VERMONT
DEPARTMENT OF HEALTH

Evaluation of the Health Department's Community Naloxone Program

December 2023

Naloxone, often known by the brand name Narcan®, is an opioid antagonist that helps temporarily reverse the effects of an opioid overdose and restore breathing. Focused naloxone distribution is an evidence-based strategy recommended by the Centers for Disease Control and Prevention (CDC) for preventing deaths related to opioid overdose (Evidence-Based Strategies for Preventing Opioid Overdose). Since 2014, Vermont has implemented community-based overdose prevention training and naloxone distribution and continues to develop programming and partnerships to increase naloxone access and prevent deaths due to overdose.

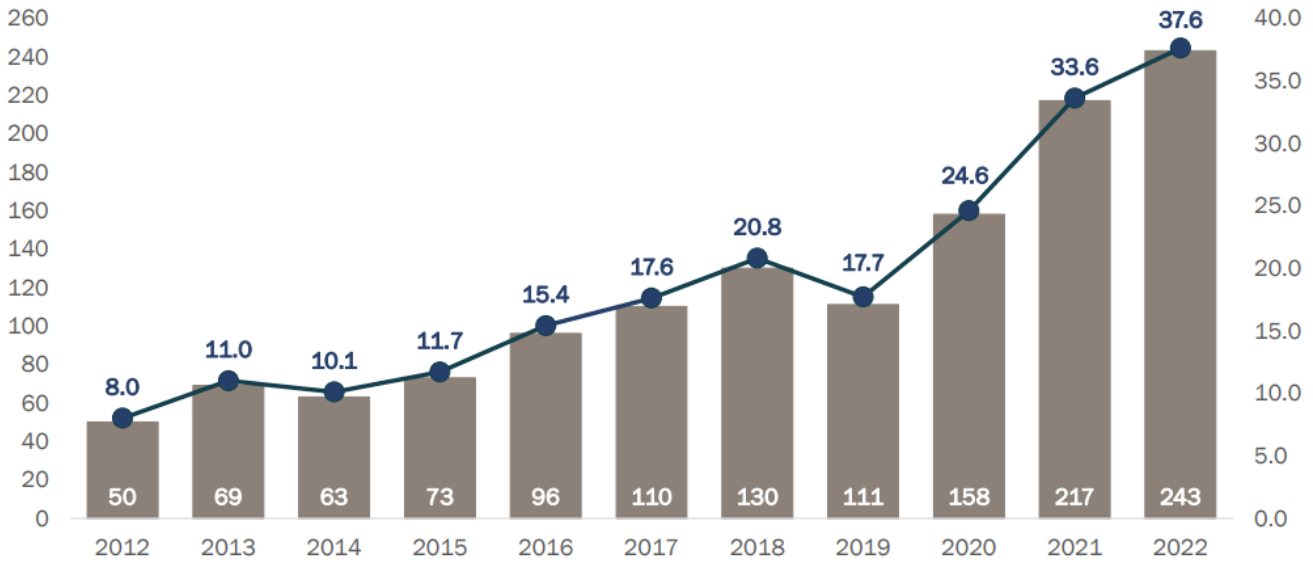
KEY POINTS

- **Naloxone distribution to community partners has increased every year.**
- **Between 2019 and 2021, the Health Department provided 72,561 doses (rate of 113.8 doses per 1,000 Vermonters).**
- **Opportunities exist to expand access to naloxone in communities.**

Background on opioid use and overdoses

The number of accidental and undetermined opioid-related deaths has increased in Vermont since 2010. In 2021 the rate of fatal overdoses was 33.6 per 100,000 Vermonters. This is a statistically significant increase from 2020 when the rate was 24.6 per 100,000 Vermonters. Multiple factors have contributed to this increase including a shift in substances involved in overdose fatalities such as fentanyl and xylazine, in the drug supply, and impacts from the COVID-19 pandemic on overdoses including social isolation.

The number and rate per 100,000 of opioid-related deaths has increased over the past 10 years*



*2022 data is preliminary and subject to change.

