SEOW Special Report: Heroin, Opioids, and Other Drugs in Maine

By Tim Diomede, MPPM

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State Epidemiological Outcomes Workgroup
The following report is a product of the Maine State Epidemiological Outcomes Workgroup (SEOW). The Maine SEOW, under the Office of Substance Abuse and Mental Health Services (SAMHS), is charged with collecting, analyzing, and disseminating data regarding substance use and related behavioral health in efforts to help prevention professionals and stakeholders make data driven decisions.

The following report examines the consumption, consequences, and contributing factors of substance use in Maine with a special focus on heroin and opioids. In addition, the report looks at data indicators related to the treatment of substance use as well as co-occurring mental health and substance use disorders. In order to provide for a more comprehensive report, SEOW relies on a multitude of data sources (Appendix A). When possible, indicators have been analyzed by demographics (e.g., age, gender) and defined geographical regions (e.g. public health district, county).
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Executive Summary

- Prescription drugs continue to represent a serious public health concern.
- Prescription drug misuse also continues to have a large impact on treatment, mortality/morbidity, and crime in Maine.
- Pharmaceutical drugs contribute to the majority of drug overdose deaths.
- Lethal co-toxicants such as Benzodiazepines and Fentanyl require closer monitoring.
- As the availability of prescription narcotics has leveled off, heroin use and the consequences thereof have been on the rise.
- Somerset and Kennebec have persistently observed some of the highest rates for narcotics prescribed per person since 2008.
Based on arrest and treatment data, heroin use is most prevalent among the southern and coastal regions (specifically York, Cumberland, Androscoggin, Kennebec, and Knox).

Rates of heroin trafficking/sales (DEA) arrests are highest in the Midcoast region.

Opioid and heroin treatment is most common among 26 to 34 year olds.

Availability and accessibility of opioids continues to be a problem.

Co-occurring mental health and substance disorders are increasingly common among those seeking treatment.

It’s evident that there is a strong relationship between substance use and mental health.
Impact
(e.g., deaths, overdoses, arrests, poisonings)
Unintentional Deaths in Maine, by type: 2009-2014

In 2014, there were **208** drug related overdose deaths compared to **131** motor vehicle related deaths.

<table>
<thead>
<tr>
<th>Year</th>
<th>Motor vehicle-related injury deaths</th>
<th>Drug-related overdose deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>159</td>
<td>179</td>
</tr>
<tr>
<td>2010</td>
<td>161</td>
<td>167</td>
</tr>
<tr>
<td>2011</td>
<td>136</td>
<td>155</td>
</tr>
<tr>
<td>2012</td>
<td>164</td>
<td>163</td>
</tr>
<tr>
<td>2013</td>
<td>145</td>
<td>176</td>
</tr>
<tr>
<td>2014</td>
<td>131</td>
<td>208</td>
</tr>
</tbody>
</table>

Source: Office of the Chief Medical Examiner, Maine Bureau of Highway Safety/Maine Department of Transportation
In 2013, Maine ranked 30th in drug poisoning deaths with 13.2 deaths per 100,000.

Source: National Vital Statistics Report
http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf
From 2011 to 2014, Maine observed a 34% increase in the number of all drug related overdose deaths.

In 2014, most (89%) drug overdose deaths involved pharmaceutical drugs.

There was a 340% increase in the number of illicit drug-related overdose deaths was observed from 2011 to 2014.

Deaths involving pharmaceuticals and illicit drugs are not mutually exclusive.

Source: Marci Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner
More than one in three overdose deaths involved benzodiazepines.

More than one in four overdose deaths involved heroin/morphine.

*Some deaths may be caused by more than one key drug.
**2014 results are preliminary
***Deaths caused by known pharmaceutical morphine removed from total.

Source: Marci Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner
In 2014, there were **57** deaths involving **heroin/morphine**; a 530% increase since 2011.

