A Healthy Chicago for LGBT Youth

An IMPACT Program White Paper on Health Disparities in Chicago's LGBT youth

IMPACT
The LGBT Health and Development Program
@Northwestern University

NORTHWESTERN UNIVERSITY
FEINBERG
SCHOOL OF MEDICINE

The IMPACT LGBT Health and Development Program is based in the Department of Medical Social Sciences (MSS) in the **Feinberg School of Medicine at Northwestern University.** The Department provides a unique scientific home for applied researchers who integrate biomedical and social science approaches to the improvement of health and health care delivery in diverse populations across the lifespan. The IMPACT Program was founded by Dr. Brian Mustanski in 2008, and since then has been the home to many federal and foundation funded research projects. The mission of the IMPACT Program is to conduct translational research that improves the health of the lesbian, gay, bisexual, and transgender (LGBT) community and to develop the clinical research capacity of the community. By "translational," we mean that we seek to identify health issues, understand factors that put people at risk or protect them, and turn that knowledge into programs that advance the health of LGBT people and communities. "Translate" also means that we try to explain some of the fascinating but complicated language of science into lessons that everyone can benefit from. The study of LGBT development is also part of our mission. We seek to understand how sexual orientation and gender identity develop because we believe they are core parts of human identity and worthy of understanding.

Authors
Brian Mustanski, PhD[1]
Antonia Clifford, MSW[1]
Lou Bigelow, BA[1]
Katie Andrews, MA, MEd[1]
Michelle Birkett, PhD[1]
Alan Ashbeck, BA[1]
Kimberly Fisher, MA[1]

Contributors
Emily Smith[1]
Dawn Brown, BA[2]
Laura Kuper, MA[3]
George Greene, PhD[1]
Michael E. Newcomb, PhD[1]

Affiliations
[1]Northwestern University
[2]DePaul University
[3]University of Illinois at Chicago

Suggested Citation: Mustanski, B.S., Clifford, A., Bigelow, L., Andrews, K., Birkett, M.A., Ashbeck, A., & Fisher, K. (2012) *A Healthy Chicago for LGBT Youth: An IMPACT Program White Paper on Health Disparities in Chicago's LGBT Youth*. Chicago, IL: The IMPACT Program at Northwestern University. Retrieved from http://www.impactprogram.org/youth/whitepaper .

Project Q2 was funded by the **American Foundation for Suicide Prevention**, the **David Bohnett Foundation** and **UIC LGBT Seed Fund**, the **William T. Grant Foundation**, and the **National Institute of Mental Health**.
The Youth Risk Behavior Survey was developed by the **Centers for Disease Control and Prevention** and administered by Chicago Public Schools. The content is solely the responsibility of the authors and does not necessarily represent the official views of any of agencies involved in collecting the data.

Executive Summary

As an extension of the *Healthy Chicago* Initiative, The IMPACT Program at Northwestern University has created this report to document the health disparities of Chicago's LGBT youth. Utilizing data from two different studies, Project Q2 and the Chicago YRBS, this report is able to provide a comprehensive picture of a broad range of health disparities.

This report follows the framework of the *Healthy Chicago* Initiative and focuses on the areas of mental, physical, and sexual health, as well as substance use and violence prevention.

Results show that Chicago LGBT youth report health disparities across all domains. In terms of mental health, LGBT youth were more likely to report depression and depressive symptoms, previous suicide attempts, and non-suicidal self-injury. In terms of physical health, LGBT youth were not more likely to be obese, but LGB males were more likely to be underweight and both LGBT males and females were more likely to report vomiting to lose weight. In terms of sexual health, LGBT youth were more likely to report sexual risk behaviors, a deficit in HIV education, and in female-born youth, were more likely to report a teen pregnancy. In terms of substance use, LGBT youth were more likely to use tobacco, alcohol, and marijuana. And finally, LGBT youth were more likely to report experiences of sexual violence, dating violence, and victimization.

Taken together, these results indicate health disparities for Chicago LGBT youth are strong and pervasive. Due to the presence of these disparities at such a young age, they are likely to influence to health and wellbeing of LGBT Chicagoans throughout their lifespans.

This report concludes by highlighting the role of support in buffering many of these outcomes. Additionally, recommendations for addressing each of these disparities have been inserted throughout the document for policy makers, community organizations, and individuals to consider in taking action.

Message from the Director of the IMPACT Program

Dear Colleagues,

In March of 2012 the Chicago Department of Public Health released an LGBT Community Action Plan as a supplement to the *Healthy Chicago* Initiative, which seeks to make our city a healthy place to live and grow. The Community Action Plan aims to serve as a roadmap to address the health needs of Chicago's LGBT community. We laud the efforts of Commissioner Choucair and Mayor Emanuel in bringing attention to the health status and health care access of our community.

"We seek to conduct research that has an impact"

The IMPACT LGBT Health and Development Program at Northwestern University seeks to address these disparities by following a simple motto: "we seek to conduct research that has an impact." To live this motto, we conduct a portfolio of research that spans epidemiological research on the prevalence of health issues, longitudinal research that identified risk and protective factors for a range of health outcomes, prevention research that creates and tests innovative approaches to preventing the development of health issues, and dissemination research that moves interventions into application. We are fortunate to collaborate with many community-based organizations in Chicago and beyond to accomplish this mission. Key among them is the Center on Halsted, where we are a resident research partner.

As mentioned in the Community Action Plan, there is a lack of comprehensive health information about the LGBT community—and that absence is particularly acute among the youngest members of our community. The goal of this White Paper is to shed light on disparities in the health of LGBT youth in Chicago within many of the domains of the *Healthy Chicago* Initiative. To do this we pull from two complementary sources of data: one collected by the IMPACT Program (Project Q2) and one collected by the City of Chicago (YRBS). We hope that by compiling and reporting on these data that this White Paper will serve as a resource to a wide range of constituents seeking to address the health needs of Chicago youth, including policy makers, service providers, and funders.

We are not naïve in believing that the change necessary to eliminate health disparities among Chicago's LGBT youth will come effortlessly or instantly, but we do believe in the value of sharing data that can serve as a roadmap for the need for change.

Sincerely,

Brian Mustanski, Ph.D.
Associate Professor of Medical Social Sciences and Psychology at Northwestern University
Director, IMPACT LGBT Health and Development Program

Contents

Introduction

Healthy Chicago Initiative

The *Healthy Chicago* Initiative is "a blueprint for action intended to serve as a framework for a focused, yet comprehensive, approach to how the Chicago Department of Public Health (CDPH) will lead and work with partners to improve the health and well-being of Chicagoans [1]." The Initiative focuses on measurable policy, program, and public awareness goals, and its supplementary document provides policy recommendations for the LGBT Community. The IMPACT Program values the *Healthy Chicago* Initiative's focus on measurable strategies to raise awareness and reduce existing inequalities for Chicago's diverse population. Throughout this report we propose recommendations that aim to directly achieve these goals with a specific focus on the needs of LGBT youth in Chicago.

Download the full documents at the links below:

Healthy Chicago Initiative

http://www.cityofchicago.org/content/dam/city/depts/cdph/CDPH/PublicHlthAgenda2011.pdf

LGBT Community Action Plan

http://www.cityofchicago.org/dam/city/depts/cdph/tobacco_alchohol_and_drug_abuse/LGBTCommunityActionPlanHC.pdf

Why this Report?

