Public Health Approaches to Youth Suicide Prevention

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## Leading causes of death – United States, 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>Number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heart Disease</td>
<td>633,842</td>
</tr>
<tr>
<td>2</td>
<td>Malignant Neoplasms</td>
<td>595,930</td>
</tr>
<tr>
<td>3</td>
<td>Chronic Lower Respiratory Diseases</td>
<td>155,041</td>
</tr>
<tr>
<td>4</td>
<td>Unintentional Injuries</td>
<td>146,571</td>
</tr>
<tr>
<td>5</td>
<td>Cerebrovascular Diseases</td>
<td>140,323</td>
</tr>
<tr>
<td>6</td>
<td>Alzheimer’s Disease</td>
<td>110,561</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes mellitus</td>
<td>79,535</td>
</tr>
<tr>
<td>8</td>
<td>Influenza and pneumonia</td>
<td>57,062</td>
</tr>
<tr>
<td>9</td>
<td>Nephritis</td>
<td>49,959</td>
</tr>
<tr>
<td>10</td>
<td>Suicide</td>
<td>44,193</td>
</tr>
</tbody>
</table>

Source: CDC vital statistics
Completed suicide rates are increasing in the United States
The magnitude of the increases vary by age

Girls and women

Boys and men
### Leading causes of death for selected age groups – United States, 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>10-14 years</th>
<th>15-19 years</th>
<th>20-29 years</th>
<th>30-39 years</th>
<th>40-49 years</th>
<th>50-59 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unintentional Injuries</td>
<td>Unintentional Injuries</td>
<td>Unintentional Injuries</td>
<td>Unintentional Injuries</td>
<td>Malignant Neoplasms</td>
<td>Malignant Neoplasms</td>
</tr>
<tr>
<td>2</td>
<td>Malignant Neoplasms</td>
<td><strong>Suicide</strong></td>
<td>Suicide</td>
<td>Suicide</td>
<td><strong>Heart Disease</strong></td>
<td><strong>Heart Disease</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>Suicide</strong></td>
<td>Homicide</td>
<td>Homicide</td>
<td>Malignant Neoplasms</td>
<td>Unintentional Injuries</td>
<td>Unintentional Injuries</td>
</tr>
<tr>
<td>4</td>
<td>Homicide</td>
<td>Malignant Neoplasms</td>
<td>Malignant Neoplasms</td>
<td><strong>Heart Disease</strong></td>
<td><strong>Suicide</strong></td>
<td>Liver Disease</td>
</tr>
<tr>
<td>5</td>
<td>Congenital Malformations</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td><strong>Homicide</strong></td>
<td>Liver Disease</td>
<td>Chronic Lower Respiratory Ds</td>
</tr>
<tr>
<td>6</td>
<td>Heart Disease</td>
<td>Congenital Malformations</td>
<td>Diabetes Mellitus</td>
<td>Liver Disease</td>
<td>Diabetes Mellitus</td>
<td>Diabetes Mellitus</td>
</tr>
<tr>
<td>7</td>
<td>Chronic Lower Respiratory Ds</td>
<td>Influenza and Pneumonia</td>
<td>Congenital Malformations</td>
<td>Diabetes Mellitus</td>
<td>Cerebro-Vascular</td>
<td><strong>Suicide</strong></td>
</tr>
<tr>
<td>8</td>
<td>Cerebro-Vascular</td>
<td>Chronic Lower Respiratory Ds</td>
<td>Complicated pregnancy</td>
<td>Cerebro-Vascular</td>
<td>Homicide</td>
<td>Cerebro-Vascular</td>
</tr>
</tbody>
</table>

**Source:** CDC vital statistics
Suicide rates among all persons by age and sex--United States, 2015

Source: CDC vital statistics
Suicide by method among persons aged 10-24 years and all, United States, 2015

Source: CDC vital statistics
Age-standardized suicide rates (per 100 000 population), both sexes, 2015

Suicide rate (per 100 000 population)
- ≤5.0
- 5.0–9.9
- 10.0–14.9
- >15.0

Data not available
Not applicable

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Information Evidence and Research (IER)
World Health Organization
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Key points about adolescent suicide and suicide attempts

• First onset of mental disorders usually occur in childhood or adolescence (Kessler et al., 2007).

• Younger individuals may not know which methods are lethal - a cry for help could be fatal

• Family contextual factors important
Key points about adolescent suicide and suicide attempts

• The prefrontal cortex, implicated in higher order executive functions, emotional control, impulsivity, and decision making, continues to mature into the mid-20s (Gogtay et al., 2004; Steinberg, 2008).

• Young individuals can be more vulnerable to contagion (Insel & Gould, 2008)
  • Evidence has accumulated to support the idea that suicidal behavior is “contagious” in that it can be transmitted, directly or indirectly, from one person to another (Gould, 1990)
Which strategies are most effective for preventing suicide?

• Comprehensive, multicomponent approaches
• Embedded in service settings, sustained
• Most SP programs focus on identifying those at risk and intervening
  • Selected, Indicated
  • Population-based, universal
Evidence-based recommendations for management of self harm and suicide in non-specialized health settings

- Assessment for self harm/suicide in persons with priority mental, neurological and substance use disorders
- Removing means for self-harm
- Usefulness of regular contact
- Problem solving approach
- Use of social support
- Hospitalization for persons with self-harm
Evidence-based recommendations for management of self harm and suicide in non-specialized health settings

• Reducing access to means of suicide
• Reducing the availability of alcohol
• Responsible and deglamourized media reporting
• School-based interventions for reducing deaths from suicide and suicide attempts among young people
School-based interventions for reducing deaths from suicide and suicide attempts among young people

• The implementation of suicide prevention programmes in school settings that include mental health awareness training and skills training can be offered to reduce suicide attempts and suicide deaths among adolescent students.

  *Strength of recommendation: CONDITIONAL*
  *Quality of evidence: LOW*