Delaware Data: Mental Health Data from the 2017 Youth Risk Behavior Survey

A presentation to the Delaware Suicide Prevention Coalition
August 20th, 2018
The National Context
# 10 Leading Causes of Death by Age Group, United States - 2016

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age Groups</th>
<th>1-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
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<td>Congenital Anomalies</td>
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<td>377</td>
<td>435</td>
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<td>6</td>
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<td>545</td>
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<td>Septicemia</td>
<td>583</td>
<td>70</td>
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<td>20</td>
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<td>75</td>
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<td>204</td>
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<td>8</td>
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<td>385</td>
<td>40</td>
<td>30</td>
<td>30</td>
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<td>75</td>
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<td>204</td>
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<td>10</td>
<td>Chronic Lower Respiratory Disease</td>
<td>385</td>
<td>40</td>
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<td>55</td>
<td>75</td>
<td>196</td>
<td>204</td>
<td>226</td>
<td>86,955</td>
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</tbody>
</table>

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC 2016
Leading Causes of Death Across the Lifespan

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC 2016
Child and Youth Suicide is a Big Deal

![Bar chart showing comparison between Medical and Suicide categories with various causes such as Cerebrovascular, Flu/Pneumonia, Congenital Abnormalities, Heart Disease, and Malignant Neoplasm.]
2017 Delaware
Youth Risk Behavior Surveys

• CDC-based survey administered in odd-numbered years by the Center for Drug and Health Studies at UD on behalf of Division of Public Health

• Sample of 6th - 12th classes in a census of Delaware public schools

• 2017 YRBS samples include 2,906 HS and 2,974 MS students

• Provides an opportunity to see early associations between mental health indicators, risk behaviors, and other factors
Middle School: Self Harm and Suicide
Percentage of Middle School Students Who Did Something to Purposely Hurt Themselves Without Wanting to Die 2017

*During the 12 months before the survey
†F > M; 8th > 6th; H > B, W > B (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.
Percentage of Middle School Students Who Ever Seriously Thought About Killing Themselves 2017

- F > M; 7th > 6th, 8th > 6th (Based on t-test analysis, p < 0.05.)
- All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
- Note: This graph contains weighted results.
Percentage of Middle School Students Who Ever Seriously Thought About Killing Themselves, 2007-2017*

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
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<tr>
<td>2007</td>
<td>21.6</td>
</tr>
<tr>
<td>2009</td>
<td>20.8</td>
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<tr>
<td>2011</td>
<td>22.5</td>
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<tr>
<td>2013</td>
<td>17.6</td>
</tr>
<tr>
<td>2015</td>
<td>18.1</td>
</tr>
<tr>
<td>2017</td>
<td>17.8</td>
</tr>
</tbody>
</table>

*Delaware - YRBS, 2007-2017
Percentage of Middle School Students Who Ever Made a Plan About How They Would Kill Themselves 2017

*F > M; 7th > 6th, 8th > 6th (Based on t-test analysis, p < 0.05.)*
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.

Note: This graph contains weighted results.
Percentage of Middle School Students Who Ever Tried to Kill Themselves, 2017

F > M; 8th > 6th; H > W (Based on t-test analysis, p < 0.05.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.

Delaware - YRBS, 2017
Percentage of Middle School Students Who Ever Tried to Kill Themselves, 2013-2017*

Note: This graph contains weighted results.
High School: Self Harm, Depression, and Suicide
Percentage of High School Students Who Did Something to Purposely Hurt Themselves Without Wanting to Die,* 2017

*Such as cutting or burning themselves on purpose one or more times during the 12 months before the survey

†F > M (Based on t-test analysis, p < 0.05.)

All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.

Note: This graph contains weighted results.

Delaware - YRBS, 2017
Percentage of High School Students Who Felt Sad or Hopeless,* 2017

*Almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey
†F > M; 10th > 9th (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.
Percentage of High School Students Who Felt Sad or Hopeless, * 1999-2017†

*Almost every day for ≥2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey
†Note: This graph contains weighted results.

Delaware and National YRBS, 1999-2017
Percentage of High School Students Who Seriously Considered Attempting Suicide, * 2017

*Ever during the 12 months before the survey
†F > M (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.

