Suicide Prevention Resource Center

Preventing Suicide in People with Opioid Use Disorder

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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.

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Medical leadership for mind, brain and body.

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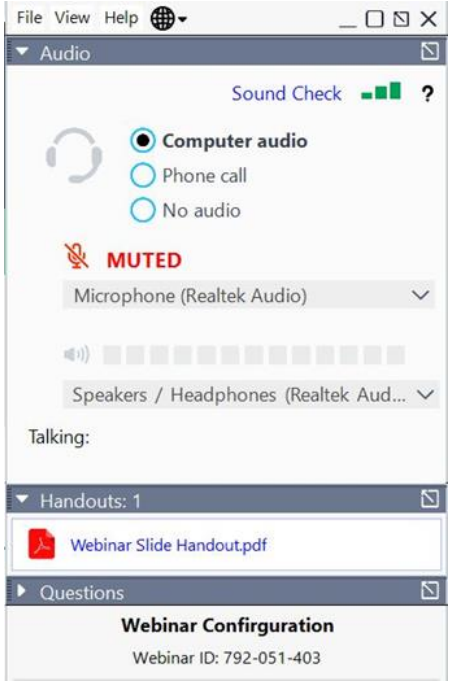

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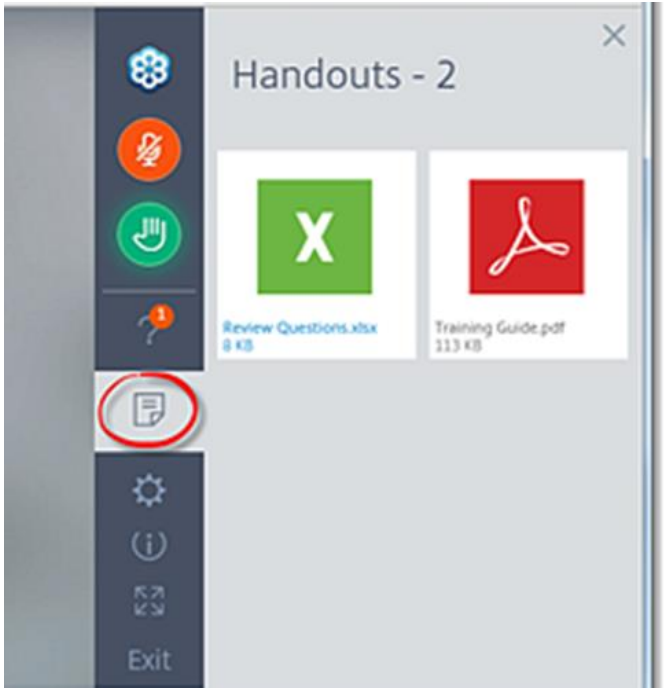

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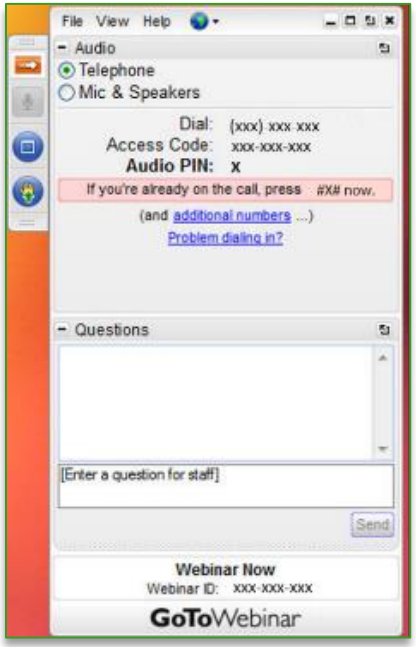

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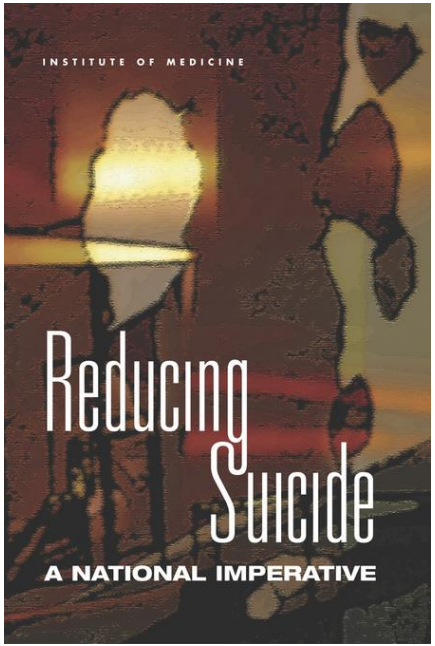
Click the “?” symbol to display the “Questions” area.

