Stimulant Trends in Vermont

Alcohol and Drug Abuse Programs

October 17, 2018
We will review

- Prevalence
- Treatment
- Fatalities
- Other Data
- Discussion
Illicit Stimulant and Opioid Use in Past Year among Persons Aged 12 or Older, United States: Numbers in Thousands, 2002-2017

Data Source: National Survey on Drug Use and Health (NSDUH)

* There are statistically significant changes between 2015 and 2017 for all substances except methamphetamine.

Data not available for opioids, Rx Stimulants, Methamphetamine prior to 2015
No Statistically Significant Change in Cocaine Use by Individual Age Group - US

No difference between this estimate and the 2017 estimate is statistically significant at the .05 level.

See figure 16 in the 2017 NSDUH Report for additional information.

Data Source: NSDUH
Approximately 16,000 Vermonters age 12+ used cocaine in the last year (NSDUH 2015/2016)
Statistically Significant Increase in Methamphetamine Use for those Age 18-25 between 2016 & 2017 - US

See tables 7.5, 7.11, and 7.14 in the 2017 NSDUH detailed tables for additional information.

+ Difference between this estimate and the 2017 estimate is statistically significant at the .05 level.

Data Source: NSDUH
Methamphetamine Use is Most Common West of the Mississippi River

PAST YEAR, 2015 - 2016, 12+

Percentages of People Aged 12 or Older

- 1.06-1.41
- 0.67-1.05
- 0.51-0.66
- 0.26-0.50
- 0.03-0.25

Differences in colors across states does not indicate significant differences in estimates.

Source: NSDUHs, 2015 and 2016.
Statistically Significant Increase in Misuse of Prescription Stimulants for those Age 26+ between 2015 & 2017 - US

+ Difference between this estimate and the 2017 estimate is statistically significant at the .05 level.

Data Source: NSDUH

See tables 7.2, 7.5, 7.11, and 7.14 in the 2017 NSDUH detailed tables for additional information.
US: New Initiates – Nonmedical/I illicit Users - Stimulants

Source: John Eadie presentation at the National Rx Drug Abuse & Heroin Summit/NSDUH
US: Past Month Nonmedical/Illicit - Stimulants

Source: John Eadie presentation at the National Rx Drug Abuse & Heroin Summit/NSDUH
Substances Used by Vermonters ages 12+ by Substance Type – Past Year

Source: National Survey on Drug Use and Health, 2003-2016

* Because of question reformulation for non-medical use of pain relievers no data are available for 2014/15 & data from 2015/16 are not comparable to previous years
Vermonters age 18-25 report the highest use of cocaine

Percent of Vermont population reporting cocaine use in the past year by age in years.

Source: National Survey on Drug Use and Health, 2003-2016
9-12 grade students reporting ever misusing a prescription stimulant: 2017, Vermont

- Males are more likely to misuse than females
- Older students are more likely to misuse
- Racial and ethnic minorities (REM) are more likely to use than white non-Hispanic (WnH)
- LGBT students are more likely to misuse than heterosexual students

Note: the question was modified in the 2017 report so earlier results are not directly comparable

Source: Youth Risk Behavior Survey (YRBS)
Lifetime Use of Stimulants – Grades 9-12, Vermont

Cocaine

- 2013: 5%
- 2015: 5%
- 2017: 4%

Methamphetamine

- 2007: 5%
- 2009: 4%
- 2011: 3%
- 2013: 3%
- 2015: 3%
- 2017: 2%

Prescription Stimulant Misuse

- 2009: 8%
- 2011: 7%
- 2013: 7%
- 2015: 7%
- 2017: 6%

• Cocaine questions weren’t asked prior to 2013
• Rx misuse question was modified in 2017 so earlier values are not directly comparable

Source: YRBS

Vermont Department of Health
High School Students Ever Using Cocaine

Ever Used Cocaine
(any form of cocaine, such as powder, crack, or freebase, one or more times during their life)

High School Youth Risk Behavior Survey, 2017

Source: YRBS/CDC
High School Students Ever Using Methamphetamines

Ever Used Methamphetamines
(also called "speed," "crystal," "crank," or "ice," one or more times during their life)

High School Youth Risk Behavior Survey, 2017

Source: YRBS/CDC
Vermont Treatment System Admissions Age of First Use for Substances of Abuse

