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# Risk Behaviors and Risk Factors of Youth Engaging in Same-Sex Sexual Behaviors: Analysis of the 2007 Wisconsin Youth Risk Behavior Survey (YRBS)<sup>1</sup>

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### Background

Lesbian, gay, bisexual and transgender (LBGT) youth and adults experience health disparities compared to their heterosexual peers.<sup>2</sup> The Wisconsin Youth Risk Behavior Survey (YRBS) is conducted as part of a national effort by the U.S. Centers for Disease Control and Prevention to monitor health-risk behaviors of the nation's high school students. These behaviors, in turn, result in the most significant causes of both mortality and morbidity during youth and adulthood. In 2007, for the first time, Wisconsin added a question to its YRBS asking respondents the gender(s) of the persons with whom they had had sexual contact. Information from this question allows better understanding of health conditions and behaviors of youth engaging in same-sex sexual behaviors compared to peers engaging in opposite-sex sexual behaviors.

#### Method

We used SAS 9.1.3 statistical software and followed analytic methods outlined in the federal Centers for Disease Control and Prevention (CDC) publication *Software for Analysis of YRBS Data*.<sup>3</sup> Risk behaviors and health conditions of students who reported having had opposite-sex sexual contact only (referred to hereafter as "het-sex") were compared to students who had same-sex sexual contact ("same-sex"). Same-sex students may also have had sexual contact with persons of the opposite sex. Youth who reported not having engaged in any sexual contact ("no-sex") were excluded from the analysis.

## **Key findings**

The 2007 YRBS sample of 2,078 includes 111 same-sex, 1,181 het-sex, and 786 no-sex students. Same-sex respondents comprise 8% of students who have had sexual contact. The table that follows shows thirty survey items broken down by category. On nearly

Information about the national and Wisconsin YRBS is available at: http://www.cdc.gov/HealthyYouth/yrbs/index.htm and http://dpi.wi.gov/sspw/yrbsindx.html

<sup>&</sup>lt;sup>2</sup> Healthy People 2010: Companion Document for Lesbian, Gay, Transgender Health, http://www.lgbthealth.net/side\_hp2010.shtml

<sup>&</sup>lt;sup>3</sup> Software for Analysis of YRBS Data, Available from http://www.cdc.gov/HealthyYouth/yrbs/pdf/YRBS\_analysis\_software.pdf

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all questions related to physical safety, emotional safety and support, mental health, and tobacco and drug use, same-sex youth experienced statistically-significantly higher rates of risk behaviors and conditions than did het-sex youth.

- More than one-third (35%) of same-sex youth, compared to 20% of het-sex youth, were harassed or bullied so much that they felt unsafe at school or it affected their schoolwork. Same-sex youth report having been forced verbally or physically to take part in sexual activity at a rate three times that of het-sex youth (34% *vs.* 11%).
- Same-sex youth experienced lower levels of support from family and teachers, and expressed less of a sense of belonging at school. Nearly as many same-sex as het-sex youth would feel comfortable seeking help from a caring adult, a positive sign.
- Nearly twice as many same-sex youth (47%) experienced depression in the previous year as did het-sex youth (26%).
- One-in-four same-sex youth (7.5% het-sex youth) had a suicide attempt in the previous 12 months. More than one in seven (15%) same-sex had a suicide attempt in the previous 12 months serious enough that it required medical attention, compared to 2.5% of het-sex youth, a six-fold difference.
- Same-sex youth use tobacco at more than twice the rates of het-sex youth and have higher rates of marijuana and other drug use and frequent binge drinking.

#### **Implications**

Policy and programmatic interventions are needed to support same-sex youth and reduce health disparities.

## Limitations and next steps

In addition to limitations inherent in the YRBS, the number of same-sex respondents (111) is too small to disaggregate by respondents' gender or other differences. Future analysis will compare the 2007 and 2009 datasets for trends and combine the datasets to increase the size, and thereby the statistical power of the same-sex group.

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# Analysis of survey responses to select Wisconsin YRBS 2007 items, comparing youth reporting same-sex and youth reporting only opposite-sex sexual behaviors

The following summary table highlights (in bold) weighted percentages, confidence intervals, p-values from Rao-Scott Chi-Square tests, and relative risks of same-sex/het-sex, p-values of <.01, and their relative risks.

YRBS Category/Survey Item	Respondents who had same-sex sexual contact (may have also had opposite-sex contact)		Respondents who had only opposite-sex sexual contact		<b>p-value</b> (<.01 bold)	Relative Risk: Same- sex/ Het-sex
	Weighted percent	95% Confidence Interval	Weighed percent	95% Confidence Interval		(p<.01 bold)
CATEGORY: PHYSICAL SAFETY						
Q15. Did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school.	16.3%	10.0% 22.6%	6.8%	3.9% 9.7%	.0001	2.4
Q16. Had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months.	16.8%	10.6% 23.0%	5.7%	4.0% 7.4%	<.0001	2.9
Q18. Were in a physical fight one or more times during the past 12 months.	50.8%	40.6% 60.9%	35.3%	31.3% 39.3%	.001	1.4
Q21. Were ever hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the past 12 months.	22.1%	14.8% 29.4%	12.0%	10.1% 13.8%	<.0001	1.8
Q89. Someone had tried to hurt them by hitting, punching, or kicking them while on school property one or more times during the past 12 months.	37.2%	29.0% 45.3%	21.2%	17.1% 25.3%	<.0001	1.8
Q90. Have been harassed, picked on, or bullied so much that they felt unsafe at school or that it was hard to do their best at school during the past 12 months.	35.0%	26.9% 43.2%	20.0%	17.1% 22.9%	<.0001	1.8
Q91. Never or rarely feel safe from physical harm when they are at school.	12.5%	6.2% 18.8%	9.1%	6.3% 11.9%	NS	1.4
Q94. Have ever been forced, either verbally or physically, to take part in a sexual activity.	34.2%	25.3% 43.2%	11.4%	9.4% 13.5%	<.0001	3.0
CATEGORY: EMOTIONAL SAFETY & SUPPORT  Q92. Strongly agree or agree that harassment and bullying by other students is a problem at their school.	59.6%	49.4% 69.9%	46.7%	42.0% 51.5%	0.02	1.3

