



Published in final edited form as:

Trauma Violence Abuse. 2011 April ; 12(2): 55–66. doi:10.1177/1524838010390707.

The prevalence of sexual assault against people who identify as Gay, Lesbian or Bisexual in the United States: A systematic review

Emily F. Rothman, ScD,
Boston University School of Public Health

Deinera Exner, MPH, and
Cornell University

Allyson Baughman, MPH
Boston University School of Public Health

Abstract

This article systematically reviews 75 studies that examine the prevalence of sexual assault victimization among gay or bisexual (GB) men, and lesbian or bisexual (LB) women, in the United States. All studies were published between 1989 and 2009 and report the results of quantitative research. The authors reviewed the reported prevalence of lifetime sexual assault victimization (LSA), and where available, childhood sexual assault (CSA), adult sexual assault (ASA), intimate partner sexual assault (IPSA), and hate crime-related sexual assault (HC). The studies were grouped into those that used a probability or census sampling technique (n=25) and those that used a non-probability or “community-based” sampling technique (n=50). A total of 139,635 GLB respondents participated in the underlying studies reviewed. Prevalence estimates of LSA ranged from 15.6–85.0% for LB women, and 11.8–54.0% for GB men. Considering the median estimates derived from the collective set of studies reviewed, LB women were more likely to report CSA, ASA, LSA and IPSA than GB men, whereas GB men were more likely to report HC than LB women. Across all studies, the highest estimates reported were for LSA of LB women (85%), CSA of LB women (76.0%), and CSA of GB men (59.2%). With some exceptions, studies using non-probability samples reported higher sexual assault prevalence rates than did population-based or census sample studies. The challenges of assessing sexual assault victimization with GLB populations are discussed, as well as the implications for practice, policy and future research.

Keywords

Sexual assault; gay; lesbian; bisexual; rape; violence; review; partner violence; child sexual abuse; hate crimes

Introduction

Sexual assault is a substantial public health problem in the U.S. and throughout the world. As many as 11–17% of women and 2–3% of men in the U.S. report having experienced

Contact author: Emily F. Rothman, ScD, Boston University School of Public Health, Department of Community Health Sciences, 801 Mass. Ave., Floor 3, Crosstown Center, Boston, MA 02118, Phone: 617-414-1385, Fax: 617-638-4483, erothman@bu.edu.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

sexual assault victimization (Basile, Chen, Lynberg, & Saltzman, 2007; Tjaden & Thoennes, 2000). The results of national surveys from countries in all regions of the globe find 5-year prevalence rates of sexual assault victimization that range from 0.3 to 8.0% among women age 16 and older (World Health Organization, 2002).

Some have suggested that the rates of sexual assault victimization among gay, lesbian or bisexual (GLB) individuals may be elevated compared to those in heterosexual populations, and several plausible mechanisms for such a disparity have been proposed (Austin et al., 2008; Blake, S. M., Ledsky, R., Lehman, T., Goodenow, C., Sawyer, R., & Hack, T., 2001; Todahl, Linville, Bustin, Wheeler, & Gau, 2009; Wilson & Widom, 2010). These suggestions remain speculative, however, as estimates of sexual violence victimization among GLB individuals range widely, and often have been derived from convenience samples and are not necessarily generalizable.

Researchers and practitioners currently struggle with the range of estimates of the prevalence of sexual violence victimization among GLB people and urgently need more specificity in order to proceed with funded initiatives. For example, the US Rape Prevention and Education (RPE) funding awarded by the US Centers for Disease Control and Prevention is to be used to support education, awareness and training to prevent sexual violence (US Centers for Disease Control and Prevention, 2009). In many states, practitioners want to use RPE funds to focus on sexual assault prevention with GLB individuals because they are perceived to be at heightened risk for victimization. Is the focus on GLB populations supported by available data? Moreover, in some locales policy makers and program planners are considering the mounting evidence that GLB youth are disproportionately the targets of bullying and physical violence (Russell, Franz, & Driscoll, 2001), are at increased risk for substance use (Marshall et al., 2008), and suicide (Garofalo, Wolf, Wissow, Woods, & Goodman, 1999), and therefore require stronger supportive and antiviolence programming in schools. As they develop these programs, and propose policies to deter the perpetration of violence against GLB youth, the prevalence of sexual violence against these youth would be critical to consider.