In addition to an increase in overdose deaths, we have seen an increase in Emergency Medical Services (EMS) calls related to opioid overdoses. The rate of emergency department visits for non-fatal opioid overdoses increased from 16.6 per 10,000 visits in 2019 to 29.4 per 10,000 visits in 2021. During this time period there was also a 2.2% increase in people receiving treatment with medications for opioid use disorder (MOUD) from 284 people per 100,000 Vermonters aged 18-64 in 2019 to 290 in 2021.

Overview of community naloxone distribution in Vermont

Naloxone is widely available at no cost to Vermonters. Vermont's community naloxone distribution programs began in 2014, first through Vermont's four Syringe Services Programs (SSPs), then through focused distribution of Narcan® Kits by organizations that also work with people at high-risk of opioid overdose.

The Health Department's naloxone distribution program has evolved to include distribution of naloxone by new overdose prevention partners such as the Department for Children and Families' Economic Services Division, emergency and short-term housing programs, and law enforcement agencies. Distribution of Harm Reduction Packs (HRPs) that include a variety of overdose prevention resources, began in 2019. In 2020, strategic distribution of First Responder Naloxone Leave Behind Kits by our partners in emergency response began, though data from that method of distribution are not included in this report. Through these new initiatives, the health department gets naloxone and overdose prevention information to Vermonters not currently engaged in substance use services (such as harm reduction, treatment, or recovery services).

Figure 1 The left picture shows an HRP. The right picture shows a Naloxone Leave Behind Kit.

This evaluation focused on two of the public community distribution pathways: HRPs and Narcan® Kits (read the Opioid Overdose and Naloxone Overview for more detail on these programs). Community sites that only offer naloxone to clients, but do not provide open public access to naloxone are excluded from this evaluation.

Public community naloxone distribution data 2019-2021

While data collection is a vital part of the community naloxone distribution program, the Health Department prioritizes removing barriers and expanding access. Vermonters receiving naloxone from a public community distribution location are not required to provide personal information in order to receive naloxone. This may impact quantifying the exact impact naloxone has had in Vermont, including but not limited to the number of overdoses reversed by naloxone provided through the public distribution sites.

To assess the reach of the naloxone program, the Health Department examines the following:

- The number of doses of naloxone provided to public community distribution sites for distribution to Vermonters
- The types of agencies partnering with the Health Department to distribute naloxone
- The number of public distribution sites in each county
- Communities within a 30-minute drive time to a public distribution site

Number of doses of naloxone distributed to public community distribution sites Vermont

Between 2019 and 2021, the Health Department provided 72,561 doses of naloxone (rate of 113.8 doses per 1,000 Vermonters) to public community partners for distribution through both the HRPs and Community Narcan® Kits pathways described above.

- **NOTE** - These rates do not include other naloxone distribution pathways including but not limited to State of Vermont agencies, EMS, law enforcement or non-public community partners.

Types of organizations distributing naloxone

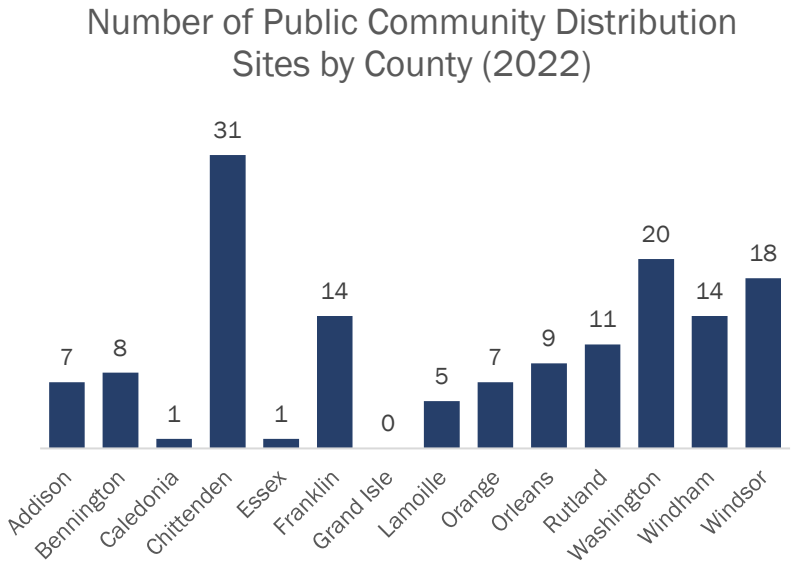
The diversity of partners who distribute naloxone has grown substantially over the COVID-19 pandemic, increasing access for Vermonters. Types of organizations that the Health Department partners with at the time of this report include but are not limited to the following:

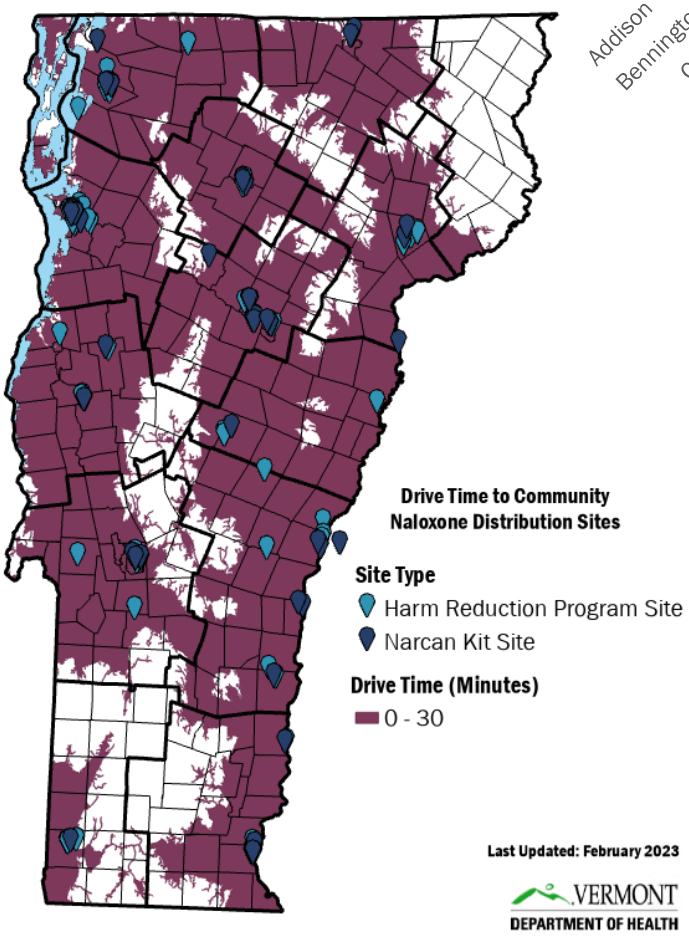
- Colleges and universities
- Department of Corrections
- Emergency housing providers
- Healthcare providers
- Criminal justice system
- K-12 schools
- Law enforcement
- Mental health providers
- Recovery Centers
- Syringe Service Programs (SSPs)
- State agencies
- Substance use disorder treatment providers

Community Naloxone Evaluation

Public naloxone distribution sites in Vermont

There is at least one public community distribution site in 13 of Vermont's 14 counties. Grand Isle County is currently served by mobile distribution through community partners and has a new public site with a medical partner that started working with the program in 2023. Neither are represented in our current data collection. Future evaluation will include examining the proportion of distribution sites in relation to the overall population of the county, as well as the proportion of fatal and non-fatal overdoses experienced in each county.





The map shows the areas of the state that are within a 30-minute drive time to a public community naloxone distribution site. White areas are not within a 30-minute drive time though many are served through mobile services which is not captured in this analysis. Important to note that part of the white areas that indicate greater than 30-minute drive time are areas of low population density and mountain ranges where people do not live. Future evaluation efforts will further examine population density within white areas of the map to determine additional needs for naloxone distribution sites.