**AGE OF FIRST USE OF SUBSTANCE FOR WHICH ARE PEOPLE RECEIVING TREATMENT**

- **Alcohol**: Age 15
- **Marijuana/Hashish**: Age 16
- **Cocaine**: Age 17
- **Hallucinogens**: Age 19
- **Benzodiazepines**: Age 21
- **Prescription Opioids**: Age 18
- **Heroin**: Age 20

Source: SATIS. Median age of first use, substances for which a person is receiving treatment only, admissions records 2014-2017
Distribution of the Age of First Use of Stimulants

Individual’s Most Recent Admission to a Preferred Provider 2014-2017

Cocaine:
- Median Age = 18
- Average Age = 19.9

Data Source: Substance Abuse Treatment Information System
There were Statistically Significant Increases ★ in Specialty Treatment for Illicit Drug Use Disorders in 2017 - US

PAST YEAR, 2015 - 2017, 12+

+ Difference between this estimate and the 2017 estimate is statistically significant at the .05 level.

Special analysis of the 2017 NSDUH report.
People Treated in the ADAP System of Care by Primary Substance of Abuse by SFY

- **Alcohol**
- **Marijuana/Hashish**
- **Heroin/Other Opiates**
- **Cocaine/Other Stimulants**

**Providers without final reporting as of 10/4/18:** 2018 – UCS, BAART NEK, RMH, Starting Now/Brattleboro Retreat, Valley Vista

Vermont Department of Health

Data Source: Substance Abuse Treatment Information System
Primary Substance Used at ED Visit (Jul-Aug 2018)

- Alcohol: n = 162
- Opioids: n = 11
- Stimulants
- Benzodiazepines
- Marijuana
- Other

Source: Grant Reporting
Percent of People Admitted to Treatment with Stimulants as Primary, Secondary, or Tertiary Substance by SFY

Vermont Department of Health

Data Source: Substance Abuse Treatment Information System
Stimulants are typically not the primary substance of abuse on admission.
People using primary, secondary, or tertiary stimulants at admission by stimulant type and state fiscal year

Totals may be greater than 100% - people may use multiple stimulants

Data Source: Substance Abuse Treatment Information System
Percent of People Admitted to Treatment Using Stimulants by County: SFY of Admission 2009 and 2018

Vermont Department of Health

Data Source: Substance Abuse Treatment Information System – primary, secondary, tertiary substance
Percent of Primary, Secondary, or Tertiary Stimulant Admissions by Age Group and SFY

Data Source: Substance Abuse Treatment Information System
People using primary, secondary, or tertiary stimulants at admission by gender and state fiscal year

Vermont Department of Health

Data Source: Substance Abuse Treatment Information System
Medicaid Recipients with Stimulant Use Disorder as Primary Diagnosis

Vermont Department of Health

Data Source: Medicaid Claims
Stimulant Use is Common in Those with OUD

2017 HUB & SPOKE EVALUATION

Average Days of Stimulant Use (out of 90) for In-treatment Participants (n = 80)

<table>
<thead>
<tr>
<th>Type of Drugs</th>
<th>Average Days of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine</td>
<td>18.1</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>7.9</td>
</tr>
</tbody>
</table>

90 days before treatment
90 days before the interview

2016 ETHNOGRAPHIC EVALUATION

Type of Drugs Participants Would Get if They Had the Money

<table>
<thead>
<tr>
<th>Type of Drugs</th>
<th>2016 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td>98%</td>
</tr>
<tr>
<td>Cannabis</td>
<td>90%</td>
</tr>
<tr>
<td>Crack</td>
<td>85%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>78%</td>
</tr>
<tr>
<td>Painkillers</td>
<td>68%</td>
</tr>
<tr>
<td>Downers (Benzos)</td>
<td>65%</td>
</tr>
<tr>
<td>Molly</td>
<td>39%</td>
</tr>
<tr>
<td>LSD</td>
<td>35%</td>
</tr>
<tr>
<td>Crystal Meth</td>
<td>21%</td>
</tr>
<tr>
<td>Special K</td>
<td>9%</td>
</tr>
</tbody>
</table>

“The first drug I ever tried was of course pot, then cocaine then opiates. Opiates have been by far the worst. Traded one for another. Weed is my main drug of choice but when cocaine or heroin comes up it gets pushed aside because… the opiates take control because it’s more physical. Cocaine is just a mental addiction, opiates are a mental and physical addiction. It’s so much worse.” — Ethnographic Evaluation Participant

