Naloxone Distribution and Administration

September 2022

Opioid Misuse in Vermont

The US is in the middle of an opioid epidemic. In 2020, 9.3 million Americans aged 12 years or older reported past-year misuse of prescription pain relievers. Preliminary data indicate that opioid-related fatalities among Vermont residents increased from 158 in 2020 to 210 in 2021, and fentanyl now accounts for 93% of all accidental and undetermined opioid-related fatalities.

The Opioid Overdose Prevention and Reversal Project (OOPRP) and Vermont's Response

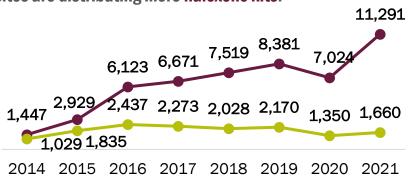
The OOPRP collaborates with community-based organizations to distribute naloxone and provides overdose response training, opioid misuse prevention training, and referrals to treatment across Vermont. As one piece of the State of Vermont's coordinated effort to reduce opioid-related fatalities, the OOPRP 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 individuals at risk of overdose, family members of those at risk, and anyone who may be able to help in the event of an overdose.

Naloxone Distribution Through OOPRP

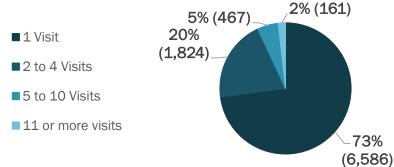
The total number of **client visits** to OOPRP sites and **naloxone kits** distributed increased in 2021. This increase is likely due to many distribution sites reopening to inperson operations following the COVID-19 pandemic.

Most individuals visiting OOPRP sites are **new clients** (73%). In total, 27% of clients have visited an OOPRP site more than once. Only **161 individuals** (2%) have visited **11** or **more times** since the program started in 2013.

More clients visited 00PRP sites in 2021, while sites are distributing more naloxone kits.







Preliminary Data from Community Naloxone Distribution Sites – 2021

The following tables contain data collected by OOPRP community naloxone distribution sites. These data are updated on a quarterly basis. Historic data may change if there are delays in reporting. All data in the following tables should be considered preliminary until final data are published.

Client Visits and Distribution of Kits – Preliminary 2021 Data*,**								
	Q1	Q2	Q3	Q4				
Number of New Clients	200	276	322	291				
Number of Returning Clients	187	222	287	203				
Total	387	498	609	494				
Kits of Naloxone Distributed	1,719	1,603	1,738	1,877				

^{*}Clients are classified as new/returning/other using the following criteria: (1) new clients are those receiving naloxone who are filling out a naloxone survey for the first time; (2) returning clients are those receiving naloxone who have filled out a naloxone survey at any point since the start of the naloxone program (December 2013) prior to their visit; and (3) other clients are those not receiving naloxone who are filling out the survey – regardless of whether they have visited an OOPRP site for naloxone in the past or not.

^{**}Quarterly totals will not match yearly totals for distribution data collected from returning clients. For example, if a unique client visits an OOPRP site in 3 out of 4 quarters during the year, they count 3 times toward the total number of unique returning clients if counted by discrete quarters. However, they would only count one time toward the total number of unique returning clients if a count was done for that single year.

Information Reported by Naloxone Kit Recipients – Preliminary 2021 Data*						
	Q1	Q2	Q3	Q4	Total	
Overdoses Reported by Naloxone Kit Recipients	83	84	129	116	412	
Number of Individuals Administered Naloxone in Response to a Perceived Overdose	77	72	117	111	377	
Number of Kits Used to Reverse a Perceived Overdose	127	139	215	224	705	
Successful Overdose Reversals Reported	51	48	83	76	258	

^{*}This information is reported by individuals who have received a naloxone kit through the OOPRP at any point in time – not just those picking up a naloxone kit at the time of the survey.

As a result of OOPRP community naloxone distribution, since 2014...



51,384 naloxone kits have been distributed.



2.477 lives have been saved.

Naloxone Administration by Emergency Medical Services (EMS) Personnel

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.

SIREN data indicate that Vermont EMS agencies administered 958 doses of naloxone to 667 individual patients in 2021 (9 of these incidents occurred out of state, accounting for 13 total administrations of naloxone).

