Prevalence of non-medical drug use by drug type and state, Survey of Non-Medical Use of Prescription Drugs Program (NMURx)

APHA - October 2021
1. The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

   Arundel Metrics’ work on America’s Health Rankings is entirely underwritten by United Health Foundation. This analysis was conducted as part of that project.

   Rocky Mountain Poison and Drug Safety provided data for this project, but received no funding.

2. My presentation will include discussion of “off-label” use of the following:

   None
Learning Outcomes

• Describe which non-medical drug use behaviors were most prevalent in the nation.
• Describe which non-medical drug use behaviors had the highest disparity across states

Data Sources

• Denver Health and Hospital Authority, RADARS® System Survey of Non-Medical Use of Prescription Drugs Program
• U.S. Census Bureau, American Community Survey 5-year estimates

Interactive data

• https://www.americashealthrankings.org/explore/annual/measurement/drug_use/state/ALL
Non-medical drug use (NMU):
• Use of a prescription or non-prescription drug without a doctor’s guidance
• Cannabis is treated separately

Data stratification by drug types
• Prescription drugs - opioids
• Prescription drugs – non-opioids
• Illicit drugs – opioids
• Illicit drugs – non-opioids
• Cannabis

Opioids include heroin, synthetics such as fentanyl and common prescriptions drugs like oxycodone, hydrocodone, codeine, morphine, etc.

Non-opioids include cocaine, benzodiazepines, amphetamines, etc.
Methods

• Data from Denver Health & Hospital Authority’s RADARS® System, NMURx Program, 2020.
• Prevalence and 95% confidence intervals were calculated based on rates per 100,000 adults using 2018 American Community Survey 5-year Estimates.
• Estimates were suppressed if the numerator was < 5, if n < 25 in a subgroup, and if the estimated percentage was <0.00005.
National Findings – by state

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Dakota</td>
<td>6.4</td>
</tr>
<tr>
<td>2</td>
<td>Minnesota</td>
<td>6.9</td>
</tr>
<tr>
<td>3</td>
<td>Nebraska</td>
<td>7.3</td>
</tr>
<tr>
<td>4</td>
<td>Vermont</td>
<td>8.2</td>
</tr>
<tr>
<td>5</td>
<td>Maine</td>
<td>8.3</td>
</tr>
<tr>
<td>5</td>
<td>Maryland</td>
<td>8.3</td>
</tr>
<tr>
<td>5</td>
<td>New Hampshire</td>
<td>8.3</td>
</tr>
<tr>
<td>8</td>
<td>New Jersey</td>
<td>8.5</td>
</tr>
<tr>
<td>9</td>
<td>Massachusetts</td>
<td>8.6</td>
</tr>
<tr>
<td>10</td>
<td>Wisconsin</td>
<td>8.8</td>
</tr>
<tr>
<td>39</td>
<td>Colorado</td>
<td>13.4</td>
</tr>
<tr>
<td>39</td>
<td>Kentucky</td>
<td>13.4</td>
</tr>
<tr>
<td>39</td>
<td>Montana</td>
<td>13.4</td>
</tr>
<tr>
<td>42</td>
<td>Washington</td>
<td>13.5</td>
</tr>
<tr>
<td>43</td>
<td>Utah</td>
<td>13.6</td>
</tr>
<tr>
<td>44</td>
<td>Arizona</td>
<td>13.7</td>
</tr>
<tr>
<td>45</td>
<td>West Virginia</td>
<td>13.8</td>
</tr>
<tr>
<td>46</td>
<td>Georgia</td>
<td>14.5</td>
</tr>
<tr>
<td>47</td>
<td>Oregon</td>
<td>15.3</td>
</tr>
<tr>
<td>48</td>
<td>Florida</td>
<td>15.5</td>
</tr>
<tr>
<td>49</td>
<td>Oklahoma</td>
<td>15.7</td>
</tr>
<tr>
<td>50</td>
<td>Nevada</td>
<td>16.0</td>
</tr>
</tbody>
</table>

U.S. 11.9%
National Findings – by drug group

Non-medical Drug Use

- Overall: 11.9
- Illicit - Opioids: 0.9
- Illicit - non-opioids: 5.8
- Prescription Opioids: 5.7
- Prescription - non-opioids: 5.6
State Findings – by drug group