The 2011 *Healthy Chicago* Initiative outlines crucial areas of health for Chicago residents, and its supplementary document, the *LGBT Community Action Plan*, outlines key actions to improve the health of LGBT Chicagoans. A key strategy outlined in this report is strengthening the public health infrastructure around LGBT health via prioritizing research identifying health disparities in the LGBT community. Following the framework developed by the *Healthy Chicago* Initiative, the IMPACT Program seeks to identify and describe LGBT youth health disparities in Chicago.

Why Are Two Datasets Used in this Report?

This report utilizes two different datasets to provide a comprehensive picture of the health disparities that affect Chicago's young LGBT people.

First, data from **Project Q2** is utilized. Project Q2 is a research study conducted by the IMPACT Program and funded by The **American Foundation for Suicide Prevention, The David Bohnett Foundation** and **UIC LGBT Seed Fund, William T. Grant Foundation**, **Northwestern University**, and the **National Institute of Mental Health**. It focuses on the health and well-being of LGBT youth across development, including mental, physical, and sexual health. Project Q2 is currently the longest running longitudinal study of LGBT youth ever conducted, now in its eighth wave of data collection (4 year follow-up) with a current retention rate of 82%.

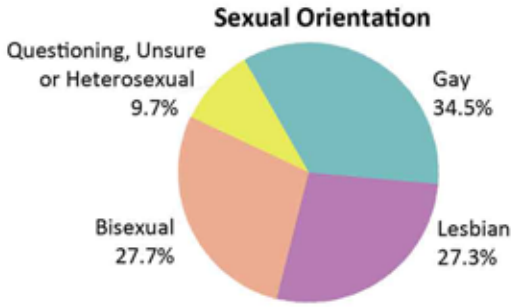
Second, data from the 2009 and 2011 combined **Chicago Youth Risk Behavior Survey (YRBS)** was also utilized. The YRBS, developed by the **Centers for Disease Control and Prevention** to monitor priority health areas, is administered every two years nationwide to a random sample of high school students. As the Chicago YRBS measures sexual orientation and sexual behavior, disparities between heterosexually-identified youth versus sexual minority (lesbian, gay, or bisexual) identified youth, can be highlighted directly.

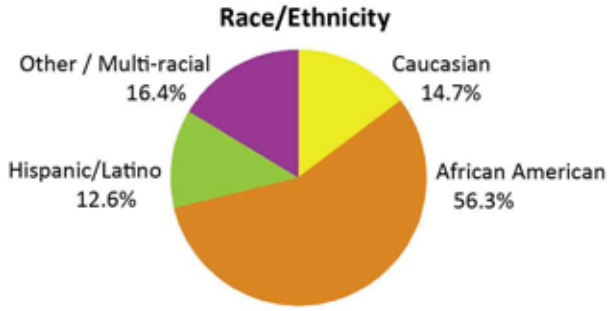
This report mobilizes the data from both studies to provide a better picture of LGBT health disparities across a variety of domains. While these surveys both provide data on sexual minority youth in Chicago, substantial differences in population samples and surveys exist.

Differences in Population Samples:

Project Q2 employs a sampling design where youth were recruited through snowball and community-based sampling. Because of this method, Project Q2 is able to target youth who may be more vulnerable to health disparities and include youth who were not in school and/or stably housed. A major strength of Project Q2 is the high quality assessment of health outcomes. For example, mental health was assessed using the "gold standard," which is a structured psychiatric interview.

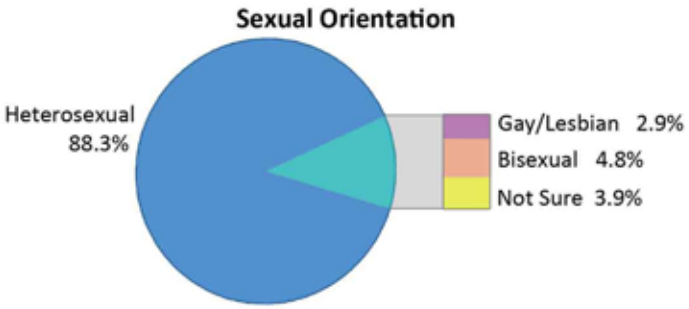
For this report, the Project Q2 sample includes 238 Chicago-based youth (47.5% male-born) between the ages of 16 and 20 at enrollment, with an average age of 18.78. All Project Q2 participants identified as LGBT or were attracted to members of the same sex. The figure below left displays the percentage of participants who identified their sexual orientation as gay, lesbian, bisexual, or questioning, unsure, or heterosexual. Of Project Q2 youth, 8.8% identified as transgender, or as a gender that is different from their biological sex. The second figure represents participants' racial or ethnic identity as African-American, Caucasian, Hispanic/Latino, or multi-racial / other. When enrolled, 58.9% lived with their family, 30.1% in other stable housing, and 11% in unstable housing (e.g., were homeless). At enrollment, 72.5% were students and 27.3% were not in school.

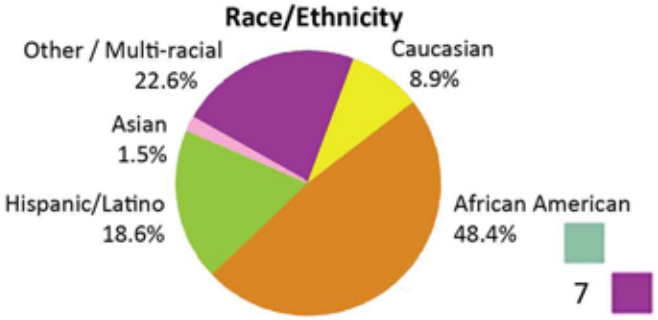




Chicago YRBS surveys a representative sample of Chicago Public School students in grades 9-12 and can provide prevalence estimates across health risk behaviors. It surveys both heterosexual and LGB youth, and as such can directly highlight disparities between the two groups. Its sample does not include youth who are not currently attending school, or who do not attend public school in Chicago. Each health issue is assessed with a small number of questionnaire items.

The YRBS sample includes 3183 adolescents ranging in age from 13 to 18 years old, with an average age of 15.96 years. Nearly 90% identified as heterosexual, while 11.6% identified as gay, lesbian, bisexual, or not sure (see figure below). Birth sex was evenly split. The second figure shows the racial demographics of the sample, by the categories African-American, Hispanic/Latino, White, Asian, and those identifying as Other. Data was weighted to adjust for school and student nonresponse and to make the data representative of the population of students from which the sample was drawn. Weighted data was used for all analyses.





Differences in Surveys:

The Chicago YRBS is designed to provide a brief overview of trends in six health areas: violence, sexual behavior, alcohol and other drug use, tobacco use, dietary behaviors, and physical activity. It is administered to students in the Chicago Public School classroom setting. In contrast, Project Q2 was designed to provide a rich assessment of individual and sociocultural predictors of mental health, substance use, HIV risk, and resilience. Project Q2 also utilizes a number of psychosocial metrics, including the Computerized Diagnostic Interview Schedule for Children (CDISC), to provide comprehensive psychosocial and psychiatric assessments. Information from Project Q2 is not intended to be representative of all Chicago youth, but rather to provide an in depth picture of LGBT health and wellness.

