

# **Emergency Medical Services** Naloxone Distribution and Administration

# **Overview of Opioid Overdoses in Vermont**

Preliminary data indicates there were 236 accidental or undetermined opioid-related fatalities among Vermont residents in 2023, a decrease from 244 the previous year<sup>1</sup>. Fentanyl is involved in 95% of these fatalities, cocaine is involved in 60%, and xylazine in 32%. As more adulterants are present in the drug supply and involved in overdose fatalities, access to naloxone is critical. Naloxone, an opioid antidote medication, is often known by the brand name Narcan®.

# **Naloxone Distribution in Vermont**

#### **KEY POINTS**

In 2024, EMS:

- Administered naloxone to 724 patients.
- Approximately 8 of every 10 (77%) overdose patients received 4mg or less of naloxone.
- Documented distributing 352 Naloxone Leave Behind Kits to patients and their families.

As one piece of the State of Vermont's coordinated effort to reduce opioid-related fatalities, the program trains first responders and the public in overdose response. The goal of the Health Department's Opioid Overdose Prevention and Reversal Program (OOPRP) is to distribute naloxone overdose rescue kits to Vermonters at risk of overdose, family members of those at risk, and anyone who may be able to help in the event of an overdose. As fentanyl is found in many illicit substances, it is important for anyone using any powder or pill, not purchased at a pharmacy, to have naloxone on hand and teach loved ones where it is kept and how to use it in case of an opioid overdose. Fentanyl and xylazine test strips are also available to test substances prior to use. Learn where to access naloxone at <u>VTHelpLink.org</u>.

The OOPRP supports naloxone distribution to the community through three pathways:

- First responder distribution by the leave behind kit (LBK) program first responders distribute LBKs to anyone on scene who may be able to prevent an opioid overdose.
- Community distribution accessible to the public by:
  - Narcan® Kit Program and
  - Harm Reduction Pack (HRP) Program

Further information on opioid overdose prevention can be found at <u>HealthVermont.gov</u>.

This data brief focuses on the **first responder leave behind kit (LBK) program** and EMS naloxone administration. Read the <u>quarterly community naloxone distribution and administration is</u> <u>presented in a separate data brief</u>.

<sup>&</sup>lt;sup>1</sup> Vermont Department of Health – Monthly Opioid Morbidity and Mortality Report

# First Response Naloxone Leave Behind Kits (LBKs)

Leave behind kits are provided to people following an interaction with a first responder such as law enforcement or emergency medical services (EMS). EMS are required to offer LBKs to people who refuse transportation to the hospital following an opioid overdose. EMS are also encouraged to provide LBKs in any circumstance in which opioid use might be indicated, even if the original call to the first responder was not opioid-related. These kits include two doses of 4 mg naloxone, fentanyl test strips and xylazine test strips, instructions for use, information on harm reduction, treatment, recovery services and information on <u>Vermont 211</u>. For more information on LBKs contact: <u>naloxone@vermont.gov</u>.

## Naloxone Distribution by the Vermont Department of Health - 2024

The following table contains data on LBKs and naloxone doses for EMS use distributed to the Vermont Department of Health's EMS partners in 2024. EMS receives both 2mg and 4mg doses and may titrate doses to effect in the field to reduce potential for severe withdrawal symptoms. Historic data may change due to delays in reporting.

### The Health Department distributed 5,877 doses of naloxone to first responders in 2024

|   | Q1  | Q2    | Q3    | Q4    | Total |
|---|-----|-------|-------|-------|-------|
| Leave behind kits: Number of doses provided to EMS and law enforcement agencies (2 doses in each kit) | 984 | 644   | 600   | 536   | 2,764 |
| For EMS Use: Number of 4 mg doses provided to EMS   |     | 450   | 280   | 390   | 1,561 |
| For EMS Use: Number of 2 mg doses provided to EMS   |     | 305   | 498   | 348   | 1,552 |
| Doses of naloxone distributed to first responders   |     | 1,399 | 1,378 | 1,274 | 5,877 |

