Substance Use Involved Deaths in New Mexico

NMDOH Substance Use Epidemiology Section
- Hayley Peterson
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OSAP Recipients Meeting - February 2022
Years of Potential Life Lost (before age 75) for 15 Leading Causes of Death, NM 2020

4. Unintentional injuries
2. Cancer
3. Coronavirus Disease 2019 (COVID-19)
1. Heart disease
10. Suicide
8. Chronic liver disease and cirrhosis
14. Homicide
7. Diabetes mellitus
6. Cerebrovascular disease (stroke)
5. Chronic lower respiratory diseases
11. Influenza and pneumonia
13. Septicemia
12. Kidney Disease
9. Alzheimer's disease
15. Parkinson's disease

Source: NM IBIS 1/13/2022
Emergency Department Syndromic Surveillance

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Emergency Department Syndromic Surveillance (EDSS) Overview

• Originally intended for infectious disease surveillance
• In recent years, it has been utilized to monitor ED visits related to nonfatal drug overdose.
  • Has the advantage of providing more timely data
• Caveats to consider:
  • Stability of the number of reporting facilities
  • Does not include federal or IHS facilities
  • Intended to provide a rough estimate of disease burden rather than an exact measure
  • Toxicology not consistently performed
Number of Hospitals Reporting in New Mexico EDSS Data by Quarter, 2016Q1-2021Q3

Data source: NMDOH Syndromic Surveillance ED Files
Total All-Cause ED Visits by Month, New Mexico

Data source: NMDOH Syndromic Surveillance ED Files
*These are not individual level data i.e. a person may visit the ED more than once in the specified time period.
Total Drug Overdose Related ED Visits by Month, New Mexico

Data source: NMDOH Syndromic Surveillance ED Files
*Total Overdose visits include any overdose due to opioids, amphetamines, benzodiazepines, or cocaine based on finding those drug poisoning ICD-10-CM & ICD-9-CM codes in any diagnosis field.
**These are not individual level data i.e. a person may visit the ED more than once in the specified time period.
Total Drug Overdose Related ED Visit Rate per 10,000 by Month, New Mexico

Data source: NMDOH Syndromic Surveillance ED Files

*Total Overdose visits include any overdose due to opioids, amphetamines, benzodiazepines, or cocaine based on finding those drug poisoning ICD-10-CM & ICD-9-CM codes in any diagnosis field.

**These are not individual level data i.e. a person may visit the ED more than once in the specified time period.
Estimated Drug Overdose Death Rates by State, 2019

Rate per 100,000 population, estimated from NCHS/NVSS provisional data through Dec 2019
Source: NCHS/NVSS provisional data
Drug Overdose Death Rate by State, 2020

Rate per 100,000 population, estimated from NCHS/NVSS provisional data through Dec 2020
Source: NCHS/NVSS provisional data
Drug Overdose Death Rates New Mexico and United States, 1990-2020

Rates are age adjusted to the US 2000 standard population
Most Common Drugs in Drug Overdose Death, NM, 2020, vs 2015

Drug involvements in overdose deaths

METHAMPHETAMINE
FENTANYL
HEROIN
COCAINE
OXYCODONE
METHADONE
ALPRAZOLAM
HYDROCODONE
DIAZEPAM
GABAPENTIN
MORPHINE
BUPRENORPHINE
CHLORDIAZEPXIDE

Many deaths involve more than one drug
Source: NM DOH BVRHS death data
Percent of Overdose Deaths Involving Fentanyl and Analogues, NM 2013-2020

Source: NMDOH Bureau of Vital Records and Health Statistics death data
Percent of Overdose Deaths Involving Non-Fentanyl Rx Opioids, NM 2013-2020

Source: NMDOH Bureau of Vital Records and Health Statistics death data
Overdose Deaths by Month and Year, NM 2019-2020 and Provisional 2021

Source: NMDOH Bureau of Vital Records and Health Statistics death data
*2021 data is provisional to 2/9/22 and subject to change
Drug Overdose Death Rates and Count by County, NM, 2020

Rates are age adjusted to the US 2000 standard population
Source: NM BVRHS death data; GPS population estimates
Drug Overdose Death Rates by Age, NM, 2016-2020

Source: NM DOH BVRHS death data; UNM GPS population estimates
Drug Overdose Death Rates by Race/Ethnicity, NM, 2016-2020

Death rates are age-adjusted to the US 2000 standard population
Source: NM DOH BVRHS death data
Drug Overdose Death Rates by Region & Year, NM, 2016-2020

Deaths per 100,000 pop

2016  2017  2018  2019  2020

Northwest  Northeast  Metro  Southeast  Southwest  New Mexico

Death rates are age-adjusted to the US 2000 standard population.
## Substances in Methamphetamine-involved Drug Overdose Death, 2020