The purpose of this systematic review is to describe the prevalence of sexual violence victimization among GLB people in the U.S., discuss the related methodological difficulties, and identify areas of future research. This review will also distinguish between different forms of sexual violence victimization by perpetrator type, and across the lifespan, in order to highlight needs for future prevention-oriented research.

Method

Search strategy

To compile a list of publications for possible inclusion in this review, we searched Medline and PsycINFO for articles containing prevalence estimates of sexual violence victimization of GLB people by using the following search terms: *victimization* or *violence* or *sexual assault* or *rape* or *abuse* or *childhood sexual abuse*, and *gay* or *lesbian* or *same-sex* or *bisexual* or *homosexual* or *non-heterosexual* or *GLB* or *queer*. We also reviewed the reference lists of selected publications in order to identify additional articles for potential inclusion, and accepted two article nominations from one of the anonymous reviewers of this article.

Inclusion criteria

Searches were restricted to peer-reviewed articles published in English between January 1, 1989 and December 31, 2009. The initial search returned 4,511 articles. To be included in this review, articles needed to meet the following additional criteria: report the results of

quantitative research using a United States-based sample; report the prevalence of sexual violence victimization for a heterogeneous GLB sample (rather than for a specialized potentially high-risk subset such as “HIV-infected gay men,” “intravenous drug users,” or “homeless”); report results stratified by gender or for one gender, rather than grouping males and females; and have a response rate $\geq 30\%$. Five articles were excluded because we could not obtain the full text, and two were excluded because they presented data that were also published in a different article (*i.e.*, duplicate results).

We included any article that was described by the authors as having assessed sexual assault, sexual abuse or rape. However, studies that assessed only sexual harassment, bullying, sex work, survival sex, and/or sex trading were excluded for two reasons: (1) it was not possible to determine consistently if the studies on these topics were reporting on sexual violence and (2) it was necessary to make some definitional exclusions in order to keep this systematic review focused and feasible. In addition, we excluded four studies because they investigated narrow subtypes of sexual violence, such as “sexual assault perpetrated by female caregivers” or “sexual assault perpetrated in the workplace.” Because the prevalence of sexual violence victimization history was the outcome of interest, articles reporting incidence or that used a restricted time frame (*e.g.*, past 5 years) were also excluded.

Our procedure for determining inclusion was as follows. One research team member scanned article abstracts in order to determine if returned articles met the above-listed second round of inclusion criteria. If a determination could not be made from the abstract, the full text of the article was reviewed by two research team members. Of the original 4,511 abstracts identified, 181 articles were selected for full text review. Of these, 110 were excluded because they did not meet our inclusion criteria. One included paper (Saewyc et al., 2006) presented results from five U.S. studies. Thus, our final yield was 71 articles which included results from 75 studies.

Review procedures

All 71 articles were reviewed independently by two research team members using a predetermined template to extract desired information, including the lifetime sexual assault (LSA) victimization against GB males and LB females, and where available estimates of childhood sexual assault (CSA), adult sexual assault (ASA), intimate partner sexual assault (IPSA), and hate crime-related sexual assault (HC). We defined CSA as sexual assault occurring before the victim was 18 years old or sexual contact between a youth younger than 16 years old and a person five or more years older. We also included estimates of CSA from articles where the victim age was not presented, but the underlying article characterized the event as CSA. In six instances where prevalence data were not published in the original articles, but count data were provided, each of the reviewers independently calculated prevalence and that statistic is presented here.

We classified studies into two groups: population-based or census studies, and non-probability studies. Studies that had high external validity because all individuals in a particular geographic area had equal probability of being selected into the study, or that were described by the authors as a population-based or census study, were classified as a population-based or census study in our review. All other studies were classified as non-probability studies. For example, a survey of individuals who attended a GLB youth rally was classified as a non-probability study (Freedner, Freed, Yang, & Austin, 2002).

In instances when the underlying article presented two different estimates for G/L and B populations, or a prevalence range rather than a point estimate (*e.g.*, “the prevalence of sexual violence in our sample ranged from 5–10%”), we selected to reprint the range rather than calculate a mid-point estimate. In instances where men were classified as “men who

have sex with men” (MSM) in the underlying article, we classified them as GB in this review. Similarly, two-spirit and non-heterosexual individuals were classified as either GB or LB in our review. Discrepancies in opinion about how to interpret information or data presented in the underlying articles were discussed by all three authors until consensus was reached. We calculated the median prevalence rate reported for each type of sexual assault assessed by ordering the reported prevalence rates from low to high and selecting the midpoint rate. In instances where we had a prevalence rate range from the underlying article, we used the midpoint estimate in the rank ordering.

