CASE STUDIES

Stigma Reduction

OVERDOSE DATA2ACTION

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

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Introduction to Case Studies

The purpose of the case studies project is to capture in-depth information from the Centers for Disease Control and Prevention's (CDC) Overdose Data to Action (OD2A)-funded jurisdictions about current and emerging practices related to overdose prevention and response.

Each of the highlighted jurisdictions is funded through the multiyear (OD2A) cooperative agreement which focuses on understanding and tracking the complex and changing nature of the drug overdose epidemic and highlights the need for seamless integration of data into prevention strategies. Six key topic areas identified for interviews, analysis, and dissemination are listed here. Within each topic, specific activities and programs from various jurisdictions are captured as case studies. Programs and projects were selected based on a thorough review of current OD2A activities. These case studies illustrate overdose prevention and response efforts that can be shared with practitioners as they consider how to adapt interventions to their local context.

- Adverse childhood experiences or ACEs
- Harm reduction
- Linkage to care in non-public safety settings
- Public safety-led post-overdose outreach programs
- State and local integration activities
- **Stigma reduction**

Stigma Reduction

How does it work?

The drug overdose epidemic in the United States remains a critical public health issue.

Stigma can negatively affect access to health care, such as initiation of medications for opioid use disorder (MOUD).[1] Stigma is a process where people with certain social identities are labeled, stereotyped, and devalued, leading to discriminatory behavior and internalized shame.[2] Rates of stigma toward people who use drugs are high and well documented among healthcare providers and the general public.[1,3,4]

Confronting stigma at multiple levels and creating a culture of change is possible despite the pervasiveness among the public and healthcare providers.[4,5,6]

To reduce stigma among those working with people at high risk of overdose, health departments can promote these three strategies to healthcare providers and the general public:

1. **Changing language.** Healthcare providers and the general public can use "person-first" terminology to describe people who have experienced an overdose or are at high risk of overdose and those who are affected by it. Increasing use of nonjudgmental language is key. Healthcare providers and the general public may need training on accurate and appropriate terminology.
2. **State policies.** Policies can promote and expand comprehensive treatment programs, especially in criminal justice systems. The public can also support and advocate for broad access to MOUD.
3. **Training.** Stigma reduction training helps healthcare providers develop the appropriate skills to work effectively with stigmatized groups. For example, motivational interviewing is a type of counseling style that uses constructive conversation to elicit behavior change. Motivational interviewing training enables people in frequent contact with those with opioid use disorder to assess their readiness for behavior change and connect them with appropriate resources (e.g., engage persons with harm reduction techniques or linkages to care).[7] Healthcare providers can also receive additional training to increase their knowledge and confidence in MOUD or to provide links to other services/treatment.

Case Studies

The following case studies describe two OD2A-funded stigma reduction initiatives.

The first describes the **Vermont's Motivational Interviewing and Compassion Training**: a training that aims to increase positive interactions between emergency personnel and people who have experienced an overdose or are at high risk of overdose. The second describes **Vermont's Stigma/Harm Reduction Training**: a training that aims to improve understanding of harm reduction approaches/principles and the challenges and stigmatization of people at high risk of overdose and provide tangible language and phrases emergency personnel can use when encountering people who have experienced an overdose or are at high risk of overdose.

CASE 1

Vermont's Motivational Interviewing and Compassion Training

CASE STUDY SNAPSHOT

- **Training purpose:** To increase positive interactions between emergency personnel and people who have experienced an overdose or are at high risk of overdose
- **Intended audience:** Staff in emergency departments, emergency medical services, and Department of Corrections
- **Length:** 4.5 hours
- **Number of trainees/session:** 12–25 people
- **Content:** Screening, brief intervention and referral to treatment, and motivational interviewing
- **Format:** Instructor-led learning, self-led learning, interactive role-play with standardized patients

TRAINING PROGRAM MODEL

The Vermont Department of Health (VDOH) collaborates with and funds medical providers from the University of Vermont Medical Center (UVMC) and the Center for Health and Learning[a] (CHL) to develop and deliver a motivational interviewing and compassion training program[b] tailored to emergency department (ED) staff, emergency medical services (EMS) staff and volunteers, and Department of Corrections (DOC) parole officers.[c] The training program was initially implemented in 2019 with funding from CDC's Prevention for States cooperative agreement and is currently funded through CDC's Overdose Data to Action (OD2A) cooperative agreement.

The goal of the training is to increase positive interactions between emergency personnel and people who have experienced an overdose or are at high risk of overdose.

The training refreshes or introduces screening, brief intervention, and referral to treatment (SBIRT) skills, allows participants to observe and practice skills using experts and interactive role-plays with standardized patients (simulated patient actors),[d] and instructs participants on how to differentiate between advice-giving and motivational interviewing around substance use.[9] The training is interactive and involves dialogue with standardized patients.

It was prioritized by VDOH because the Vermont Opioid Use Harm Reduction Evaluation[e] indicated that people at high risk of overdose reported not calling for emergency assistance during an opioid overdose because they felt stigmatized due to negative experiences in past interactions with emergency personnel. Experiential evidence[8] from VDOH staff suggests that when medical staff use motivational interviewing techniques, people at high risk for overdose reported feeling less stigmatized.

