Health compromising behaviors adopted during adolescence often translate into poor health status later in adulthood. Therefore, early recognition of these behaviors, and intervention efforts, are critical to improving the Publics’ health. The purpose of this Brief is fivefold: 1) to identify unfavorable risk factors among RI high schoolers (Chart 1), 2) to see how RI students compare to their peers across the country (Chart 2), 3) to see if RI risks have improved or worsened over time (Chart 2), 4) to see if there are any gender differences in risks (Chart 3), and 5) to see if there is any difference in risks by grade level (Chart 4). The findings are intended to inform interested parties and stimulate further research.

Twenty one measures\(^1\) are examined, comprising seven areas of vulnerability (i.e., drugs & alcohol, injury, mental health, sex, tobacco, violence, and weight). Any differences in values (over time or between groups), were statistically ‘significant’ at the 95% confidence level.\(^2\) Lastly, with the exception of the ‘lesbian, gay or bisexual’ measure, all others are unfavorable indicators, so lower/declining values are preferred (i.e., are ‘better’).

**Drugs & Alcohol:** Twenty six percent (26%) of students use marijuana, and the rates increase by grade level (20% to 34%, 9\(^{th}\) to 12\(^{th}\) grade). Seventeen percent (17%) of kids abuse Rx and/or non-Rx drugs. More boys than girls abuse these drugs (19% vs. 14%), and the rates increase by grade level (13% to 21%, 9\(^{th}\) to 12\(^{th}\) grade). Drinking is lower in RI than the nation (34% vs. 39%). Drinking rates improved from 2007 to 2011 (43% to 34%), but they increase unfavorably by grade level (23% to 45%, 9\(^{th}\) to 12\(^{th}\) grade).

**Injury:** RI students are less likely to not wear bike helmets than their national peers (78% vs. 88%). Ten percent (10%) of kids do not wear seat belts, and 7% drive after drinking. Drinking and driving, however, improved from 2007 to 2011 (10% to 7%).

**Mental Health:** Fifteen percent (15%) of students have a long-term emotional disability. Psychological depression is less common in RI than the nation (25% vs. 29%). Girls are more likely to suffer from depression than boys (32% vs. 18%), and 9% of students attempt suicide.

**Sex:** Eight percent (8%) of students identify themselves as lesbian, gay or bisexual, with more girls than boys doing so (10% vs. 5%). Thirty percent (30%) of kids are sexually active, and sexual activity increases by grade level (17% to 45%, 9\(^{th}\) to 12\(^{th}\) grade). Twelve percent (12%) of students used no protection during their last sexual encounter.

**Tobacco:** RI students are less likely to smoke than their national peers (11% vs. 18%). Nine percent (9%) of kids are heavy smokers. Use of any tobacco product is also lower in RI than the nation (18% vs. 23%). More boys than girls use tobacco products (23% vs. 13%), and tobacco use increases by grade level (13% to 23%, 9\(^{th}\) to 12\(^{th}\) grade).

**Violence:** Fighting is less common in RI than the nation (24% vs. 33%). Boys are more likely to fight than girls (30% vs. 17%), and fighting decreases by grade level (27% to 18%, 9\(^{th}\) to 12\(^{th}\) grade). Dating violence improved from 2007 to 2011 (14% to 8%). Sexual assault (i.e., rape) also improved from 2007 to 2011 (10% to 7%). Girls are more likely to be victims of rape than boys (8% vs. 5%).

**Weight:** Eleven percent (11%) of students are obese, and 12% are not physically active. Four percent (4%) of kids don’t consume fruits or vegetables, and boys are more likely to have poor nutrition than girls (5% vs. 3%).

Despite the considerable improvement in certain risk measures (e.g., drinking, dating violence, rape), current rates remain unacceptably high (e.g., suicide, smoking, obesity). For public health to improve and healthcare costs to moderate, these factors need to be addressed through concerted, committed effort.

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1. Data are from RI’s Youth Risk Behavior Survey, part of a biennial national survey of public high school students on the major causes of disease and injury morbidity and mortality (contact Bruce Cryan, 401-222-5111, www.health.ri.gov/data/youthriskbehaviorsurvey/)

2. As the RI-YRBS is a sample survey, if the 95% Confidence Intervals of two values do not overlap, one may conclude (with 95% certainty) that there was a ‘real’ difference between the two values (i.e., the difference was not likely due to sampling bias).
Chart 3: Male & Female (RI 2011 High School Health Risks)

