## Sexual Orientation \& High School Health Risks (2011)

One in twelve (8\%) high school students in Rhode Island (RI) is lesbian, gay or bisexual. ${ }^{1}$ This Brief examines if these students are in greater jeopardy from health risk behaviors than their heterosexual peers (Chart 1), and whether those risks have improved or worsened over time (Chart 2). Twenty measures are evaluated, ${ }^{2}$ comprising seven areas of vulnerability (drugs and alcohol, injury, mental health, sex, tobacco, violence, and weight). The findings are intended to inform interested parties and stimulate further research.
In this Brief, the relationship between sexual orientation and health risk factors is one of association, not causation (e.g., non-heterosexual students attempt suicide four times more often than heterosexuals, but being lesbian, gay or bisexual does not cause one to try to kill oneself). In the text, only those differences in values (over time or between heterosexual and non-heterosexual students) that are statistically 'significant' at the $95 \%$ confidence level are noted. ${ }^{3}$ Lastly, all the measures are unfavorable indicators, so lower/declining values are preferred.

Drugs \& Alcohol: Marijuana use is higher among nonheterosexual students ( $39 \%$ vs. $25 \%$ ), and the abuse of prescription and 'over-the-counter' drugs is twice as high (35\% vs. $15 \%$ ). Drinking among lesbian, gay and bisexual students declined from 2007 ( $65 \%$ to 49\%), but remained higher for this group in 2011 (49\% vs. 33\%).
Injury: There was no significant difference in bike helmet use for heterosexual and non-heterosexual students. Lesbians, gays and bisexuals, however, are more likely to not wear seat belts ( $19 \%$ vs. $9 \%$ ), and $21 / 2$ times more likely to drink and drive ( $15 \%$ vs. $6 \%$ ).

Key Findings


Rl's high school lesbian, gay and bisexual population increased from $7 \%$ to 8\% (2007-2011).
A non-heterosexual orientation is strongly associated with higher health risks (these students had higher rates on 19 (of 20) measures).
From 2007-2011, one risk measure for lesbian, gay or bisexual students improved significantly (i.e., drinking). No measure worsened.

Mental Health: Emotional disability is more prevalent among
lesbian, gay and bisexual high schoolers ( $31 \%$ vs. $13 \%$ ), and acute depression is $21 / 2$ times more common ( $55 \%$ vs. $22 \%$ ). These students are also four times more likely to attempt suicide ( $29 \%$ vs. $7 \%$ ).
Sex: More lesbian, gay and bisexual students are sexually active ( $44 \%$ vs. $29 \%$ ), and they are four times more likely to have unprotected sex ( $17 \%$ vs. $4 \%$ ).
Tobacco: Cigarette smoking is $21 / 2$ times higher among non-heterosexual students ( $25 \%$ vs. $10 \%$ ), and they are much more likely to be heavy smokers (more than 10 cigarettes a day; $5 \%$ vs. $1 \%$ ). More nonheterosexual students use some kind of tobacco product ( $29 \%$ vs. $17 \%$ ).
Violence: Physical fighting is more prevalent among lesbian, gay and bisexual high schoolers ( $36 \%$ vs. $22 \%$ ), and dating violence is three times higher ( $22 \%$ vs. $7 \%$ ). In addition, the incidence of rape among these students is four times higher ( $22 \%$ vs. $5 \%$ ).
Weight: More lesbian, gay and bisexual students are obese ( $17 \%$ vs. $10 \%$ ), in part because they are more likely to not exercise ( $19 \%$ vs. $11 \%$ ) and have poor nutrition ( $7 \%$ vs. $3 \%$ ).
Eight percent (8\%) of RI high schoolers are lesbian, gay or bisexual and this is strongly correlated with higher health risks. ${ }^{4}$ These students are clearly vulnerable from a host of factors compromising their current and future health status. Addressing their negative health disparities is therefore key to enabling these students to lead long and healthy lives.

[^0]Chart 1: RI High School Health Risks by Sexual Orientation (2011)

* statistically significant differences


Chart 2: RI 2007 \& 2011 Health Risks for Lesbian, Gay, Bisexual Students * statistically significant changes


DRUGS \& ALCOHOL MEASURES: Use Marijuana (1+ times, past mo.); Abused Legal Drugs (abused prescription and/or 'over-the-counter' drugs 1+ times, ever); Drink Alcohol (1+ days, past mo.); INJURY MEASURES: No Bike Helmet (never or rarely wore, past yr.); No Seat Belt (never or rarely wore, past yr.); Drinking \& Driving (1+ times, past mo.); MENTAL HEALTH MEASURES: Emotional Disability (for 6+ mos.); Acute Depression (for 2+ weeks, past yr.); Attempted Suicide (1+ times, past yr.); SEX MEASURES: Sexually Active (1+ partner, past 3 mos.); Unprotected Sex (no protection, last encounter); TOBACCO MEASURES: Smoke Cigarettes (on 1+ days, past mo.); Heavy Smoking (over 10 cigarettes per day, past mo.); Use Any Tobacco (used chewing tobacco, snuff, dip, or smoked cigars or cigarettes on 1+ days, past mo.); VIOLENCE MEASURES: Physical Fighting (1+ times, past yr.); Dating Violence (physically abused by partner in the past yr.); Rape Victim (forced into sexual intercourse, ever); WEIGHT MEASURES: Obesity (over the 95th percentile for body mass index); Inadequate Exercise (60+ min. of exercise on 0 days, past wk.); Poor Nutrition (no fruit or vegetables, past wk.)

HEALTH Information Line, 401-222-5960 / RI Relay 711, www.health.ri.gov


[^0]:    Students self-reported their sexual orientation
    Data are from Rl's Youth Risk Behavior Survey, part of a biennial national survey of high school students on the major causes of disease and injury morbidity and mortality. For more information contact Bruce Cryan, 401-222-5111, www.health.ri.gov/data/youthriskbehaviorsurvey/.
    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) there was a 'real' difference between the two values (i.e., the difference was not likely due to sampling bias).
    The Phi Coefficient ( $r_{r}$ ) measuring the correlation of sexual orientation \& higher health risks is 0.951 (' 0 ' is no correlation \& ' 1 ' is perfect correlation).

