

Emergency Medical Services Naloxone Distribution and Administration

2024 Annual Report

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 year¹. 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®.

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.

Naloxone Distribution in Vermont

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 VTHelpLink.org.

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:
 - o Narcan® Kit Program and
 - Harm Reduction Pack (HRP) Program

Further information on opioid overdose prevention can be found at HealthVermont.gov.

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> presented in a separate data brief.

¹ 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 Vermont 211. For more information on LBKs contact: naloxone@vermont.gov.

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

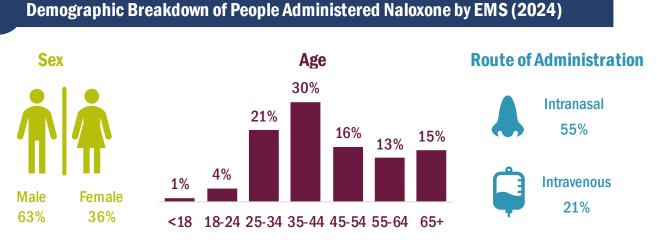
The following table contains data from EMS providers who reported leaving **naloxone kits** behind with people who are at higher risk of overdose due to opioid misuse. These data are updated on a quarterly basis.

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

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

Naloxone Administration by Emergency Medical Services – 2024

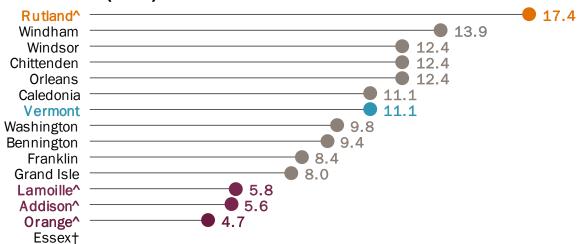
Naloxone is administered by EMS personnel when medically indicated in several scenarios, including perceived overdoses and cardiac arrests. These administrations are captured in Vermont's State Incident Reporting Network (SIREN) database. In 2024, Vermont EMS agencies administered naloxone to 724 patients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

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

	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		

^{*}Values less than 6 are suppressed.

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

^{**}Secondary suppression prevents suppressed values from being calculated.

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

	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 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.

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

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

For more information on overdose prevention strategies: www.KnowODVT.com

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

For questions about this data brief: naloxone@vermont.gov

^{**}Secondary suppression prevents suppressed values from being calculated.