Sustainability of Programs

A successful naloxone distribution program requires consistent and sufficient funding and program staffing support to meet the needs of the population. Between 2019 and 2021 the Community Narcan® Kit and HRP distribution efforts were able to be fully funded through a combination of federal and state funding. On May 25, 2023, Governor Phil Scott signed H.222 (Act 22) which included the Opioid Settlement Advisory Committee's recommendation to expand naloxone funding in state fiscal year 2024 to allow for greater distribution, and to invest in new distribution methods such as public health/naloxone vending machines and mail order distribution.

Impact of community naloxone distribution

The true impact of community naloxone distribution in Vermont is difficult to measure as it requires both tracking where individual doses go and relying on people to report when a dose of naloxone is used to reverse a suspected opioid overdose. Vermonters are encouraged to obtain naloxone and provide it to a friend or family member if they do not have direct access themselves. Though this "secondary exchange" is an important strategy to ensure all Vermonters have access to naloxone, it increases the difficulty in tracking where naloxone is going and when it is used.

Between 2019 and 2021, there were 831 reported overdoses reversed by the use of Narcan® Kits and 170 reported to be reversed by HRPs. These totals under represent the true impact the community distribution efforts in Vermont but are a clear indicator that this work is meaningful and has helped to save lives.

Reported Overdoses Reversed		
Year	Number of reported overdoses reversed from Narcan® Kits	Number of reported overdoses reversed from HRPs
2019	294	10
2020	279	99
2021	258	61

Tracking the percentage of non-fatal overdoses where naloxone was given prior to EMS arrival provides another way to determine if the community distribution efforts are reaching the intended population. Community naloxone programs provide overdose prevention education and naloxone to people who have a higher likelihood of being present when a person is experiencing an opioid overdose. In 2019, 15% of people experiencing non-fatal overdoses where EMS was called had been given naloxone prior to EMS arriving, 14% in 2020 and 13% in 2021.

Bystander naloxone administered before EMS arrives		
Year	Number of non-fatal overdoses where naloxone was given prior to EMS arrival	Percent of non-fatal overdoses where naloxone was given prior to EMS arrival
2019	56	15%
2020	68	14%
2021	88	13%

Improving community naloxone distribution in Vermont

In January 2023, a new data collection form was launched for the Narcan® Kit distribution pathway. Included in this form is a required data field that indicates the town where the kit was distributed. This will help better determine where naloxone is being distributed through mobile exchange. Though this will not be able to overcome the secondary exchange limitation in our data, it will allow the Health Department to better assess gaps in distribution locations and access with considerations of mobile exchange efforts, which is an important aspect of harm reduction work.

Nationally, racial inequity in access to naloxone is a known and studied issue that continues to exist despite state and federal policies being implemented to increase the distribution and access to naloxone.[1] The implementation of the new data form provided an opportunity to discuss with community partners the importance of race, ethnicity, and other data measures to our overall work to ensure equitable access to naloxone for all communities, both physical and cultural, in Vermont. The Health Department will continue to expand our analysis of equitable access utilizing all data available related to naloxone distribution.

Work continues to examine harm reduction and intervention opportunities identified through Vermont's Social Autopsy Report in relation to naloxone distribution efforts. The Health Department will continue to partner with other state departments and community partners to provide access to naloxone to those who are best positioned to respond to an overdose. Sixty one percent (61%) of overdose fatalities in 2020 occurred at home or at a friend's home, indicating an important audience for naloxone distribution is loved ones of those at risk of an overdose. Campaigns such as KnowOD messages to family and friends of those who use opioids to encourage them to obtain naloxone and to have conversations with their loved ones around harm reduction. The Health Department and partners will continue to identify and implement strategies to help Vermonters recognize and respond to an overdose.

For more information: naloxone@vermont.gov

References:

1. S. Nolen, X. Zang, A. Chatterjee, et al. Evaluating equity in community-based naloxone access among racial/ethnic groups in Massachusetts, Drug and Alcohol Dependence, Volume 241, 2022, 109668, ISSN 0376-8716. Retrieved from https://stacks.cdc.gov/view/cdc/116084/cdc_116084_DS1.pdf