## Naloxone Distribution by Emergency Medical Services – 2024

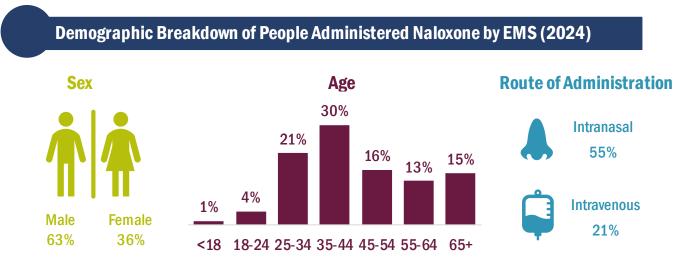
The following table contains data from EMS providers who reported leaving **naloxone kits** behind with people who are at higher risk of overdose due to opioid misuse. These data are updated on a quarterly basis.

#### EMS distributed 352 naloxone leave behind kits during 286 incidents in 2024

|  | Q1 | Q2  | Q3  | Q4 | Total |
|--|----|-----|-----|----|-------|
| Number of <b>incidents</b> where EMS left naloxone (in<br>a Leave Behind Kit) with people who are at<br>higher risk of overdose due to opioid misuse | 69 | 80  | 87  | 50 | 286   |
| Number of Naloxone Leave Behind kits left at<br>EMS scenes with people who are at higher risk<br>of overdose due to opioid misuse (2 doses/kit)      | 84 | 106 | 106 | 56 | 352   |

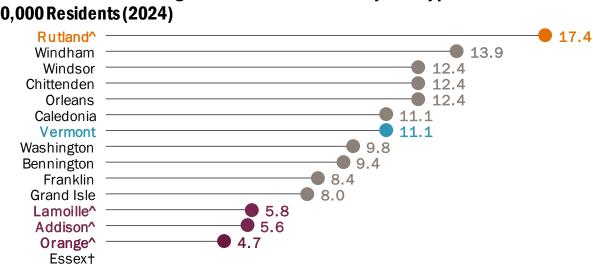
# Naloxone Administration by Emergency Medical Services – 2024

Naloxone is administered by EMS personnel when medically indicated in several scenarios, including perceived overdoses and cardiac arrests. These administrations are captured in Vermont's State Incident Reporting Network (SIREN) database. In 2024, Vermont EMS agencies administered naloxone to 724 patients (7 patients were administered naloxone out of state).



Source: Vermont State Incident Reporting Network (SIREN), 2024

In 2024, Rutland County had a significantly higher rate of naloxone administration (17.4 per 10,000 residents), while Lamoille, Addison, and Orange Counties had significantly lower rates of administration (5.8, 5.6, and 4.7 per 10,000 residents respectively). Data for Essex County is suppressed due to insufficient data. All other counties have statistically similar rates to Vermont.



### Rate of EMS Calls Involving Naloxone Administration by County per **10,000** Residents (2024)

Source: Vermont Statewide Incident Reporting Network (SIREN), 2024, Vermont Population Statistics (2023)

+ Essex County has been suppressed due to insufficient data

^ Statistically significant at 0.05 level, compared to Vermont rate (11.1 per 10,000 Vermonters)

## Naloxone Administration by Emergency Medical Services – 2024

The following tables contain 2024 data on the use of naloxone by 78 unique emergency medical services in Vermont. These data are updated quarterly using the Statewide Incident Reporting Network (SIREN). Historic data may change if there are delays in reporting. Note: EMS agencies do not administer a 'standardized' 4 mg dose of naloxone.