This program initially focused on Vermont's four southern counties with the highest overdose burden (Windsor, Windham, Bennington, and Rutland). Due to COVID-19, the program was adapted to an online format for statewide implementation with enhanced outreach to partners in those four counties. The training includes:

- One hour of pre-work completed before the training
- A 3-hour virtual training
- An optional 30-minute debrief

According to the trainers, the ideal number of participants is 12 to 15, with a minimum of eight and a maximum of 25.

The trainers work in EDs and are providers who specialize in addiction medicine and practice in Vermont. The trainers use their expertise to personally design the trainings. They are aware of the regional challenges facing healthcare providers in the state and those they serve and are uniquely able to curate training content to include and accommodate regional resources. All trainers adapted to COVID-19 restrictions, adjusted to a virtual format, and conducted four virtual trainings in the first year of the program, with a total of 37 attendees.

Program implementation during the second year will focus on further improving the virtual format process. EMS, ED staff, and parole officers from the DOC will be the priority audience; virtual breakout rooms will be offered for these three audiences. CHL[a] will ensure that continuing medical education (CME) credits are offered for training attendees.

PARTNERS INVOLVED

VDOH, UVMMC, and CHL collaborate to offer motivational interviewing and compassion training to ED staff, EMS staff and volunteers, and DOC parole officers. CHL partners with professors from the University of Vermont Larner School of Medicine. Three primary trainers implement the trainings and are integral to the program's success.

With support from OD2A, Vermont also funds a naloxone administrator in the VDOH Division of Emergency Preparedness, Response, and Injury Prevention, who offered pertinent contextual information and expertise in developing the trainings. The administrator works closely with the EMS team in the division, which has enhanced rapport, engagement, and recruitment among emergency providers.

DATA USED TO INFORM THE TRAINING PROGRAM MODEL

Data used to develop the training program

The training program was developed using information gathered from an evaluation[e] capturing the needs and experiences of people at high risk of overdose. The sample included 69 individuals who reported using opioids in the past 30 days and 11 who reported using opioids previously but not in the past 30 days. The sample's composition reflected the evaluation's effort to elicit diverse perspectives on opioid-related risks, including recent experiences related to abstinence from opioid use and initial stages of recovery. The primary objective of the evaluation was to conduct interviews with persons who use opioids and live in or access syringe services programs (SSPs) in three priority counties in Vermont. The evaluation had the following goals:

1. Assess current harm reduction services and strategies being used to lower the risk of opioid overdose and infectious disease transmission.
2. Assess gaps in knowledge and use of services and behavioral strategies that can lower risk.
3. Identify content and formats for effectively communicating health messages from VDOH and other agencies to those at high risk of opioid-involved overdose and infectious disease transmission.

The evaluation showed that interactions with emergency personnel in Vermont's rural communities led to people feeling stigmatized for using drugs. Based on these evaluation findings, VDOH funded CHL to formalize and design the training program for emergency personnel.

Data used to inform ongoing implementation of the training program

Early evaluation results collected from post-training surveys and informal conversations indicated that participants were enthusiastic about the trainings and learned valuable information. They were excited about the knowledgeable and dedicated trainers who encouraged them to attend the trainings.

Vermont's four southern counties—Windsor, Windham, Bennington, and Rutland—had the highest overdose burden in 2018, so outreach and trainings were initially focused there. CHL and VDOH partnered with hospitals in these counties

to conduct outreach for the recruitment process with the intention that each hospital would host a training for the priority partners in its region. Due to COVID-19, the program was adapted to an online format for statewide implementation.

BARRIERS AND FACILITATORS TO IMPLEMENTING VERMONT'S MOTIVATIONAL INTERVIEWING AND COMPASSION TRAINING

Facilitators

A significant facilitator to the training program uptake and implementation is its use of interactive techniques like role playing with standardized live patient actors.[9] Standardized patient actors play the role of people who have experienced an overdose and engage with the training attendees so they can practice interpersonal interactions and other techniques. The University of Vermont Larner College of Medicine Clinical Simulation Laboratory employs two experienced standardized patient actors for this training who collaborate with the trainers to tailor their work to the topic. The patient actors give feedback to the participants and trainers following the trainings regarding participants' interactions during the role-play; this enhances the training experience by providing live feedback to the participant and by providing information to the trainer on whether participants were able to demonstrate the skills adequately during the exercises.

The trainers established a strong rapport with each other and are well respected among the training attendees. They are knowledgeable, dedicated to the work, have experience in education, and adapt the trainings in real-time based on the unique needs of their trainees. As Vermont is a small, rural state, the trainers' reputations have garnered further interest in this training.

VDOH's strong partnership with CHL[a] helped build productive partnerships with Vermont's universities and medical centers, enhancing training uptake and implementation.

Finally, CME credits are available to motivate emergency personnel to participate in this training.[f]

Barriers

Scheduling trainers' time is one of the greatest challenges of this activity. Three trainers are specialized in this work; they are in high demand and must be available for all trainings, as they each facilitate their own breakout group in the virtual environment.

The planning and logistics to conduct the trainings virtually are time-consuming, as is the pre-work attendees must complete. The virtual training environment requires technical expertise that the in-person version does not. A remote technology advisor manages the virtual breakout rooms and other aspects of the virtual environment. The trainers need dedicated practice sessions with the technology advisor to ensure the training runs smoothly. In addition, the trainers have mentioned that in-person trainings are easier to address because they can manage group dynamics and unexpected issues more easily. In a virtual setting, unexpected issues can be more disruptive. Pivoting to a virtual format in the middle of planning for in-person trainings added a significant amount of time and energy. The trainers must be mindful of the minimum (eight) and maximum (25) number of attendees to ensure the trainings are effective.

