

## Overview of Opioid Overdoses in Vermont

Preliminary data indicate that there were 243 accidental or undetermined opioid-related fatalities among Vermont residents in 2022, an increase from previous years. Fentanyl is involved in 93% of these fatalities, while cocaine is involved in 49%, and xylazine in 28%<sup>1</sup>. As more substances are involved in overdose fatalities, it becomes important to ensure adequate access to and utilization of the opioid antidote medication, naloxone. Naloxone is often known by the brand name Narcan®.

## Naloxone Distribution in Vermont

The Health Department's Opioid Overdose Prevention and Reversal Program (OOPRP) collaborates with community-based organizations and first responders to distribute naloxone. The OOPRP provides training on overdose prevention, overdose response, and opioid misuse prevention training. The program provides referrals to harm reduction, recovery, and treatment services across Vermont. As one piece of the State of Vermont's coordinated effort to reduce opioid-related fatalities, the program works to ensure that first responders and the public are trained in overdose response. The goal of the 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 being 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, teach loved ones where it is kept and how to use it in case of an opioid overdose. Learn where to access naloxone at [vthelplink.org](http://vthelplink.org).

The OOPRP supports naloxone distribution through three pathways:

- Community distribution by:
  - Narcan® Kit Program and
  - Harm Reduction Pack (HRP) Program
- **First responder distribution by the leave behind kit (LBK) program**

This data brief focuses on the **first responder leave behind kit (LBK) program** and EMS naloxone administration. Read the [quarterly community naloxone distribution and administration data brief](#).

### KEY POINTS

- **EMS administered 1,161 doses of naloxone to 818 patients in 2022.**
- Between Jan 1 – Sep 30, 2023:**
- **EMS administered naloxone to 682 patients.**
  - **EMS documented distributing 421 naloxone Leave Behind Kits to patients and their families.**

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<sup>1</sup> [Vermont Department of Health - Opioid-Related Fatal Overdoses Among Vermonters](#)

## 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 leave behind kits 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, instructions for use, information on harm reduction, treatment, and recovery services, and information on Vermont 211. For more information on LBKs contact: [naloxone@vermont.gov](mailto:naloxone@vermont.gov).

## Naloxone Distribution by the Vermont Department of Health – 2023

The following table contains data on naloxone-related kits and materials distributed to EMS partners by the Vermont Department of Health. This includes naloxone leave behind kits given to EMS for their distribution and administration. Historic data may change if there are delays in reporting.

Distribution of Naloxone Doses from the Vermont Department of Health – 2023 (Preliminary)					
	Q1	Q2	Q3	Q4	Total
<b>Leave behind kits:</b> Number of doses provided to EMS and law enforcement agencies (1026 doses in 513 kits)	528	498	1224		2250
For EMS Use: Number of 4 mg doses provided to EMS	462	534	553		1549
For EMS Use: Number of 2 mg doses provided to EMS	431	434	517		1382
<b>Doses of naloxone distributed to first responders</b>	<b>1421</b>	<b>1466</b>	<b>2294</b>		<b>5181</b>

## Naloxone Distribution by Emergency Medical Services – 2023

The following tables contain data from EMS providers who reported leaving **naloxone kits** behind on scenes with people who are at higher risk of overdose due to opioid misuse. These data are updated on a quarterly basis. Historic data may change if there are delays in reporting. *Note: previously reported data in this table was underreported and has been corrected in this brief.*

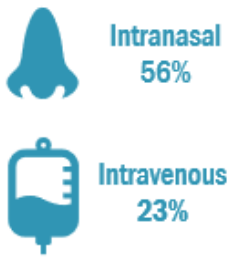
EMS Naloxone Leave Behind Kit Distribution – 2023 (Preliminary)					
	Q1	Q2	Q3	Q4	Total
Number of <b>incidents</b> where EMS left naloxone (in a Leave Behind Kit) with people who are at higher risk of overdose due to opioid misuse	112	96	121		329
Number of <b>kits left</b> at EMS scenes with people who are at higher risk of overdose due to opioid misuse	141	121	159		421

## Naloxone Administration by Emergency Medical Services - 2022

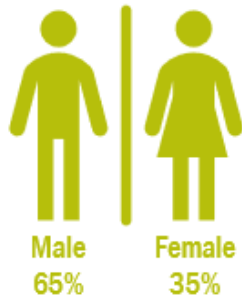
Naloxone is administered by EMS personnel when medically indicated in several scenarios, including perceived overdoses and cardiac arrests. These administrations are captured in Vermont’s State Incident Reporting Network (SIREN) database. In 2022, Vermont EMS agencies administered 1,161 doses of naloxone to 818 patients (8 of these incidents occurred out of state, accounting for 16 total administrations of naloxone).

