Preventing Suicide in People with Opioid Use Disorder

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Hilary S. Connery, MD, PhD
Clinical Director
Division of Alcohol, Drugs, and Addiction at McLean Hospital
Department of Psychiatry, Harvard Medical School
Funding and Disclaimer

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Disclosures

No financial relationships or conflicts of interest to report.
About SPRC

The Suicide Prevention Resource Center (SPRC) is the only federally funded resource center devoted to advancing the implementation of the National Strategy for Suicide Prevention. SPRC is supported through a grant from the U.S. Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA).

SPRC builds capacity and infrastructure for effective suicide prevention through consultation, training, and resources for state, tribal, health/behavioral health, and community systems; professionals and professional education programs; and national public and private partners and stakeholders.
This activity is being accredited and implemented by the American Psychiatric Association (APA) as part of a subaward from the Suicide Prevention Resource Center (SPRC).

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education. The APA is accredited by the ACCME to provide continuing medical education for physicians. The American Psychiatric Association designates this live activity for a maximum of 1 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

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Instant Join Viewer

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How to Participate in Q&A

**Desktop**

Use the “Questions” area of the attendee control panel.

**Instant Join Viewer**

Click the “?” symbol to display the “Questions” area.
Suicide and Substance Intoxication
Reducing Suicide

- Research on suicide is plagued by many methodological problems.
- Definitions of suicide lack uniformity.
- Investigation and reporting of suicide is inaccurate and dependent on regional medical examiner/coroner resources.
- Some jurisdictions tend to call any deaths with prominent intoxication an accident.

Source: Institute of Medicine, 2002
Suicide Definitions

• Suicidal self-directed violence:
  • Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself.
  • There is evidence, whether implicit or explicit, of suicidal intent.

• Explicit: Suicide note, internet searches for methods, social media declaration, final communication to other(s).

• Implicit: Gunshot with own firearm, hanging on own property, carbon monoxide poisoning in own garage or vehicle.

• Substance use is not implicit evidence of suicidal intent.

Source: CDC, 2011
## What Is Substance Use Disorder (SUD)?

**Over a 12-month period:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONTROL</strong></td>
<td>Is substance use self-moderated in a safe and appropriate way?</td>
</tr>
<tr>
<td><strong>CRAVING</strong></td>
<td>Does the person anticipate substance use with an urgency that is disproportionate to other drives?</td>
</tr>
<tr>
<td><strong>CONSEQUENCES</strong></td>
<td>Substance use is observed to be associated with negative health and/or social outcomes.</td>
</tr>
</tbody>
</table>

Source: American Psychiatric Association, 2013 (DSM 5)

[www.sprc.org](http://www.sprc.org)
People with **alcohol use disorder** and **opioid use disorder** have 10-15 times higher rates of suicide deaths than the general population.

People with **substance use disorder** have elevated suicide risk even during abstinence/remission from substance use.

Alcohol and opioid **intoxication** is associated with more lethal suicidal behaviors.

**All substance misuse** is significantly associated with increased risk for suicidal thoughts and behaviors.

- **1 in 4** suicide deaths involve alcohol.
- **1 in 5** suicide deaths involve opioids.

Source: Wilcox et al., 2004; SAMHSA, 2016; Rizk et al., 2021
Why Might Substance Use Be Associated with Suicide Risk?

- SUD and substance intoxication are significantly associated with impulsive behaviors and novelty-seeking.
- SUD has high rates of co-occurring depressive disorders and grief.
- Depressive disorders also elevate substance intoxication risk.
- Especially among opioid use disorders, frequent exposures to premature mortality may desensitize to death and increase an individual’s acquired capacity for self-harm behavior.
- There may be shared biological and social factors for SUD and suicide risk.
If We Aim to Save Lives, We Need to First Understand Deaths
Discerning Intent Post-Mortem

Twice the number of suicide notes are found after suicide deaths by drug poisoning than in suicide deaths by firearm or hanging.

