50
WASHINGTON	0.19	15
WEST VIRGINIA	0.22	4
WISCONSIN	0.17	10
WYOMING	0.00	0
TOTAL	**0.64**	**2,116**

Source: Single Race Vintage 2021 postcensal estimates.

Notice to Readers:
Final 2021 Reports of Notifiable Diseases

NOTE: The pertussis case definition was modified by CSTE effective January 1, 2020. Criteria were modified increasing sensitivity for case ascertainment such that case counts may increase. The 2020 CSTE case definition can be viewed here: https://ndc.services.cdc.gov/case-definitions/pertussis-2020/.

Reported Pertussis Cases

2020: **6,124** 2021: **2,116**

Reported Pertussis Cases and Percent Hospitalization by Age Group

Age	No. of Cases (% of total)	Age Inc /100,000	% Hospitalized by age**
< 6 mos	95 (4.5)	5.3	22.5
6-11 mos	91 (4.3)	5.1	2.9
1-6 yrs	454 (21.5)	1.9	2.0
7-10 yrs	75 (3.5)	0.5	3.4
11-19 yrs	176 (8.3)	0.5	3.4
20+ yrs	1,225 (57.9)	0.5	11.1
Unknown Age	0 (0.0)	N/A	N/A
Total	**2,116 (100)**	**0.6***	**5.9**

**Total age incidence per 100,000 calculated from 2,116 cases with age reported.
**Age-specific proportion of cases that were hospitalized, calculated from those with a known hospitalization status.

Reported Pertussis Deaths

Age	Deaths*
Cases, aged < 1 yr	0
Cases, aged ≥ 1 yr	2
Total	**2**

*Deaths reported through NNDSS

Reported DTaP Vaccine Status of Children with Pertussis, Ages 6 months through 6 years

Age	Vaccine History Unknown	Unvaccinated	Undervaccinated (1-2 doses)	Completed Primary DTaP Series (3+ doses)	Total
	No. (%)	No. (%)	No. (%)	No. (%)	No.
6-11 mo	36 (39.6)	4 (4.4)	8 (8.8)	43 (47.3)	91
1-4 yrs	153 (41.2)	11 (3.0)	21 (5.7)	186 (50.1)	371
5-6 yrs	28 (33.7)	5 (6.0)	3 (3.6)	47 (56.6)	83
Total	**217 (39.8)**	**20 (3.7)**	**32 (5.9)**	**276 (50.6)**	**545**

Footnote: CDC recommends all children receive at least 3 doses of DTaP by age 6 months. DTaP coverage in the United States is very high. Over 95% of all children 19-35 months of age have received at least 3 doses of DTaP. This table illustrates a similar trend among the pertussis cases reported during 2022—the majority have received at least 3 doses of DTaP. Because protection from DTaP wanes over time, even children who are up to date with their pertussis vaccines may contract pertussis. Unvaccinated children are more likely to contract pertussis and have more severe disease than those who are fully vaccinated. These data cannot be used to interpret vaccine effectiveness or to assess risk, as the data are incomplete and there is no healthy comparison group.

Weeks 1-52, 2021 CDC/NCIRD/DBD/MVPDB

National Center for Immunization and Respiratory Diseases
Division of Bacterial Diseases

CS292279

May, 2023