**Fentanyl** related deaths increased by **377%** from 2013 (9) to 2014 (43)

*Deaths caused by known pharmaceutical morphine removed from total.** Some deaths may be caused by more than one key drug.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone</td>
<td>50</td>
<td>42</td>
<td>32</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>48</td>
<td>36</td>
<td>45</td>
<td>32</td>
<td>42</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>57</td>
<td>41</td>
<td>33</td>
<td>63</td>
<td>70</td>
</tr>
<tr>
<td>Heroin/morphine**</td>
<td>7</td>
<td>9</td>
<td>28</td>
<td>34</td>
<td>57</td>
</tr>
<tr>
<td>Cocaine</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>10</td>
<td>14</td>
<td>10</td>
<td>9</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: Marci Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner
Heroin related death overdoses, Maine vs. Nation: 2002-2013

Source, National Data: US CDC; Multiple Cause of Death Files from the National Vital Statistics System, 2002-2013.

Source, Maine Data: Maine Department of Health and Human Services, Office of Research, Data and Vital Statistics.
In 2012-14, **Washington** county observed on average 19.7 drug related overdose deaths per 100,000 residents per year.

*Drug related deaths include all drug types (illicit and pharmaceutical)*

Source: Marci Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner
Drug-related* death rate per 100,000, by public health district: 2009-10 to 2013-14

<table>
<thead>
<tr>
<th>Public Health District</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>6.3</td>
<td>10.5</td>
<td>11.2</td>
<td>9.9</td>
<td>10.8</td>
</tr>
<tr>
<td>Central</td>
<td>13.3</td>
<td>14.9</td>
<td>12.7</td>
<td>15.6</td>
<td>17.4</td>
</tr>
<tr>
<td>Cumberland</td>
<td>15.0</td>
<td>12.0</td>
<td>13.8</td>
<td>16.7</td>
<td>15.5</td>
</tr>
<tr>
<td>Downeast</td>
<td>13.3</td>
<td>12.0</td>
<td>12.6</td>
<td>9.8</td>
<td>13.3</td>
</tr>
<tr>
<td>Mid Coast</td>
<td>8.0</td>
<td>10.1</td>
<td>11.5</td>
<td>11.2</td>
<td>12.9</td>
</tr>
<tr>
<td>Penquis</td>
<td>16.0</td>
<td>14.9</td>
<td>12.3</td>
<td>11.4</td>
<td>12.9</td>
</tr>
<tr>
<td>Western</td>
<td>12.9</td>
<td>11.0</td>
<td>10.7</td>
<td>11.3</td>
<td>13.1</td>
</tr>
<tr>
<td>York</td>
<td>14.0</td>
<td>10.9</td>
<td>10.3</td>
<td>10.8</td>
<td>14.5</td>
</tr>
<tr>
<td>Maine</td>
<td>13.1</td>
<td>12.2</td>
<td>12.0</td>
<td>12.8</td>
<td>14.4</td>
</tr>
</tbody>
</table>

*Drug related deaths include all drug types (illicit and pharmaceutical)

Central and Cumberland have observed some of the highest rates of drug related overdose deaths.

In 2013-14, Central observed the highest average of drug related deaths, at **17.4** per 100,000 residents per year.

Source: Marci Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner
From 2011-2014, Maine EMS reported a **35% increase** in **overdoses** from **drugs/medications**.

*Drugs/medication include illicit drugs and prescription drugs. Data are not broken down further than this category.*

**Source:** Maine Emergency Medical Services
Distribution of EMS drug/medication* overdose responses, by age and type: 2014

EMS **overdose** responses due to **drugs/medication** were most common among Mainers between **26 and 55** year olds.

*Drugs/medication include illicit drugs and prescription drugs. Data are not broken down further than this category.*

<table>
<thead>
<tr>
<th>Percent by Age Group (n=2947)</th>
<th>&lt; 18</th>
<th>18 - 25</th>
<th>26 - 35</th>
<th>36 - 45</th>
<th>46 - 55</th>
<th>56 - 65</th>
<th>66 - 75</th>
<th>&gt; 75</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>7%</td>
<td>17%</td>
<td>22%</td>
<td>18%</td>
<td>19%</td>
<td>10%</td>
<td>4%</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Source:** Maine Emergency Medical Services
In 2014, **Cumberland** observed the highest rate of EMS overdose responses due to **drugs/medication** with an average of 32.7 responses per 10,000 residents.