Results

Table 1 lists each of the 71 articles reviewed, and the underlying studies’ sample sizes, study populations, geography, and the types of sexual assault victimization reported (*e.g.*, CSA, ASA, LSA, IPSA, and/or HC). Note that while 71 articles were reviewed, one contained data from five studies, bringing the total number of studies reviewed to 75. Sample sizes ranged from 29 to 63,028, with a median sample size of 499. A total of 139,635 GLB respondents participated in the underlying studies reviewed. Of the 25 probability/census and 50 non-probability studies reviewed, 36% and 14% involved adolescent-only samples, respectively. Seven studies drew respondents from all 50 U.S. states, but the majority took place in select urban areas, including Baltimore, Boston, Chicago, Dallas, Denver, Los Angeles, Miami, Minneapolis/St.Paul, New York City, Portland, Sacramento, San Diego, San Francisco, Seattle and Tucson. Forty seven studies provide the prevalence of CSA, 19 provide the prevalence of IPSA, 18 provide the prevalence of LSA, 12 provide the prevalence of ASA, and 5 present the prevalence of HC.

Prevalence of Sexual Assault Victimization

Table 2 presents information from the 46 articles that report the prevalence of sexual violence against GB men, and Table 3 presents the information from the 44 studies that report the prevalence of sexual violence against LB women. Note that one study (Saewyc et al, 2006) presented results from five U.S. population-based samples, and each estimate is presented separately in Tables 2 and 3. Both tables are summarized in Table 4, which stratifies studies based on study design (population-based or census vs. non-probability). Approximately 39% of the studies involving GB men, and 26% of the studies involving LB women, used population-based methods ($\chi^2=1.74$, $p<.10$). With some exceptions, the studies using non-probability methods reported higher sexual assault victimization rates across all types of sexual assault as compared to the studies using population-based or census methods (Table 4).

The prevalence of CSA for males ranged from 4.1% to 59.2% (median 22.7%; Tables 2 and 4) and from 14.9% to 76.0% for females (median 34.5%; Tables 3 and 4). The prevalence of ASA for males ranged from 10.8% to 44.7% (median 14.7%; Tables 2 and 4) and from 11.3% to 53.2% for females (median 23.2%; Tables 3 and 4). The reported prevalence of LSA ranged from 11.8% to 54.0% among GB males (median 30.4%; Tables 2 and 4) and from 15.6% to 85.0% among females (median 43.4.0%; Tables 3 and 4). The prevalence of IPSA for males ranged from 9.5% to 57.0% (median 12.1%; Tables 2 and 4) and from 3.0% to 45.0% for females (median 13.3 %; Tables 3 and 4). The prevalence of HC for males ranged from 3.0% to 19.8% (median 14.0%; Tables 2 and 4) and from 1% to 12.3% for females (median 5.0%; Tables 3 and 4). Considering the median estimates derived from the collective set of studies reviewed, LB women were more likely to report CSA, ASA, LSA and IPSA than GB men, whereas GB men were more likely to report HC than LB women (Table 4).

Discussion

This systematic review presents estimates of the prevalence of five forms of sexual assault experienced by gay, lesbian and bisexual (GLB) people from 71 peer-reviewed, published articles. Taken together, the findings suggest that sexual violence victimization is prevalent among GLB individuals. Furthermore, these data suggest that GLB individuals may be at increased risk for sexual violence victimization as compared to their heterosexual counterparts. According to population-based data, approximately 11–17% of women and 2–3% of men in the U.S. experience sexual assault during their lifetimes (Basile, et al., 2007; Tjaden & Thoennes, 2000). Our review of population-based studies finds that the prevalence estimates of LSA reported are approximately 15.6–85.0% for lesbian and bisexual (LB) women, and 11.8–54.0% for gay and bisexual (GB) men. Relatively few studies made direct comparisons between LGB and heterosexual subpopulations within their samples. Additional population-based studies that allow direct comparisons of the prevalence of sexual violence among GLB and heterosexual subgroups are needed, particularly among adults. Collectively, however, the currently available literature suggests that GLB people are likely at elevated risk for lifetime sexual violence victimization.

