

## Health Indicators of Sexual Minority Youth Living in Rural and Non-rural Communities



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\* Thank you for your interest in this presentation. Please note that analyses included herein are preliminary. More recent, finalized analyses may be available by contacting CIPHR.



### Background: LGB+ Youth

Poorer health outcomes for LGB+ youth

- Gay and bisexual young men account for 72% of new HIV infections among youth (CDC, 2012)
- LGB+ youth are more likely to be injured in physical fight, experience dating violence, and physically forced to have sex (CDC, 2011)
- LGB+ youth also report higher rates of depression, emotional distress (Robinson et al., 2013), substance abuse (Sells et al., 2014), and attempted suicide (Birkett et al., 2009)



LGB+ youth are similarly resilient as heterosexual youth when they feel socially, emotionally, and physically safe and supported in schools and families (Espelage et al., 2009; Bouris et al., 2010)

### Background: Rural LGB+



Challenges faced might be more pronounced in rural communities

- Negative attitudes toward LGB+ people related to lack of diversity (Forest et al., 2009), lower income (Harak, 2002), lower education levels (Kosciw et al., 2009) and higher concentration of conservative and religious individuals (Drumheller & McQuay, 2010)
- The availability of a sexual minority peer group is often limited or nonexistent (D'Augelli & Hart, 1987)

Research is limited:

- Same-sex attracted girls living in rural communities report lower school belonging and higher depressive symptoms (Gallagher et al., 2004)
- Rural youth are equally likely to be out, but lower well-being and grade point averages (Kosciw et al., 2015)
- Rural youth are more likely to experience harassment and assault related to sexual identity and gender expression (Kosciw & Diaz, 2006)

### Current Study

- We address gaps in the literature by examining comprehensive health indicators in a nationally-representative sample of LGB+ and non-LGB youth
- To disentangle sexual identity and urbanicity, we compared rural sexual minority youth to: 1) non-rural sexual minority youth, 2) rural heterosexual youth, and 3) non-rural heterosexual youth
- Because sex could account for variability in experiences among sexual minority individuals, we examined health indicators separately by sex



## Methods



### Participants

- Data are from Teen Health and Technology study, an online, national survey of sexual and gender minority adolescents 13-18 yo as well as those who were not
- Recruited a) randomly from Harris Poll Online (HPOL) opt-in panel or b) national outreach by Gay, Lesbian, & Straight Network (GLSEN)
- 5,542 (3,777 through HPOL and 1765 GLSEN)
- Missing data imputed using STATA "impute" command
- Data are weighted to approximate the national population of youth

### Procedure

- Self-administered online survey
- Data collected between August 2010 and January 2011
- Median length 23 min (HPOL) and 34 min (GLSEN)

## Methods

### Sexual Identity

- "How would you describe your sexual identity or sexual orientation? Please select all that apply"
- 17% endorsed two or more identities
- We created five exclusive categories: straight/heterosexual exclusively; bisexual, lesbian/gay; queer; questioning, unsure, and other

### Health indicators

- Self-appraised safety at school, home, etc
- Perceived social support
- Self-reported substance use (past 12 mo)
- Self-esteem
- Depressive symptomatology
- Peer victimization
- Involvement in social or political activities
- Outness to others



• <http://innovativepublichealth.org/projects/teen-health-and-technology/>

## Data Analyses



- Chi-square used to test differences in health indicators across all four groups: rural sexual minority, non-rural sexual minority, rural heterosexual, and non-rural heterosexual
- Unadjusted multinomial regression used to quantify relative differences between rural sexual minority youth and the other three urbanicity-sexual identity categories
  - The reciprocal was calculated to reflect the relative odds of being rural sexual minority vs other three groups
- Summation of self-appraised safety, substance use, social or political involvement, and outness examined to see if rural sexual minority youth experienced a higher quantity of these characteristics

## Results: Sample Characteristics

	All Youth (n=5542)	Rural Sexual Minority (n = 594)	Non-Rural Sexual Minority (n = 1568)	Rural Heterosexual (n = 1130)	Non-Rural Heterosexual (n = 2250)
Female***	53.87	66.42	50.13	51.63	47.23
Age (Range: 13-18, M; SE)***	15.70 (.03)	15.78 (.12)	15.97 (.08)	15.54 (.06)	15.58 (.04)
Race/Ethnicity***					
White	59.88	72.99	49.03	74.12	52.73
Hispanic	19.31	14.13	25.71	12.68	21.35
Black/African American	12.66	5.27	12.76	7.33	19.03
Other Race	8.16	7.60	12.50	5.87	6.89
Sexual Identity*					
Heterosexual	61.58	--	--	--	--
Gay/Lesbian/Queer	15.42	36.84	41.79	--	--
Bisexual	18.92	51.37	48.19	--	--
Questioning/Unsure/Other	4.08	11.79	10.02	--	--
Urbanicity					
Rural	38.54	--	--	--	--
Suburban/Urban	61.46	--	--	--	--
Income*					
Low Income	28.95	32.34	32.00	29.62	25.07
Middle/High Income	71.05	67.66	68.00	70.38	74.93