While CMEs and documented training hours are available to participants, priority audiences may find attendance difficult due to their demanding schedules. Many of Vermont's EMS workforce are volunteers, which makes attending trainings during regular business hours challenging.

EVALUATION OF VERMONT'S MOTIVATIONAL INTERVIEWING AND COMPASSION TRAINING

The evaluation of the training is structured to guide future program design and to assess training effectiveness. The evaluation includes a qualitative analysis of registrants' feedback to assess the usefulness of the training. The evaluation findings from the qualitative indicators show support for motivational interviewing and compassion training programs.

Quantitative and qualitative performance indicators are used to evaluate the trainings. A survey is administered before and after each training that measures self-reported changes to participants' knowledge and skills. The survey includes quantitative measures and qualitative questions to assess participants' knowledge and skills. A minimum of 10 participants from the priority audiences are required to attend each training, and trainers aim for 80% of participants to report increased skills and knowledge.

EXAMPLES OF VDOH'S EVALUATION QUESTIONS AND INDICATORS:

Question: Does motivational interviewing and compassion training increase the ability of EMS staff to work with complex patients and vulnerable populations?

- **Process Indicators:**
  - Number of unique individuals who complete trainings
  - Number of trainings held/completed
  - Number of trainings held in high-burden communities
- **Outcome Indicator:** Qualitative feedback from the surveys completed after training on the usefulness of the training and perceived increase in knowledge, skills, and techniques post-training

Question: Is motivational interviewing an effective method for increasing knowledge among EMS staff?

- **Outcome Indicator:** Percentage of individuals who completed a training that report an increase in knowledge and/or skills (Vermont's current benchmark is for 80% of participants to report increased knowledge)
- **Outcome Indicator:** Qualitative feedback from the surveys completed after training on the usefulness of the training and perceived increase in knowledge, skills, and techniques post-training

OUTCOMES

In year 1 (2019-2020), Vermont reported the following quantitative data:

- Four motivational interviewing and compassion trainings were conducted virtually due to the COVID-19 global pandemic. While the original intent involved trainings be delivered in Vermont's counties with the highest burden of overdose (Windsor, Windham, Bennington, and Rutland), the virtual trainings were offered to a statewide audience with targeted marketing and outreach in the counties with high burden. Thirty-seven individuals participated, and though there was representation from service providers working in all fourteen of Vermont's counties, 54% (n=20) of participants worked in the counties with high burden. Twenty-seven training evaluations were collected.
- All trainees who completed the post-evaluation reported that the training increased their knowledge and/or skill (Vermont's current benchmark is for 80% of participants to report increased knowledge).

In year 2 (2020-2021), Vermont reported the following quantitative data:

- Five motivational interviewing and compassion trainings were conducted virtually due to the COVID-19 global pandemic. While the original intent involved trainings be delivered in Vermont's counties with the highest burden of overdose (Windsor, Windham, Bennington, and Rutland), the virtual trainings were offered to a statewide audience with targeted marketing and outreach in the counties with high burden. Ninety-five individuals participated, and though there was representation from service providers working in all fourteen of Vermont's counties, 45% (n=43) of participants worked in the counties with high burden. Seventy-three training evaluations were collected.
- Ninety-five percent (n=69) of individuals who completed the post-evaluation reported that the training increased their knowledge and/or skills (Vermont's current benchmark is for 80% of participants to report increased knowledge).

Preliminary qualitative feedback from training participants and trainers reflects that the motivational interviewing and compassion training program helped to increase trainee knowledge and the skills/techniques they can use to engage with people who have experienced an overdose or are at high risk of an overdose. Based on qualitative findings from the post-training evaluation, several trainees appreciated the opportunity to practice principles of motivational interviewing (e.g., reflective listening, interactive role-play with standardized patients), and many indicated an intent to adopt changes to their practices based on key messages and skills introduced during the training. Equipped with knowledge and skills obtained through the training, trainees are anticipated to be better prepared to engage with people who have experienced an overdose or are at high risk of overdose. The strong collaboration among VDOH, CHL,[a] university partners, and medical center partners can help ensure the success of the training, despite the shift from in-person to virtual. In fact, CHL has taken advantage of the virtual format and has expanded its reach throughout the state. CHL will continue to solicit formal and anecdotal feedback from training attendees and trainers to ensure the virtual environment is engaging and effective.

SUSTAINABILITY

VDOH will continuously solicit feedback from its trainers and training attendees to ensure the program remains relevant and necessary. Over time, a cultural shift may occur in how those who have experienced overdose are cared for in various settings. As more of the EMS, ED, and corrections workforce participate in this training, more can model techniques to colleagues.

The virtual training environment has enabled VDOH and CHL to extend the geographic reach of this work to the entire state, which increases its sustainability.

Grant funding will need to be secured to evaluate progress and to inform future iterations of the work to continue this training program.