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:

CONTROL	Is substance use self-moderated in a safe and appropriate way?
CRAVING	Does the person anticipate substance use with an urgency that is disproportionate to other drives?
CONSEQUENCES	Substance use is observed to be associated with negative heath and/or social outcomes.

Source: American Psychiatric Association, 2013 (DSM 5)

Substance Intoxication and Suicide

- 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[a]

	No. of deaths by year					
Cause of death	2015	2016	2017	2018	2019	2020
Total deaths	2 712 630	2 744 248	2 813 503	2 839 205	2 854 838	3 358 814
Heart disease	633 842	635 260	647 457	655 381	659 041	690 882
Cancer	595 930	598 038	599 108	599 274	599 601	598 932
COVID-19[b]						345 323
Unintentional injuries	146 571	161 374	169 936	167 127	173 040	192 176
Stroke	140 323	142 142	146 383	147 810	150 005	159 050
Chronic lower respiratory diseases	155 041	154 596	160 201	159 486	156 979	151 637
Alzheimer disease	110 561	116 103	121 404	122 019	121 499	133 382
Diabetes	79 535	80 058	83 564	84 946	87 647	101 106
Influenza and pneumonia	57 062	51 537	55 672	59 120	49 783	53 495
Kidney disease	49 959	50 046	50 633	51 386	51 565	52 260
Suicide	44 193	44 965	47 173	48 344	47 511	44 834

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

Race/Ethnicity	2019	2020	
White, non-Hispanic	547	518	-5%
Black, non-Hispanic	32	22	-31%
Asian, non-Hispanic	21	26	+24%
Hispanic/Latinx	40	45	+13%
Other/Unknown	2	4	*

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

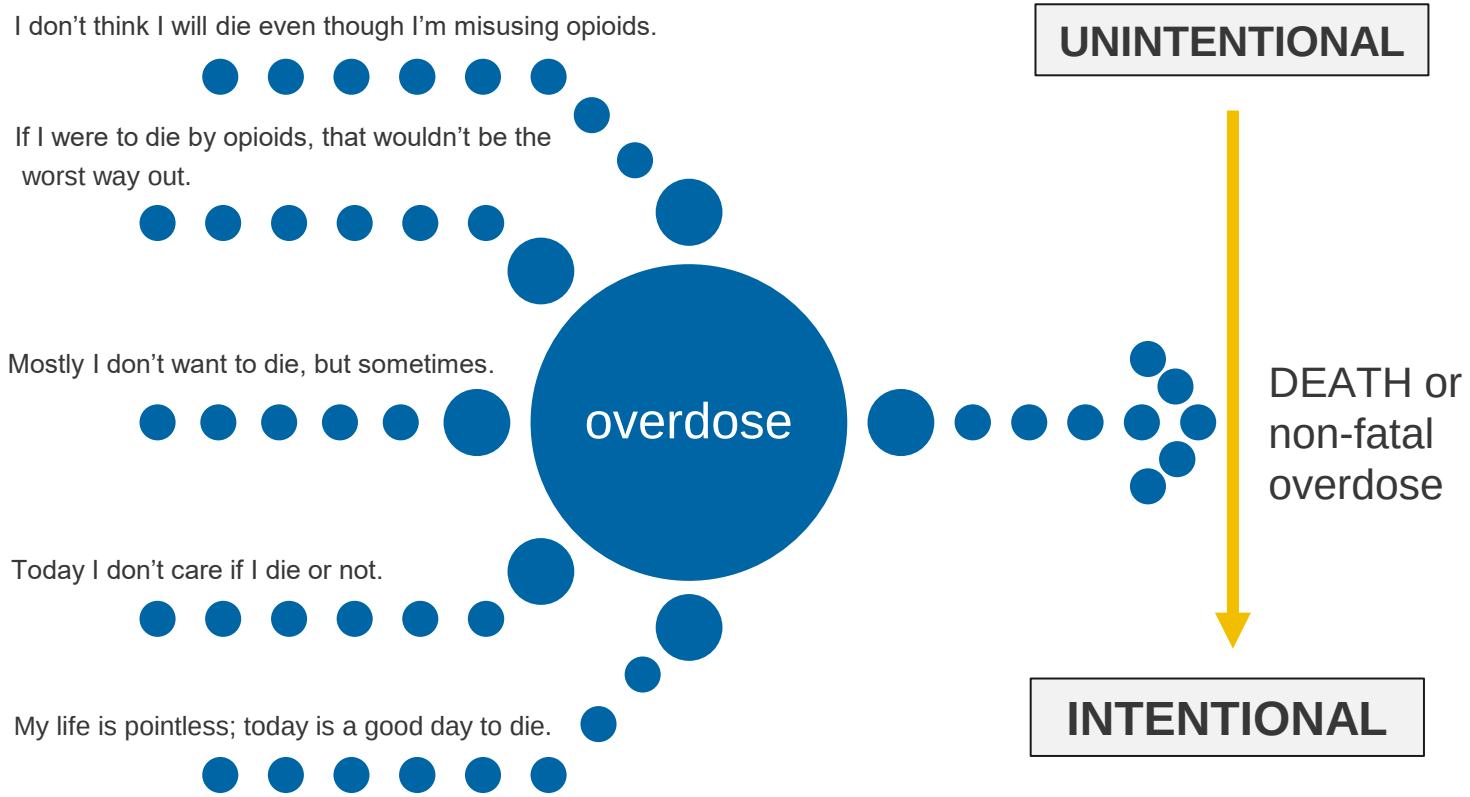
- **"Non-Hispanic Blacks and people of other races/ethnicities were less likely than non-Hispanic Whites to receive a mental health assessment during hospitalization for a deliberate drug overdose."**