Source: Rockett et al., 2018
Death Certificates: Useful but Flawed Data

Table. Number of Deaths for Leading Causes of Death, US, 2015-2020*

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total deaths</td>
<td>2712630</td>
<td>2744248</td>
<td>2813503</td>
<td>2839205</td>
<td>2854838</td>
<td>3358814</td>
</tr>
<tr>
<td>Heart disease</td>
<td>633842</td>
<td>635260</td>
<td>647457</td>
<td>655381</td>
<td>659041</td>
<td>690882</td>
</tr>
<tr>
<td>Cancer</td>
<td>595930</td>
<td>598038</td>
<td>599108</td>
<td>599274</td>
<td>599601</td>
<td>598932</td>
</tr>
<tr>
<td>COVID-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>345323</td>
</tr>
<tr>
<td>Unintentional injuries</td>
<td>146571</td>
<td>161374</td>
<td>169936</td>
<td>167127</td>
<td>173040</td>
<td>192176</td>
</tr>
<tr>
<td>Stroke</td>
<td>140323</td>
<td>142142</td>
<td>146383</td>
<td>147810</td>
<td>150005</td>
<td>159050</td>
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<tr>
<td>Chronic lower respiratory diseases</td>
<td>155041</td>
<td>154596</td>
<td>160201</td>
<td>159486</td>
<td>156979</td>
<td>151637</td>
</tr>
<tr>
<td>Alzheimer disease</td>
<td>110561</td>
<td>116103</td>
<td>121404</td>
<td>122019</td>
<td>121499</td>
<td>133382</td>
</tr>
<tr>
<td>Diabetes</td>
<td>79535</td>
<td>80058</td>
<td>83564</td>
<td>84946</td>
<td>87647</td>
<td>101106</td>
</tr>
<tr>
<td>Influenza and pneumonia</td>
<td>57062</td>
<td>51537</td>
<td>55672</td>
<td>59120</td>
<td>49783</td>
<td>53495</td>
</tr>
<tr>
<td>Kidney disease</td>
<td>49959</td>
<td>50046</td>
<td>50633</td>
<td>51386</td>
<td>51565</td>
<td>52260</td>
</tr>
<tr>
<td>Suicide</td>
<td>44193</td>
<td>44965</td>
<td>47173</td>
<td>48344</td>
<td>47511</td>
<td>44834</td>
</tr>
</tbody>
</table>

11% increase driven by drug poisoning deaths – rates up disproportionately among Black populations

5.6% decrease? Prevention working (in five states with firearm control/prevention emphasis) vs. undercounting of suicides mischaracterized as unintentional deaths? White populations only

Source: Ahmad & Anderson, 2021; Stone et al., 2021
## MA Suicide Deaths

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2019</th>
<th>2020</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>547</td>
<td>518</td>
<td>-5%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>32</td>
<td>22</td>
<td>-31%</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td>21</td>
<td>26</td>
<td>+24%</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>40</td>
<td>45</td>
<td>+13%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>2</td>
<td>4</td>
<td>*</td>
</tr>
</tbody>
</table>

Source: Injury Surveillance Program, Massachusetts Department of Public Health, Fall 2021
South Carolina Study of Intentional Drug Overdose

All-payers of adult services 2012-2013

- “Non-Hispanic Blacks and people of other races/ethnicities were less likely than non-Hispanic Whites to receive a mental health assessment during hospitalization for a deliberate drug overdose.”

- “Non-Hispanic Blacks were less likely than non-Hispanic Whites to be discharged to an inpatient psychiatric facility than to home after hospitalization for a deliberate drug overdose.”

- “Persons with Medicare, private, or other insurance were more likely than persons without insurance to be discharged to an inpatient psychiatric facility than to home after hospitalization for deliberate drug overdose.”

Source: Charron et al., 2019

www.sprc.org
Intentionality of an Opioid User

I don’t think I will die even though I’m misusing opioids.

If I were to die by opioids, that wouldn’t be the worst way out.

Mostly I don’t want to die, but sometimes.

Today I don’t care if I die or not.

My life is pointless; today is a good day to die.