CASE 2

Vermont's Stigma and Harm Reduction Training

CASE STUDY SNAPSHOT

- **Training purpose:** To improve understanding of harm reduction approaches/principles and the challenges and stigmatization of people at high risk of overdose and provide tangible language and phrases emergency personnel can use when encountering people who have experienced an overdose or are at high risk of overdose
- **Intended audience:** Staff in emergency departments, emergency medical services, and Department of Corrections and community partners that work with populations vulnerable to overdose
- **Length:** 2 hours
- **Number of trainees per session:** 20 people
- **Content:** Overview of harm reduction and related principles, syringe service programs (SSPs), harm reduction interventions, stigma reduction strategies, examples of tangible destigmatizing language, stories from people who formerly used drugs, engagement with people at high risk of overdose, and local and state resources
- **Format:** Instructor-led learning with meaningful digital content (e.g., videos featuring persons with lived experience sharing how a substance use disorder [SUD] impacted them and perceptions/misconceptions about SUDs)

TRAINING PROGRAM MODEL

The Vermont Department of Health (VDOH) partners with the Committee for AIDS Resources Education and Services (VT CARES), a community-based AIDS service organization that provides statewide syringe services and community education, including stigma/harm reduction trainings for emergency personnel.[g] Stigma/harm reduction strategies included in the training aim to reduce the harms associated with drug use among people with substance use disorders (SUDs) who are at high risk of overdose.[10,11,12,13,14] The need for these services has been anecdotally reported from the community (areas with high overdose burdens concentrated in Vermont's four southern counties: Windsor, Windham, Bennington, and Rutland) and from an evaluation[e] capturing the needs and experiences of people at high risk of overdose. The anecdotal evidence and evaluation indicated that interactions with emergency personnel in Vermont's rural communities led to people feeling stigmatized for using drugs. Based on these findings, VDOH funded VT CARES to design a formalized program for emergency personnel. The resulting statewide training program helps emergency personnel to better understand harm reduction approaches/principles and the challenges and stigma people at high risk of overdose face and provides tangible language and phrases emergency

personnel can use when working with people who have experienced an overdose or are at high risk of overdose. Examples of tangible language to lessen stigma include:

- Use "persons with substance use disorders" not "addict," "junkie," or "druggie."
- Use "person living with an addiction," not "suffering from addiction."
- Say "chooses not to at this point," not "non-compliant."
- Use "had a setback," not "relapse."
- Use "maintained recovery," not "stayed clean."

Due to the COVID-19 pandemic, VT CARES adapted the trainings from an in-person format to a virtual environment. VT CARES has delivered 11 trainings, five of which were for emergency personnel. The other six trainings were delivered to community partners[h] that work with populations at high risk for overdose. In year one, an average of 20 trainees attended a session. Ten additional trainings were scheduled in 2021. Trainings focus on various topics: an overview of harm reduction and related principles, SSPs, harm reduction interventions, stigma reduction strategies, stories from people who formerly used drugs, engaging people at high risk of overdose, and local and state resources. Virtual trainings are 90 minutes long with an optional 30-minute debrief.

PARTNERS INVOLVED

This training requires collaboration among VDOH (public sector), VT CARES (non-profit sector), EMS, EDs, and law enforcement.

VT CARES is a leader in harm reduction and operates the second-longest-running SSP in Vermont. An SSP is a component of comprehensive community-based prevention and intervention programs that provide services such as substance use treatment. In addition to being an SSP provider, VT CARES also offers services to those affected by HIV/AIDS, which has informed their awareness of stigma and how it can impact their work with clients. VT CARES employs two primary trainers who implement the trainings and are integral to the program's success. They articulate the experiences, concerns, and challenges of people at high risk for overdose, which is tied to their experience working with SSPs and SSP clients.

The stigma reduction training program is developed for emergency personnel, which includes EMS, EDs, and law enforcement. VDOH strives to see improvements in health outcomes for the populations they serve by tailoring the training program to these groups. As a leader in harm reduction and SSP, VT CARES relies on strong rapport with partners to conduct outreach and recruitment for training implementation.

The Vermont Board of Medical Practice; the Emergency Department Coalition; and the VDOH Division of Emergency Preparedness, Response, and Injury Prevention are also involved in recruiting trainees. Partnering with these respected statewide organizations added legitimacy to the work and increased emergency personnel participation.

Additional partners include community members with SUDs who were willing to share their stories for video segments that were incorporated into the virtual trainings.

DATA USED TO INFORM THE TRAINING PROGRAM MODEL

Surveillance data were used to identify areas in Vermont with high overdose rates. Data indicated Vermont's four southern counties (Windsor, Windham, Bennington, and Rutland) experience the highest overdose burden, which is where outreach and trainings were initially focused. However, due to COVID-19, the program was adapted to an online format for statewide implementation. Qualitative data were used to develop the trainings, including anecdotal evidence from community members and an evaluation capturing the needs and experiences of people at high risk of overdose.

BARRIERS AND FACILITATORS TO IMPLEMENTING VERMONT'S STIGMA AND HARM REDUCTION TRAINING

Facilitators

A significant facilitator to the stigma/harm reduction trainings is VDOH's strong partnership with VT CARES. VT CARES recruited emergency personnel in Vermont through their internal community connections. As leaders in the state, they are well-positioned in communities and well known to key partners to conduct outreach for training recruitment. The organization is also well versed in negotiating with partners, achieving buy-in with leadership, and implementing stigma/harm reduction trainings.

Vermont also has a robust Good Samaritan law, which protects a bystander who seeks medical assistance for someone who is experiencing a drug overdose. According to this law, the bystander will not be cited, arrested, or prosecuted for aiding the person experiencing an overdose. This law helps to empower bystanders to call EMS if they witness someone experiencing an overdose or to offer further assistance, such as administering naloxone.[15,16]

Another facilitator is the virtual environment, which has enabled trainers to reach a larger geographic area and a broader population of emergency personnel. VT CARES also requested unspent travel funds, due to COVID-19, to fund new videos to incorporate into their trainings, which significantly enhanced the program. The videos feature people with lived experience sharing how SUDs and perceptions/misconceptions about SUDs impact them.