<table>
<thead>
<tr>
<th>Health District</th>
<th>Number of EMS Overdose Responses per 10,000 Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumberland</td>
<td>32.7</td>
</tr>
<tr>
<td>York</td>
<td>25.2</td>
</tr>
<tr>
<td>Maine</td>
<td>22.2</td>
</tr>
<tr>
<td>Penquis</td>
<td>21.5</td>
</tr>
<tr>
<td>Central</td>
<td>19.9</td>
</tr>
<tr>
<td>Western</td>
<td>17.7</td>
</tr>
<tr>
<td>Downeast</td>
<td>17.3</td>
</tr>
<tr>
<td>Aroostook</td>
<td>14.1</td>
</tr>
<tr>
<td>Midcoast</td>
<td>13.5</td>
</tr>
</tbody>
</table>

*Drugs/medication include illicit drugs and prescription drugs. Data are not broken down further than this category.

Source: Maine Emergency Medical Services
Number of overdose EMS responses due to drug/medication* per 10,000 residents, by public health district: 2011-2014

*Drugs/medication include illicit drugs and prescription drugs. Data are not broken down further than this category.

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>14.7</td>
<td>16.8</td>
<td>16.1</td>
<td>14.1</td>
</tr>
<tr>
<td>Central</td>
<td>19.4</td>
<td>30.4</td>
<td>25.1</td>
<td>19.9</td>
</tr>
<tr>
<td>Cumber.</td>
<td>14.2</td>
<td>43.6</td>
<td>38.1</td>
<td>32.7</td>
</tr>
<tr>
<td>Downeast</td>
<td>18.9</td>
<td>18.0</td>
<td>17.0</td>
<td>17.3</td>
</tr>
<tr>
<td>Midcoast</td>
<td>17.9</td>
<td>21.4</td>
<td>18.6</td>
<td>13.5</td>
</tr>
<tr>
<td>Penquis</td>
<td>14.7</td>
<td>16.2</td>
<td>17.8</td>
<td>21.5</td>
</tr>
<tr>
<td>Western</td>
<td>12.5</td>
<td>21.4</td>
<td>19.7</td>
<td>17.7</td>
</tr>
<tr>
<td>York</td>
<td>21.2</td>
<td>20.6</td>
<td>23.6</td>
<td>25.2</td>
</tr>
<tr>
<td>Maine</td>
<td>16.5</td>
<td>26.1</td>
<td>24.2</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Source: Maine Emergency Medical Services

Most public health districts observed a **decrease** in the rates of EMS responses due to drugs/medication after 2012, with the exception of York and Penquis.
In 2014, there were a total of 829 EMS *naloxone* administrations statewide. **Males** of all ages and **males and females** aged 25 to 54 years received the highest percentage of administrations.

*Source: Maine Emergency Medical Services*
York, Androscoggin, Cumberland, and Washington counties observed the highest rates of EMS naloxone administrations.

<table>
<thead>
<tr>
<th>County</th>
<th>EMS Naloxone Administrations per 10,000 Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>York</td>
<td>9.0</td>
</tr>
<tr>
<td>Androscoggin</td>
<td>8.4</td>
</tr>
<tr>
<td>Cumberland</td>
<td>7.7</td>
</tr>
<tr>
<td>Washington</td>
<td>7.2</td>
</tr>
<tr>
<td>Maine</td>
<td>6.2</td>
</tr>
<tr>
<td>Kennebec</td>
<td>5.9</td>
</tr>
<tr>
<td>Penobscot</td>
<td>5.8</td>
</tr>
<tr>
<td>Somerset</td>
<td>5.7</td>
</tr>
<tr>
<td>Knox</td>
<td>5.5</td>
</tr>
<tr>
<td>Lincoln</td>
<td>4.7</td>
</tr>
<tr>
<td>Sagadahoc</td>
<td>3.7</td>
</tr>
<tr>
<td>Oxford</td>
<td>3.5</td>
</tr>
<tr>
<td>Piscataquis</td>
<td>2.9</td>
</tr>
<tr>
<td>Hancock</td>
<td>2.7</td>
</tr>
<tr>
<td>Aroostook</td>
<td>2.4</td>
</tr>
<tr>
<td>Waldo</td>
<td>2.0</td>
</tr>
<tr>
<td>Franklin</td>
<td>2.0</td>
</tr>
</tbody>
</table>

State average = 6.2

Source: Maine Emergency Medical Services
In 2014, one in three drug offense arrests made by MDEA involved heroin.