|  | Q1  | Q2  | Q3  | Q4  | Total |  |
|--|-----|-----|-----|-----|-------|--|
| Addison                                  | 7   | 6   | *   | *   | 21    |  |
| Bennington                               | 9   | 6   | 13  | 7   | 35    |  |
| Caledonia                                | 10  | 7   | 11  | 6   | 34    |  |
| Chittenden                               | 42  | 55  | 72  | 41  | 210   |  |
| Essex                                    | *   | *   | 0   | 0   | *     |  |
| Franklin                                 | 12  | 14  | 10  | 7   | 43    |  |
| Grand Isle                               | *   | *   | *   | *   | **    |  |
| Lamoille                                 | *   | *   | *   | *   | 15    |  |
| Orange                                   | 6   | *   | *   | *   | 14    |  |
| Orleans                                  | 7   | 9   | 10  | 8   | 34    |  |
| Rutland                                  | 25  | 27  | 34  | 19  | 105   |  |
| Washington                               | 9   | 23  | 16  | 11  | 59    |  |
| Windham                                  | 11  | 21  | 15  | 17  | 64    |  |
| Windsor                                  | 20  | 17  | 23  | 12  | 72    |  |
|  |     |     |     |     |       |  |
| Missing County                           | 0   | 0   | 0   | 0   | 0     |  |
| Out of State (administered by VT agency) | 2   | 2   | 1   | 2   | 7     |  |
| Total                                    | 167 | 199 | 217 | 141 | 724   |  |

#### EMS administered naloxone to 724 patients across all counties and out of state in 2024

\*Values less than 6 are suppressed.

\*\*Secondary suppression prevents suppressed values from being calculated.

#### EMS administer naloxone in different doses in 2024

| Number of mg Received | Q1 | Q2 | Q3 | Q4 | Total |
|-----------------------|----|----|----|----|-------|
| 2 or fewer            | 76 | 85 | 79 | 65 | 305   |
| 2.1 - 4               | 55 | 70 | 71 | 52 | 248   |
| 4.1 - 8               | 31 | 27 | 42 | 15 | 115   |
| 8.1 - 12              | 4  | 7  | 18 | 6  | 35    |
| More than 12          | 1  | 4  | 5  | 2  | 12    |

|          | Q1  | Q2  | Q3  | Q4 | Total |
|----------|-----|-----|-----|----|-------|
| Sex      |     |     |     |    |       |
| Female   | 65  | 70  | 71  | 54 | 260   |
| Male     | 101 | 127 | 145 | 86 | 459   |
| Age      |     |     |     |    |       |
| ≤17      | *   | *   | *   | *  | 8     |
| 18 to 24 | 9   | *   | 8   | ** | 28    |
| 25 to 34 | 38  | 39  | 42  | 30 | 149   |
| 35 to 44 | 40  | 64  | 62  | 42 | 208   |
| 45 to 54 | 24  | 33  | 39  | 18 | 114   |
| 55 to 64 | 22  | 19  | 35  | 15 | 91    |
| 65+      | 27  | 31  | 26  | 23 | 107   |

### EMS administered naloxone to people of different sexes and ages in 2024

#### EMS administered naloxone via a variety of routes in 2024

|                             | Q1  | Q2  | Q3  | Q4 | Total |
|-----------------------------|-----|-----|-----|----|-------|
| Intranasal                  | 103 | 115 | 127 | 88 | 433   |
| Intravenous (IV)            | 33  | 47  | 52  | 35 | 167   |
| Intramuscular (IM)          | 17  | 23  | 28  | 13 | 81    |
| Intraosseous (IO)           | 18  | 17  | 25  | 13 | 73    |
| Other/Miscellaneous/Missing | 7   | 12  | 12  | 6  | 37    |

\*Values less than 6 are suppressed.

\*\*Secondary suppression prevents suppressed values from being calculated.

## **Key Takeaways:**

First responders, including emergency medical services (EMS) providers play a critical role in addressing the opioid epidemic. EMS provide services to people who are using drugs, their loved ones, or others that may be able to help in the event of an opioid overdose. In addition to reversing overdoses, EMS agencies across the state are helping to build community networks and employ a comprehensive response to the opioid epidemic.

For more information on the OOPRP: <a href="http://www.HealthVermont.gov/naloxone">www.HealthVermont.gov/naloxone</a>

For more information on SIREN: www.HealthVermont.gov/siren

For more information on overdose prevention strategies: <u>www.KnowODVT.com</u>

For more information on harm reduction, treatment, and recovery services: www.VTHelpLink.org

For questions about this data brief: <a href="mailto:naloxone@vermont.gov">naloxone@vermont.gov</a>