Throughout this report there are differences between the two studies in terms of prevalence of certain health outcomes as a result of these differences in the samples and survey measures. However, by reporting results from these two studies, we are able to provide a richer picture of LGBT youth health disparities in Chicago.

A Note on Terminology

In this report we refer to respondents from Project Q2 as ***Project Q2 youth***. We also describe Project Q2 youth as ***LGBT***, meaning lesbian, gay, bisexual, and/or transgender. At times, we report specific data for ***male-born*** or ***female-born*** youth. These terms refer to an individual's sex at birth. Sometimes we refer to ***YMSM***, which stands for Young Men who have Sex with Men, in order to include young men who may not identify as gay or bisexual but do have sex with men.

While most sections refer to respondents by sex at birth, in some areas we highlight health disparities based on a respondent's gender identity—a personal identity of being male, female, or other/between. When we use the term ***transgender***, we are referring to the 8.8% of Project Q2 respondents who indicated that they identified with a gender other than, or in addition to, the gender associated with their sex at birth. Transgender youth face additional health risks not covered in depth here. For more information, a good resource is The National Gay and Lesbian Task Force's "Injustice at Every Turn: A Report of the National Transgender Discrimination Survey." The YRBS does not currently administer questions with regard to gender identity, and as a result we are not able to report health disparities specific to transgender youth using the YRBS data.

The Chicago YRBS contains both LGB and heterosexual respondents. In this report, the heterosexual respondents are referred to as ***YRBS heterosexual youth***. For the YRBS respondents who describe their sexual orientation as lesbian, gay, bisexual, and/or unsure, we refer to them as ***YRBS LGB youth***.

Where there are graphs and figures that present data from these samples, we use the following colors to represent the three different groups:

Project Q2 youth YRBS LGB youth YRBS heterosexual youth

Depression, Suicide, and Self-Injury

Depression has been shown to affect approximately 25% of adolescents [2] and has also been associated with lower school performance and an increased risk of suicide [3] [4]. Suicide is the third leading cause of death among youth and young adults nationwide, with 7.8% of high school youth reporting a suicide attempt [1]. Young adults engaging in non-suicidal self-injury, such as cutting, have displayed a greater risk for both suicidal ideation and suicide attempts [5]. Non-suicidal self-injury has been shown to occur in 23.2% of Midwestern adolescents [6].

LGBT youth experience significantly higher rates of mood disorders, like depression, compared to their heterosexual counterparts [7-12]. Random population surveys of youth in schools and national studies of adolescents have reported associations between aspects of suicidality and having an LGBT identity [13, 14], same-gender attractions [15, 16], and same-gender sexual behavior [17, 18]. Evidence suggests that rates of suicidal ideation and suicide attempts are even higher for homeless and runaway youth [19].

Consistent with prior research, large disparities were found in reported rates of depression, suicide attempts, and non-suicidal self-injury for LGBT youth from the YRBS and Project Q2 compared to their heterosexual peers.

In Chicago: Depression

In the YRBS, high school students who identify as LGB were more likely to report being sad or depressed (42.6%) than their heterosexual peers (29%).

Project Q2 respondents were screened for Major Depressive Disorder (MDD) and 14.7% of youth met the diagnostic criteria for major depression in the last 12 months. When examining MDD diagnoses by gender identity, transgender youth had more than twice the rate of depression compared to youth whose gender identity and birth sex aligned.

In Chicago: Suicide Attempts

In the YRBS, 26.3% of LGBT students reported attempting suicide in the past 12 months, compared to 12.7% of heterosexual students.

In Project Q2, almost one-third of respondents (31.9%) reported having made a suicide attempt in their lifetime, with 6.8% reporting an attempt within the past year. Female-born youth were more likely to report a suicide attempt in the last year than male-born youth.

Key References for More Information

Liu, R. T., & Mustanski, B. (2012). *Suicidal ideation and self-harm in lesbian, gay, bisexual, and transgender youth.* American Journal of Preventive Medicine, 42, 221-228.

In Chicago: Non-Suicidal Self-Injury

In the YRBS, LGB youth were more likely to have hurt themselves in the last 12 months (34.2%) than their heterosexual peers (13.6%).

Among Project Q2 respondents, 27.1% reported having ever intentionally cut themselves, with female-born youth twice as likely as male-born youth to report this behavior.

CDPH LGBT Community Action Plan

Advocate for increased State funding to include support of LGBT persons suffering from anxiety, suicidal ideations, or other conditions.

IMPACT Recommendations

- Create and implement programs to help educate parents on how to effectively support their LGBT children.
- Establish school-based policies and programs to reduce bullying of LGBT youth.
- Provide culturally competent training for mental health professionals on issues relevant to LGBT youth.
- Prioritize access to mental health care for LGBT youth through increased services, and provide linkage to mental health care at youth serving organizations and schools.

Obesity and Disordered Eating

Obesity during childhood and adolescence is a growing national and local issue, with childhood obesity more than tripling in the last 30 years [20]. Obesity increases risks for high cholesterol, hypertension, pre-diabetes, bone and joint problems, and sleep apnea in adolescents [21], as well as heart disease, cancer, and stroke in adults. Eating disorders, such as purging and overuse of diet pills, are the third most common chronic childhood illness, after obesity and asthma, and are associated with a range of other illnesses [21, 22]. Furthermore, adolescents who are overweight or obese have been found to be at increased risk of eating disorder symptoms, such as purging and overuse of diet pills [21].

Studies suggest that lesbian and bisexual women are at a 40-50% higher risk for obesity than heterosexual females [23], and that sexual minority male and female adolescents are 1.5 to 6 times more likely to have an eating disorder [21]. Research has been limited on obesity and eating disorders among transgender people.

In Chicago: Obesity

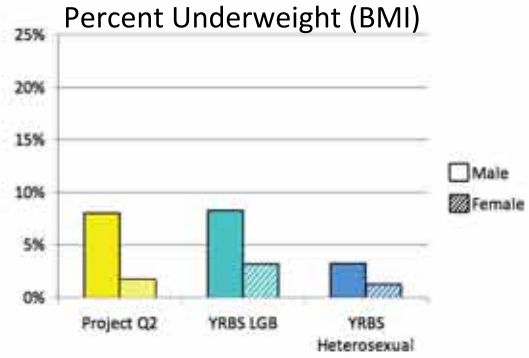
The *Healthy Chicago* Initiative stated that 28% of older children in Chicago are obese (compared to 20% nationally) [24]. In the YRBS sample of Chicago high school students, over one-third of male and females were overweight or obese. The LGB students were not significantly more likely to be overweight or obese than their heterosexual peers.

Of all Project Q2 participants, 14% of those born male and 30% of those born female were overweight or obese. Bisexual females were at the highest risk, with 33% overweight or obese, compared to 29% of lesbian/gay females, and 23% of questioning or unsure females.

While there was not a strong disparity in obesity between the LGB youth and the heterosexual youth, both heterosexual and LGB youth report high rates of obesity in Chicago.