* statistically significant differences

- Use Marijuana
  - Male: 23%
  - Female: 30%

- * Abused Rx/non-Rx Drugs
  - Male: 19%
  - Female: 14%

- Drink Alcohol
  - Male: 33%
  - Female: 35%

- No Bike Helmet
  - Male: 8%
  - Female: 12%

- No Seat Belt
  - Male: 7%
  - Female: 8%

- Drinking & Driving
  - Male: 16%
  - Female: 14%

- Emotional Disability
  - Male: 14%
  - Female: 16%

- * Felt 'Depressed'
  - Male: 32%
  - Female: 18%

- Attempted Suicide
  - Male: 9%
  - Female: 6%

- * Lesbian, Gay or Bisexual
  - Male: 5%
  - Female: 10%

- Sexually Active
  - Male: 28%
  - Female: 31%

- Unprotected Sex
  - Male: 11%
  - Female: 13%

- Current Smoking
  - Male: 11%
  - Female: 13%

- Heavy Smoking
  - Male: 3%
  - Female: 11%

- * Any Tobacco Use
  - Male: 13%
  - Female: 23%

- * Physical Fighting
  - Male: 17%
  - Female: 30%

- Dating Violence
  - Male: 8%
  - Female: 5%

- * Rape Victim
  - Male: 5%
  - Female: 8%

- Obesity
  - Male: 13%
  - Female: 8%

- Inadequate Exercise
  - Male: 11%
  - Female: 14%

- * Poor Nutrition
  - Male: 3%
  - Female: 5%

Chart 4: 9th & 12th Grade (RI 2011 High School Health Risks)