- "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."

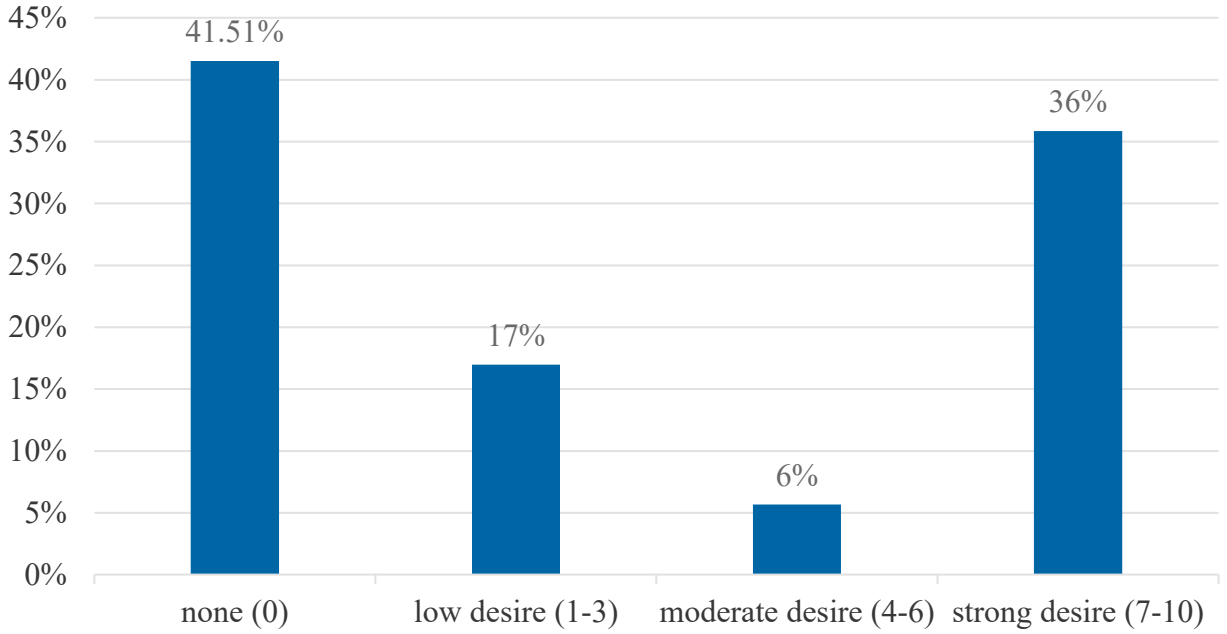
Source: Charron et al., 2019

Intentionality of an Opioid User



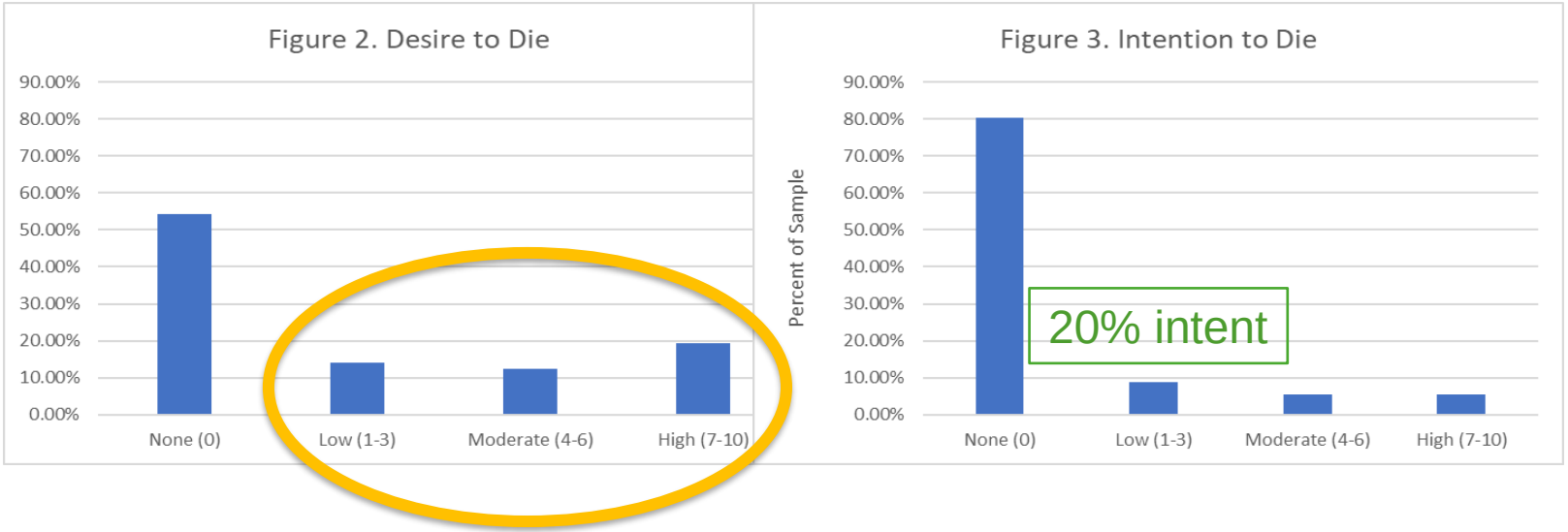
Desire to Die in Survivors of Opioid Overdose (OD)

- 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

Suspected Overdose Death Checklist

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

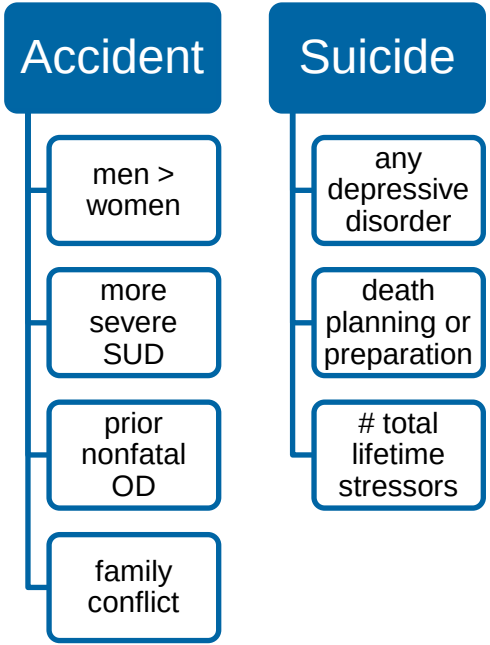
2. Review medical records with special attention to psychiatric medical history.

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).