The methodologies used to assess sexual violence victimization across the studies reviewed varied widely. Differences in participant recruitment procedures, sampling strategies, conceptual definitions of sexual assault and sexual orientation categories, and instrumentation likely account for the variation in sexual assault prevalence rates that were detected. It is notable that the non-probability studies consistently found higher rates of sexual assault victimization, because it is therefore likely that some aspect of the methodology is related to the findings. What remains unclear is whether population-based studies are systematically underestimating the true prevalence of sexual assault or non-probability studies tend to overestimate it. Additional research that clarifies and ultimately improves accurate detection of sexual assault victimization among GLB people would benefit the field.

We can offer several observations about this body of literature that may benefit future research. First, there were some studies excluded from this review because they grouped GLB people together, yielding estimates that are not comparable to those reported for the general population that are almost always stratified by gender. An empirically-based argument for grouping or segregating data based on gender, or sex, would benefit the field. Similarly, because bisexual people appear to experience less of particular forms of discrimination than gay and lesbian people (Herek, 2009), there may be differences in the prevalence of sexual violence experienced by lesbian versus bisexual women, and gay versus bisexual men. Therefore, future studies in this area should also disaggregate and present separately data for lesbians, gays and bisexuals.

Second, the studies on CSA outnumbered the studies on LSA by more than two-fold. Additional and more rigorous research on the CSA of GLB people is of critical importance, but the relative dearth of information about adult experiences of sexual assault and the impact of sexual assault across the life-course should be considered. Third, a greater proportion of studies involving GB men than LB women used population-based methods, tended to include larger sample sizes, and therefore to have better external validity. This disparity in sexual violence research should be addressed; funding agencies with research agendas that include violence prevention are urged to consider prioritizing research on LB women. Fourth, it is a substantial limitation of the existing literature that few studies assessed the sex, gender or sexual orientation of the perpetrator of the sexual violence against the GLB victims. This is perhaps particularly problematic with regard to IPVA (Waldner-Haugrud & Gratch, 1997). It cannot be assumed that the perpetrator of the IPVA

was a GLB partner; it is possible that the majority of GLB individuals reporting lifetime IPSA were victimized by an opposite-sex partner. Future studies of sexual assault perpetration against GLB people, and studies of IPSA in particular, should attempt to determine the perpetrator sex or gender and sexual orientation. Moreover, we note that IPSA may be particularly difficult to detect; respondents may more readily report stranger-or family-perpetrated sexual assaults, but systematically under-report sexual assault perpetrated by intimates for two reasons: (a) they may be more fearful of the repercussions of reporting this form of abuse and (b) individuals may not perceive unwanted sexual contact with an intimate partner as coercive as consistently as they might unwanted sexual contact with a stranger or family member. However, there are several valid, reliable measures for assessing IPSA available to researchers, including the revised version of the Conflict Tactics Scale, the Index of Spouse Abuse, and the Tactics to Obtain Sex scale (Camilleri, Quinsey, & Tapscott, 2009; Hudson & McIntosh, 1981; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Finally, there were a handful of studies that were excluded from this review because they focused on a narrow or highly specific subset of sexual violence victimizations; for example, sexual abuse perpetrated by a family member or friend of the family. Although the findings from these studies contribute to the knowledge base as a whole, the practical implications of their findings are limited.

Limitations

This review is subject to several limitations. First, we do not present a direct comparison of the prevalence of sexual assault against GLB populations to the prevalence against heterosexuals. Few of the articles included in this review included non-GLB participants in their studies, and the majority of these were among adolescents, limiting the availability of directly comparable estimates for adults in particular. Additional studies that simultaneously assess sexual violence victimization for GB, LB and heterosexual populations are needed. Second, we do not present data on the prevalence of sexual violence against transgender people. This review was focused on sexual orientation, not gender identity, so it was beyond the scope. However, we wish to stress the importance of additional research that investigates sexual violence victimization of transgender people, given their elevated risk of violence victimization overall (Stotzer, 2009). Third, we selected to accept uncritically the descriptions of sampling methodologies and estimates put forth by the authors of the underlying 71 papers that we reviewed, with the caveat that we excluded from the review any study that reported a response rate $\leq 30\%$. There were advantages and drawbacks to this approach. While we were able to take a broad inventory of the sexual violence research available and assess patterns in the conduct of this research itself, our summary presentation of the estimates reported in the literature is only as accurate as the underlying studies upon which it is based. Our stratification of studies into probability or census versus non-probability studies is intended to provide readers with a starting point for assessing the nature and quality of the available literature. Improving the rigor of sexual violence research in general, and studies of GLB sexual violence victimization specifically, is a worthy goal. Finally, while we considered the possibility of performing a meta-analysis with the available prevalence estimates, we determined that the data were not of sufficient quality for such a calculation; the definition of sexual assault varied across studies, there was diversity in the types of studies that were conducted, and the rigor of the underlying studies was inconsistent. As the literature on sexual violence against GLB people expands, a meta-analysis may become a possibility.

