Opioids in Vermont: Prevalence, Risk, and Impact

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Anne VanDonsel, Shayla Livingston, John Searles
Essential Public Health Services

- Monitor Health to Identify and Solve Community Health Problems
- Inform, Educate, and Empower People About Health Issues
Agenda

- The current status in Vermont
- Fatal overdoses
- Non-fatal overdoses
- Prevalence
- Treatment
- Crime
- So what? (Implications)
Timeline: Addressing Opioid Misuse and Addiction in Vermont

- **2002**: First Methadone Clinic Opens (Chittenden Center)
- **2002**: Buprenorphine Approved for MAT by FDA
- **2003**: VT Prescribers use Buprenorphine
- **2004**: Buprenorphine Induction Hub Opened (CVSAS)
- **2006**: Methadone in SE (Habit Opco)
- **2006**: Patient Limits for Bup prescribers: 30 Year 1, then a max of 100
- **2006**: PDMP (VPMS) data collection begins
- **2006**: Methadone in Central VT (BAART)
- **2006**: Methadone in NEK (BAART)
- **2008**: MAT for Opioid Dependence Rules Enacted
- **2009**: PDMP (VPMS) data collection begins
- **2010**: MAT for Opioid Dependence Rules Updated
- **2011**: Opioids for Chronic Pain Rule
- **2013**: Safe Disposal of Unused Medication Rule
- **2013**: Methadone in Rutland (West Ridge)
- **2013**: Hub and Spoke Model (Care Alliance)
- **2013**: Good Samaritan Law Passed
- **2013**: Opioids overtake alcohol as primary substance in treatment
- **2015**: Acute Pain Prescribing Rules
- **2015**: Mandatory PDMP/VPMS Registration
- **2015**: VPMS Rule Updated
- **2016**: MAT for Opioid Dependence Rules Updated
- **2017**: Opioids for Chronic Pain Rule

Vermont Department of Health
VT is one of four states “making progress” in policy according to the National Safety Council.

Areas Assessed:
- Mandatory Prescriber Education
- Opioid Prescribing Guidelines
- Eliminating Pill Mills (VT doesn’t have them but also doesn’t have legislation to eliminate/prevent them)
- Prescription Drug Monitoring Programs
- Increased Access to Naloxone
- Availability of Opioid Use Disorder Treatment

In Place | Not in Place
Vermont has one of the highest rates of treatment capacity

Rate of Past Year Opioid Abuse or Dependence* and Rate of Medication Assisted Treatment Capacity with Methadone or Buprenorphine

*Opioid abuse or dependence includes prescription opioids and/or heroin

Source: NSDUH 2003-2012
Source: N-SSATS 2003-2012
Source: AJPH 2015; 105(8):e55-63
People can be in many of our data sources

- 17,844 people misused a pain reliever
- 8,600 opioid dependent people treated
- 1,375 EMS overdose calls
- 204 ED discharges
- 403 community naloxone reversals
- 2015 - 76 accidental opioid deaths

Vermont Department of Health
For every 1 fatal opioid overdose in VT there are:

- 1,482 people receiving at least one rx for analgesics
- 235 nonmedical rx pain reliever users
- 113 people receiving at least one MAT service for OUD
- 64 needle exchange members
- 18 EMS overdose calls
- 5 community opioid reversals
- 3 emergency department visits for opioids
- 2 infants born exposed to opioids

Vermont Department of Health
Fatalities
Vermont Drug Poisoning Estimated Deaths by County
(All Drug Poisoning Deaths)

Source: Centers for Disease Control and Prevention, Drug Poisoning Mortality: United States, 2002-2014

Vermont's 2014 age adjusted rate of drug poisoning deaths is the same as the U.S. average at approximately 14.7 per 100,000 Vermonters.
Drug-Related Fatalities Involving Opioids

Total number of accidental and undetermined manner drug-related fatalities involving an opioid (categories not mutually exclusive)

- Total opioid
- Rx opioid
- Heroin
- Fentanyl

Source: Vermont Department of Health Vital Statistics System

Vermont Department of Health
New England Drug Overdose Deaths by State and Year

Drug Overdose Deaths per 100,000 by State

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

New Hampshire, 26.2
Rhode Island, 23.4
Massachusetts, 19
Maine, 16.8
Vermont, 13.9