In Chicago: Disordered Eating

In Project Q2, 8% of the male-born participants were underweight compared to 1.7% of female-born participants. Despite evidence of disordered eating symptomology, the rate of clinically significant anorexia was very low (1.3%).



In the YRBS, 8.2% of LGB male students were underweight, compared 3.1% of LGB females. LGB students were more likely to be underweight than heterosexual students, with only 3.2% of heterosexual males and 1.2% of heterosexual females being underweight. In addition, LGB students were more than twice as likely to report vomiting in the past 30 days in order to lose weight as their heterosexual peers. LGB males were at particular risk, with 27.4% reporting having vomited in the past 30 days to lose weight, compared to 6.1% of their heterosexual male peers.

Healthy Chicago Goal:
Obesity Prevention
Target: Reduce adult and childhood obesity by 10%.

IMPACT Recommendations:

- Follow through with the CDPH LGBT Community Action Plan to "Deliver targeted, culturally competent obesity risk and preventive behavioral interventions to lesbians and bisexual women," including young women.
- Implement early interventions to provide long-term reduction of obesity risk.
- Develop programs that instill healthy body image and eating behaviors in young men.

Sexual Risk and HIV/AIDS in Young Men

The face of HIV/AIDS in the United States is becoming considerably younger. Adolescents and young adults between the ages of 13 and 29 accounted for 39% of all new HIV infections in the United States in 2009 [25]. Young men who have sex with men (YMSM) accounted for 69% of all newly infected youth between 2006 and 2009 [26]. Nearly 80% of HIV infections among YMSM are occurring with their main or serious partners [25].

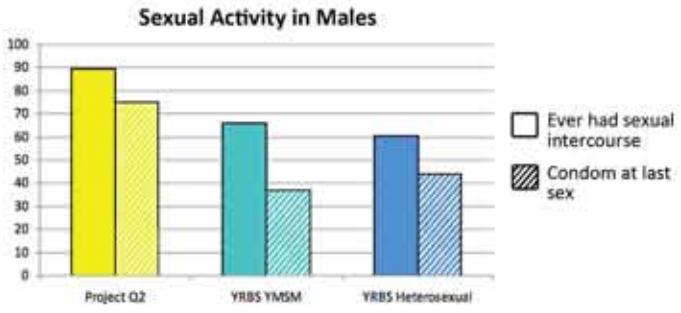
Latino and African-American YMSM are as much as 5 and 19 times more likely to be infected with HIV then their White peers, respectively [27]. Significant barriers exist for HIV positive YMSM of color to access medical care [28].

Male-to-female transgender youth have also been found to be at high risk of HIV infection due to extremely high rates of unemployment, homelessness, survival sex work, and discrimination [29] [30] [31].

In Chicago: Sexual Risk among YMSM

As shown in the figure below, the majority of YRBS and Project Q2 respondents were sexually active. Condom use at the last sexual encounter was high in the Project Q2 sample, but lower among adolescents in YRBS.

Among Project Q2 males in relationships, unprotected sex was eight times higher with participants that considered their relationship to be serious. Other risk factors for unprotected sex included older partners, drug use prior to sex, physical violence, forced sex, and partnerships lasting more than six months [32].

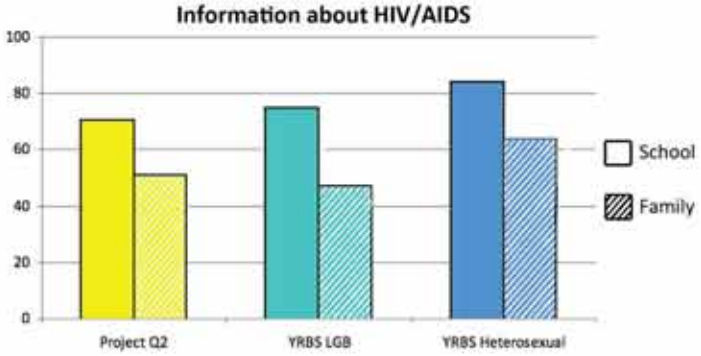


In Chicago: HIV Testing

Among Project Q2 male participants, 79.5% reported having ever been tested for HIV. African Americans had the highest rates of HIV testing (86.3%), while Hispanic/Latino participants had the lowest (56.3%). Of male Project Q2 participants who had previously been tested for HIV, 6.7% reported a positive HIV status.

In Chicago: HIV/AIDS Information

Information about HIV and AIDS for youth, and where youth receive this information, is critical. The YRBS reports 85.3% of heterosexual students have been taught about HIV/AIDS in school, 64.8% from family, and 5.7% had not received information from either place, while for LGB students, 74.9% had been taught in school, 46.7% from family, and 11.9% had no information on HIV/AIDS.



In the Project Q2 sample, fewer youth reported getting information about HIV/AIDS from school (70.5%) and family (50.9%) than the YRBS heterosexual youth, but participants also reported getting information from friends, doctors, and the Internet. This data confirms recent research utilizing the national YRBS dataset that shows that gay and bisexual young men are less likely to report receiving HIV/AIDS education in school [33].

Healthy Chicago Goal:
Prevent human immunodeficiency virus (HIV) infection and its related illness and death.

IMPACT Recommendations:

- Increase access to HIV information and LGBT inclusive sexual health education through schools and youth serving organizations.
- Increase access to HIV testing, targeting YMSM, transgender youth, and young couples.
- Increase LGBT youth access to condoms.

Sexual Risk and Pregnancy in Young Women

Teen pregnancy is not commonly thought of as an LGBT health disparity issue, but recent research emphasizes the need for its inclusion in an examination of health issues for LGBT youth.

By age 20, 30% of all American women have been pregnant at least once [34]. Hispanic/Latina and African-American teens experience rates of teen pregnancy three times that of White teens [35]. Violence and victimization are risk factors for teen pregnancy; over 50% of adolescents who become pregnant have a history of childhood sexual or physical abuse [36]. Teenage mothers experience negative educational and poverty outcomes [37] [38] [39].

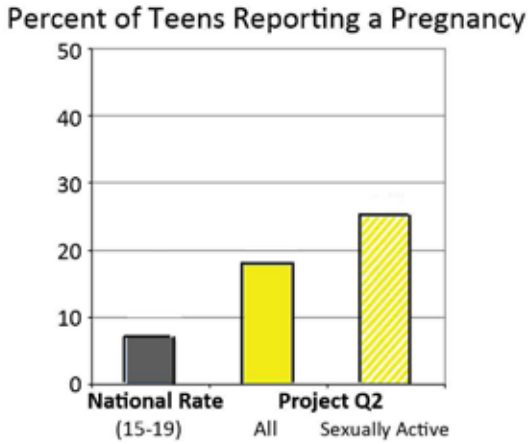
Lesbian and bisexual female teenagers report rates of pregnancy 2 to 8 times higher than their heterosexual peers [40] [41]. The relationships among individual and socio-environmental factors and adolescent pregnancy have been well-documented among heterosexual adolescents (e.g., sexual risk-taking, pubertal timing, peer/family support and dynamics [42] [43] [44]), however it has yet to be established whether these factors are relevant for sexual minority youth.