Barriers

COVID-19 significantly impacted the training schedule and methods used to conduct the trainings, which included difficulty collecting completed pre/post surveys from all attendees. Based on feedback from attendees, the in-person training needed to be adapted for the virtual environment to ensure its success. The in-person training was two hours, whereas the virtual training was modified to 90 minutes with an optional 30-minute debrief. The trainers needed to revise their content and delivery because of this shift.

Conducting the trainings in a virtual environment changed the scope of the evaluation to assess not only training effectiveness but also the attendees' perception of the online format and their ability to learn in a virtual environment. Due to this transition, data collected from in-person trainings (baseline and year one) to virtual trainings (year two) may not be comparable.

Engaging community organizations to enroll their staff in the trainings was difficult due to initial resistance against the topic of stigma/harm reduction. Further, many small community organizations needed to halt their day-to-day operations or to reserve a portion of their workforce to attend the trainings; half of the workforce would attend the training, and half would complete their daily job duties. The time required for participants, such as medical providers with demanding schedules, to attend the trainings is a challenge.

EVALUATION OF VERMONT'S STIGMA AND HARM REDUCTION TRAINING

To evaluate the training, pre-post tests were administered, and information was gathered from informal conversations. Evaluation results from the 11 trainings were analyzed to improve the quality and effectiveness of the trainings. Findings indicated changes in emergency personnel's knowledge and attitudes toward people at high risk of overdose. Expected outcomes of this training are increased referrals to harm reduction services, reduced barriers to care, decreases in SUD-related stigma, and enhanced understanding of the value of harm reduction and overdose prevention strategies among emergency personnel.

EXAMPLES OF VDOH'S EVALUATION QUESTIONS AND INDICATORS:

Question: Does targeted training for first responders increase harm reduction knowledge?

- **Process Indicators:**
  - Number of unique individuals who complete trainings
  - Number of trainings held/completed
  - Number of trainings held in high-burden communities
  - Number of emergency personnel who serve high burden areas who complete training
- **Year 1 Outcome Indicator (2019-2020):** Pre/post questions used for this training using a scale of 1 (no knowledge) to 4 (significant knowledge):
  - I am familiar with the principles of harm reduction.
  - I feel knowledgeable in using harm reduction in my work.
  - I am familiar with the types of harm reduction interventions offered at SSPs.
  - I believe harm reduction is an effective strategy for engaging people who use drugs.
  - I am familiar with the local and state resources available for harm reduction.
- **Year 2 Outcome Indicator (2020-2021):** Pre/post questions used for this training using a scale of 1 (no knowledge) to 4 (significant knowledge):
  - I know the principles of harm reduction.
  - I know what SSPs are and the interventions they offer.
  - I know what person-centered language is.
  - I believe harm reduction is an effective strategy to address substance use.
  - I believe there are safer ways to use substances.
  - I know where and how to connect people with harm reduction services.

Question: Does targeted training for first responders increase capacity to work with vulnerable populations?

- **Outcome Indicator:** Percentage of individuals who completed a training and report an increase in knowledge (Vermont's current benchmark is for 80% of participants to report increased knowledge)

OUTCOMES

Feedback from training participants and trainers indicates participants perceived that the stigma/harm reduction training program is being implemented successfully. The strong partnership among VDOH, VT CARES, and emergency personnel can help ensure the success of the training, despite the shift from in-person to virtual.

In fact, VT CARES has taken advantage of the virtual format and has expanded its reach to people at high risk of overdose throughout the state. This training reached almost 400 first responders, nurses, MOUD providers, prevention consultants, people at risk of opioid overdose, and representatives from community partners, social service organizations, and recovery centers.

In year 1 (2019-2020), Vermont reported the following quantitative data:

- Nineteen harm reduction trainings were conducted in nine counties: Bennington, Brattleboro, Chittenden, Franklin, Grand Isle, Lamoille, Rutland, Washington, and Windham. Two hundred and twenty-one individuals participated by attending one of the 19 trainings. Of those, 125 pre-and-post assessments were collected.
- Regarding changes in knowledge after attending the stigma/harm reduction training (see **Figure 1**):
  - One hundred percent of individuals who completed a training and the pre/post self-assessment reported an increase in knowledge (Vermont's current benchmark is for 80% of participants to report increased knowledge).
  - Many of the participants self-reported not being familiar with SSPs and the harm reduction interventions available and were not familiar with how and where to access these services locally prior to the training.
  - Many of the participants came to the training with previous knowledge of harm reduction principles and felt comfortable using them in their work.
  - Most participants came with a strong belief in the effectiveness of using harm reduction strategies to engage people who use drugs (PWUD), which led to a lesser knowledge change in that area.
  - All the attendees were interested in learning more about harm reduction, no matter what their baseline understanding of the concept was.