### Demographic Breakdown of Individuals Administered Naloxone by EMS (2022)

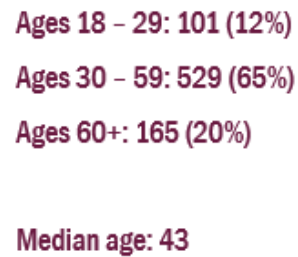
#### Route of Administration



#### Sex



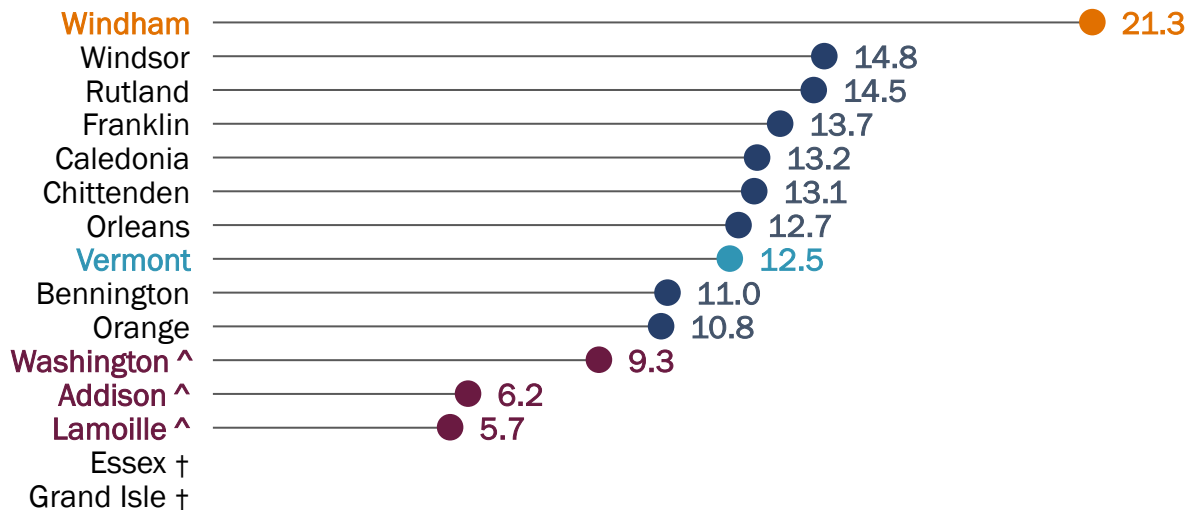
#### Age



Source: Vermont State Incident Reporting Network (SIREN), 2022

In 2022, Windham County had a significantly **higher** rate of naloxone administrations (21.3 per 10,000 residents), while Washington, Addison, and Lamoille Counties had significantly **lower** rates of administrations (9.3, 6.2 and 5.7 per 10,000 residents respectively). Data for Essex and Grand Isle Counties are suppressed due to insufficient data. All other counties were statistically similar to Vermont overall.

### Rate of EMS Calls Involving Naloxone Administration Per 10,000 Residents, by County (2022)



Source: Vermont Statewide Incident Reporting Network (SIREN), 2022

† Essex and Grand Isle Counties have been suppressed due to insufficient data

^ Statistically significant at 0.05 level, compared to Vermont rate (12.5 per 10,000 Vermonters)

# Naloxone Distribution and Administration: EMS

## Naloxone Administration by Emergency Medical Services – 2023

The following tables contain preliminary 2023 data on the use of naloxone by emergency medical services personnel 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’ 4mg dose of naloxone.

Number of Patients Administered Naloxone via EMS by County of Incident – 2023 (Preliminary)					
	Q1	Q2	Q3	Q4	Total
Addison	7	8	7		22
Bennington	6	6	12		24
Caledonia	8	9	9		26
Chittenden	60	68	67		195
Essex	0	0	*		*
Franklin	27	14	17		58
Grand Isle	*	*	0		*
Lamoille	*	11	*		**
Orange	8	6	8		22
Orleans	9	7	*		20
Rutland	32	37	33		102
Washington	20	6	17		43
Windham	32	28	21		81
Windsor	8	27	23		58
Missing	1	0	0		1
Out of State (administered by VT agency)	*	*	*		**
<b>Total</b>	<b>227</b>	<b>231</b>	<b>224</b>		<b>682</b>

Number of Patients Administered Naloxone via EMS by Sex and Age, and Number of Doses Received – 2023 (Preliminary)					
	Q1	Q2	Q3	Q4	Total
<b>Sex</b>					
Female	74	76	70		220
Male	152	155	154		461
<b>Age</b>					
< 17	*	*	*		7
18 – 29	25	21	31		77
30 – 59	148	163	141		452
60 +	46	41	42		129

\*Fewer than 6 records – data have been suppressed. \*\*Secondary suppression.

# Naloxone Distribution and Administration: EMS

## Number of Patients Administered Naloxone via EMS by milligrams (mg) Received – 2023 (Preliminary)

Number of mg Received	Q1	Q2	Q3	Q4	Total
2 or fewer	134	153	140		427
2.1 – 4	106	107	116		329
4.1 – 8	59	56	48		163
8.1 – 12	12	12	13		37
More than 12	*	*	*		9

## Number of Naloxone Administrations via EMS by Route of Administration – 2023 (Preliminary)

	Q1	Q2	Q3	Q4	Total
Intranasal	142	131	135		408
Intravenous (IV)	44	68	54		166
Intramuscular (IM)	25	36	33		94
Intraosseous (IO)	10	24	17		51
Other/Miscellaneous/Missing	22	10	13		45

\*Fewer than 6 records – data have been suppressed.

### 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: [www.healthvermont.gov/naloxone](http://www.healthvermont.gov/naloxone)

For more information on SIREN: [www.healthvermont.gov/siren](http://www.healthvermont.gov/siren)

For more information on overdose prevention strategies: [www.knowodvt.com](http://www.knowodvt.com)

For more information on harm reduction, treatment, and recovery services: [www.vthelplink.org](http://www.vthelplink.org)

For questions about this data brief: [naloxone@vermont.gov](mailto:naloxone@vermont.gov)