The number of drug offense arrests due to heroin more than quadrupled from 2010 to 2014.

*Cathinones are synthetic derivatives of an alkaloid that are used as drugs for their stimulating properties.

Source: Maine Drug Enforcement Agency, 2010-2014
During 2012-14, Knox county observed the highest rate of MDEA arrests related to heroin with a yearly average of 32.8 arrests per 100,000 residents.

**NOTE:** The MDEA, through its regional multi-jurisdictional task forces is the lead state agency in confronting drug trafficking crime.

**Source:** Maine Drug Enforcement Agency
During 2012-14, Knox, Lincoln, Hancock, and Waldo counties observed the highest rates of MDEA arrests related to pharmaceutical narcotics.

NOTE: The MDEA, through its regional multi-jurisdictional task forces is the lead state agency in confronting drug trafficking crime.

Source: Maine Drug Enforcement Agency
In 2013, local law enforcement arrests involving pharmaceutical narcotics were highest in Knox and Hancock counties.

Note: Arrests include sales, manufacturing, and possession of drugs. Although not shown, the majority of arrests made by state, county, and local law enforcement are for possession.

Source: Maine Department of Public Safety/Uniform Crime Report
In 2013, state, county, and local law enforcement arrests involving **opium, cocaine, and derivatives** were highest in Cumberland and Androscoggin counties.

**Note:** Arrests include sales, manufacturing, and possession of drugs. Although not shown, the majority of arrests made by state, county, and local law enforcement are for possession.

**Source:** Maine Department of Public Safety/Uniform Crime Report
From 2009-2013, the majority of drug related local law enforcement arrests involved marijuana.

Maine observed a 28% increase in arrests related to opium, cocaine, and derivatives from 2009-2013.

Arrests due to synthetic opioids have remained relatively stable from 2009-2013.

Note: Arrests include sales, manufacturing, and possession of drugs. Although not shown, the majority of arrests made by state, county, and local law enforcement are for possession. For UCR statistical purposes, “arrests” also include those persons cited or summonsed for criminal acts in lieu of actual physical custody.

Source: Maine Department of Public Safety/Uniform Crime Report
Number of pharmacy robberies in Maine: 2010–2014

From 2010-2014, pharmacy robberies in Maine remained relatively stable, with a spike in 2012.

Source: Maine Drug Enforcement Agency/Uniform Crime Report
From 2012-14, **Kennebec** County held the highest rate of **pharmacy robberies** reporting a yearly average of 7.4 robberies per 100,000 residents.

<table>
<thead>
<tr>
<th>County</th>
<th>Rate (per 100,000 residents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kennebec</td>
<td>7.4</td>
</tr>
<tr>
<td>Knox</td>
<td>5.0</td>
</tr>
<tr>
<td>Hancock</td>
<td>4.3</td>
</tr>
<tr>
<td>Franklin</td>
<td>3.3</td>
</tr>
<tr>
<td>Piscataquis</td>
<td>3.3</td>
</tr>
<tr>
<td>Sagadahoc</td>
<td>2.9</td>
</tr>
<tr>
<td>Penobscot</td>
<td>2.8</td>
</tr>
<tr>
<td>Cumberland</td>
<td>2.6</td>
</tr>
<tr>
<td>Maine</td>
<td>2.3</td>
</tr>
<tr>
<td>Somerset</td>
<td>2.2</td>
</tr>
<tr>
<td>Washington</td>
<td>1.9</td>
</tr>
<tr>
<td>Waldo</td>
<td>1.5</td>
</tr>
<tr>
<td>York</td>
<td>1.3</td>
</tr>
<tr>
<td>Oxford</td>
<td>1.0</td>
</tr>
<tr>
<td>Androscoggin</td>
<td>0.9</td>
</tr>
<tr>
<td>Aroostook</td>
<td>0.0</td>
</tr>
<tr>
<td>Lincoln</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*State average=2.2*

**Source:** Maine Drug Enforcement Agency/Uniform Crime Report
In 2014, there were a total of **961** reports of **drug affected baby notifications**.