Delaware - YRBS, 2017
Percentage of High School Students Who Seriously Considered Attempting Suicide, * 1999-2017 †

*Ever during the 12 months before the survey
†Note: This graph contains weighted results.

Delaware and National YRBS, 1999-2017
Percentage of High School Students Who Made a Plan About How They Would Attempt Suicide,* 2017

*During the 12 months before the survey
†F > M (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.
Percentage of High School Students Who Made a Plan About How They Would Attempt Suicide,* 1999-2017†

*During the 12 months before the survey
Note: This graph contains weighted results.
Percentage of High School Students Who Attempted Suicide, * 2017

*One or more times during the 12 months before the survey
†F > M (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.
Percentage of High School Students Who Attempted Suicide,* 1999-2017†

*One or more times during the 12 months before the survey
†Note: This graph contains weighted results.

Delaware and National YRBS, 1999-2017
Percentage of High School Students Who Had a Suicide Attempt That Resulted in an Injury, Poisoning, or Overdose That Had to Be Treated by a Doctor or Nurse, * † 2017

*During the 12 months before the survey
†9th > 12th, 10th > 12th, 11th > 12th; H > W (Based on t-test analysis, p < 0.05.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
Note: This graph contains weighted results.
Percentage of High School Students Who Had a Suicide Attempt That Resulted in an Injury, Poisoning, or Overdose That Had to Be Treated by a Doctor or Nurse, * 1999-2017 †

Note: This graph contains weighted results.

*During the 12 months before the survey
†Note: This graph contains weighted results.
Mental Health and ACEs
# Aggregated Statewide ACEs (%, 2017 Delaware High School YRBS)

<table>
<thead>
<tr>
<th></th>
<th>0 ACE</th>
<th>1 ACE</th>
<th>2 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>60</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Females</td>
<td>54</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td><strong>New Castle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>61</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>Females</td>
<td>54</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td><strong>Kent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>57</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Females</td>
<td>56</td>
<td>21</td>
<td>23</td>
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<tr>
<td><strong>Sussex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>59</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Females</td>
<td>52</td>
<td>24</td>
<td>25</td>
</tr>
</tbody>
</table>
HS: Homelessness (%)

Homelessness and mental health*

- **Depressed for Two Weeks**
  - Homeless: 36
  - Not Homeless: 27

- **Self-Harm**
  - Homeless: 37
  - Not Homeless: 13

- **Attempt Suicide**
  - Homeless: 24
  - Not Homeless: 6

2017 Delaware High School YRBS
*Mental health indicators asked regarding the previous 12 months*
HS: Parental Incarceration (%)

Incarcerated parent and mental health*

- Depressed for Two Weeks:
  - Parent incarcerated: 50
  - No parent incarcerated: 23

- Self-Harm:
  - Parent incarcerated: 25
  - No parent incarcerated: 13

- Attempt Suicide:
  - Parent incarcerated: 16
  - No parent incarcerated: 6

2017 Delaware High School YRBS
*Mental health indicators asked regarding the previous 12 months
HS: Exposure to Violence Indicators (%)

Threatened at school and mental health*

-Depressed for Two Weeks: 51%
-Self-Harm: 36%
-Attempt Suicide: 28%

*Mental health indicators asked regarding the previous 12 months
HS: Exposure to Violence Indicators (%)

Bullying and mental health

- Depressed for Two Weeks: 55% Have been bullied, 23% Have NOT been bullied
- Self-Harm: 38% Have been bullied, 10% Have NOT been bullied
- Attempt Suicide: 20% Have been bullied, 4% Have NOT been bullied

2017 Delaware High School YRBS
*Mental health indicators asked regarding the previous 12 months
HS: Exposure to Violence Indicators (%)

Physical teen dating violence and mental health*

- **Depressed for Two Weeks**
  - Have experienced physical DV: 58%
  - Have NOT experienced physical DV: 25%

- **Self-Harm**
  - Have experienced physical DV: 42%
  - Have NOT experienced physical DV: 12%

- **Attempt Suicide**
  - Have experienced physical DV: 28%
  - Have NOT experienced physical DV: 5%

