RESEARCH ON ADOLESCENT SUICIDAL BEHAVIORS: THE FACTS, THE FIGURES, AND WHAT’S NEXT

Arielle Sheftall, PhD
The Research Institute at Nationwide Children’s Hospital
Statistics and Facts Concerning Adolescent Suicidality

- Suicide vs. Suicide attempts vs. NSSI vs. suicidal ideation
- 2nd leading cause of death; # of attempts & ideation has increased
- Associated with a number of risk factors
  - Household dysfunction
  - Adverse childhood trauma
  - Lack of social support
  - Interpersonal conflict
  - Mental health disorders

Bridge, Goldstein, & Brent, 2006; CDC, 2011, 2012; Evans, Hawton, & Rodham, 2004; Leon et al., 1990; Stanley et al., 2001
2004-2010, United States
Age-adjusted Death Rates per 100,000 Population
All Injury, Suicide, All Races, All Ethnicities, Both Sexes, All Ages
Annualized Age-adjusted Rate for United States: 11.38

Ohio = 11.4 (16th)
New Jersey = 6.7 (LOWEST)
Alaska = 21.8 (HIGHEST)

Reports for All Ages include those of unknown age.
* Rates based on 20 or fewer deaths may be unstable. States with these rates are cross-hatched in the map (see legend above). Such rates have an asterisk. The standard population for age-adjustment represents the year 2000, all races, both sexes.

Produced by: the Statistics, Programming & Economics Branch, National Center for Injury Prevention & Control, CDC
Data Sources: NCES National Vital Statistics System for numbers of deaths; US Census Bureau for population estimates.
New York = 2.44 (LOWEST)

Ohio = 5.05 (28th)

Alaska = 16.47 (HIGHEST)

4.00-4.93

1.88-3.99

5.99-16.47

4.94-5.98

Reports for All Ages include those of unknown age.

* Rates based on 20 or fewer deaths may be unstable. States with these rates are cross-hatched in the map (see legend above). Such rates have an asterisk.
The Burden of Suicide in Ohio

In 2010, suicide was the 11th leading cause of death for all ages and the 2nd leading cause of death in youth aged 10-19 years.

In 2010, more than twice as many Ohioans died by suicide than by homicide (1,439 suicide deaths vs. 569 homicide deaths).

Suicide Rates per 100,000 Population, Ohio Counties, All Ages, 2004-2010*

*Annualized age-adjusted suicide rate for Ohio: 11.37

Franklin County 10.77 per 100,000 persons
Warren County 6.05 per 100,000 persons
Adams County 35.14 per 100,000 persons
Muskingum County 19.71 per 100,000 persons

Suicide Rates per 100,000 Population, Ohio Counties, 10-19yrs, 2004-2010*

*Annualized crude rate for Ohio: 5.05

Fulton County
3.87 per 100,000 persons

Franklin County
4.13 per 100,000 persons

Seneca County
7.73 per 100,000 persons

Comparison of Adolescent Suicide Rates in Ohio and U.S. by Sex, 2011

Suicide among males is roughly three times higher than among females in the US and Ohio.

Source: Centers for Disease Control and Prevention, WISQARS; data accessed from http://webappa.cdc.gov/sasweb/ncipc/dataRestriction_inj.html
Suicide Deaths by Mechanism, Ohio, 2006 to 2010

Columbus Dispatch: ‘Youth Suicides Up in Franklin County’, December 16, 2012

- Dramatic single-year increase in the number of pediatric suicides in Franklin County
- The number of suicide deaths in 2012 is equal to the number of suicide deaths in the past 5 years combined

### Disturbing trend

The number of pediatric suicides investigated in Franklin County this year has risen threefold from 2011 and is equal to the number of such deaths in the past five years combined.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Hanging</th>
<th>Gunshot</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 2012 figures are through Dec. 14. Two victims were residents of adjacent counties who died at Nationwide Children’s Hospital, and their deaths were investigated by Franklin County.

Source: Franklin County coroner

THE COLUMBUS DISPATCH
My Past Research

- Dissertation Research
  - Protective factors for adolescent suicide (case-control study)
    - Attachment Security, Religious Orientation, and Family Alliance

- South Texas Adolescent Transition Study (STAT)
  - Adolescents 12-17 yrs old; 5 year study follow-up every 6 months
    - Assessed Impulsivity, Substance Use, Serotonin Transporter Functioning, and more
My Current Research

- **BRAINS study**
  - Neurocognitive functioning, family history of mental health, impulsivity, and more

- **STAT-ED**
  - Emergency department (ED) intervention study; examining the efficiency of “case management” vs. “usual care” after ED discharge
  - Examining willingness to enter into treatment, follow through, and suicidal thoughts/behaviors 2 and 6 months after discharge
What does the future hold?

1. **Supplemental Award from National Institute of Mental Health (NIMH)**
   - Neurocognitive functioning and impulsivity of parents in the BRAINS study

2. **Manuscripts, manuscripts, and more manuscripts**
   - Ideators and Decision Making
   - Attachment/Peer relationships/Suicidal behavior
   - Correlation between adolescents and their parents on decision making and impulsive aggression

3. **Apply for more grants!**
   - Career Development Grant via NIMH
What if you or someone you know needs help?

- National Line
  - 1-800-273-TALK (8255)

- Muskingum County Crisis Hotline
  - 1-800-344-5818

- Franklin County Crisis Hotline
  - 24-hour Hotline – 614-221-5445
  - 24-hour Teen Hotline – 614-294-3300
  - 24-hour Senior Hotline – 614-294-3309

- Closest Emergency Room
Questions??