In Chicago: Sexual Risk

In the YRBS, 44.1% of heterosexual female students reported having ever had sex, compared to 59.2% of YRBS LGB identified Chicago female students. Over 60% of heterosexual female students in YRBS used a condom at last intercourse, compared to 49.3% of LGB female students. Looking at female-born youth in Project Q2, 71.1% reported having had sexual intercourse and 58.9% reported using a condom at the time of their last sexual encounter.

In Chicago: Teen Pregnancy

In Project Q2's female-born sample, 17.8% reported having ever been pregnant. Of the subsample reporting a pregnancy, 26.1% indicated they had been pregnant multiple times. Project Q2's pregnancy rate among LGBT female-born participants was over 2 times higher than the National teen pregnancy rate of 7.1% [45]. This is consistent with recent research and highlights a strong health disparity.



Youth in Project Q2 with a history of pregnancy were found to be one year younger at puberty than their sexually active LGBT peers, but reported comparable rates of risky sex practices in the previous six months and during their last sexual encounter. Youth with a history of pregnancy also reported a range of sexual orientation labels (40% identified as lesbian).

Healthy Chicago Goal: Adolescent Health
Target: Reduce the teen birth rate by 10% to 29 per 1,000.

IMPACT Recommendations:

- Provide LGBT adolescents access to relevant resources relating to pregnancy and safer-sex behaviors, including condoms and other forms of birth control.
- Increase the awareness of medical practitioners and health educators to include sexual and reproductive health resources to LGBT young people.

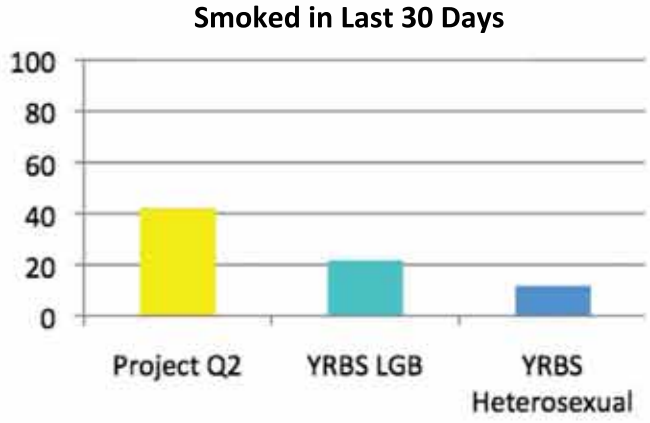
Tobacco Use

Tobacco use is currently the leading cause of preventable death and disease in the United States, causing over 1,200 deaths every day. An estimated 19.5% of high school students currently smoke [46]. Studies have shown that smoking during adolescence significantly increases one's likelihood of smoking during adulthood [47]. Aside from the risk for nicotine dependence, tobacco use in adolescence is also associated with health concerns such as high-risk sexual behavior and use of alcohol and other drugs [46].

Studies have shown that LGBT young people are significantly more likely to smoke or use tobacco than their heterosexual peers. A representative sample of U.S. high school students found that 39% of LGBT high school students currently smoke, with relatively higher rates for Black and Latino gays and lesbians, as well as bisexual females [48]. In addition, tobacco industry marketing has effectively targeted LGBT communities, which may contribute to elevated smoking rates [49].

In Chicago: Tobacco Use

Both Chicago YRBS and Project Q2 samples highlighted strong tobacco use disparities for LGBT youth. For the Chicago YRBS respondents, LGB respondents were more likely to have ever smoked, with 63% reporting having ever smoked versus 48.8% of the heterosexual students. More YRBS LGB females reported having ever smoked (66%) than males (56%). The figure above shows that heterosexual YRBS respondents were less likely to have smoked in the last 30 days, followed by YRBS LGB respondents. Project Q2 respondents were more likely to smoke, with over 40% reporting having smoked in the past 30 days.



In Project Q2, 71.2% of respondents report having ever smoked. In addition, 51% of those born male versus 39% of those born female were current smokers, with all bisexual youth less likely to currently smoke than other respondents. Of those youth that reported smoking currently, they reported an average of 5.9 cigarettes a day.

Healthy Chicago Goal:
Tobacco Use
Target: Reduce smoking prevalence among youth to 11.4%.

IMPACT Recommendations:

- Increase the scope and availability of culturally competent smoking cessation services that are available to LGBT youth in Chicago.
- Create smoking prevention campaigns that are tailored for LGBT youth.

Alcohol and Marijuana Use

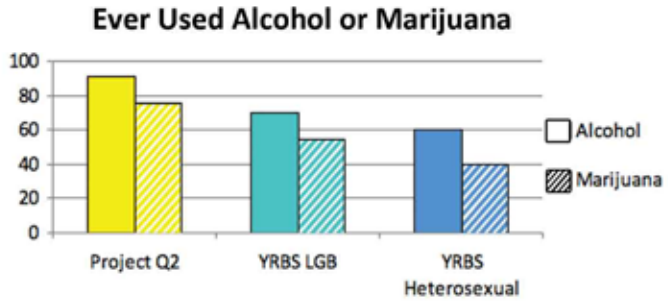
Alcohol and illicit drug use during adolescence has been found to be associated with increased risk for alcohol and substance use disorders later in life, as well as higher likelihood of experiencing a variety of other mental health disorders, including mood and anxiety disorders [50]. According to the Centers for Disease Control and Prevention (2011), 14.7% and 7.3% of U.S. adolescents between the ages of 12 to 17 used alcohol and marijuana, respectively, in 2009 within the month prior to being interviewed [51].

Research has found LGB adolescents to be 2 to 5 times more likely to use alcohol and illicit drugs than their heterosexual counterparts, with bisexual females at the highest risk for substance use [52]. Similarly, sexual minority females were more likely to consume alcohol than both sexual minority males and their heterosexual peers [53] [54]. Alcohol use has been found to begin earlier for LGB youth and increase more rapidly over time, in contrast to use among their heterosexual peers [55]. Importantly, alcohol and illicit drug use may be important predictors of other risk behaviors that contribute to health disparities, including unprotected sex and HIV risk.

In Chicago: Alcohol Use

In Chicago, both YRBS and Project Q2 showed disparities in reported rates of alcohol and marijuana use for LGBT youth compared to their heterosexual peers. As shown in the figure on this page, YRBS heterosexual youth reported drinking alcohol at some point in their life least frequently, followed by YRBS LGB youth, and then Project Q2 youth most frequently. Of the YRBS sample, 30.2% of LGB youth reported drinking alcohol before the age of 13 versus 21.3% of heterosexual youth.

On average, Project Q2 youth consumed their first alcoholic drink at age 15.14. Over the last 6 months, 72.6% of male-born youth and 65.6% of female-born youth from Project Q2 reported drinking five or more alcoholic drinks in a row (i.e., within a few hours). Nearly 24% drank alcohol within four hours of their last sexual encounter.



In Chicago: Marijuana Use

The figure above demonstrates that the majority of respondents in Project Q2 reported having used marijuana at least once in their lifetime, with lower rates reported among YRBS LGB youth. Heterosexual youth reported even lower rates of use.

In Project Q2, the average age of first marijuana use was 14.67, and 54.2% of youth reported using marijuana at least once in the last month. In addition, 36.7% had used marijuana or other drugs within 4 hours of their last sexual encounter.