<table>
<thead>
<tr>
<th>Methamphetamine</th>
<th>None (no 3rd drug)</th>
<th>Cocaine</th>
<th>Fentanyl</th>
<th>Treatment Opioids</th>
<th>Pain Opioids</th>
<th>Benzo-diazepines</th>
<th>Anti-depressants</th>
<th>OTC Drugs</th>
<th>Total</th>
<th>% Alcohol Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (Meth alone)</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>119 5%</td>
</tr>
<tr>
<td>Heroin</td>
<td>40</td>
<td>10</td>
<td>42</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>104</td>
<td>13%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>17</td>
<td>35%</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>38</td>
<td></td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>52</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Treatment Opioids</td>
<td>12</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td>Pain opioids</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>OTC Drugs</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>222</td>
<td>10</td>
<td>50</td>
<td>9</td>
<td>13</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>318</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Substances include alcohol
Drug types are not mutually exclusive
Source: NMDOH Bureau of Vital Records and Health Statistics death data
## Substances in Fentanyl-involved Drug Overdose Death, 2020

<table>
<thead>
<tr>
<th>Fentanyl</th>
<th>Methamphetamine</th>
<th>Cocaine</th>
<th>Treatment Opioids</th>
<th>Pain Opioids</th>
<th>Benzo-diazepines</th>
<th>Anti-depressants</th>
<th>OTC Drugs</th>
<th>Total</th>
<th>% Alcohol Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (Fentanyl alone)</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>74</td>
<td>34%</td>
</tr>
<tr>
<td>Heroin</td>
<td>19</td>
<td>47</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>81</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>38</td>
<td>8</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>60</td>
<td>13%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>31</td>
<td></td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>49</td>
<td>31%</td>
</tr>
<tr>
<td>Treatment Opioids</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>Pain opioids</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>25%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>18</td>
<td>33%</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>OTC Drugs</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>47</strong></td>
<td><strong>13</strong></td>
<td><strong>8</strong></td>
<td><strong>20</strong></td>
<td><strong>25</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong></td>
<td><strong>311</strong></td>
</tr>
</tbody>
</table>

*Substances include alcohol
Drug types are not mutually exclusive
Source: NMDOH Bureau of Vital Records and Health Statistics death data
• Record level of overdose deaths
  • Count = 801 (2019 = 605)
  • Rate = 39.7 (2019 = 26.2)
• Driven by illicit substances
  • Fentanyl
  • Methamphetamine
• Overdose death rate due to prescription opioids is decreasing
• Overdose deaths appear to have a seasonality trend
• Close to half of all the counties in New Mexico have death rates equal to or higher than the state rate
• Males between 35-44 had the largest rate of overdose deaths, 25-34 largest increase in from 2019-2020
• Blacks had shown an extremely significant increase in overdose deaths
- Total Distribution doubled each year through 2019
- In 2020, there was a 20% decrease
- In 2021, current reported data has shown a 10% increase. This will increase as final data is received.

Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.
*2021 Data is not complete
The data DOH reports is collected from 3 sources:
- Declines in distribution 2020-Q2 though 2021-Q1
- Medicaid has decreased slightly, is the largest distributing source

Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data. *2021-Q4 data is not complete
In 2019, the distribution was slightly more equal

In 2020, Medicaid increased to 51%

So far in 2021, Medicaid claims are still the largest source for naloxone distribution

Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.

*2021 Data is not complete
Since 2015, reporting of reversals was steadily increasing.

There was about a -29% in reversals reported 2019 to 2020.

2021 has shown a 9% increase.

Roughly 95% of reversals are reported through harm reduction services.

*Reversals are defined as a patient outcome of "OK"

**Reversals are not individual level data i.e. the same person may have been reversed more than once.
Doses of Naloxone Distributed and Reported Reversals, NM, 2015-2021*

Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.

*2021 Data is not complete
Alcohol Related Deaths New Mexico, 2020

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Alcohol-related Death Rate*, NM, by Cause, 2016-2020

*NM Rates have been age-adjusted to the standard U.S. 2000 population
Source: NM Vital Records and Health Statistics; UNM/GPS; CDC ARDI v3
Alcohol-related Death Rate*, NM, by Sex, 2016-2020

*NM Rates have been age-adjusted to the standard U.S. 2000 population
Source: NM Vital Records and Health Statistics; UNM/GPS; CDC ARDI v3
Alcohol-related Death Rate*, NM, 2010-2020

*NM Rates have been age-adjusted to the standard U.S. 2000 population
Source: NM Vital Records and Health Statistics; UNM/GPS; CDC ARDI v3
Questions?

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