← Illicit – non-opioids

Illicit – opioids →

← Prescription – non-opioids

Prescription – opioids →
## Widest disparities between states

<table>
<thead>
<tr>
<th>Measure</th>
<th>Highest Prevalence</th>
<th>Lowest Prevalence</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-medical Drug Use</td>
<td>Nevada (16.0%)</td>
<td>South Dakota (6.4%)</td>
<td>2.5x</td>
</tr>
<tr>
<td>Illicit – Opioids (35 states)</td>
<td>Delaware (3.4%)</td>
<td>Missouri (0.2%)</td>
<td>17.0x</td>
</tr>
<tr>
<td>Illicit – non-opioids</td>
<td>Rhode Island (8.8%)</td>
<td>Wisconsin (2.4%)</td>
<td>3.7x</td>
</tr>
<tr>
<td>Prescription – opioids (49 states)</td>
<td>District of Columbia (12.2%)</td>
<td>New Hampshire (2.0%)</td>
<td>6.1x</td>
</tr>
<tr>
<td>Prescription – non-opioids (46 states)</td>
<td>Utah (8.2%)</td>
<td>Nebraska (2.3%)</td>
<td>3.6x</td>
</tr>
<tr>
<td>Cannabis</td>
<td>Oregon (40.6%)</td>
<td>Iowa (11.4%)</td>
<td>3.6x</td>
</tr>
</tbody>
</table>
National Findings – by race/ethnicity

Non-medical Drug Use

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Non-medical Drug Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>11.9</td>
</tr>
<tr>
<td>AIAN</td>
<td>15.7</td>
</tr>
<tr>
<td>Asian</td>
<td>9.9</td>
</tr>
<tr>
<td>Black</td>
<td>8.5</td>
</tr>
<tr>
<td>HPI</td>
<td>22.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.3</td>
</tr>
<tr>
<td>Other</td>
<td>24.7</td>
</tr>
<tr>
<td>White</td>
<td>12.4</td>
</tr>
</tbody>
</table>

AIAN: American Indian / Alaska Native
HPI: Hawaiian / Pacific Islander
National Findings — by gender, by education

Non-medical Drug Use

- Overall: 11.9
- Female: 10.2
- Male: 13.7
- HS Grad: 7.8
- Some College: 14.7
- College: 16.6
National Findings – by income

Non-medical Drug Use

<table>
<thead>
<tr>
<th>Income</th>
<th>Non-medical Drug Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>11.9</td>
</tr>
<tr>
<td>&lt; $25K</td>
<td>16.9</td>
</tr>
<tr>
<td>$25-$75k</td>
<td>15.8</td>
</tr>
<tr>
<td>&gt; $75k</td>
<td>8</td>
</tr>
</tbody>
</table>
Neighboring States

- Arizona, Nevada and Utah
- Oregon and Washington
- Minnesota, South Dakota and Wisconsin
Select State Findings – by race/ethnicity

Non-medical Drug Use

AIAN: American Indian / Alaska Native
HPI: Hawaiian / Pacific Islander
National Findings – by gender, by education

Non-medical Drug Use

- Overall
- Female
- Male
- HS Grad
- Some College
- College

NMU <-> US

- Nevada
- Arizona
- Utah

AMERICA’S HEALTH RANKINGS
UNITED HEALTH FOUNDATION
Select State Findings – by race/ethnicity

Non-medical Drug Use

US
Oregon
Washington

AIAN: American Indian / Alaska Native
HPI: Hawaiian / Pacific Islander
National Findings – by gender, by education

Non-medical Drug Use

Overall | Female | Male | HS Grad | Some College | College

NMU US
Oregon
Washington
Select State Findings – by race/ethnicity

Non-medical Drug Use

AIAN: American Indian / Alaska Native
HPI: Hawaiian / Pacific Islander
National Findings — by gender, by education

Non-medical Drug Use

Overall: US, Minnesota, South Dakota, Wisconsin
Female: US, Minnesota, South Dakota, Wisconsin
Male: US, Minnesota, South Dakota, Wisconsin
HS Grad: US, Minnesota, South Dakota, Wisconsin
Some College: US, Minnesota, South Dakota, Wisconsin
College: US, Minnesota, South Dakota, Wisconsin
Summary

- Described non-medical drug use behaviors
- Described disparity across states and income, education, gender and racial/ethnic subpopulations

- Each state is unique, even among neighboring states
- Drug use varies within states
Thanks

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- Sarah Milder, MPH, Arundel Metrics
- Tom Eckstein, MBA, Arundel Metrics

Special thanks to RMPDS for the use of their data in this analysis. These data are available at https://www.americashealthrankings.org/explore/annual/measure/drug_use/state/ALL