CDPH LGBT Community Action Plan

Maintain community task forces on LGBT substance abuse issues.

IMPACT Recommendations

- Create substance abuse prevention campaigns that are tailored to the experiences of LGBT youth.
- Raise awareness of intersection between binge drinking/ substance use and sexual health in order to reduce unprotected sex in the context of substance use.
- Assure availability of culturally competent substance abuse treatment programs for LGBT youth.

Sexual and Dating Violence

Adolescent relationship violence puts youth at risk for a range of psychosocial and physical health problems [56], such as depression, anxiety, and PTSD. The CDC reports that 8.8% of adolescent females and 8.9% of adolescent males reported experiencing physical abuse in the context of a romantic relationship [57]. Experiences of partner-perpetrated sexual assault and the inability to negotiate safer sex practices also put victims at higher risk for contracting HIV and other STIs [58].

A limited number of community and national-level studies estimate that the rate of relationship-violence among LGBT youth is similar to that of their peers in opposite-sex relationships [59]. Qualitative research has revealed that homophobia, fear of 'outing,' and social gender norms and expectations are unique factors that may also fuel physical and emotional abuse among adolescents in same-sex relationships [60].

In Chicago, YRBS and Project Q2 highlight disparities of LGBT youth facing sexual and dating violence more frequently than their heterosexual peers.

In Chicago: Sexual Violence

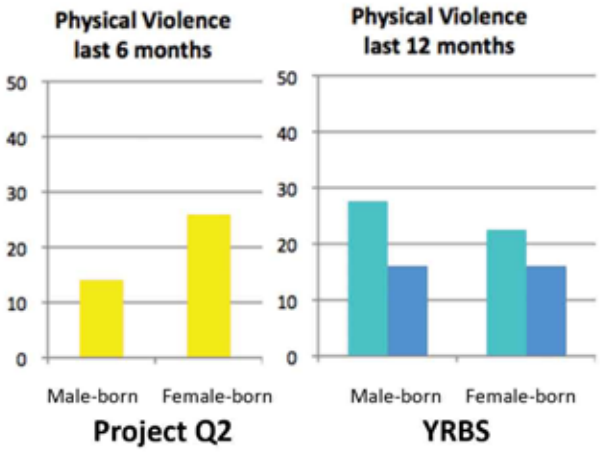
In the YRBS, 8.7% of heterosexual females and 6.9% of heterosexual males reported being forced to have sex in their lifetime, compared to 17.8% of LGB females and 24.7% of LGB males. Data on survival sex, or having sex in exchange for shelter, food, or money, was not collected in the YRBS.

In Project Q2, 38.2% of female-born and 23.9% of male-born youth reported at baseline having ever been upset by someone forcing a sexual act on the participant. In addition, 6.8% of sexually active youth in Project Q2 reported having sex in order to secure shelter, food, or money (i.e., survival sex) during the last 6 months.

In Chicago: Physical Dating Violence

Among YRBS LGB youth, 22.5% of female-born students and 27.6% of the male-born students reported physical violence from a boyfriend or girlfriend in the last 12 months, compared to 16% of both male and female heterosexual youth.

Fourteen percent of male-born youth and 25.9% of female-born youth in Project Q2 reported physical violence from a sexual partner in the last six months.



Healthy Chicago Goal: Adolescent Health
Target: Reduce the percent of youth experiencing teen dating violence by 10% to 11%.

IMPACT Recommendations:

- Create and implement relationship violence intervention programs that specifically target LGBT youth.
- Create and implement projects focused on forming and sustaining healthy romantic relationships in young same-sex couples.
- Further research the reporting behaviors of LGBT youth victims of relationship violence, sexual assault, and survival sex.

LGBT Victimization

Youth with a history of physical victimization and witnessing violence report increased rates of substance abuse [61], as well as higher rates of sexual risk taking and self-injury [62] [63]. Youth who experience chronic victimization and bullying have been shown to be at greater risk for negative health outcomes like suicide and depression [64].

Research has shown that LGBT youth in schools report higher rates of victimization in the last 12 months compared to their heterosexual peers [65]. In a national study of LGBT youth, researchers found that sexual minorities reported more fighting, skipping school because they felt unsafe, and having property stolen or damaged at school. Within that sample, bisexual youth and those with sexual partners of both sexes reported the highest levels of victimization [66].

The National School Climate Survey (over 7000 LGBT high school students ages 13 to 21) found nearly 9 out of 10 LGBT students experienced harassment at school based on their sexual orientation [67]. A Midwestern population-based survey indicated that targeted victimization, based on race/ethnicity or sexual orientation, puts youth at greater risk for adjustment problems as compared to youth who experienced more generalized forms of harassment [68].

In Chicago: General Victimization

Consistent with prior research, both YRBS and Project Q2 samples showed a disparity of LGBT youth facing higher rates of victimization compared to their heterosexual peers. Of the YRBS sample, 17.2% of LGB students had been bullied in the last 12 months, versus 10.9% of heterosexual students.

In Chicago: LGBT Victimization

In the Chicago YRBS, 32.3% of male-born and 17.9% of female-born LGB respondents reported having experienced some form of LGBT victimization within the past 12 months. Of note, 6.9% of male-born and 8.7% of female-born heterosexual youth also reported experiencing LGBT harassment based on their perceived sexual orientation.

Project Q2 participants were asked if they had ever been the victim of harassment or violence for being LGBT, including receiving verbal threats, physical violence, or sexual assault. Nearly 90% of youth reported having experienced some form of LGBT-specific victimization within their lifetime, with 73.1% experiencing LGBT victimization within the last six months.

Healthy Chicago Goal: Violence Prevention
Target: Reduce school bullying from 11.1% to 9%.

CDPH LGBT Community Action Plan
Conduct bullying training for school staff and faculty with a focus on how LGBT students are disproportionally impacted and on appropriate interventions in schools to end all forms of bullying.

IMPACT Recommendations

- Adopt and enact safe school policies that target negative and homophobic school climates.
- Create and support Gay-Straight Alliances (GSA) in schools, recognizing their potential for positive impacts on truancy, smoking, drinking, suicide attempts, and sex with casual partners [71].

Conclusion: The Role of Support

The LGBT health disparities findings in this report are important in that they suggest several promising targets for prevention and intervention. In this context, it is important to consider factors that minimize these disparities and promote resiliency and healthy development. Luthar, Cicchetti, and Becker (2000)[69] define resilience as a "process encompassing positive adaptation within the context of significant adversity." Social support has been widely studied and shown to serve as a buffer against stressful experiences [32] [70].

An example of the benefits of social support can be seen through the positive effects of Gay Straight Alliances (GSAs) in schools. Youth in schools with GSAs have reported less truancy, smoking, drinking, suicide attempts, and sex with casual partners than youth in schools without GSAs, with LGBT youth showing greater differences than their heterosexual peers [71].

In Chicago: Social Support

A lack of social support predicts suicidal ideation, and LGBT victimization was one of the strongest predictors of self-injury [72]. In support of these findings, higher levels of family and peer social support were associated with lower levels of depression, self-injury, and victimization for Project Q2 youth. Finally, higher levels of perceived family support have been found to be associated with less alcohol use in this sample [73].