DEATH or non-fatal overdose

UNINTENTIONAL

INTENTIONAL
Desire to Die in Survivors of Opioid Overdose (OD)

- N=120 adults with opioid use disorder (OUD)
- 41% female, mean age = 34, 89% White
- 45% reported a history of OD (N=54)

Source: Connery et al., 2019
Suicidal Intention in Opioid Overdose

N = 59 OUD patients entering care with history of non-fatal opioid overdose

We asked them, “Just before your most recent overdose, how strongly did you want to die?” 0 = I did not want to die  10 = I definitely wanted to die

We also asked, “Were you trying to kill yourself?” 0 = not at all  10 = definitely

Source: Connery et al., under review

www.sprc.org
Suspected Overdose Death Checklist

1. Complete a thorough medicolegal death investigation, full autopsy examination, and comprehensive toxicology testing.

2. Review medical records with special attention to psychiatric medical history.

3. Speak with all relevant individuals (i.e., family, friends), even if the opportunity occurs after the initial medicolegal death investigation.

4. Investigate the decedent’s cell phone, personal email, and social media accounts.

5. Establish an engaged relationship between the forensic pathologist or designated family liaison with relevant individuals (i.e., family, friends).

Source: Abiragi et al., 2020
www.sprc.org
Forensic psychological autopsies of opiate + deaths

- N = 19 of each category, no other demographic predictors.
- Both had multiple nonfatal suicide attempts and were equal in multiple variables reflecting psychosocial stressors (e.g., homelessness, incarceration).
- Neither differed by treatment receipt for SUD, mental health, or medication for opioid use disorder (MOUD).

Source: Athey et al., 2020
www.sprc.org
1. Diagnosis and effective treatment of depressive symptoms.
2. Screening carefully for any history of suicide planning or preparation.
3. Educating patients and families how to recognize and respond to suicide planning/preparation.
4. Prior nonfatal OD in large population studies is associated with both future fatal OD and future suicide.

Source: Olfson et al., 2018
www.sprc.org
Suicide and Opioids: What Do We Know?
Opioids and Suicide

- Opioid users have elevated mortality risk for both drug poisoning and suicide (standard mortality ratio = 3) that persists through age 65.
- Illicit and Rx opioid misuse, OUD, and chronic opioid Rx for pain all associated with elevated SI, planning, and attempts.
- Suicidal pain patients do plan to overdose on Rx opioids.
- Suicide risk in opioid users is further elevated with alcohol misuse.
- Suicide poisonings: highest fatality with opioids, relative risk compared to other substances = 5x higher.
- Novel risk screening tools have been piloted, but there is no current standard.

Source: Refer to references section.
Suicide Is Not One Behavior
Suicidal Symptoms May Look Different Between Mental Health Disorders, ALL May Be Lethal

- **Psychotic disorders:** Auditory command hallucinations to die
- **Mood disorders:** Impulsive or carefully planned suicide
- **Personality disorders:** Abrupt suicidal behavior following perceived interpersonal conflict
- **Substance use disorders:** Transient reaction to stress or reckless risk-taking when life is intolerable
- **No mental health condition:** Loss of identity/security
“This painting represents my journey from active addiction, the darkness and bleak shadows on one side…to recovery, represented by the sunlight and the serenity prayer medal on the other side. Somewhere, along the way, I began to break free.

My mother has been there for this whole journey. The pictures of my mom and I walking, with our shadows, show all the times we have felt lost or in limbo. I felt lost and so did my mom. She didn’t know what to do.”

https://www.mcleanhospital.org/opioid-project
Direct Warning Signs

These require immediate actions to ensure safety:

Person communicates desire or plan to die

Person is seeking means

- Internet searches
- Purchase of firearm or another weapon
- Stockpiling pills

Person is making “final arrangements”

- Saying goodbye to others
- Giving away possessions
Indirect Warning Signs

These require further assessment for suicidal intent (SI):

- Marked shift in mood/anxiety or behavior
- Severe, persistent insomnia
- Relapse following stability
- Agitation or rage
- Isolation, hopelessness, feeling like they “don’t belong”
- Feels like a burden to others
- Family/significant other states “not him/herself”
- Recklessness
Determinants of Risk and Protection
Question: What is the strongest predictor of future suicidal behavior?

a) Intense suicidal ideation
b) Suicide planning
c) History of previous suicide attempt
d) Severe substance use disorder
Suicide attempt = #1 risk factor

Prior suicide attempt is the most consistent predictor of future suicidal behavior.