From 2005 to 2014, the number of drug affected baby notifications increased by **480%**.

*This measure reflects the number of infants born in Maine where a healthcare provider reported to OCFS that there was reasonable cause to suspect the baby may be affected by illegal substance abuse or demonstrating withdrawal symptoms resulting from prenatal drug exposure (illicit or prescribed appropriately under a physician’s care for the mother’s substance abuse treatment) or who have fetal alcohol spectrum disorders.*

**Source:** Office of Child and Family Services (OCFS), Maine Automated Child Welfare Information System (MACWIS).
Average rate of drug affected baby notifications per 10,000 residents, by county: 2012-14

From 2012-14, Penobscot and Washington reported the highest rates of drug affected baby notifications.

Since 2006-08, Penobscot has observed the highest rate of drug affected baby notifications.

Impact Summary

• Drug overdose deaths increased by 34% from 2011 to 2014.
• One in three drug OD’s involved Benzodiazepines, one in four involved heroin, and one in five involved fentanyl.
• Fentanyl related deaths increased by 377% from 2013 to 2014
• From 2013 to 2014, the number of drug overdose deaths involving pharmaceutical drugs increased by 77% while those due to illicit drugs increased by 60%.
• Cumberland and York had the highest rates of EMS overdose responses due to drugs/medication.
• Majority of EMS naloxone admins were among males between 25 and 54.
• Rates of drug related OD’s are highest in Washington, Androscoggin, Cumberland, Kennebec, and Somerset counties.
• Majority of MDEA heroin and opioid arrests are from Midcoast and Downeast.
• The number of drug offense arrests due to heroin more than quadrupled from 2010 to 2014.
• Highest rate of local law enforcement arrests related to opium, cocaine, and derivatives were observed in Cumberland and Androscoggin.
• Kennebec had the highest rate of pharmacy robberies in recent years.
• From 2005 to 2014, the number of drug affected baby notifications increased by 480%; Penobscot and Washington counties reported the highest rates.
Rates of Use
In 2013, more than 1 out of 10 high school students reported misusing a Rx drug in their lifetime.

Rates for lifetime as well as past month misuse of prescription drugs decreased from 2009 to 2013.

Source: Maine Integrated Youth health Survey
Percent of high school students who have taken prescription drugs not prescribed to them by a doctor in past 30 days, by public health district: 2009-2013

Rates across public health districts in Maine are relatively consistent.

<table>
<thead>
<tr>
<th>District</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Central</td>
<td>8%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Cumber.</td>
<td>8%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Downeast</td>
<td>9%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Midcoast</td>
<td>9%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Penquis</td>
<td>9%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Western</td>
<td>9%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>York</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Maine</td>
<td>9%</td>
<td>7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: Maine Integrated Youth health Survey
In 2012-13, about **1 in 10** young adults **18 to 25** reported misusing **pain relievers** in the past year.

Rates among **18 to 25** year olds group have been **declined** from **2008-2009** to **2012-2013**.

Source: National Survey on Drug Use and Health
Percent of adults who used prescription pain relievers in past year for nonmedical use, by age group and public health district: 2010-12

Across public health districts, rates are consistently higher among young adults 18-25 years of age.

Source: National Survey on Drug Use and Health
Illicit drug* use other than marijuana in the past month, by age group and state: 2012-13

*Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total U.S.</th>
<th>Northeast</th>
<th>Maine</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 or Older</td>
<td>3.4%</td>
<td>3.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>12-17</td>
<td>3.4%</td>
<td>2.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>18-25</td>
<td>6.9%</td>
<td>7.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td>26 or Older</td>
<td>2.8%</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>18 or Older</td>
<td>3.4%</td>
<td>3.1%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

Illicit drug use (other than marijuana) among 18 to 25 year olds was higher in Maine compared to the Northeast and the U.S.

Source: National Survey on Drug Use and Health
Illicit drug* use other than marijuana in the past month among 18-25 year olds in Maine: 2012-13

Illicit drug use (other than marijuana) among 18 to 25 year olds has been declining since 2009-10.

*Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically.