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YRBS Category/Survey Item	Respondents who had same-sex sexual contact (may have also had opposite-sex contact)		Respondents who had only opposite-sex sexual contact		p-value (<.01 bold)	Relative Risk: Same- sex/ Het-sex
	Weighted percent	95% Confidence Interval	Weighed percent	95% Confidence Interval	,	(p<.01 bold)
Q111. Strongly agree or agree that their family loves them and gives them help and support when they need it.	69.0%	60.5% 77.5%	86.7%	84.5% 88.9%	<.0001	1.3
Q112. Strongly agree or agree that their teachers really care about them and give them a lot of encouragement.	41.4%	30.8% 52.0%	57.6%	53.6% 61.6%	<.0001	1.4
Q113. Strongly agree or agree that they feel like they belong at this school.	45.9%	35.5% 56.3%	68.6%	64.9% 72.1%	<.0001	1.5
Q114. Would feel comfortable seeking help from one or more adults besides their parents if they had an important question affecting their life.	85.6%	80.6% 90.7%	88.3%	86.0% 90.5%	NS	1.0
CATEGORY: MENTAL HEALTH  Q23. Felt so sad or hopeless almost every day						
for two weeks or more in a row during the past 12 months that they stopped doing some usual activities.	47.2%	39.0% 56.1%	25.7%	22.8% 28.6%	<.0001	1.9
Q88. Have any long-term emotional or mental health problems like depression, anxiety, ADD/ADHD, eating disorders, or cutting.	38.3%	29.0% 47.7%	17.9%	14.7% 21.1%	<.0001	2.1
Q24. Seriously considered attempting suicide during the past 12 months.	41.4%	33.9% 48.9%	16.6%	14.1% 19.1%	<.0001	2.5
Q25. Made a plan about how they would attempt suicide during the past 12 months.	31.1%	23.8% 38.3%	10.8%	8.7% 12.9%	<.0001	2.9
Q26. Actually attempted suicide one or more times during the past 12 months.	25.2%	16.7% 33.8%	7.5%	6.1% 9.0%	<.0001	3.4
Q27. Made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.	14.9%	6.9% 23.0%	2.5%	1.2% 3.8%	<.0001	6.0
Q34. Ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days.	41.6%	34.0% 49.2%	19.1%	16.4% 21.8%	<.0001	2.2
Q31. Smoked more than 10 cigarettes per day on the days they smoked during the past 30 days.	19.0%	7.9% 30.1%	6.9%	4.3% 9.5%	.002	2.8
Q41. Had at least one drink of alcohol on one or more of the past 30 days.	66.4%	58.5% 74.4%	63.8%	58.9% 68.6%	NS	1.0

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	Weighted percent	95% Confidence Interval	Weighed percent	95% Confidence Interval	,	(p<.01 bold)
Q42. Had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days.	48.3%	40.8% 55.9%	43.4%	38.8% 47.9%	NS	1.1
Q42. Had five or more drinks of alcohol in a row, that is, within a couple of hours, on <b>six</b> or more of the past 30 days.	16.3%	11.5% 21.1%	9.6%	7.6% 11.6%	.008	1.7
Q47. Used marijuana one or more times during the past 30 days.	41.6%	32.0% 51.1%	28.6%	25.0% 32.2%	.004	1.5
Q47. Used marijuana <b>ten</b> or more times during the past 30 days.	19.9%	11.7% 28.1%	11.5%	8.9% 14.1%	.006	1.7
Q49,51-54. Ever used cocaine, inhalants, heroin, methamphetamines, or ecstasy.	21.9%	13.7% 30.2%	10.2%	8.2% 12.3%	.0002	2.1
CATEGORY: PHYSICAL ACTIVITY AND WEIGHT Q108. Exercised or participated in vigorous physical activity for at least 20 minutes on three or more of the past seven days.	60.0%	52.3% 67.7%	70.3%	66.6% 74.0%	0.01	1.2
Q106. Trying to lose weight.	61.7%	54.5% 68.9%	43.1%	39.0% 47.2%	<.0001	1.4
Q6,7. At risk for becoming overweight (BMI > 85th and <95th percentile).	19.3%	12.1% 26.4%	12.8%	10.8% 14.7%	NS	1.5
Q6,7. At risk for becoming overweight (BMI > 95th percentile).	11.3%	4.1% 18.5%	9.0%	7.0% 10.9%	NS	1.3

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# Risk Behaviors and Factors of Youth Engaging in Same-Sex versus Heterosexual Sexual Contact, Wisconsin Youth Risk Behavior Survey, 2007