Among Project Q2 participants, 38.9% of youth indicated there was an LGBT community center or group located in their neighborhood. Of those youth that did not have access to an LGBT community center or group, 66.3% indicated that they would like to have one located within their neighborhood. When asked why, the most common responses referenced the following: (1) a desire to meet or connect with similar others; (2) to increase feelings of safety and comfort; and (3) to provide a place to explore one's identity and receive emotional support. One participant stated, "Because it can help so many lost teens who are trying to find themselves".

IMPACT Recommendations

- Address LGB Health disparities in Chicago by following recommendations outlined in previous sections of this report, as well as raising awareness of the existence of these disparities.
- Prioritizing support for already existing community centers and organizations which provide assistance and resources for LGB youth
- Increasing the presence of LGB-supportive organizations and services throughout the city of Chicago

Key References for More Information

Allen, K. D., *Hammack, P. L., & Himes, H. L. (2012). Analysis of GLBTQ youth community-based programs in the United States.* Journal of Homosexuality, 59(9), 1289-1306.

References

1. Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance -- United States, 2011. Morbidity and Mortality Weekly Report, 2012. 61(4).
2. Lewinsohn, P.M., et al., Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III--R disorders in high school students. Journal of Abnormal Psychology, 1993. 102(1): p. 133-144.
3. Bhatia, S.K. and S.C. Bhatia, Childhood and adolescent depression. Am Fam Physician, 2007. 75(1): p. 73-80.
4. Frojd, S.A., et al., Depression and school performance in middle adolescent boys and girls. J Adolesc, 2008. 31(4): p. 485-98.
5. Glenn, C.R. and E.D. Klonsky, Social context during non-suicidal self-injury indicates risk. Personality and Individual Differences, 2008. 2009(46): p. 24-29.
6. Muehlenkamp, J.J. and P.M. Gutierrez, Risk for Suicide Attempts Among Adolescents Who Engage in Non-Suicidal Self-Injury. Archives of Suicide Research, 2007. 11(1): p. 69-82.
7. Cochran, S.D. and V.M. Mays, Relation between psychiatric syndromes and behaviorally defined sexual orientation in a sample of the US population. American Journal of Epidemiology, 2000. 151(5): p. 516-523.
8. Cochran, S.D., J.G. Sullivan, and V.M. Mays, Prevalence of mental disorders, psychological distress, and mental services use among lesbian, gay, and bisexual adults in the United States. Journal of Consulting and Clinical Psychology, 2003. 71(1): p. 53-61.
9. Bos, H.M., et al., Same-sex attraction, social relationships, psychosocial functioning, and school performance in early adolescence. Dev Psychol, 2008. 44(1): p. 59-68.
10. Fergusson, D.M., L.J. Horwood, and A.L. Beautrais, Is sexual orientation related to mental health problems and suicidality in young people? Archives of General Psychiatry, 1999. 56(10): p. 876-880.
11. Hatzenbuehler, M.L., K.A. McLaughlin, and S. Nolen-Hoeksema, Emotion regulation and internalizing symptoms in a longitudinal study of sexual minority and heterosexual adolescents. J Child Psychol Psychiatry, 2008. 49(12): p. 1270-8.
12. Galliher, R.V., S.S. Rostosky, and H.K. Hughes, School belonging, self-esteem, and depressive symptoms in adolescents: An examination of sex, sexual attraction status, and urbanicity. Journal of Youth and Adolescence, 2004. 33(3): p. 235-245.
13. Garofalo, R., et al., Sexual orientation and risk of suicide attempts among a representative sample of youth. Arch Pediatr Adolesc Med, 1999. 153(5): p. 487-93.
14. Saewyc, E.M., et al., Suicidal ideation and attempts in North American school-based surveys: are bisexual youth at increasing risk? J LGBT Health Res, 2007. 3(2): p. 25-36.
15. Remafedi, G., et al., The relationship between suicide risk and sexual orientation: Results of a population-based study. American Journal of Public Health, 1998. 88(1): p. 57-60.
16. Russell, S.T. and K. Joyner, Adolescent sexual orientation and suicide risk: Evidence from a national study. American Journal of Public Health, 2001. 91(8): p. 1276-1281.
17. DuRant, R.H., D.P. Krowchuk, and S.H. Sinal, Victimization, use of violence, and drug use at school among male adolescents who engage in same-sex sexual behavior. Journal of Pediatrics, 1998. 133(1): p. 113-118.
18. Faulkner, A.H. and K. Cranston, Correlates of same-sex sexual behavior in a random sample of Massachusetts high school students. American Journal of Public Health, 1998. 88(2): p. 262-266.

References (cont.)

19. Whitbeck, L.B., et al., Mental Disorder, Subsistence Strategies, and Victimization Among Gay, Lesbian, and Bisexual Homeless and Runaway Adolescents. Journal of Sex Research, 2004. 41(4): p. 329-342.
20. Ogden, C.L., et al., Prevalence and trends in overweight among US children and adolescents, 1999-2000. JAMA, 2002. 288(14): p. 1728-32.
21. Austin, S.B., et al., Eating disorder symptoms and obesity at the intersections of gender, ethnicity and sexual orientation: results from a large sample of U.S. high school students. IP, 2012.
22. Croll, J.K., et al., Prevalence and risk and protective factors related to disordered eating behaviors among adolescents: Relationship to gender and ethnicity. Journal of Adolescent Health, 2002. 31(2): p. 166-175.
23. Case, P., et al., Sexual Orientation, Health Risk Factors, and Physical Functioning in the Nurses' Health Study II. Journal of Women's Health, 2004. 13(9): p. 1033-1047.
24. Health, C.D.o.P., Healthy Chicago: Transforming the Health of Our City. 2011.
25. Centers for Disease Control and Prevention, HIV and young men who have sex with men. 2012.
26. Centers for Disease Control and Prevention, HIV among youth. 2011.
27. Hall, H.I., et al., Racial/ethnic and age disparities in HIV prevalence and disease progression among men who have sex with men in the United States. American Journal of Public Health, 2007. 97(6): p. 1060-1066.
28. Magnus, M., et al., Characteristics associated with retention among African American and Latino adolescent HIV-positive men: Results from the outreach, care, and prevention to engage HIV-seropositive young MSM of color Special Project of National Significance initiative. JAIDS Journal of Acquired Immune Deficiency Syndromes, 2010. 53(4): p. 529-536.
29. Brennan, J., et al., Syndemic theory and HIV-related risk among young transgender women: the role of multiple, co-occurring health problems and social marginalization. American Journal of Public Health, 2012. 102(9): p. 1751-1757.
30. Garofalo, R., et al., Overlooked, misunderstood and at-risk: exploring the lives and HIV risk of ethnic minority male-to-female transgender youth. J Adolesc Health, 2006. 38(3): p. 230-6.
31. Wilson, E.C., et al., Sexual risk taking among transgender male-to-female youths with different partner types. American Journal of Public Health, 2010. 100(8): p. 1500-1505.
32. Mustanski, B.S., M. Newcomb, and R. Garofalo, Mental health of lesbian, gay, and bisexual youth: a developmental resiliency perspective. The Journal of Gay & Lesbian Social Services, 2011. 23(2): p. 204-225.
33. Centers for Disease Control and Prevention, Sexual identity, sex of sexual contacts, and health-risk behaviors among students in grades 9–12: Youth risk behavior surveillance, selected sites, United States, 2001-2009. MMWR, 2011. 60(7): p. 1-136.
34. The National Campaign to Prevent Teen and Unplanned Pregnancy, Why it matters: Linking Teen Pregnancy Prevention to Other Critical Social Issues 2010.
35. Guttmacher Institute, U.S. teenage pregnancies, births and abortions: National and state trends and trends by race and ethnicity. 2010.
36. Boyer, D. and D. Fine, Sexual abuse as a factor in adolescent pregnancy and child maltreatment. Family Planning Perspectives, 1993. 24(2).
37. Breheny, M. and C. Stephens, Individual responsibility and social constraint: The construction of adolescent motherhood in social scientific research. Culture, Health & Sexuality, 2007. 9(4): p. 333-346.