Statistically significant drug overdose death rate increase from 2013 to 2014, US states
Non-fatal overdose
Key Surveillance Needs

- Respond to emerging issues
Syndromic Surveillance

Syndromic Surveillance Rate per 10,000 Vermonters

- Heroin
- Other opioid

Source: Early Aberration Reporting System
Emergency Department Discharge Rate per 100,000 People for Opioid Overdose, by Type of Opioid and Year
Vermont Residents at Vermont Hospitals

Other opioids
Heroin


0.2 0.3 0.2 0.1 0.1 0.2 0.1 0.1 0.2
0.6 1.4 2.6

1.3 1.5 1.3 1.6 1.7 1.6 1.4 1.3 1.4 1.6 1.7 1.5

Source: Vermont Uniform Hospital Discharge Data Set
EMS – SIREN data system

- Data are newly being used for opioid surveillance purposes – cases are not well defined
- Data are available immediately, but analysis takes a long time
- Data are based on first impression and reason for call

Preliminary Data
- In 2014 there were 1,257 potential overdose responses
- In 2015 there were 1,361 potential overdose responses
- These comprise approximately 1.5% of all calls.

Source: Vermont SIREN, 2014 and 2015
Naloxone

Number of doses dispensed by client type, quarter and year

Number of reports of naloxone use in response to a perceived overdose incident

Source: Vermont Department of Health Naloxone Pilot Program
Prevalence
Non-medical use of prescription pain relievers in Vermont

Percent of Vermont population reporting non-medical use of pain relievers in the past year by age in years.

Source: National Survey on Drug Use and Health, 2003-2014
Nationally, over half of those who misused a prescription pain reliever got it from a friend or relative.
High School prescription drug misuse decreased in almost every county from 2013 to 2015

Percent of high school students reporting past 30 day prescription drug misuse by county and year

Source: Youth Risk Behavior Survey, 2013 and 2015
Heroin use among high school students remains low

Percent of high school students reporting heroin use within their lifetime by year

Vermont Department of Health

Source: Youth Risk Behavior Survey, 2013 and 2015
Percent of Adults Who Report Prescription Drug Misuse

Percent of adults (18+) who report prescription drug misuse by frequency and year

- Ever used Rx Drug w/o Own Rx
- Past 30 Days Rx Drug w/o Own Rx

2007: 9%, 1%
2008: 9%, 1%
2009: 7%, 1%
2010: 7%, 1%
2011: 8%, 1%
2012: 8%, 1%
2013: 6%, 1%
2015: 7%, 1%

Source: Behavioral Risk Factor Surveillance System
Opioid Misuse – Young Adult Survey* & College Health Survey

Percent of young adults who report opioid misuse in the past year by data source

- **Young Adult Survey**
  - 2014: 8
  - 2016: 6

- **College Health Survey**
  - 2014: 6
  - 2016: 5

*Young Adult Survey conducted by the Pacific Institute for Research and Evaluation under a contract with VDH

Source: Young Adult Survey and College Health Survey

Vermont Department of Health
The vast majority of drugs recovered at take back days are non-scheduled.
The total number of needle exchange members is increasing rapidly.
The total number of needles dispensed almost hit 1 million

Total number of syringes dispensed by year

- 2010: 485,095
- 2011: 633,000
- 2012: 763,321
- 2013: 932,266
- 2014: 841,136
- 2015: 999,459

Source: Vermont Syringe Exchange Programs
Total Number of Controlled Substance Prescriptions by Drug Type and Year

Opioids  Sedatives  Stimulants  Adjusted Opioids

2010 2011 2012 2013 2014 2015

482,572 502,566 513,773 509,057 538,403 601,506
281,624 284,571 287,121 289,756 291,011 291,833
111,203 128,169 150,617 164,655 173,199 185,315

Note: The 2015 Annual Report reflects the first full year of VPMS data with tramadol reclassified from a Schedule V to a Schedule IV drug. Its inclusion in VPMS data due to this reclassification resulted in an increase of 82,992 opioid prescriptions being reported to VPMS 2015. Additionally, the White River Junction Veterans Affairs Medical Center began uploading to VPMS in March of 2015. It uploaded 19,541 opioid prescriptions in 2015. Had these two new data sources not been provided to VPMS in 2015, the number of opioid prescriptions would have decreased for the first time since 2010. (See the Adjusted Opioids trend line.)