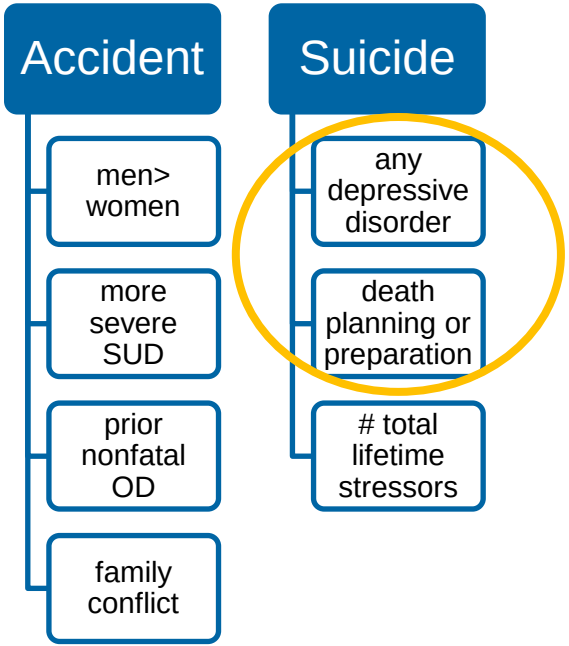
Source: Abiragi et al., 2020



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



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

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

Suicide Warning Signs

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

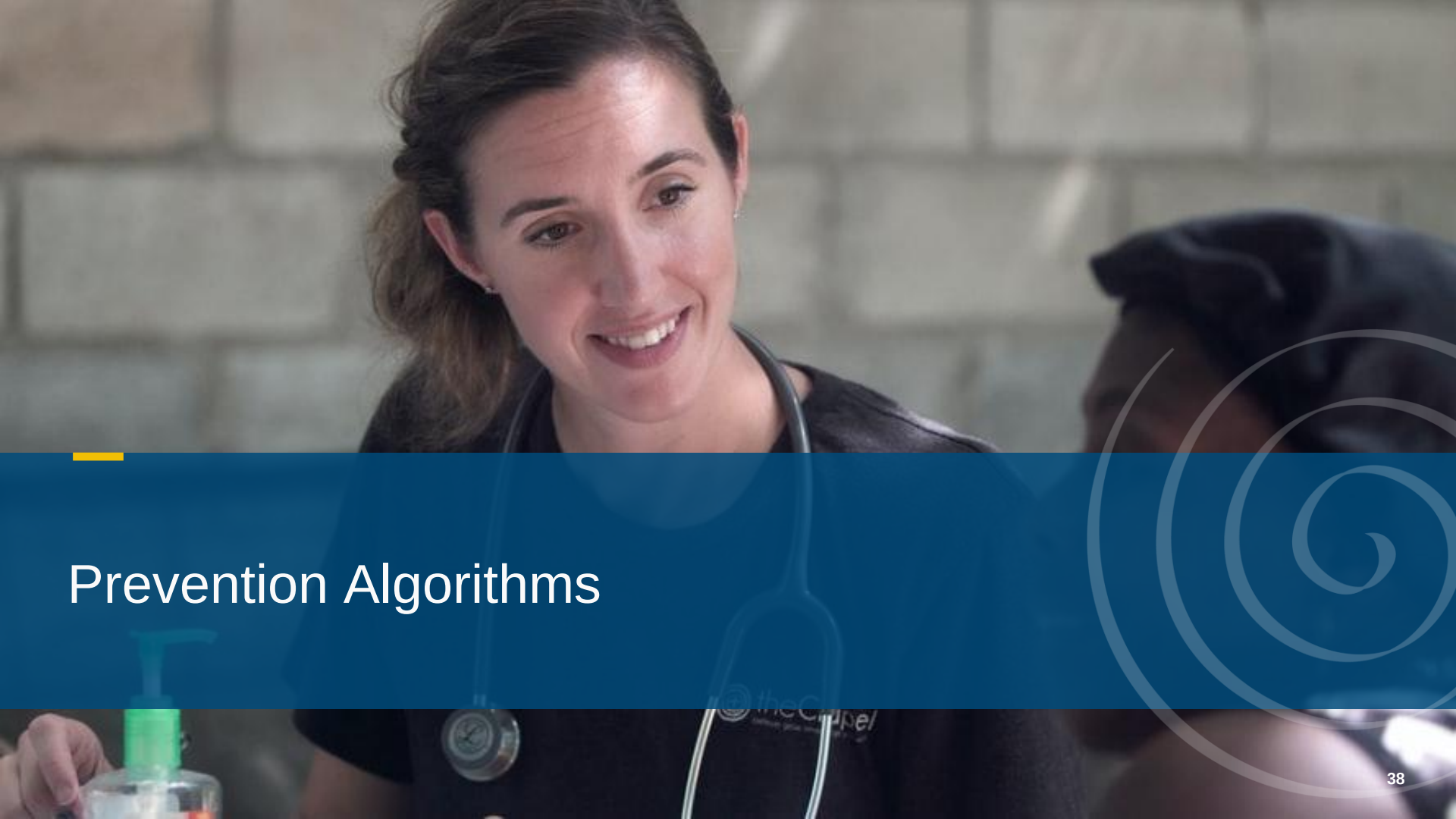
Protective Factors against Suicide

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 Toolkit

Zero Suicide Toolkit℠

HOW TO USE THE ZERO SUICIDE TOOLKIT RESOURCES

The 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

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NATIONAL SUICIDE PREVENTION LIFELINE 8255 1 (800) 273 TALK

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:

PHQ-2: Over the past 2 weeks,	Interpretation
1. . . .have you felt down, depressed, or hopeless? Yes No	Depressed mood
2. . . .have you felt little interest or pleasure in doing things? Yes No	Anhedonia
C-SSRS, Ideation: Over the past 2 weeks,	
1. . . .have you wished you were dead or wished you could go to sleep and not wake up Yes No	Passive ideation
2. . . .have you had thoughts of killing yourself? Yes No	At least active ideation, general thoughts without thoughts of ways, intent, or plan
C-SSRS, Behavior: In your lifetime,	
1. . . .have you ever attempted to kill yourself? Yes No 2. . . .When did this happen? Today Within the last 30 days (but not today) Between 1 and 6 months ago More than 6 months ago	Lifetime attempt If within the last 6 months, considered a recent attempt

Source: http://emnet-usa.org/ED-SAFE/materials.htm

ASQ: 4-Item Age-Appropriate Suicide Screening

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

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? _____

   _____

   _____

   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:

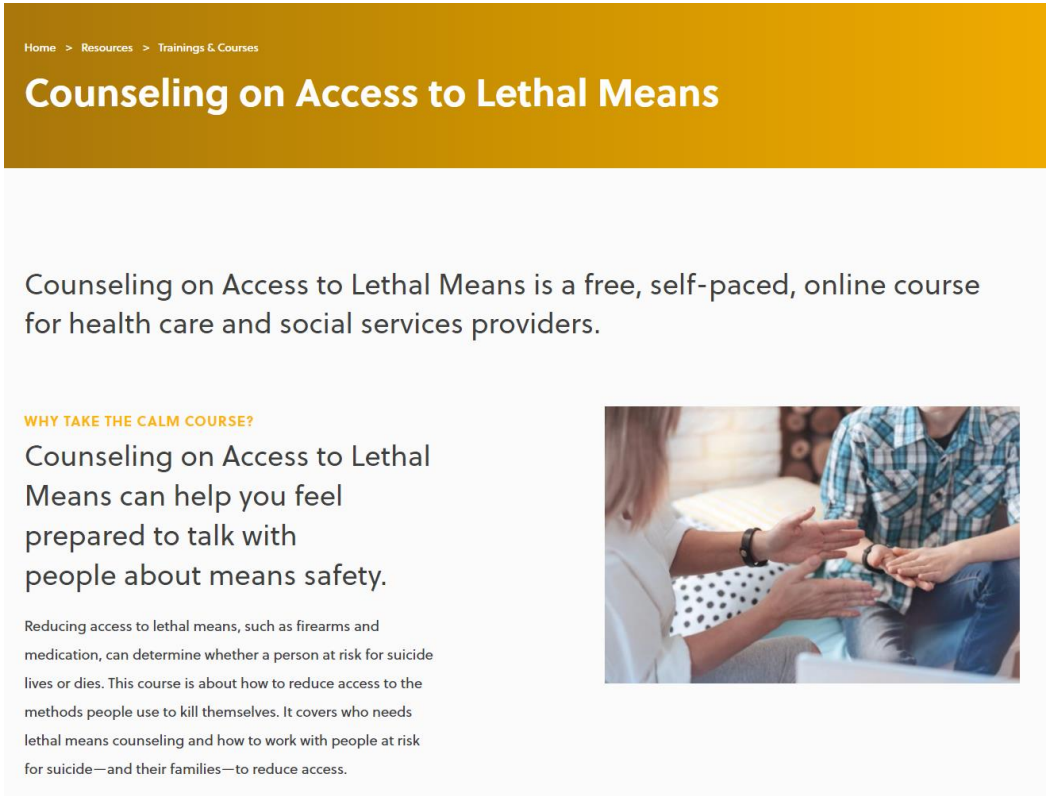
- “Has it gotten so bad that you wished you were dead?”
- “I know that you’re telling me about your relapse, but I’m actually more concerned that you’re spending time thinking about your own death.”
- “You told me that you planned to use last week, and that you were not going to carry your naloxone kit 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?”

CALM Course

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.



Source: https://zerosuicide.edc.org/resources/trainings-courses/CALM-course

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

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Thank you!

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