- OUD entering treatment: 30-45% report at least one prior suicide attempt
- Not modifiable, but a focus for education and the need to create a personalized safety plan

Source: Ribeiro et al., 2015; Darke et al., 2004
Risk Factors for Suicide

Modifiable targets:
- Substance use disorders
- Other mental health disorders
- Sleep disorders
- Chronic pain disorders
- Trauma exposures

Social determinants of health:
- Housing/food insecurity
- Social isolation
- Unemployment
- Firearm in home
- Domestic violence
- Family stressors
- Health care access
- Legal stressors
Protective Factors against Suicide

Biological determinants of health:
- Abstinence, recovery care for all MH disorders
- Sleep hygiene
- Pain relief

Social determinants of health:
- Security of food, housing, safety, economics
- Community alliances: Social connections and belonging
- Positive, shared spiritual beliefs and connections
- No firearm in home, no substances in home
Prevention Algorithms
Zero Suicide Model operationalizes the core components necessary for health care systems to transform suicide care into seven elements.

Navigate the Zero Suicide Toolkit™ resources by clicking on an element below. Within each element section, find a description of what each element is, why it is necessary to Zero Suicide implementation, a summary of supporting research, and key readings and tools. Use the navigation bar that appears at the top of each element page to jump between sections.

https://zerosuicide.edc.org/toolkit/zero-suicide-toolkitsm
Online Courses

Improve your knowledge and skills in suicide prevention with these self-paced online courses. They are designed for clinicians and other service providers, educators, health professionals, public officials, and members of community-based coalitions who develop and implement suicide prevention programs and policies.

All courses are free of charge and open to anyone.

Locating and Understanding Data for Suicide Prevention
Explore sources of data that can help provide an understanding of suicide nationally, in your state, and locally.

A Strategic Planning Approach to Suicide Prevention
Identify and prioritize suicide prevention activities through strategic planning to maximize impact in your community or setting.

https://www.sprc.org/training/online-courses
Safety Planning

Identify Risk: Ongoing screening, assessment, means reduction

- Depressed mood
- Hopelessness
- Severe guilt
- Can’t handle another day
- Desire to die
- Thoughts to self-harm
- Plans to self-harm
- Means to self-harm
- Interrupted self-harm
- Actual self-harm
- Modifiable risk factors

Identify personal patterns

- Thoughts
- Behaviors
- Mood
- Sleep
- Common triggers (people, places, things)

Enhance positive coping

- Self-assessment
- Reasons to live
- Connections to others
- Medication adherence
- Abstinence
- Physical self-care
- Spiritual self-care
### Sample Suicide Risk Screener Item Content:

<table>
<thead>
<tr>
<th>PHQ-2: Over the past 2 weeks,</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. . . .have you felt down, depressed, or hopeless?</td>
<td>Depressed mood</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. . . .have you felt little interest or pleasure in doing things?</td>
<td>Anhedonia</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C-SSRS, Ideation: Over the past 2 weeks,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. . . .have you wished you were dead or wished you could go to sleep and not wake up</td>
<td>Passive ideation</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. . . .have you had thoughts of killing yourself?</td>
<td>At least active ideation, general thoughts without thoughts of ways, intent, or plan</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C-SSRS, Behavior: In your lifetime,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. . . .have you ever attempted to kill yourself?</td>
<td>Lifetime attempt</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. . . .When did this happen?</td>
<td>If within the last 6 months, considered a recent attempt</td>
</tr>
<tr>
<td>Today</td>
<td></td>
</tr>
<tr>
<td>Within the last 30 days (but not today)</td>
<td></td>
</tr>
<tr>
<td>Between 1 and 6 months ago</td>
<td></td>
</tr>
<tr>
<td>More than 6 months ago</td>
<td></td>
</tr>
</tbody>
</table>

Source: [http://emnet-usa.org/ED-SAFE/materials.htm](http://emnet-usa.org/ED-SAFE/materials.htm)
ASQ: 4-Item Age-Appropriate Suicide Screening

Instructions on YouTube: https://youtu.be/hlemr7Oq7-E

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**Ask the patient:**

1. In the past few weeks, have you wished you were dead?  
   - Yes  
   - No

2. In the past few weeks, have you felt that you or your family would be better off if you were dead?  
   - Yes  
   - No

3. In the past week, have you been having thoughts about killing yourself?  
   - Yes  
   - No

4. Have you ever tried to kill yourself?  
   - Yes  
   - No
   
   If yes, how? 
   