In year 2 (2020-2021), Vermont reported the following quantitative data:

- Ten harm reduction trainings were conducted in 14 counties: Addison, Bennington, Caledonia, Chittenden, Essex, Franklin, Grand Isle, Lamoille, Orange, Orleans, Rutland, Washington, Windham, and Windsor. One hundred and fifty-eight individuals participated by attending one of the ten trainings. Of those, 45 completed training pre-and-post assessments.
- Regarding changes in knowledge after attending the stigma/harm reduction training (see **Figure 2**):
  - One hundred percent of individuals who completed a training and the pre/post self-assessment reported an increase in knowledge (Vermont's current benchmark is for 80% of participants to report increased knowledge).
  - Many of the participants self-reported not being familiar with SSPs and the harm reduction interventions available and were not familiar with how and where to access these services locally prior to the training.
  - Some of the participants came to the training with previous knowledge of harm reduction principles and person-centered language.
  - Most participants came with a strong belief in the effectiveness of using harm reduction strategies to engage PWUD, which led to a lesser knowledge change in that area.
  - All the attendees were interested in learning more about harm reduction, no matter what their baseline understanding of the concept was.

Figure 1. Change in Knowledge After Attending Harm Reduction Training in Year 1

Lower end of range (shown in bars below) represent the average scored responses to pre-workshop questionaires; upper range represents the average scored responses after workshops were completed. Wider bars show greater gain in knowledge or increase in buy-in for each topic. All questions were on a 1-4 scale with "1" representing no knowledge or comfort, and "4" representing significant knowledge or comfort. *(n=125 completed pairs of surveys returned)*

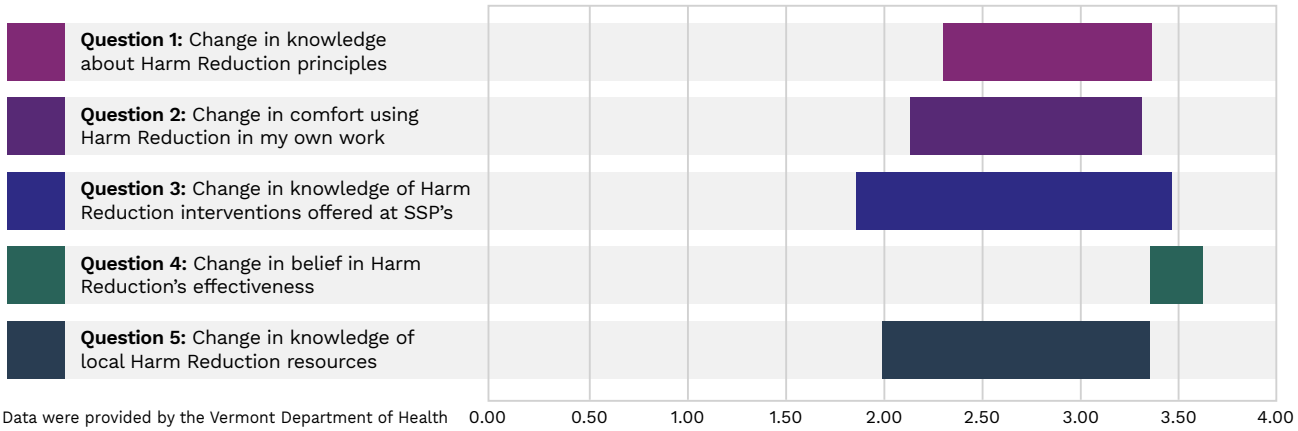
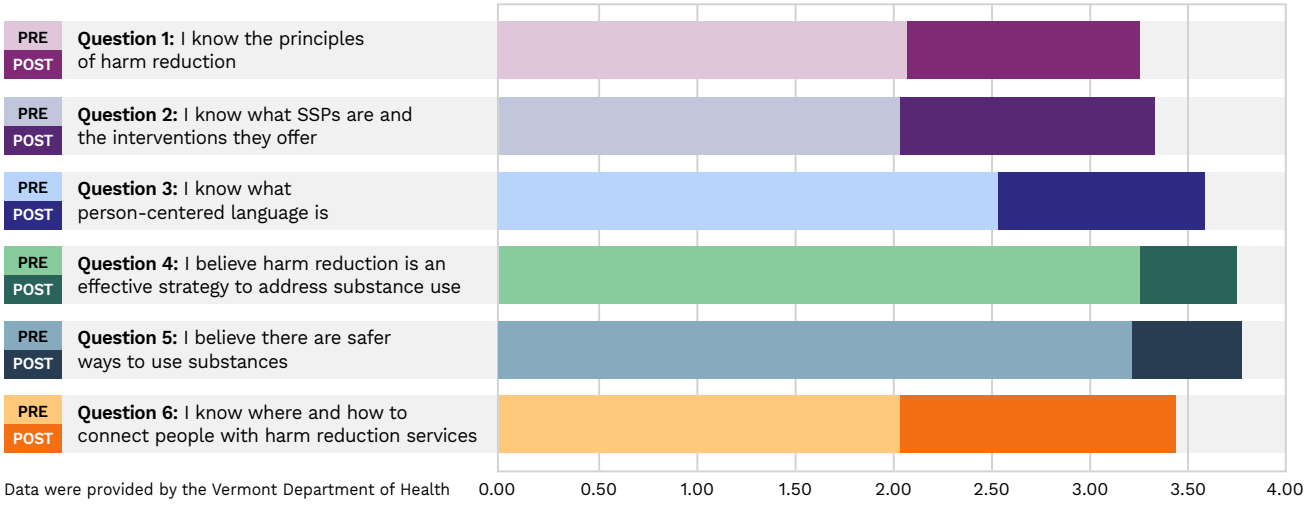


Figure 2. Change in Knowledge Pre/Post Attending Harm Reduction Training in Year 2

All items are on a scale of 1 (no knowledge) to 4 (significant knowledge).