Vermont Department of Health
In 2015, 68 of 75 ORAF individuals had controlled substance prescription histories.

Of the 68, 81% received high dose (≥90 MME) analgesics in the period before their deaths.

ORAF’s with an opioid prescription in the year prior to fatality received average of 261 days’ supply in that year.

% of ORAF with ≥ 90 MME Opioid Rx by Time Elapsed Before Death

- Five years: 81%
- One year: 36%
- 30 days: 24%
- 10 days: 20%

Source: Vermont Prescription Monitoring System and Vital Statistics
Treatment
The number of people using heroin at treatment admission is increasing faster than for other opioids.
The number of individuals using heroin at treatment admission has increased in the last five years.

Number of People Treated by Type of Opioid Being Used on Admission to Treatment by Fiscal Year

- Heroin
- Other Opioids/ Synthetics
- Non-prescription Methadone

Source: Alcohol and Drug Abuse Treatment Programs
While more heroin users inject than prescription drug users, the percent has remained fairly stable.
Most Medicaid recipients with an opioid misuse diagnosis are receiving medication assisted treatment.

Number of Medicaid recipients with at least one primary diagnosis of opioid misuse by calendar year and treatment status.

- Receiving MAT
- Any Opioid Diagnosis or Treatment

Source: Vermont Medicaid Claims
Medicaid recipients between 25 and 44 make up the vast majority of those treated for opioid misuse.

Number of Medicaid recipients with at least one primary opioid diagnosis or buprenorphine prescription by age and year:

- 12-17
- 18-24
- 25-34
- 35-44
- 45-54
- 55+

Source: Vermont Medicaid Claims
Drug poisoning diagnosis (overdose) among Medicaid recipients is driven by illicit opioids

Number of Medicaid recipients with at least one primary opioid poisoning diagnosis by year and drug type

Vermont Department of Health
Source: Vermont Medicaid Claims
Medicaid recipients between 25 and 34 make up the vast majority of those treated for opioid poisoning (overdose).
As the total number of clients in treatment increased, the number of people waiting for services remains flat.
The average age of first drug use by clients has remained stable

Average age (in years) of first use of drug at admission by drug type and year

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Source: Alcohol and Drug Abuse Treatment Programs
People seek treatment for opioid addiction much sooner after first use than with alcohol.

**Elapsed Time (Years) Between Age of First Use and Age at Treatment Admission for Daily Users of Opioid and Alcohol (2005-2011)**

- **Opioids**
  - Average Elapsed Time: 8.2 +/- 7 years

- **Alcohol**
  - Average Elapsed Time: 24.8 +/- 12 years

Source: Alcohol and Drug Abuse Treatment Programs, admissions 2005-2011
The median time to treatment has increased slightly for prescription opioids and decreased for heroin.

![Bar chart showing the median number of years between age of first use and entering treatment by year and substance for Alcohol, Heroin, and Other Opioids.](chart)

- **Alcohol**:
  - 2009-2011: 16 years
  - 2012-2014: 16 years
- **Heroin**:
  - 2009-2011: 7 years
  - 2012-2014: 4 years
- **Other Opioids**:
  - 2009-2011: 6 years
  - 2012-2014: 7 years

Source: Alcohol and Drug Abuse Treatment Programs

Vermont Department of Health
Improved treatment and screening have helped to identify more infants exposed to opioids.
Change in Crimes/100,000 in Vermont 2011-2014

Vermont Department of Health

Federal Bureau of Investigation Uniform Crime Report
So what?
In Summary

- Vermont is putting in place many of the prevention, intervention, treatment and recovery options that could help turn the tide on the opioid crisis.
- Vermont is doing better than much of the country in substance abuse treatment, harm reduction and data collection.
- While the problem continues to increase, there are small signs of hope:
  - Large parts of the state do not have wait lists for treatment
  - Deaths from prescription opioids appear to be flattening
  - Naloxone is getting into the hands of those who need it most
  - Youth use is trending downward over time