   If yes, please describe: 

   When?

   When?

   When?

   When?

   **If the patient answers Yes to any of the above, ask the following acuity question:**

5. Are you having thoughts of killing yourself right now?  
   - Yes  
   - No

   If yes, please describe: 

---
ASQ: 4-Item Age-Appropriate Suicide Screening

Next steps:

- If patient answers “No” to all questions 1 through 4, screening is complete (not necessary to ask question #5). No intervention is necessary (*Note: Clinical judgment can always override a negative screen).
- If patient answers “Yes” to any of questions 1 through 4, or refuses to answer, they are considered a positive screen. Ask question #5 to assess acuity:
  - “Yes” to question #5 = acute positive screen (imminent risk identified)
    - Patient requires a STAT safety/full mental health evaluation.
    - Patient cannot leave until evaluated for safety.
    - Keep patient in sight. Remove all dangerous objects from room. Alert physician or clinician responsible for patient’s care.
  - “No” to question #5 = non-acute positive screen (potential risk identified)
    - Patient requires a brief suicide safety assessment to determine if a full mental health evaluation is needed. Patient cannot leave until evaluated for safety.
    - Alert physician or clinician responsible for patient’s care.

Provide resources to all patients

- 24/7 National Suicide Prevention Lifeline 1-800-273-TALK (8255) En Español: 1-888-628-9454
- 24/7 Crisis Text Line: Text “HOME” to 741-741
Personalized Safety Planning: Patient Engagement

1. Patient-specific warning signs
2. Who can support you, and how?
3. What can you do to reduce risk, and what are you willing to do?
4. Written pocket reminder
5. Collateral data connections – engage in risk management
6. Medications that target risk factors
7. Peer supports linkage
8. Caring outreach contacts (personal follow-up)
Conversation Starters with OUD Patients:

• “Has it gotten so bad that you wished you were dead?”

• “I know that you’re telling me about your relapse, but I’m actually more concerned that you’re spending time thinking about your own death.”

• “You told me that you planned to use last week, and that you were not going to carry your naloxone kit with you, which is different from before. What do you think about this?”

• “You’re taking more risks than you usually do. What’s going on?”
Reducing access to lethal means, such as firearms and medication, can determine whether a person at risk for suicide lives or dies.

This course is about how to reduce access to the methods people use to die by suicide.

It covers who needs lethal means counseling and how to work with people at risk for suicide—and their families—to reduce access.
Means Reduction in Substance Use Disorder

- Remove alcohol and drugs whenever possible.
- Remove controlled substance prescriptions when necessary and monitor all prescription supplies.
- Check the prescription drug monitoring program.
- Harm reduction:
  - Reduce number of substances used.
  - Avoid driving, swimming during use.
  - Carry naloxone rescue.
Involuntary commitment?

• May be avoided if containment in community and means reduction is adequate; requires patient and community participation

• Necessary for acute biological states that will not resolve rapidly with medication adjustments in outpatient or emergency department setting

• Necessary for patient who confirms serious intent/plan

• More likely for patient who is socially isolated or disconnected
References


References


References


References


How To Claim Credit

Simply follow the instructions below. Email LearningCenter@psych.org with any questions.

1. Attend the virtual event.
2. Submit the evaluation.
3. Select the CLAIM CREDITS tab.
4. Choose the number of credits from the dropdown menu.
5. Click the CLAIM button.

Claimed certificates are accessible in My Courses > My Completed Activities
Thank you!

Hilary S. Connery, MD, PhD
Clinical Director
Division of Alcohol, Drugs, and Addiction at McLean Hospital
Department of Psychiatry, Harvard Medical School

Suicide Prevention Resource Center
940 N.E. 13th Street
Nicholson Tower, 4N, 4900
Oklahoma City, OK 73104
sprc.org