Acknowledgments

Funding

The author(s) received no financial support for the research and/or authorship of this article

References

- Aaron DJ, Hughes TL. Association of childhood sexual abuse with obesity in a community sample of lesbians. *Obesity*. 2007; 15:1023–1028. [PubMed: 17426338]
- Arreola SG, Neilands TB, Diaz R. Childhood sexual abuse and the sociocultural context of sexual risk among adult Latino gay and bisexual men. *American Journal of Public Health*. 2009; 99:432–438.
- Arreola SG, Neilands TB, Pollack LM, Paul JP, Catania JA. Higher prevalence of childhood sexual abuse among Latino men who have sex with men than non-Latino men who have sex with men: Data from the Urban Men's Health Study. *Child Abuse & Neglect*. 2005; 29:285–290. [PubMed: 15820544]
- Arreola S, Neilands T, Pollack L, Paul J, Catania J. Childhood sexual experiences and adult health sequelae among gay and bisexual men: defining childhood sexual abuse. *Journal of Sex Research*. 2008; 45:246–252. [PubMed: 18686153]
- Austin SB, Jun HJ, Jackson B, Spiegelman D, Rich-Edwards J, Corliss HL, et al. Disparities in child abuse victimization in lesbian, bisexual, and heterosexual women in the Nurses' Health Study II. *Journal of Women's Health*. 2008; 17:597–606.
- Balsam KF, Rothblum ED, Beauchaine TP. Victimization over the life span: a comparison of lesbian, gay, bisexual, and heterosexual siblings. *Journal of Consulting and Clinical Psychology*. 2005; 73:477–487. [PubMed: 15982145]
- Barney DD. Health risk-factors for gay American Indian and Alaska Native adolescent males. *Journal of Homosexuality*. 2003; 46:137–157. [PubMed: 15086222]
- Bartholow BN, Doll LS, Joy D, Douglas JM Jr, Bolan G, Harrison JS, McKiman D. Emotional, behavioral, and HIV risks associated with sexual abuse among adult homosexual and bisexual men. *Child Abuse & Neglect*. 1994; 18:747–761. [PubMed: 8000905]
- Basile K, Chen J, Lynberg M, Saltzman L. Prevalence and characteristics of sexual violence victimization. *Violence & Victims*. 2007; 22:437–448. [PubMed: 17691551]
- Berg MB, Mimiaga MJ, Safren SA. Mental health concerns of HIV-Infected gay and bisexual men seeking mental health services: an observational study. *AIDS Patient Care and STDs*. 2004; 18:635–643. [PubMed: 15633261]
- Berg MB, Mimiaga MJ, Safren SA. Mental health concerns of gay and bisexual men seeking mental health services. *Journal of Homosexuality*. 2008; 54:293–306. [PubMed: 18825866]
- Bernhard LA. Physical and sexual violence experienced by lesbian and heterosexual women. *Violence Against Women*. 2000; 6:68–79.
- Blake SM, Ledsy R, Lehman T, Goodenow C, Sawyer R, Hack T. 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; 91:940–946. [PubMed: 11392938]
- Bradford J, Ryan C, Rothblum ED. National Lesbian Health Care Survey: Implications for mental health care. *Journal of Consulting and Clinical Psychology*. 1994; 62:228–242. [PubMed: 8201059]
- Brennan DJ, Hellerstedt WL, Ross MW, Welles SL. History of childhood sexual abuse and HIV risk behaviors in homosexual and bisexual men. *American Journal of Public Health*. 2007; 97:1107–1112. [PubMed: 17463386]
- Camilleri J, Quinsey V, Tapscott J. Assessing the propensity for sexual coaxing and coercion in relationships: Factor structure, reliability, and validity of the Tactics to Obtain Sex Scale. *Archives of Sexual Behavior*. 2009; 38:959–973. [PubMed: 18607709]
- Carballo-Diéguez A, Dolezal C. Association between history of childhood sexual abuse and adult HIV-risk sexual behavior in Puerto Rican men who have sex with men. *Child Abuse & Neglect*. 1995; 19:595–605. [PubMed: 7664139]
- Comstock GD. Victims of anti-gay/lesbian violence. *Journal of Interpersonal Violence*. 1989; 4:101–106.
- Corliss HL, Cochran SD, Mayes VM, Greeland S, Seeman TE. Age of minority sexual orientation development and risk of childhood maltreatment and suicide attempts in women. *American Journal of Orthopsychiatry*. 2009; 79:511–521.

