The Intersection of Opioid Abuse, Overdose, and Suicide: Understanding the Connections

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The views expressed in this training do not necessarily represent the views, policies, and positions of the Substance Abuse and Mental Health Services Administration or the U.S. Department of Health and Human Services.
Today’s Facilitators

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Objectives

- Describe the relationship between opioid abuse, opioid use disorder, and suicidality

- Define action steps for accessing state-, tribe-, jurisdiction-, and community-level data on suicidal behaviors, opioid abuse, and overdose

- Identify populations at increased risk for overdose and suicide death, and factors that contribute to these risks
What questions would YOU like to see answered today?
National and Local Data on Opioid Abuse, Overdose, and Suicide
**Opioid Abuse: Youth and Adults (2016)**

11.8 Million People (≥12) Abused Opioids in 2016

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
<th>Percentage of Opioid Abusers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.5 Million Abused Prescription Opioids</td>
<td>948,000</td>
<td>8%</td>
</tr>
<tr>
<td>(97.4% of all people who abused opioids)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>641,000 Used Heroin and Abused Prescription Opioids</td>
<td></td>
<td>5.4%</td>
</tr>
<tr>
<td>(8% of all people who abused opioids)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2017
Suicidal Behaviors: Adults (2016)

- 9,829,000 Serious Thoughts of Suicide¹
- 1,319,000 Suicide Attempts¹
- 44,965 Deaths²

¹NSDUH, 2017; ²Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2017
Suicide by Method (2015)

Means of Suicide, United States\(^3\)

- **50%** Firearms
- **27%** Suffocation
- **15%** Poisoning
- **8%** Other

Poisoning Suicides by Substance – 27 States (2015)\(^3\)

- Other
- Opioids
- Benzodiazepines
- Antipsychotics

\(^3\)Centers for Disease Control and Prevention, National Violent Death Reporting System (NVDRS), 2016.
Drug, Alcohol and Suicide Death Rates: Race (2016)

Alcohol-induced, Drug-induced, and Suicide* Death Rates by Race (All Ages)\(^4\)

<table>
<thead>
<tr>
<th>Race</th>
<th>Alcohol-induced</th>
<th>Drug-induced</th>
<th>Suicides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American or Alaskan Native</td>
<td>30.5</td>
<td>16.8</td>
<td>13.5</td>
</tr>
<tr>
<td>White</td>
<td>10.2</td>
<td>23.3</td>
<td>15.2</td>
</tr>
<tr>
<td>Black or African American</td>
<td>6.7</td>
<td>17.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>2.1</td>
<td>3.4</td>
<td>6.7</td>
</tr>
</tbody>
</table>

*Suicide category includes substance-related suicides

\(^4\) Centers for Disease Control and Prevention., National Center for Health Statistics, CDC WONDER, 2017
Selected Injury-Related, Age-adjusted Death Rates (2000-2016)

Rate per 100,000 population

Motor Vehicle Deaths

Suicide

Unintentional Drug Poisoning

Homicide

Year


Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS)
# Data Sources for Opioid Abuse, Overdose and Suicide

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opioid Abuse</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Web-based Injury Statistics Query and Reporting System Fatal AND Non-fatal Injury</td>
<td>X (fatal)</td>
</tr>
<tr>
<td>National Violent Death Reporting System</td>
<td>X</td>
</tr>
<tr>
<td>National Survey on Drug Use and Health</td>
<td>X</td>
</tr>
<tr>
<td>Youth Risk Behavior Surveillance System</td>
<td>X</td>
</tr>
<tr>
<td>BioSense Platform/ESSENSE</td>
<td>X</td>
</tr>
</tbody>
</table>
So What? Implications for Practice

- Identify community-level data sources to assess cause(s) of death
- Collect data on both method of suicide AND presence of opioids in suicidal attempts and deaths
- Compare local data to national and state data
- Identify potential partners who can contribute qualitative data
- Understand what populations are at increased risk for suicide and opioid abuse in your community
Example From the Field: Rhode Island

**Key Features:** Tests all suicide deaths (98% in 2017) for the presence of opioids, participates in a 20-state partnership to reduce opioid trafficking

**Benefits of Collaboration:**

- Better informed prevention efforts due to comprehensive data
- Reductions in opioid supply