Source: National Survey on Drug Use and Health
• In 2013, 12% of high school students reported misusing Rx drugs in their lifetime.
• Rates of illicit drugs and Rx misuse are higher among younger adults 18 to 25.
• Maine appears to have a higher illicit drug (other than MJ) use rate among 18 to 25 year olds compared to the Northeast and Nation (rates have decreased over the past several years).
Contributing Factors
(e.g. availability, accessibility)
In 2014, there was an average of 60.4 prescribed narcotic pills per capita in Maine. Somerset and Kennebec counties observed the highest rates of 76.8 and 80.7 pills per capita, respectively.

Source: Prescription Monitoring Program
Dispensed quantity of narcotics per capita, by county: 2010-2014*

* The increase observed in 2014 in number of narcotic pills prescribed per capita was due in part to the inclusion of the previously unscheduled drug Tramadol (as of 8/18/2014) as well as the inclusion of data submitted via the Veterans Administration (as of 10/31/2014). 2014 data shown includes only two months of VA data therefore rates are expected to increase in coming years.

Source: Maine Prescription Monitoring Program
Substances most frequently requested for verification by non-law enforcement, by drug type: (NNEPC, 2014)

In 2014, the poison center received 5,611 (41%) calls relating to the verification of opioids.

Source: Northern New England Poison Control Center
Number of poisoning calls related to verification of opioids reported to New England Poison Center (per 10,000 residents), by county: 2013-14

During 2013-14, Washington county observed the highest rate of poison center calls relating to opioid verification with a yearly average of 104.8 calls per 10,000 residents.

Source: Northern New England Poison Center
Number of poisonings reported to Northern New England Poison Center 10,000 residents, by drug type and public health district: 2013-14

Central and Penquis districts observed the highest rates of poison center calls for the verification of opioids, benzodiazepines, and stimulants/street drugs.

<table>
<thead>
<tr>
<th>Public Health District</th>
<th>Opioids</th>
<th>Benzodiazepines</th>
<th>Stimulants/street drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>38.6</td>
<td>14.3</td>
<td>7.3</td>
</tr>
<tr>
<td>Central</td>
<td>67.7</td>
<td>35.1</td>
<td>20.3</td>
</tr>
<tr>
<td>Cumber.</td>
<td>31.0</td>
<td>26.7</td>
<td>9.6</td>
</tr>
<tr>
<td>Downeast</td>
<td>54.3</td>
<td>30.5</td>
<td>9.8</td>
</tr>
<tr>
<td>Midcoast</td>
<td>42.3</td>
<td>21.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Penquis</td>
<td>66.2</td>
<td>43.4</td>
<td>19.5</td>
</tr>
<tr>
<td>Western</td>
<td>61.8</td>
<td>29.4</td>
<td>10.2</td>
</tr>
<tr>
<td>York</td>
<td>31.7</td>
<td>14.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Maine</td>
<td>48.1</td>
<td>27.5</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Source: Northern New England Poison Center
More than **one in three** (35%) of Maine parents felt that their teen would be able to **access Rx medications** (that were not prescribed to the child) at **home** **without** their parents’ knowledge.

Source: Maine Parent Survey administered by Pan Atlantic for the Maine Office of Substance of Abuse and Mental Health Services.
Parent perception of teen accessibility of prescription drugs at home without parental knowledge, by public health district: 2015

Cumberland and York reported the highest rates of parents who felt their teens could access Rx drugs at home.

Source: Maine Parent Survey
U.S. residents aged 12 and older who used pain relievers nonmedically, by point of access: 2012-13

- Obtained from a friend or relative: 53%
- Bought from a friend or relative: 11%
- Prescribed by a doctor: 21%
- Got from a drug dealer or stranger: 4%
- Other: 11%

Of those who reported misusing pain relievers, over a half (64%) obtained them from a relative or friend.

Source: National Survey on Drug Use and Health
• For the past couple of years, Somerset and Kennebec have observed the highest rates of narcotics prescribed per person.
• 41% of calls to the poison center for purposes of verification were related to opioids; 25% were related to Benzodiazepines.
• Washington, Androscoggin, and Somerset had the highest rates of poison center calls related to the verification of opioids.
• Central and Penquis districts observed the highest rates of poison center calls for the verification of opioids, benzodiazepines, and stimulants/street drugs.
• A third of parents felt their teen could access meds in their home without permission; rates were highest in Cumberland and York.
• The majority of people who misuse pain relievers obtain them from a friend or relative.
Treatment
In 2012-2013, **8% of 18 to 25 year olds in Maine are classified as needing, but not receiving treatment.**

**NOTE:** Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs, but not receiving treatment for an illicit problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Criteria is based on Diagnostic and Statistical Manual standards.