2017 Delaware High School YRBS

*Mental health indicators asked regarding the previous 12 months*
HS: Exposure to violence indicators (%)

Forced sexual contact (TDV) and mental health*

Depressed for Two Weeks | Self-Harm | Attempt Suicide
---|---|---
Males who have been forced to have sexual contact | Females who have been forced to have sexual contact | Males who have NOT been forced to have sexual contact | Females who have NOT been forced to have sexual contact
46 | 50 | 7 | 3
16 | 7 | 15 | 3
33 | | | 6

2017 Delaware High School YRBS
*Mental health indicators asked regarding the previous 12 months
HS: Aggregated ACEs and Mental Health (%)

- Depressed for Two Weeks:
  - 0 ACEs: 15
  - 1 ACE: 33
  - 2 or more ACEs: 54

- Self-Harm:
  - 0 ACEs: 6
  - 1 ACE: 15
  - 2 or more ACEs: 35

- Attempt Suicide:
  - 0 ACEs: 2
  - 1 ACE: 6
  - 2 or more ACEs: 20

2017 Delaware High School YRBS
Homelessness and mental health

- Self-Harm:
  - Homeless: 10
  - Not Homeless: 11

- Attempt Suicide:
  - Homeless: 15
  - Not Homeless: 6

2017 Delaware Middle School YRBS
MS: Exposure to Violence Indicators (%)

MS Bullying and mental health

- Self-Harm:
  - Have been bullied: 20%
  - Have NOT been bullied: 5%

- Attempt Suicide:
  - Have been bullied: 12%
  - Have NOT been bullied: 3%

2017 Delaware Middle School YRBS
MS: Exposure to Violence Indicators (%)

![Bar chart showing emotional TDV and mental health]

- **Self-Harm**: 34%
  - Have experienced Emotional DV: 9%
  - Have NOT experienced Emotional DV: 5%
- **Attempt Suicide**: 21%
  - Have experienced Emotional DV: 5%
  - Have NOT experienced Emotional DV: 5%

2017 Delaware Middle School YRBS
MS: Exposure to Violence Indicators (%)

Physical TDV and mental health

- **Self-Harm**
  - Have experienced physical DV: 42%
  - Have NOT experienced physical DV: 10%

- **Attempt Suicide**
  - Have experienced physical DV: 32%
  - Have NOT experienced physical DV: 6%

2017 Delaware Middle School YRBS
Protective Factors
HS Academic Achievement and Mental Health* (%)
MS Academic Achievement and Mental Health* (%)

<table>
<thead>
<tr>
<th></th>
<th>Mostly As</th>
<th>Mostly Bs</th>
<th>Mostly Cs</th>
<th>Mostly Ds or Fs</th>
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</thead>
<tbody>
<tr>
<td>Self-Harm</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Attempt Suicide</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>8</td>
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</tbody>
</table>

2017 Delaware Middle School YRBS
*"Self harm" refers to the previous 12 months; “attempted suicide” refers to lifetime experience.
Past Month Substance Use among Delaware 11th Graders Reporting Where Parents Know Where They Are When They Are Not In School

- Past Month Smoking: 2% to 23%
- Past Month Alcohol Use: 5% to 49%
- Past 2 Weeks Binge Drinking*: 22% to 37%
- Past Month Marijuana Use: 12% to 60%

*Past 2 Weeks Binge Drinking: Reporting drinking 5 or more alcoholic drinks in a row at least once in the past 2 weeks.
Past Month Substance Abuse among Delaware 8th Graders Reporting Where Parents Know Where They Are When They Are Not In School

- Past Month Smoking
- Past Month Alcohol Use
- Past Month Binge Drinking*
- Past Month Marijuana Use
Substance Use and Mental Health
Self Harm* and Past Month Substance Use (%)