## Results

### Urbanicity

- Rural and non-rural sexual minority youth similar on all measured health indicators
- Exception: rural sexual minority girls less likely to have low self-esteem (OR=63) and more likely to have been bullied (1.83) compared to non-rural sexual minority girls



### Sexual Identity

- Rural sexual minority youth differed from rural heterosexual and non-rural heterosexual youth on nearly every measured health indicator
- More likely than heterosexual youth (both rural and non-rural) to have used substances, poorer mental health outcomes, felt less safe (e.g. places of worship, to-and-from school)
- Rural sexual minority youth were 2.5-9.1 times more likely than heterosexual youth to be involved in social or political activities compared to both hetero groups, esp taking part in community that supports issue/cause

## Results

	Males (n = 2377)			Females (n = 3165)		
	Non-Rural Sexual Minority (n = 625)	Rural Heterosexual (n = 491)	Non-Rural Heterosexual (n = 1013)	Non-Rural Sexual Minority (n = 943)	Rural Heterosexual (n = 639)	Non-Rural Heterosexual (n = 1327)
<b>Measures of Self-Appraised Safety</b>						
Did Not Feel Unsafe (reference)						
Unsafe in One or More Places	.93 (.47, 1.85)	1.79 (.85, 3.27)	1.54 (.54, 2.00)	.81 (.49, 1.35)	<b>1.89 (1.10, 3.23)</b>	1.27 (.77, 2.08)
<b>Substance Use</b>						
No Substance Use (reference)						
Used 1 or 2 Substances in Past 12 months	1.43 (.74, 2.78)	<b>3.23 (1.79, 5.88)</b>	2.70 (1.49, 4.76)	1.18 (.72, 1.89)	<b>3.33 (2.13, 5.26)</b>	<b>3.23 (2.08, 5.00)</b>
Used 3 to 5 Substances in Past 12 months	1.41 (.57, 3.45)	<b>3.45 (1.45, 8.33)</b>	<b>2.50 (1.10, 5.56)</b>	.88 (.52, 1.52)	<b>5.88 (1.23, 11.11)</b>	<b>5.26 (1.03, 9.09)</b>
<b>Involvement in Social or Political Activities</b>						
No Involvement (reference)						
Involved in 1 to 4 Social or Political Activities	.78 (.26, 2.27)	2.38 (1.64, 5.88)	2.00 (.61, 5.00)	.33 (.15, .76)	<b>2.08 (1.05, 4.17)</b>	1.69 (.87, 3.33)
Involved in 5 to 8 Social or Political Activities	.95 (.34, 2.70)	<b>3.33 (1.57, 20.00)</b>	<b>8.33 (3.57, 20.00)</b>	.47 (.23, 1.02)	<b>8.33 (4.55, 16.67)</b>	<b>6.67 (3.57, 12.50)</b>
<b>Outness</b>						
Not Out in Any Relationships (reference)						
Out in 1 or 2 Relationships	.75 (.31, 1.49)			1.32 (.77, 2.27)		
Out in 3 to 6 Relationships	.81 (.41, 1.59)			1.28 (.79, 2.04)		

aORs are the adjusted conditional odds of being rural sexual minority youth versus the category in question. Point estimates are adjusted for age, race/ethnicity, income, parents combined education, gender identity, honesty while taking the survey, and not being alone while taking the survey.

## Discussion



- Overall pattern suggests health indicators similar for LGB+ youth irrespective of whether they live in a rural or non-rural setting
  - Perhaps, access to resources and general attitudes towards LGB+ youth have changed such that the gap between rural and non-rural LGB+ youth has decreased
  - Also, online connectivity may be providing support for rural youth that was not possible before, thereby mitigating previous challenges related to isolation
- Findings highlight, however, the relative disparity in health and well-being between LGB+ and non-LGB youth, both rural and urban
  - Compared to non-LGB youth, LGB+ youth more likely to be using substances, be bullied, feel unsafe in public spaces, and report depressive symptomatology
  - These findings are consistent with the voluminous literature documenting health disparities for people who are LGB+

## Limitations

- Data collected in 2012, before many currently pertinent LGBT rights issues (e.g. gay marriage legalization, HB2)
- Rural and non-rural status was self-determined and may depend on one's perspective
- Data are cross-sectional – temporality cannot be determined
- Because of sample sizes, we could not look within sexual minority group (e.g. lesbian/gay versus bisexual)
- Findings do not necessarily generalize to gender minority youth



## Conclusion



- Findings suggest living in rural environment does not confer differential experience for sexual minority youth
- One's sexual identity, whether youth live in rural or non-rural settings, is associated with a greater likelihood of risk behaviors and poorer mental health outcomes
- LGB+ youth overall, are more likely to have more social or political involvement (online and through text) than heterosexual youth
  - Suggests they are possibly using these tools to feel connected to a community, gain support, and be empowered
- Local sexual minority-inclusive services still needed for youth in rural communities

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For more information about the Teen Health and Technology study, contact:

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