38. Hoffman, S.D., By the numbers: The public costs of teen childbearing. National Campaign to Prevent Teen Pregnancy, 2006.
39. Martin, J.A., Births: Final Data for 2006. National Vital Statistics Reports, 2009. 57(7).
40. Blake, S.M., et al., Preventing sexual risk behaviors among gay, lesbian, and bisexual adolescents: The benefits of gay-sensitive HIV instruction in schools. American Journal of Public Health, 2001. 91(6): p. 940-946.
41. Saewyc, E.M., et al., Sexual intercourse, abuse and pregnancy among adolescent women: does sexual orientation make a difference? Fam Plann Perspect, 1999. 31(3): p. 127-31.
42. Kirby, D., Antecedents of adolescent initiation of sex, contraceptive use and pregnancy. American Journal of Health Behavior, 2002. 26(6): p. 473-485.
43. Miller, K.S., R. Forehand, and B.A. Kotchick, Adolescent sexual behavior in two ethnic minority samples: The role of family variables. Journal of Marriage and the Family, 1999. 61(1): p. 85-98.
44. Woodward, L., D.M. Fergusson, and L.J. Horwood, Risk factors and life processes associated with teenage pregnancy: Results of a prospective study from birth to 20 years. Journal of Marriage and Family, 2001. 63(4): p. 1170-1184.
45. Ventura, S.J., et al., Estimated pregnancy rates for the United States, 1990-2005: an update. Natl Vital Stat Rep, 2009. 58(4): p. 1-14.
46. Centers for Disease Control and Prevention, Smoking & tobacco use: youth and tobacco use. 2012.
47. Breslau, N., N. Fenn, and E.L. Peterson, Early smoking initiation and nicotine dependence in a cohort of young adults. Drug and Alcohol Dependence, 1993. 33(2): p. 129-137.
48. Corliss, H.L., et al., Sexual-orientation disparities in adolescent cigarette smoking: Intersections with race/ethnicity, sex/gender, and age. 2012.
49. Dilley, J.A., et al., Does tobacco industry marketing excessively impact lesbian, gay and bisexual communities? Tobacco Control: An International Journal, 2008. 17(6): p. 385-390.
50. Brook, D.W., et al., Drug use and the risk of major depressive disorder, alcohol dependence and substance use disorders. Archives of General Psychiatry, 2002. 59(11): p. 1039-1044.
51. Centers for Disease Control and Prevention, Use of selected substances in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, selected years 2002-2009. 2011.
52. Marshal, M.P., et al., Sexual orientation and adolescent substance use: A meta-analysis and methodological review. Addiction, 2008. 103(4): p. 546-556.
53. Corliss, H.L., et al., Sexual orientation and drug use in a longitudinal cohort study of U.S. adolescents. Addictive Behaviors, 2010. 35(5): p. 517-521.
54. Ziyadeh, N.J., et al., Sexual orientation, gender, and alcohol use in a cohort study of U.S. adolescent girls and boys. Drug and Alcohol Dependence, 2007. 87(2-3): p. 119-130.
55. Marshal, M.P., et al., Individual trajectories of substance use in lesbian, gay and bisexual youth and heterosexual youth. Addiction, 2009. 104(6): p. 974-981.
56. Centers for Disease Control and Prevention, Understanding teen dating violence. 2012.
57. Centers for Disease Control and Prevention, Physical Dating Violence Among High School Students --- United States, 2003. MMWR, 2006. 55(19): p. 532-535.
58. Heintz, A.J. and R.M. Melendez, Intimate partner violence and HIV/STD risk among lesbian, gay, bisexual, and transgender individuals. J Interpers Violence, 2006. 21(2): p. 193-208.

59. Freedner, N., et al., Dating violence among gay, lesbian, and bisexual adolescents: Results from a community survey. Journal of Adolescent Health, 2002. 31(6): p. 469-474.
60. Gillum, T.L. and G. DiFulvio, "There's so much at stake": Sexual minority youth discuss dating violence. Violence Against Women, 2012. 18(7): p. 725-745.
61. Kilpatrick, D.G., et al., Risk factors for adolescent substance abuse and dependence: Data from a national sample. Journal of Consulting and Clinical Psychology, 2000. 68: p. 19-30.
62. Berenson, A.B., C.M. Wiemann, and S. McCombs, Exposure to violence and associated health-risk behaviors among adolescent girls. Arch Pediatr Adolesc Med, 2001. 155(11): p. 1238-42.
63. Valois, R.F., et al., Relationship between number of sexual intercourse partners and selected health risk behaviors among public high school adolescents. Journal of Adolescent Health, 1999. 25(5): p. 328-335.
64. Arseneault, L., L. Bowes, and S. Shakoor, Bullying victimization in youths and mental health problems: 'Much ado about nothing?'. Psychological Medicine, 2010. 40(5): p. 717-729.
65. Birkett, M., D.L. Espelage, and B. Koenig, LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. Journal of Youth and Adolescence, 2009. 38(7): p. 989-1000.
66. Russell, S.T., et al., Victimization and sexual orientation among youth. under review, 2012.
67. Kosciw, J.G., et al., The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools. 2010(Gay, Lesbian and Straight Education Network).
68. Russell, S.T., et al., Adolescent health and harassment based on discriminatory bias. Am J Public Health, 2012. 102(3): p. 493-5.
69. Luthar, S.S., D. Cicchetti, and B. Becker, The construct of resilience: A critical evaluation and guidelines for future work. Child Development, 2000. 71(3): p. 543-562.
70. Cohen, S. and T.A. Wills, Stress, social support, and the buffering hypothesis. Psychological Bulletin, 1985. 98(2): p. 310-357.
71. Poteat, V.P., et al., Gay–straight alliances are associated with student health: a multischool comparison of LGBTQ and heterosexual youth. Journal of Research on Adolescence, 2012: p. 1-12.
72. Liu, R.T. and B.S. Mustanski, Suicidal ideation and self-harm in lesbian, gay, bisexual, and transgender youth. The American Journal of Preventive Medicine, 2012. 42(3): p. 221-228.
73. Newcomb, M.E., A.J. Heinz, and B. Mustanski, Examining risk and protective factors for alcohol use in lesbian, gay, bisexual, and transgender youth: A longitudinal multilevel analysis. Journal of Studies on Alcohol and Drugs, 2012. 73(5): p. 783-793.