[www.preventoverdoseri.org](http://www.preventoverdoseri.org)
Opioids and Suicide: A Complex Relationship
% Adults (18+) Who Report Having Serious Thoughts of Suicide in the Past Year by Lifetime Nonmedical Prescription Drug (including Opioid) Use (2011-2016)¹

¹NSDUH, 2017
Rx Drug Abuse and Suicidal Behaviors: Youth

% Students (in Grades 9-12) Who Report Having Attempted Suicide in the Past Year by Lifetime Prescription Drug (including Opioid) Abuse (2009-2015)\textsuperscript{6}

\textsuperscript{6}Centers for Disease Control and Prevention, Youth Risk Behavior Survey Data, 2009-2015
From the Research

• Adults who receive high doses of opioids are at increased risk for suicide\(^7\)
• Adults who abuse opioids weekly or more are more likely to engage in suicide planning and attempts\(^8\)
• Adults who have an opioid use disorder are 13x more likely to die by suicide than the general population\(^9\)

\(^7\) Ilgen et al., 2016; \(^8\) Ashrafioun et al., 2017; \(^9\) Wilcox, Conner & Caine, 2004
Opioids and Suicide: Three Possible Links

Higher doses of opioids offer increased access to lethal means.

Opioids have disinhibiting effects, increasing the likelihood of acting on suicidal impulses.

People who take higher opioid doses share other characteristics that explain the link with suicide.
Limitations to Overdose and Suicide Death Data

Intentionality Continuum

Unintentional Overdose
Suicide

Intentionality Continuum
Determining Intent in a Drug-related Death

Manner of Death (MOD) classification include:

- Homicide
- Natural causes (disease)
- Suicide
- Accident (unintentional)
- Deaths of undetermined intent
- Deaths of unknown causes

Where we really struggle to classify drug-related deaths
Challenges in Classifying Poisoning Deaths\textsuperscript{10,11,12}

- Scarce resources and inadequate training opportunities
- Punitive policies
- Bias produced by knowledge of existing trends
- Stigma and cultural opinions
- Complexities around determining intent

\textsuperscript{10}Donaldson et al., 2006; \textsuperscript{11}Rockett et al., 2010a; \textsuperscript{12}Timmermans, 2005
Undercounting of Suicides

• Specific groups may be disproportionately affected by the undercounting of suicides. Suicide undercounting may be more common among: $^{13}$

  o Decedents who are Black or Hispanic
  o Younger decedents (ages 15-34)
  o Decedents with lower levels of education (high school diploma or less)
  o Decedents without a history of psychiatric co-morbidity
  o Cases where a suicide note was not present

$^{13}$ Rockett et al., 2010b
Data Collection: Considerations for Tribes

- Cultural considerations (e.g., power of words and language)
- Concerns about data sharing (e.g., stigmatization, release of personal identifiers)
- Not all data sources are available
Once you’ve identified who is being affected in your community…

- Consider relevant local conditions that may influence these problems
- Engage key stakeholders to understand classification practices
- Identify others in your region who are addressing this issue
Key Features: Standardization of crime scene investigation and fatality review process for suicides and opioid overdoses, interventions in emergency rooms to screen patients for suicide and overdose risk

Benefits of Collaboration:
- Improved accuracy in suicide and opioid overdose data
- Increased reach by addressing suicide and overdose risk concurrently
Opioid Abuse and Suicide: What We Know About Risk
Opioid Abuse: Factors that Increase Risk

• Physical health problems\textsuperscript{14-20}
  o Chronic pain
  o Headaches

• Behavioral health problems\textsuperscript{15,17-19,21-24}
  o Depression
  o Anxiety

• Past incarceration\textsuperscript{25}
• Social isolation\textsuperscript{20,23, 26-27}
• Trauma/Adverse childhood experiences\textsuperscript{28}
• Parents with favorable attitudes towards substance use\textsuperscript{23}

