

2016 EMS Use of Naloxone Data Brief

SIREN Pre-hospital Data Analysis

About SIREN

The Statewide Incident Reporting Network (SIREN) is Vermont's pre-hospital electronic documentation database hosted by ImageTrend, Inc. According to Vermont State Rule, all Vermont licensed ambulance agencies are mandated to submit electronic patient care reports (ePCRs) within one business day after responding to an incident. There are currently over 360,000 records stored in SIREN, dating as far back as 2009. By 2014, 100% of Vermont based ambulances were reporting NEMSIS Version 2.2 compliant EMS data to the State. At the end of December 2016, 7 agencies had switched over to the new NEMSIS Version 3.4.0 Data Dictionary. Both databases were queried for this brief. First Response agencies are not required to submit incident reports to SIREN, but 14 of these agencies do submit their data to the state.

Total uses of Naloxone by VT EMS agencies in 2016:

Total patients receiving naloxone: **587**

Total number of naloxone administrations: **835**

* = Less than 6 cases, or potentially identifiable small numbers. Small numbers have been suppressed.

Administrations by Age Group	
Age Group	# Administrations
10 - 19	26
20 - 29	215
30 - 39	191
40 - 49	161
50 - 59	116
60 - 69	51
70 - 79	45
80 - 89	23

Administrations by Gender	
Gender	# Administrations
Female	305
Male	528

Route of Administration	
Administration Route	2016
Intravenous	345
Intranasal	383
Intraosseous	60
Intramuscular	31
Other/Misc	16

Patients Receiving Multiple Doses	
# Doses	2016
1	398
2	155
3	20
4	6
5	5
6	3

Administrations by County	
County	2016
Addison	30
Bennington	57
Caledonia	40
Chittenden	154
Essex	*
Franklin	76
Grand Isle	*
Lamoille	16
Orange	23
Orleans	36
Rutland	108
Washington	114
Windham	91
Windsor	72
New Hampshire	7
New York	*

EMS agencies in Vermont may carry and use naloxone across all four levels of licensed providers in accordance with the VT Statewide EMS Protocols. Note that indications for use of naloxone, particularly by advanced level providers, may be more expansive than solely for known/suspected acute opioid/opiate overdose reversal.

Data Limitations: If a patient received pre-hospital care for involving more than one data-submitting EMS agency, that patient may be counted multiple times (once for each EMS agency encounter).

SIREN data is entered by Vermont licensed EMS providers from across Vermont. Since there are a large number of providers submitting data, it should be recognized that individual, agency, or even regional tendencies and/or subjectivities in data reporting may exist. For this reason, administrations may be underreported.