VT CARES will continue to solicit feedback from training attendees and trainers to ensure the virtual environment is engaging and well received. It will be important for future evaluations to collect information from SSP clients and people at high risk of overdose to assess improvements in interactions with emergency personnel over time and their comfort in calling EMS.

SUSTAINABILITY

The curriculum and videos documenting experiences of people with substance use disorders are resources that can be adapted and used for future iterations of the training. This training will also be beneficial to VT CARES in the future and can be adapted as overdose trends change in Vermont.

VT CARES will benefit from future grant funding to update and enhance the stigma/harm reduction trainings based on evolving needs. Additionally, the training can increase understanding about harm reduction and facilitate a change in perception of this approach to care and treatment, which will aid in the future acceptance and sustainability of these efforts.

Evaluation Considerations

Evaluators can consider the following as they seek to evaluate similar trainings.

Strategies for successful trainings

- Strong partnerships and a high level of connectivity among partners
- Assessments/tools that help to identify disproportionately affected communities and the need for these types of trainings and increase the capacity to interpret and translate findings
- An understanding of local policies that promote stigma and harm reduction efforts (e.g., Good Samaritan Laws)
- Effective trainers with a passion for the topic and great skills to reach peers/trainees
- Interactive trainings with meaningful digital content that helps to improve trainee engagement (e.g., videos featuring persons with lived experience, role-playing exercises allowing trainees to practice skills taught in trainings)
- Trainings adapted to the needs and preferences of the intended audience (e.g., cultural considerations)
- Trainings designed to help meet first responders' requirements for continuing education

Overcoming barriers

- The time needed to attend trainings can be a barrier, especially if the intended audience is in high demand (e.g., medical providers). Jurisdictions can plan in advance, seek buy-in for trainings prior to implementation, and remain flexible with scheduling.
- Changing the modality of the trainings from in-person to virtual can be challenging. Consider appropriate pivots and adaptations that allow for enhanced virtual training experiences (e.g., create videos of those with lived experiences who can speak about substance use disorders, overdose, and engagement with EMS following an overdose; keep trainings less structured and more conversational based on the needs and preferences of the intended audience).

Additional evaluation questions and indicators to consider

- **Question:** To what extent did partners buy in to the stigma/harm reduction trainings?
  - Process Indicators:
    - Description of outreach to partners/trainees
    - Description of partner/trainee receptivity to trainings
    - Number of partners/trainees recruited
    - Description of barriers and facilitators related to partner/trainee engagement
- **Question:** To what extent was the training successfully implemented in a virtual environment?
  - Process Indicators:
    - Number of unique individuals who completed trainings/number of trainees who earned CME credits for training completion
    - Number of trainings held/completed
    - Description of trainee perceptions/feedback, including qualitative feedback on its usefulness during and after trainings
    - Description of feedback from trainers/partners about what worked well and what did not, and appropriate adjustments and corrections needed for trainings

- **Question:** To what extent do trainings improve the knowledge, attitudes, skills, and behavioral intentions of trainees to address stigma and overdose burden in their jurisdiction?
  - Outcome Indicators:
    - Description of findings from the pre-post survey to assess trainees' self-reported changes in knowledge, awareness, and understanding of key concepts, attitudes, and behavioral intentions
    - Changes in trainee self-efficacy and intention to enact changes and apply skills based on key messages from training
    - Changes in knowledge and attitudes toward promising overdose prevention efforts (e.g., harm reduction practices) and approaches to reducing stigma
    - Changes in attitudes towards people at high risk of overdose
    - Description of comfort with calling EMS among people at high risk of overdose
    - Changes in the interactions SSP clients and people at high risk of overdose have with emergency personnel over time (e.g., change in perceived stigma for SSP clients or discrimination experienced by SSP clients)
    - Changes in awareness of partner organization services

Resources

- Vermont Opioid Use Harm Reduction Evaluation[e] was used to identify the need for this work
- Preparation Content[e] for trainees before attending the Motivational Interviewing and Compassion Training
- CDC resources on assessing Training Effectiveness
- CDC resource on Stigma Reduction

References

1 Stone, E. M., Kennedy-Hendricks, A., Barry, C. L., Bachhuber, M. A., & McGinty, E. E. (2021). The role of stigma in US primary care physicians' treatment of opioid use disorder. *Drug and Alcohol Dependence, 221*, 1-7. https://doi.org/10.1016/j.drugalcdep.2021.108627

2 Tsai, A. C., Kiang, M. V., Barnett, M. L., Beletsky, L., Keyes, K. M., McGinty, E. E., Smith, L.R., Strathdee, S.A., Wakeman, S.E., & Venkataramani, A. S. (2019). Stigma as a fundamental hindrance to the United States opioid overdose crisis response. *PLOS Medicine, 16*(11), 1-18. https://doi.org/10.1371/journal.pmed.1002969

3 Barry, C. L., McGinty, E. E., Pescosolido, B. A., & Goldman, H. H. (2014). Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatric Services (Washington, D.C.), 65*(10), 1269–1272. https://doi.org/10.1176/appi.ps.201400140

4 Kennedy-Hendricks, A., Barry, C. L., Gollust, S. E., Ensminger, M. E., Chisolm, M. S., & McGinty, E. E. (2017). Social stigma toward persons with prescription opioid use disorder: associations with public support for punitive and public health–oriented policies. *Psychiatric Services, 68*(5), 462-469. https://doi.org/10.1176/appi.ps.201600056