Vermont Department of Health
Demographic Information – Stimulant Rx

Percent of Stimulant Prescriptions Dispensed by Age Group (2016)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>33%</td>
</tr>
<tr>
<td>18-24</td>
<td>12%</td>
</tr>
<tr>
<td>25-34</td>
<td>19%</td>
</tr>
<tr>
<td>35-44</td>
<td>14%</td>
</tr>
<tr>
<td>45-54</td>
<td>11%</td>
</tr>
<tr>
<td>55-64</td>
<td>8%</td>
</tr>
<tr>
<td>65+</td>
<td>4%</td>
</tr>
</tbody>
</table>

Percent of Population Receiving At Least 1 Stimulant Prescription by Age Group and Gender (2016)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 and Younger</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>18-24</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>25-34</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>35-44</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>45-54</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>55-64</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>65 and Older</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Rate of Stimulant Prescriptions per 100 Residents in Each County (2016)

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addison</td>
<td>24</td>
</tr>
<tr>
<td>Bennington</td>
<td>38</td>
</tr>
<tr>
<td>Caledonia</td>
<td>28</td>
</tr>
<tr>
<td>Chittenden</td>
<td>30</td>
</tr>
<tr>
<td>Essex</td>
<td>13</td>
</tr>
<tr>
<td>Franklin</td>
<td>23</td>
</tr>
<tr>
<td>Grand Isle</td>
<td>26</td>
</tr>
<tr>
<td>Lamoille</td>
<td>29</td>
</tr>
<tr>
<td>Orange</td>
<td>21</td>
</tr>
<tr>
<td>Orleans</td>
<td>27</td>
</tr>
<tr>
<td>Rutland</td>
<td>28</td>
</tr>
<tr>
<td>Washington</td>
<td>34</td>
</tr>
<tr>
<td>Windham</td>
<td>48</td>
</tr>
<tr>
<td>Windsor</td>
<td>17</td>
</tr>
</tbody>
</table>

VT: 31

Vermont Department of Health

Data Source: Vermont Prescription Monitoring Program
Amphetamine Distribution per 1,000 Population for the United States - 2016

Source: John Eadie presentation at the National Rx Drug Abuse & Heroin Summit/ARCOS
The number of prescriptions for stimulants dispensed has stabilized after increasing 26% between 2012 and 2016.

Data Source: Vermont Prescription Monitoring Program
Number of People Receiving Stimulants by Quarter

Data Source: Vermont Prescription Monitoring Program
Number of full-time college students aged 18 to 22 using prescription-type stimulants for the first time on an average day, by month: 2002 to 2013

* Difference between the daily average for the month and the daily average for the year is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2005, 2006 to 2010 (revised March 2012), and 2011 to 2013.
Fatalities
Cocaine-Involved Fatalities are Increasing

Total number of drug-related fatalities (categories not mutually exclusive)

- All Drug Fatalities
- Cocaine-Involved Fatalities
- Fentanyl-Involved Fatalities

Source: Vermont Department of Health Vital Statistics System
In 2016, 18% of opioids fatalities involved cocaine, in 2017 it increased to 32%.

### Number and Percentage of Accidental and Undetermined Opioid-Related Fatalities Among Vermont Residents - Substances Involved

<table>
<thead>
<tr>
<th>Substance</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Alcohol</td>
<td>16</td>
<td>17%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>17</td>
<td>18%</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>49</td>
<td>51%</td>
</tr>
<tr>
<td>Heroin</td>
<td>43</td>
<td>45%</td>
</tr>
<tr>
<td>Methadone</td>
<td>14</td>
<td>15%</td>
</tr>
<tr>
<td>RX opioid (no fentanyl)</td>
<td>35</td>
<td>36%</td>
</tr>
</tbody>
</table>

### Common cocaine/opioid combinations

<table>
<thead>
<tr>
<th>Substances</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Cocaine and Fentanyl</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>Cocaine and Heroin</td>
<td>13</td>
<td>14%</td>
</tr>
<tr>
<td>Fentanyl and Alcohol</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>Fentanyl and Heroin</td>
<td>21</td>
<td>22%</td>
</tr>
<tr>
<td>Fentanyl and RX Opioids (no fentanyl)</td>
<td>6</td>
<td>6%</td>
</tr>
</tbody>
</table>
Stimulant fatalities are increasing nationally

Source: CDC Wonder/NIDA
Combination fatalities are increasing nationally.