Source: National Survey on Drug Use and Health
During 2012-14, Maine observed a yearly rate of 31.6 primary admissions due to **alcohol** per 10,000 residents, followed by 27.2 admissions per 10,000 residents due to **synthetic opioids**, and 15.1 admissions per 10,000 residents due to **heroin**.
Average rate (per 10,000 residents) of adult primary treatment admissions related to heroin/morphine: 2012-14

In 2012-14, **Androscoggin** had the highest yearly rate of primary treatment admissions related to heroin/morphine.

Source: Treatment Data System, 2010-2014
The proportions of primary treatment admission due to heroin/morphine have increased substantially since 2010 in most districts.

In 2014, Cumberland, York, and Central districts had the highest rates.

<table>
<thead>
<tr>
<th>District</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Central</td>
<td>7%</td>
<td>8%</td>
<td>10%</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>11%</td>
<td>15%</td>
<td>20%</td>
<td>27%</td>
<td>38%</td>
</tr>
<tr>
<td>Downeast</td>
<td>4%</td>
<td>6%</td>
<td>7%</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td>Midcoast</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>Penquis</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
<td>13%</td>
<td>22%</td>
</tr>
<tr>
<td>Western</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
<td>12%</td>
<td>20%</td>
</tr>
<tr>
<td>York</td>
<td>7%</td>
<td>10%</td>
<td>16%</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>Maine</td>
<td>7%</td>
<td>9%</td>
<td>11%</td>
<td>17%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: Treatment Data System, 2010-2014
During 2012-14, **Washington** and **Androscoggin** counties observed the highest rates of primary treatment admissions related to synthetic opioids.

Source: Treatment Data System
Primary treatment admissions (18+) related to synthetic opioids, by public health district and drug type: 2010-2014

The proportions of primary treatment admissions due to synthetic opioids have steadily decreased since 2011 in most districts.

In 2014, Downeast, Penquis, and Midcoast had the highest rates.

<table>
<thead>
<tr>
<th>District</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>31%</td>
<td>36%</td>
<td>31%</td>
<td>24%</td>
<td>23%</td>
</tr>
<tr>
<td>Central</td>
<td>33%</td>
<td>34%</td>
<td>38%</td>
<td>38%</td>
<td>30%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>26%</td>
<td>29%</td>
<td>27%</td>
<td>24%</td>
<td>17%</td>
</tr>
<tr>
<td>Downeast</td>
<td>43%</td>
<td>48%</td>
<td>45%</td>
<td>42%</td>
<td>35%</td>
</tr>
<tr>
<td>Midcoast</td>
<td>33%</td>
<td>35%</td>
<td>38%</td>
<td>34%</td>
<td>33%</td>
</tr>
<tr>
<td>Penquis</td>
<td>39%</td>
<td>42%</td>
<td>41%</td>
<td>39%</td>
<td>33%</td>
</tr>
<tr>
<td>Western</td>
<td>20%</td>
<td>29%</td>
<td>39%</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>York</td>
<td>21%</td>
<td>22%</td>
<td>19%</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>Maine</td>
<td>30%</td>
<td>33%</td>
<td>34%</td>
<td>31%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Treatment Data System, 2010-2014
During 2012-14, Knox observed the highest rate of primary treatment admissions due to methadone/buprenorphine with a yearly average of 11.9 admissions per 10,000 residents.

Source: Treatment Data System

State average: 4.6
Primary heroin/morphine treatment admissions, by age group: 2014

Almost **half** (47%) of primary admissions for **heroin/morphine** were among those ages **26 to 34** years.

Source: Maine Treatment Data System
Primary treatment admissions due to heroin/morphine, methadone/buprenorphine, synthetic opioids, and stimulants were most common among those 26 to 34 years old.
Of those with a primary admission of heroin/morphine, 36% had a secondary admission related to **synthetic opioids**, 17% related to **cocaine**, and 14% related to **marijuana**.
Secondary admissions for substance use treatment, by primary drug: 2014

Of those with a primary admission of cocaine/crack admissions, 26% had a secondary admission of heroin/morphine.