5 Kelly, J. F., & Westerhoff, C. M. (2010). Does it matter how we refer to individuals with substance-related conditions? A randomized study of two commonly used terms. *International Journal of Drug Policy, 21*(3), 202-207. https://doi.org/10.1016/j.drugpo.2009.10.010

6 Olsen, Y., & Sharfstein, J. M. (2014). Confronting the Stigma of Opioid Use Disorder—and Its Treatment. *JAMA, 311*(14), 1393-1394. https://doi.org/10.1001/jama.2014.2147

7 Rollnick, S., & Miller, W. R. (1995). What is motivational interviewing? *Behavioural and Cognitive Psychotherapy, 23*(4), 325-334. https://doi.org/10.1017/S135246580001643X

8 Puddy, R. W., & Wilkins, N. (2011). *Understanding evidence part 1: Best available research evidence. A guide to the continuum of evidence of effectiveness*. Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/pdf/understanding_evidence-a.pdf

9 Tanner, T. B., Wilhelm, S. E., Rossie, K. M., & Metcalf, M. P. (2012). Web-Based SBIRT Skills Training for Health Professional Students and Primary Care Providers. *Substance Abuse, 33*(3), 316-320. https://doi.org/10.1080/08897077.2011.640151

10 Hawk, K. F., Vaca, F. E., & D'Onofrio, G. (2015). Reducing Fatal Opioid Overdose: Prevention, Treatment and Harm Reduction Strategies. *The Yale Journal of Biology and Medicine, 88*(3), 235–245.

11 Platt, L., Minozzi, S., Reed, J., Vickerman, P., Hagan, H., French, C., Jordan, A., Degenhardt, L., Hope, V., Hutchinson, S., Maher, L., Palmateer, N., Taylor, A., Bruneau, J., & Hickman, M. (2017) Needle syringe programmes and opioid substitution therapy for preventing hepatitis C transmission in people who inject drugs. *Cochrane Database of Systematic Reviews, 9*(9), 1-80. https://doi.org/10.1002/14651858.CD012021.pub2

12 Marx, M. A., Crape, B., Brookmeyer, R. S., Junge, B., Latkin, C., Vlahov, D., & Strathdee, S. A. (2000). Trends in crime and the introduction of a needle exchange program. *American Journal of Public Health, 90*(12), 1933-1936. https://doi.org/10.2105/ajph.90.12.1933

13 Tobin, K. E., Sherman, S. G., Beilenson, P., Welsh, C., & Latkin, C. A. (2009). Evaluation of the Staying Alive programme: Training injection drug users to properly administer naloxone and save lives. *The International Journal of Drug Policy, 20*(2), 131-136. https://doi.org/10.1016/j.drugpo.2008.03.002

14 Des Jarlais, D. C., Nugent, A., Solberg, A., Feelemyer, J., Mermin, J., & Holtzman, D. (2015). Syringe Service Programs for Persons Who Inject Drugs in Urban, Suburban, and Rural Areas - United States, 2013. *Morbidity and Mortality Weekly Report, 64*(48), 1337–1341. https://doi.org/10.15585/mmwr.mm6448a3

15 Immunity from Liability, 18 V.S.A. § 4254 (n.d.). https://legislature.vermont.gov/statutes/section/18/084/04254

16 Emergency medical care, 12 V.S.A § 519 (n.d.). https://legislature.vermont.gov/statutes/section/12/023/00519

Endnotes

[a] The Center for Health and Learning (CHL) is a non-profit organization focused on improving school and community health. CHL staff and consultants provide expertise in health and education to design training, develop resources, and implement research and evaluation. CHL partners with schools, coalitions, community organizations, state and national organizations and agencies.

[b] The Motivational Interviewing and Compassion training has its roots in Screening Brief Intervention and Referral to Treatment (SBIRT). One of the trainers is a member of the Motivational Interviewing Network of Trainers and the American Academy for Communication in Health Care and has been leading SBIRT workshops since 2014.

[c] Corrections was added as a priority audience in year two, so they are not mentioned in the initial evaluation that identified the need for this training. Some corrections staff attended training in year one, either because they overlapped with the priority audience or filled unregistered spots from waitlists. Those staff scored the training very high and indicated it would be of value to their colleagues.

[d] Trainers can demonstrate with the standardized patient and participants can also work with the patient and be critiqued by the trainers.

[e] The Centers for Disease Control and Prevention (CDC) cannot attest to the accuracy of a non-federal website. Linking to a non-federal website does not constitute an endorsement by CDC or any of its employees of the sponsors or the information and products presented on the website.

[f] 3.5 continuing education hours (including pre-work) have been approved by the following professions' Boards of Examiners through the Vermont Office of Professional Regulation: Nursing, Psychology, Allied Mental Health, and Alcohol and Drug Abuse Counselors. Brief Emergency Medicine Interventions to Prevent Opioid Overdoses (including pre-work) was approved by NASW Vermont for 2.5 hours. Vermont EMS providers can earn 3 hours of CEU (NCCP: psychological emergencies and individual hours) for this training, approved by the Vermont EMS Office.

[g] The Vermont CARES training is informed by the Transtheoretical Model. (Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1993). In search of how people change: Applications to addictive behaviors. *Addictions Nursing Network, 5*(1), 2-16.)

[h] Recovery residences, prevention partnerships, EMS agencies, treatment providers, housing agencies, recovery coaches, medical staff, etc.