<table>
<thead>
<tr>
<th></th>
<th>HS</th>
<th>MS</th>
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</thead>
<tbody>
<tr>
<td>Past 30 Day Alcohol Use</td>
<td>36/28</td>
<td>19/6</td>
</tr>
<tr>
<td>Past 30 Day Cigarette Use</td>
<td>16/5</td>
<td>5/1</td>
</tr>
<tr>
<td>Past 30 Day Marijuana Use</td>
<td>34/23</td>
<td>12/4</td>
</tr>
<tr>
<td>Past 30 Day RX Painkiller Use</td>
<td>15/6</td>
<td>8/2</td>
</tr>
</tbody>
</table>

*Self harm refers to previous 12 months.
HS: Sad/Hopelessness and past month substance use (%)

Sad or hopelessness for 2 weeks or more within past year and past month substance use

- Past 30 Day Alcohol Use: 39 (Sad), 25 (Not Sad)
- Past 30 Day Cigarette Use: 12 (Sad), 4 (Not Sad)
- Past 30 Day Marijuana Use: 36 (Sad), 20 (Not Sad)
- Past 30 Day RX Painkiller Use: 12 (Sad), 3 (Not Sad)

2017 Delaware HS and MS YRBS
Seriously considered suicide* and past month substance use

**HS**

- Past 30 Day Alcohol Use: 39 Considered, 27 Did Not
- Past 30 Day Cigarette Use: 15 Considered, 5 Did Not
- Past 30 Day Marijuana Use: 37 Considered, 22 Did Not
- Past 30 Day RX Painkiller Use: 16 Considered, 4 Did Not

**MS**

- Past 30 Day Alcohol Use: 16 Considered, 6 Did Not
- Past 30 Day Cigarette Use: 4 Considered, 1 Did Not
- Past 30 Day Marijuana Use: 11 Considered, 4 Did Not
- Past 30 Day RX Painkiller Use: 6 Considered, 2 Did Not

2017 Delaware HS and MS YRBS
*Mental health indicator refers to past 12 months for HS; refers to lifetime for middle school.*
Planned suicide* and past month substance use (%)

2017 Delaware HS and MS YRBS
*Mental health indicator refers to past 12 months for HS; refers to lifetime for middle school.
Attempted suicide* and past month substance use (%)

2017 Delaware HS and MS YRBS
*Mental health indicator refers to past 12 months for HS; refers to lifetime for middle school.
Past month cigarette use and mental health* (%)  

2017 Delaware HS and MS YRBS.  
*Self harm refers to previous 12 months.  
HS: Sad/hopeless and all suicide indicators refer to previous 12 months. MS: All suicide indicators refer to lifetime.
Past month alcohol use and mental health (%)

2017 Delaware HS and MS YRBS.
*Self harm refers to previous 12 months.
HS: Sad/hopeless and all suicide indicators refer to previous 12 months. MS: All suicide indicators refer to lifetime.
Past month marijuana use and mental health (%)

2017 Delaware HS and MS YRBS.
*Self harm refers to previous 12 months.
HS: Sad/hopeless and all suicide indicators refer to previous 12 months. MS: All suicide indicators refer to lifetime.
### Past month Rx pain medication use and mental health (%)

<table>
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<tr>
<th></th>
<th>HS</th>
<th>MS</th>
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<tbody>
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<td><strong>Self Harm</strong></td>
<td>37/13</td>
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<td>43/17</td>
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<td><strong>Past 2 Weeks</strong></td>
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<tr>
<td><strong>Considered Suicide</strong></td>
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<td>39/10</td>
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<tr>
<td><strong>Planned Suicide</strong></td>
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<tr>
<td><strong>Attempted Suicide</strong></td>
<td>29/5</td>
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*Self harm refers to previous 12 months.

HS: Sad/hopeless and all suicide indicators refer to previous 12 months. MS: All suicide indicators refer to lifetime.

2017 Delaware HS and MS YRBS.
The Takeaway...

- Students who use substances are more likely to experience symptoms of depression, self harm, and to consider suicide.
- Students who experience symptoms of depression, self harm, and consider suicide are more likely to use substances.
- When developing prevention strategies, both substance use and mental health factors should be considered.
For more Delaware youth data, or to view the Delaware Youth Risk Behavior Survey and the Delaware School Survey, visit the Center for Drug and Health Studies.
Thank you!

**Project SAFETY** GLS Suicide Prevention Grant is under the direction of Harvey Doppelt, PhD
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