\textsuperscript{14}Sullivan et al., 2010; \textsuperscript{15}Edlund et al., 2007; \textsuperscript{16}Martel et al., 2013; \textsuperscript{17}Koyyalagunta et al., 2013; \textsuperscript{18}Boscarino et al., 2010; \textsuperscript{19}Park & Lavin, 2010; \textsuperscript{20}Rosenblum et al., 2007; \textsuperscript{21}Mackesy-Amiti et al., 2015; \textsuperscript{22}Mobray & Quinn, 2015; \textsuperscript{23}Ford & Rigg, 2015; \textsuperscript{24}Cepeda et al., 2013; \textsuperscript{25}Wu & Howard, 2007; \textsuperscript{26}Tani et al., 2001; \textsuperscript{27}Stein et al., 2007; \textsuperscript{28}Austin & Shanahan, 2018
Suicide: Factors that Increase Risk

- Physical health problems\textsuperscript{29}
- Behavioral health problems\textsuperscript{29}
- History of non-suicidal self injury\textsuperscript{29}
- Social isolation\textsuperscript{30-31}
- Trauma
  - Adverse childhood experiences\textsuperscript{29}
  - Historical trauma\textsuperscript{29}
- Access to lethal means\textsuperscript{32}

\textsuperscript{29} National Strategy for Suicide Prevention, 2012; \textsuperscript{30} Fontanella et al., 2015; \textsuperscript{31} Hall-Lande et al., 2007; \textsuperscript{32} Brent, 2001
Shared Factors for Opioid Abuse and Suicidality

- Physical Health Problems
- Behavioral Health Problems
- Trauma/Adverse Childhood Experiences
- Social Isolation

Intersection
Preventing Opioid Abuse and Suicide

Select Strategies that Address Both Outcomes (Suicide and Opioid Abuse)

Address Shared Risk and Protective Factors

Home visiting programs to reduce the impact of trauma/adverse childhood experiences

Strategies that help youth build self-esteem and learn how to collaborate effectively with others

33 Filene et al., 2013; 34 Kellam et al., 2014; 35 Wilcox et al., 2008; 36 Eggert, et al., 2002
A Coordinated Approach

Benefits to a coordinated approach to suicide and opioid abuse/overdose prevention:

- Focuses on those at highest risk
- Avoids duplication of effort
- Provides good value for prevention dollars

Handout #3 Collaborating to Address Substance Abuse and Suicide: Select Resources from the CAPT and SPRC
So What? Implications for Practice

- Develop systems to ensure data about suicide means and populations can be captured effectively
- Engage new partners to identify and implement innovative strategies to address both problems
- Consider pulling together a special task force to address the intersection of suicide and opioid abuse
- Familiarize yourself with stigma facing populations abusing opioids and those at a higher risk for suicide
Example From the Field: Connecticut

Key Features: Implements strategies to reduce access to lethal means, addresses stigma around naloxone use, shares information on the detrimental impact of misclassification

Benefits of Collaboration:
- Increased coordination
- Access to data
- Connections to survivors reduced stigma and informed practice
Summary

• Suicide and opioid abuse/overdose rates have grown over the past decade

• The relationship between these health problems is complex, and much is still unknown because data is limited

• Collaboration is key, including efforts to address shared risk factors
Questions?
Relevant Resources from the CAPT

Examples include:

- **Addressing Opioid Overdose: Understanding Risk Factors and Prevention Strategies**

- **Ohio Partners Work Together to Reduce the Flow of Prescribed Opiates**

- **Preventing Prescription Drug Misuse: Programs and Strategies**

Available at: [https://www.samhsa.gov/capt/](https://www.samhsa.gov/capt/)
Relevant Resources from SPRC

Examples include:

- Effective Suicide Prevention
- Suicide Prevention in American Indian/Alaska Native Settings
- Caring for Adult Patients with Suicide Risk: A Consensus Guide for Emergency Departments

Available at: http://www.sprc.org/
Other Relevant Resources


Post Webinar Follow-up

Within two weeks, all webinar participants will receive an email with a link to the following materials:

- PowerPoint slides (with complete list of references)
- Webinar recording
- Three handouts:
  - *Data Sources for Opioid Abuse, Overdose, and Suicide*
  - *Preventing Opioid Abuse, Overdose, and Suicide: Select Resources*
  - *Collaborating to Address Substance Abuse and Suicide: Select Resources from the CAPT and SPRC*
- Certificate of participation
If you have questions or comments on this webinar, please don’t hesitate to contact:

Rachel Pascale
rpascale@edc.org
Please click on the link below to provide feedback on this event:

https://www.surveymonkey.com/r/feedback-51881

Your feedback is very important to us!


References