Source: Maine Treatment Data System
Treatment Summary

- 8% of 18 to 25 year olds in Maine are perceived as needing, but not receiving treatment (2012-13).
- In 2014, about 1 in 4 (24%) primary treatment admissions were related to Heroin; up from 7% in 2010.
- Androscoggin, Cumberland, York, and Kennebec had the highest rate of adult primary treatment admissions related to heroin.
- Washington and Androscoggin counties observed the highest rates of primary treatment admissions related to synthetic opioids.
- Washington county’s primary admission rate for synthetic opioids was more than twice the statewide rate.
- Knox observed the highest rate of primary treatment admissions due to methadone/buprenorphine.
- Primary treatment admissions due to synthetic opioids and/or heroin/morphine were most common among 26 to 34 year olds.
- Almost half (47%) of primary admissions for heroin/morphine were among those ages 26 to 34 years old.
Co-occurring Disorders
(substance use and mental health)
Substance Dependence or Abuse in past year among U.S. adults (18+), by level of mental illness: 2014

18% of adults with any mental illness qualified as being dependent on substances and/or abusing substances.

Adults with serious mental illness were nearly 4x as likely to be dependent on and/or abuse substances when compared to those with NO mental illness.
Past year illicit drug use among U.S. citizens 12 to 17, by past year major depressive episode: 2014

12 to 17 year olds who had a major depressive episode within the past year were 2x as likely to use illicit drugs within the past year.

Source: National Survey on Drug Use and Health
Almost six out of ten admissions for substance abuse treatment also had a previously diagnosed mental health disorder. This rate has steadily increased since 2010.

Source: Maine Treatment Data System
Mental health disorders among substance abuse treatment admissions, by primary drug type: 2014

Co-occurring mental health disorders were most common among primary admissions related to benzodiazepines and stimulants.

Source: Maine Treatment Data System
From 2009 to 2013, the percentage of adults served through SMHA who had a **co-occurring** mental health and substance use disorder increased by 24 points.

In 2014, almost **half** (42%) of adults served through SMHA had a **co-occurring** mental health and substance use disorder.

*Source: Center for Mental Health Services, Uniform Reporting System*
Co-occurring Summary

• Adults with any mental illness are three times as likely to abuse and/or qualify as dependent on substances.
• Adolescents experiencing a major depressive episode in the past year were twice as likely to use illicit drugs within the past year.
• Almost 6 out of 10 admissions for substance abuse treatment also had a previously diagnosed mental health disorder; this rate has steadily increased since 2010.
• Co-occurring mental health disorders were most common among primary admissions related to benzodiazepines and stimulants.
• Nearly half of adults served in Maine SMHA’s also had a substance use disorder.

*For a more in depth report on mental health data in Maine please reference the SEOW Report: Mental Health in Maine*
Appendix A (Data Sources)

- Behavioral Risk Factor Surveillance System (BRFSS)
- Maine Department of Public Safety (DPS), Bureau of Highway Safety (BHS), Maine Department of Transportation (MDOT)
- Maine Department of Public Safety (DPS), Uniform Crime Reports (UCR)
- Maine Drug Enforcement Agency (MDEA)
- Maine Emergency Medical Services (EMS)
- Maine Integrated Youth Health Survey (MIYHS)
- Maine Office of the Chief Medical Examiner
- Marci Sorg, Margaret Chase Smith Policy Center at the University of Maine
- National Survey on Drug Use and Health (NSDUH)
- Northern New England Poison Center (NNEPC)
- Office of Child and Family Services (OCFS), Maine Automated Child Welfare Information System (MACWIS)
- Office of Data, Research and Vital Statistics (ODRVS)
- SAMHS Parent Survey (administered by Pan Atlantic)
- Prescription Monitoring Program (PMP)
- Treatment Data System (TDS)/WITS Substance Abuse Treatment Data System (WITS)
- 2-1-1 Maine

*For more information including a source description and source contact information please visit www.maineseow.com
Contact

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Timothy.Diomede@maine.gov
www.maineseow.com