Substance Abuse Prevention IS Suicide Prevention:
The Link Between Alcohol Use and Suicide Risk

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Suicide Prevention Resource Center

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Prevention First

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Suicide Prevention Resource Center
Promoting a public health approach to suicide prevention

The nation’s only federally supported resource center devoted to advancing the National Strategy for Suicide Prevention.
Substance Abuse Prevention IS Suicide Prevention: The Link Between Alcohol Use and Suicide Risk

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Agenda

- Suicide risk and protective factors, and warning signs
- General relationship between AOD use and suicide
- Effects of AOD use on suicidal thinking
- Alcohol as a risk factor for suicide
- Impact of environmental alcohol prevention on suicide
- The Environmental Management framework

Poll I: Your Role/Profession
Poll 2: Risk Factors

Poll 3: Warning Signs
Risk and Protective Factors and Warning Signs


Table 1. Examples of Risk and Protective Factors and Warning Signs for Heart Attack and Suicide

<table>
<thead>
<tr>
<th>Examples of Risk Factors (individual level) indicate that someone is at higher risk for heart attack or suicide</th>
<th>Heart Attack</th>
<th>Suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Obesity</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>High LDL cholesterol</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of Protective Factors (individual level) indicate that someone is at lower risk for heart attack or suicide</th>
<th>Heart Attack</th>
<th>Suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Sound diet</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>High HDL cholesterol</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Stress management</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of Warning Signs Indicate that someone is having a heart attack or is seriously considering suicide</th>
<th>Heart Attack</th>
<th>Suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest pain</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Cold sweat</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Nausea</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Lightheadedness</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Threatening to hurt or kill oneself</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Seeking a means to kill oneself</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Increasing alcohol or drug use</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Dramatic mood changes</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
Proximate Risk Factors for Suicide

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep difficulties</td>
<td>92%</td>
</tr>
<tr>
<td>Severe anxiety</td>
<td>92%</td>
</tr>
<tr>
<td>Panic/anxiety attacks</td>
<td>80%</td>
</tr>
<tr>
<td>Prevailing sad or depressed mood</td>
<td>80%</td>
</tr>
<tr>
<td>Recent loss of someone close</td>
<td>78%</td>
</tr>
<tr>
<td><strong>Alcohol or substance abuse</strong></td>
<td><strong>68%</strong></td>
</tr>
<tr>
<td>Feelings of hopelessness</td>
<td>64%</td>
</tr>
<tr>
<td>Feelings of helplessness</td>
<td>62%</td>
</tr>
</tbody>
</table>

Hall et al., 1999

Blood Alcohol Level

- .02%  Relaxed
- .04%  Relaxation continues, Buzz develops
- .06%  Cognitive judgment is impaired

Kilmer, 2014
Alcohol impairs information processing, narrowing attention to only the most salient internal and environmental cues. Kilmer, 2014
Absorption and Oxidation of Alcohol

• Factors affecting absorption
  – What one is drinking
  – Rate of consumption
  – Effervescence
  – Food in stomach

• Factors affecting oxidation
  – Time!

Kilmer, 2014

Time to get back to .000%

• .08%?
  – 5 hours
    (.080%....064%....048%....032%....016%....000%)

• .16%?
  – 10 hours
    (.160%....144%....128%....112%....096%....080%....
    .064%....048%....032%....016%....000%)

• .24%?
  – 15 hours
    (.240%....224%....208%....192%....176%....160%....
    .144%....128%....112%....096%....080%....064%....
    .048%....032%....016%....000%)

Kilmer, 2014
Alcohol Use, Sleep, Mental Health

Kilmer, 2014
Alcohol Use, Sleep, Mental Health

Increase in:
- Daytime sleepiness
- Anxiety
- Irritability
- Jumpiness

Kilmer, 2014
Alcohol Use, Sleep, Mental Health

Next day, increase in:
• Daytime sleepiness
• Anxiety
• Irritability
• Jumpiness

Kilmer, 2014
Alcohol as a Risk Factor for Suicide

Alcohol & MH as Suicide Risk Factors

• **Three patterns identified as co-occurring risk factors**
  • Alcohol along with a mental health condition
  • Alcohol with other life stresses
  • Alcohol use at the time of death

*Logan, Hall & Karch, D. (2011)*
One Way of Thinking

Alcohol

Depression
Anxiety
Stress

Suicide

Alcohol is a risk factor for suicide

– Alcohol increases risk for depression
– Alcohol worsens depression outcomes
– Depression and alcohol risk factors for suicide
– Alcohol a proximate risk factor for suicide

Hufford, 2001 and SAMHSA, 2006; Hall et al., 1999; Hufford, 2001
Poll 4: Which comes first?

Which comes first?*

<table>
<thead>
<tr>
<th>Compared to abstainers, increased risk for depressive symptoms:</th>
<th>OR (times more likely)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- light substance dabblers</td>
<td>1.86</td>
</tr>
<tr>
<td>- drinkers</td>
<td>2.45</td>
</tr>
<tr>
<td>- sex dabblers</td>
<td>2.65</td>
</tr>
<tr>
<td>- alcohol and sex dabblers</td>
<td>2.91</td>
</tr>
<tr>
<td>- multiple partners</td>
<td>3.73</td>
</tr>
<tr>
<td>- smokers</td>
<td>3.98</td>
</tr>
<tr>
<td>- binge drinkers</td>
<td>4.03</td>
</tr>
<tr>
<td>- heavy dabblers</td>
<td>4.77</td>
</tr>
<tr>
<td>- sex and drug combination</td>
<td>5.54</td>
</tr>
<tr>
<td>- high marijuana and sex</td>
<td>5.83</td>
</tr>
<tr>
<td>- sex for drugs or money</td>
<td>6.39</td>
</tr>
<tr>
<td>- marijuana</td>
<td>7.10</td>
</tr>
<tr>
<td>- marijuana and other drugs</td>
<td>7.29</td>
</tr>
<tr>
<td>- IV drug use</td>
<td>10.06</td>
</tr>
</tbody>
</table>

*Actual title of JAPH article by Hallfors et al, 2004
Another Way of Thinking

Alcohol Use → Depression


The Alcohol Environment & Suicide

- Lower MLDA associated with 18-21 y.o. suicide risk
- Increased alcohol consumption associated with increased suicide mortality rates
- Restricting alcohol availability may reduce suicide mortality

Brickmayer & Hemenway, 1999; Mann et al, 2006; Pridemore & Snowden, 2009 and Varnik et al, 2006
Alcohol Prevention as Suicide Prevention

Recap

- Alcohol constricts thinking
- Alcohol use is a risk factor for suicide
- In adolescents, alcohol may precede depression (i.e., not a self-medication model)
- Changing the alcohol environment may reduce suicide deaths
- *There is a proven framework for reducing alcohol consumption and consequences*
Framework for Environmental Alcohol Prevention

• Access
• Marketing
• Norms


Limiting Access to Alcohol

• Conditional use permits/land use ordinances
• Regulations or bans on home delivery
• Responsible Beverage Service Training
• Checking age identification
• Beer keg registration
• Alcohol restrictions at community events
Changing Misperceptions (Norms)

- Social marketing campaigns
- Social norms campaigns

Enforcement

- Compliance checks
- Party patrols
- Shoulder tap programs
- Enforce MLDA
- Enforce impaired driving laws
- Open container laws
- Etc.
Discussion/Brainstorm

What are some barriers to implementing environmental prevention strategies?

What are some possible strategies to overcome those barriers?
Environmental Strategies: Selection Guide, Reference List, and Examples of Implementation Guidelines

Thank You!

For more information about this webinar, please contact:

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