Demographic Breakdown of Individuals Administered Naloxone by EMS (2021)

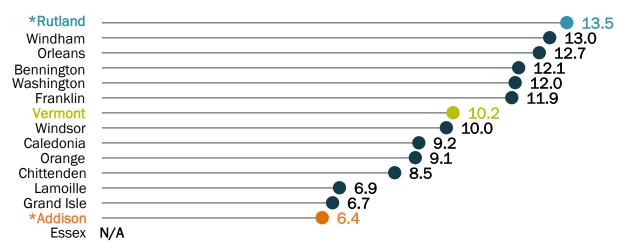


Source: Vermont State Incident Reporting Network (SIREN), 2021

Addison County had a significantly lower rate of administrations per 10,000 residents in 2021 (6.4), while Rutland County had a significantly higher rate of administrations per 10,000 residents (13.5). All other counties were statistically similar to Vermont overall.

Preliminary SIREN Data - 2021

Rate of EMS calls involving narcan administration per 10,000 residents in county (2021)



Source: Vermont Statewide Incident Reporting Network (SIREN), 2021

Note: Essex have been suppressed due to insufficient data.

^{*}Statistically significant at 0.05 level, compared to Vermont rate (10.2 per 10,000 Vermonters).

Naloxone Distribution and Administration

The following tables contain data from the Statewide Incident Reporting Network (SIREN). These data outline the use of naloxone by emergency medical personnel in Vermont. These data are updated on a quarterly basis. Historic data may change if there are delays in reporting. All data in the following tables should be considered preliminary until final data are published. Note – because EMS agencies do not administer a 'standardized' 4mg dose of naloxone, SIREN data are not comparable to those collected by OOPRP sites.

Number of Individual Patients Administered Naloxone via EMS by County of Incident – Preliminary 2021 Data						
	Q1	Q2	Q3	Q4	Total	
Addison	*	*	9	*	24	
Bennington	11	9	14	11	45	
Caledonia	*	*	11	7	28	
Chittenden	31	42	43	28	144	
Essex	0	0	0	0	0	
Franklin	10	16	21	13	60	
Grand Isle	*	*	*	*	*	
Lamoille	*	*	7	*	18	
Orange	11	*	*	7	27	
Orleans	*	13	8	9	35	
Rutland	13	21	27	21	82	
Washington	14	14	14	30	72	
Windham	8	14	27	11	60	
Windsor	12	19	14	13	58	
Out of State	*	*	*	*	9	
Total VT Counties	128	170	201	159	658	

Number of Individual Patients Administered Naloxone via EMS by Gender and Age, and Number of Doses Received – Preliminary 2021 Data						
	Q1	Q2	Q3	Q4	Total	
Gender						
Male	84	122	139	103	448	
Female	45	53	63	56	217	
Age						
< 17	*	*	*	*	*	
18 - 29	19	35	32	29	115	
30 - 59	88	110	131	102	431	
60 +	20	28	37	21	106	

^{*}Fewer than 6 records - data have been suppressed.

Naloxone Distribution and Administration

Number of Individual Patients Administered Naloxone via EMS by Number of Doses Received – Preliminary 20201 Data							
Number of Doses Received Q1 Q2 Q3 Q4 Total							
1	81	118	135	107	441		
2	40	44	54	34	172		
3	7	12	13	12	44		
4	*	*	*	*	9		
5	*	*	*	*	*		

Number of Naloxone Administrations via EMS by Route of Administration – Preliminary 2021 Data						
	Q1	Q2	Q3	Q4	Total	
Intranasal	117	140	178	140	575	
Intravenous (IV)	44	71	64	54	233	
Intraosseous (IO)	9	9	23	12	53	
Intramuscular (IM)	7	10	11	15	43	
Other/Miscellaneous	9	16	14	15	54	

^{*}Fewer than 6 records - data have been suppressed.

Key Takeaways:

Vermont has been utilizing its resources to bend the curve on the upward trend of opioid overdoses. The OOPRP plays a critical role in addressing the opioid epidemic by targeting services to people who are using drugs, their family members, or others that may be in a position to help in the event of an opioid overdose. The program helps to ensure communities have access to overdose education, training, naloxone rescue kits, and referrals to other services. The training provides guidance on how to prevent, recognize, and respond to an overdose. In addition to reversing overdoses, the OOPRP and 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: http://www.healthvermont.gov/naloxone

For more information on SIREN: https://www.healthvermont.gov/siren

For data questions: Chelsea Dubie, Chelsea.Dubie@vermont.gov

https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR1PDFW102121.pdf

" https://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP-OpioidFatalOverdoseDataBrief-2021.pdf