* statistically significant differences

- * Use Marijuana
  - 9th Grade: 20%
  - 12th Grade: 34%

- * Abused Rx/non-Rx Drugs
  - 9th Grade: 13%
  - 12th Grade: 21%

- * Drink Alcohol
  - 9th Grade: 23%
  - 12th Grade: 45%

- No Bike Helmet
  - 9th Grade: 11%
  - 12th Grade: 12%

- No Seat Belt
  - 9th Grade: 16%
  - 12th Grade: 14%

- Drinking & Driving
  - 9th Grade: 4%
  - 12th Grade: 7%

- Emotional Disability
  - 9th Grade: 17%
  - 12th Grade: 24%

- Felt 'Depressed'
  - 9th Grade: 9%
  - 12th Grade: 25%

- Attempted Suicide
  - 9th Grade: 7%
  - 12th Grade: 7%

- Lesbian, Gay or Bisexual
  - 9th Grade: 9%
  - 12th Grade: 7%

- Sexually Active
  - 9th Grade: 11%
  - 12th Grade: 17%

- Unprotected Sex
  - 9th Grade: 16%
  - 12th Grade: 45%

- Current Smoking
  - 9th Grade: 11%
  - 12th Grade: 9%

- Heavy Smoking
  - 9th Grade: 13%
  - 12th Grade: 13%

- * Any Tobacco Use
  - 9th Grade: 13%
  - 12th Grade: 23%

- * Physical Fighting
  - 9th Grade: 17%
  - 12th Grade: 27%

- Dating Violence
  - 9th Grade: 7%
  - 12th Grade: 18%

- Rape Victim
  - 9th Grade: 8%
  - 12th Grade: 8%

- Obesity
  - 9th Grade: 12%
  - 12th Grade: 11%

- Inadequate Exercise
  - 9th Grade: 10%
  - 12th Grade: 13%

- Poor Nutrition
  - 9th Grade: 4%
  - 12th Grade: 3%
<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>RI-2011</th>
<th>US-2011</th>
<th>RI-2007</th>
<th>MALE</th>
<th>FEMALE</th>
<th>9th GRADE</th>
<th>11th GRADE</th>
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</thead>
<tbody>
<tr>
<td><strong>DRUGS &amp; ALCOHOL</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Use Marijuana</td>
<td>1+ times, past mo.</td>
<td>26.3%</td>
<td>23.5%</td>
<td>29.4%</td>
<td>23.1%</td>
<td>21.5%</td>
<td>24.7%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Abused Rx/non-Rx Drugs</td>
<td>1+ times, ever</td>
<td>16.6%</td>
<td>15.3%</td>
<td>17.9%</td>
<td>16.2%</td>
<td>n/a</td>
<td>n/a</td>
<td>18.9%</td>
</tr>
<tr>
<td>Drink Alcohol</td>
<td>1+ days, past mo.</td>
<td>34.0%</td>
<td>31.3%</td>
<td>36.8%</td>
<td>38.7%</td>
<td>37.2%</td>
<td>40.3%</td>
<td>32.6%</td>
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<tr>
<td><strong>INJURY</strong></td>
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<tr>
<td>No Bike Helmet</td>
<td>never/rarely wore, past yr.</td>
<td>77.5%</td>
<td>70.9%</td>
<td>82.9%</td>
<td>87.5%</td>
<td>85.0%</td>
<td>89.7%</td>
<td>80.4%</td>
</tr>
<tr>
<td>No Seat Belt</td>
<td>never/rarely wore, past yr.</td>
<td>10.1%</td>
<td>7.7%</td>
<td>13.2%</td>
<td>7.7%</td>
<td>6.5%</td>
<td>9.1%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Drinking &amp; Driving</td>
<td>1+ times, past mo.</td>
<td>6.5%</td>
<td>5.3%</td>
<td>7.9%</td>
<td>8.2%</td>
<td>7.6%</td>
<td>8.8%</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>MENTAL HEALTH</strong></td>
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</tr>
<tr>
<td>Emotional Disability</td>
<td>for 6+ mos.</td>
<td>14.9%</td>
<td>13.3%</td>
<td>16.6%</td>
<td>12.9%</td>
<td>11.3%</td>
<td>14.7%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Felt 'Depressed'</td>
<td>for 2+ wks., past yr.</td>
<td>24.6%</td>
<td>22.8%</td>
<td>26.5%</td>
<td>26.5%</td>
<td>27.2%</td>
<td>29.7%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Attempted Suicide</td>
<td>1+ times, past yr.</td>
<td>8.7%</td>
<td>7.3%</td>
<td>10.4%</td>
<td>7.8%</td>
<td>7.1%</td>
<td>8.5%</td>
<td>9.3%</td>
</tr>
<tr>
<td><strong>SEX</strong></td>
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</tr>
<tr>
<td>Lesbian, Gay or Bisexual</td>
<td>sexual self-identity</td>
<td>7.7%</td>
<td>6.6%</td>
<td>9.0%</td>
<td>7.2%</td>
<td>5.5%</td>
<td>9.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Sexually Active</td>
<td>1+ partner, past 3 mos.</td>
<td>29.8%</td>
<td>26.4%</td>
<td>33.4%</td>
<td>33.7%</td>
<td>31.8%</td>
<td>35.7%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Unprotected Sex</td>
<td>no protection, last encounter</td>
<td>11.6%</td>
<td>8.6%</td>
<td>15.6%</td>
<td>12.9%</td>
<td>11.6%</td>
<td>14.2%</td>
<td>12.2%</td>
</tr>
<tr>
<td><strong>TOBACCO</strong></td>
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</tr>
<tr>
<td>Current Smoking</td>
<td>on 1+ days, past mo.</td>
<td>11.4%</td>
<td>9.0%</td>
<td>14.4%</td>
<td>16.1%</td>
<td>16.7%</td>
<td>19.5%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Heavy Smoking</td>
<td>10+ on days smoked, past mo.</td>
<td>8.6%</td>
<td>5.0%</td>
<td>14.6%</td>
<td>7.8%</td>
<td>6.3%</td>
<td>9.7%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Any Tobacco Use</td>
<td>cigs, cigars, smokeless past mo.</td>
<td>17.9%</td>
<td>14.6%</td>
<td>21.7%</td>
<td>23.4%</td>
<td>21.8%</td>
<td>25.1%</td>
<td>21.6%</td>
</tr>
<tr>
<td><strong>VIOLANCE</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Physical Fighting</td>
<td>1+ times, past yr.</td>
<td>23.5%</td>
<td>21.8%</td>
<td>25.3%</td>
<td>32.8%</td>
<td>31.5%</td>
<td>34.1%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Dating Violence</td>
<td>hit by boy/girlfriend, past yr.</td>
<td>8.2%</td>
<td>7.5%</td>
<td>8.9%</td>
<td>9.4%</td>
<td>8.6%</td>
<td>10.3%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Rape Victim</td>
<td>forced intercourse, ever</td>
<td>6.9%</td>
<td>6.0%</td>
<td>7.9%</td>
<td>8.0%</td>
<td>7.3%</td>
<td>8.8%</td>
<td>10.1%</td>
</tr>
<tr>
<td><strong>WEIGHT</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Obesity</td>
<td>&gt; =95th percentile for BMI</td>
<td>10.8%</td>
<td>8.8%</td>
<td>13.3%</td>
<td>13.0%</td>
<td>11.7%</td>
<td>14.4%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Inadequate Exercise</td>
<td>not active for 60+ min., past wk.</td>
<td>12.1%</td>
<td>9.7%</td>
<td>14.9%</td>
<td>13.8%</td>
<td>12.8%</td>
<td>14.8%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Poor Nutrition</td>
<td>no fruit or veggies, past wk.</td>
<td>3.9%</td>
<td>3.2%</td>
<td>4.5%</td>
<td>3.6%</td>
<td>2.7%</td>
<td>4.4%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

'na' not applicable/available, data were either not collected, the sample was too small to be statistically valid ('heavy smoking' by grade), or not a meaningful comparison ('drinking & driving' by grade)