Source: CDC Wonder/NIDA
Percent of Emergency and Urgent Care Visits with Stimulants Mentioned in the Chief Complaint and/or Diagnosis

Vermont Department of Health

*This data reflect Vermont emergency department and urgent care visits using the Electronic Surveillance System for the Early Notification of Community-based Epidemics. Data is subject to change.

Data Source: ESSENCE
Drug Use During Pregnancy - Vermont

There are low rates of stimulant use before and during pregnancy.

Data Source: PRAMS
Of infants meeting the definition of Neonatal Abstinence Syndrome for Opioids:

- 3.8% were also exposed to methamphetamine/amphetamines
- 10.6% were exposed to cocaine

Supply and Enforcement
Colombian Coca Cultivation

Potential fresh coca leaf and potential cocaine production, 2005 – 2017

Source: UN Office on Drugs and Crime
Cocaine Seizures by Customs and Border Patrol

Big Increase in U.S. Cocaine Seizures
Amount of cocaine seized by Customs and Border Patrol (CBP) officers in the U.S. (in pounds)

- Office of Field Operations
- Border Patrol

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Office of Field Operations</th>
<th>Border Patrol</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2015</td>
<td>38,100</td>
<td>11,200</td>
</tr>
<tr>
<td>FY 2016</td>
<td>52,800</td>
<td>58,300</td>
</tr>
<tr>
<td>FY 2017*</td>
<td>112,900</td>
<td>8,200</td>
</tr>
</tbody>
</table>

Figures rounded
* FY-to-date, June 30; ends September 30

Office of Field Operations (OFO) runs all ports of entry to the United States (such as border crossings). Border Patrol refers to officers out in the field between those ports (e.g. out in the open along the border).

Source: ONDCP
Methamphetamine Seized by US Border Control*

*Figure are for fiscal years. 2018 data is from October 1, 2017 through August 31, 2018.

Source: US Customs and Border Protection
Graphic: Will Houp, CNN

*2018 is through 8/31/18
## Methamphetamine seizures containing... Number of seizures

<table>
<thead>
<tr>
<th>Methamphetamine seizures containing...</th>
<th>Number of seizures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fentanyl</td>
<td>9</td>
</tr>
<tr>
<td>Carfentanil</td>
<td>1</td>
</tr>
<tr>
<td>Fentanyl and Heroin</td>
<td>10</td>
</tr>
<tr>
<td>Fentanyl and Cocaine</td>
<td>1</td>
</tr>
<tr>
<td>Fentanyl, Heroin, and Cocaine</td>
<td>2</td>
</tr>
</tbody>
</table>

U.S. Department of Justice; Drug Enforcement Administration (October 2017) 2017 National Drug Threat Assessment.
Changes in Cocaine Seizures by HIDTAs
In Kilograms – US 2010 to 2016

There was a 119% increase in seizures between 2010 and 2017

Source: John Eadie presentation at the National Rx Drug Abuse & Heroin Summit
Changes in Methamphetamine Seizures by HIDTAs
In Kilograms – US 2010 to 2016

There was a 88% increase in seizures between 2010 and 2017

Source: John Eadie presentation at the National Rx Drug Abuse & Heroin Summit
Between 2012 and 2016 there was one (1.5 gram) VT seizure of methamphetamine

Source: DEA https://www.dea.gov/drug-seizure-data
Accessed 8/21/18
Findings may not be consistent with the DEA’s own conclusions
Stimulant Criminal Charge Dispositions 2008-2017

Possible Dispositions Include: Dismissed By Court, Diversion, No Probable Cause, Guilty Plea, Acquitted, Guilty Verdict, Drug Court Dismissed, Dismissed by State

Vermont Department of Health

Source: Court Adjudication Database
Includes random and for suspicion UA test results. A positive value may indicate licit use (such as a prescription for a stimulant to treat ADHD or buprenorphine or methadone to treat OUD) or illicit use.

Source: DOC Drug Testing Statistics through Aug 2018
What do you conclude regarding Vermont stimulant use based on the data?
Data Conclusions

- Cocaine prevalence has returned to previous levels
- Prescription stimulant use has increased significantly over the past five years
- Methamphetamine remains low in Vermont
- People are using opioids and stimulants simultaneously
- Deaths involving cocaine often also involve fentanyl and heroin
- Cocaine production is increasing
Further discussion

- What are the next steps?
- Where are possible points of prevention and intervention?
- What are the opportunities for collaboration?
- Shall we initiate a strategic planning process? If so, how?