- D'Augelli AR, Grossman AH, Starks MT. Childhood gender atypicality, victimization, and PTSD among lesbian, gay, and bisexual youth. *Journal of Interpersonal Violence*. 2006; 21:1462–1482. [PubMed: 17057162]
- Descamps MJ, Rothblum E, Bradford J, Ryan C. Mental health impact of child sexual abuse, rape, intimate partner violence and hate crimes in the National Lesbian Health Care Survey. *Journal of Gay and Lesbian Social Services*. 2000; 11:27–55.
- Dibble SL, Sato N, Haller E. Asians and native Hawaiian or other Pacific Islanders midlife lesbians' health: A pilot study. *Women & Therapy*. 2007; 30:129–143.
- Dolezal C, Carballo-Diequez A. Childhood sexual experiences and the perception of abuse among Latino men who have sex with men. *Journal of Sex Research*. 2002; 39:165–173. [PubMed: 12476263]
- Doyle JP, Frank E, Saltzman LE, McMahon PM, Fielding BD. Domestic violence and sexual abuse in women physicians: Associated medical, psychiatric, and professional difficulties. *Journal of Womens Health & Gender-Based Medicine*. 1999; 8:955–965.
- Duncan DF. Prevalence of sexual assault victimization among heterosexual and gay/lesbian university students. *Psychological Reports*. 1990; 66:65–66. [PubMed: 2326430]
- Feldman MB, Meyer IH. Childhood abuse and eating disorders in gay and bisexual men. *International Journal of Eating Disorders*. 2007; 40:418–423. [PubMed: 17506080]
- Feldman MB, Ream GL, Diaz RM, El-Bassel N. Intimate partner violence and HIV sexual risk behavior among Latino gay and bisexual men: the role of situational factors. *Journal of LGBT Health Research*. 2007; 3:75–87. [PubMed: 19042911]
- Freedner N, Freed LH, Yang YW, Austin SB. Dating violence among gay, lesbian, and bisexual adolescents: results from a community survey. *Journal of Adolescent Health*. 2002; 31:469–474. [PubMed: 12457580]
- Friedman MS, Marshal MP, Stall R, Cheong J, Wright ER. Gay-related development, early abuse and adult health outcomes among gay males. *AIDS & Behavior*. 2008; 12:891–902. [PubMed: 17990094]
- Garofalo R, Wolf RC, Wissow LS, Woods ER, Goodman E. Sexual orientation and risk of suicide attempts among a representative sample of youth. *Archives of Pediatrics & Adolescent Medicine*. 1999; 153:487–493. [PubMed: 10323629]
- Garcia J, Adams J, Friedman L, East P. Links between past abuse, suicide ideation, and sexual orientation among San Diego college students. *Journal of American College Health*. 2002; 51:9–14. [PubMed: 12222848]
- Goodenow C, Netherland J, Szalacha L. AIDS-related risk among adolescent males who have sex with males, females, or both: Evidence from a statewide survey. *American Journal of Public Health*. 2002; 92:203–210. [PubMed: 11818292]
- Goodenow C, Szalacha LA, Robin LE, Westheimer K. Dimensions of sexual orientation and HIV-related risk among adolescent females: Evidence from a statewide survey. *American Journal of Public Health*. 2008; 98:1051–1058. [PubMed: 18445809]
- Griffith PL, Myers RW, Cusick GM, Tankersley MJ. MMPI-2 profiles of women differing in sexual abuse history and sexual orientation. *Journal of Clinical Psychology*. 1997; 53:791–800. [PubMed: 9403380]
- Heidt JM, Marx BP, Gold SD. Sexual revictimization among sexual minorities: A preliminary study. *Journal of Traumatic Stress*. 2005; 18:533–540. [PubMed: 16281251]
- Herek GM. Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence*. 2009; 24:54–74. [PubMed: 18391058]
- Herek GM, Gillis JR, Cogan JC. Psychological sequelae of hate-crime victimization among lesbian, gay, and bisexual adults. *Journal of Consulting and Clinical Psychology*. 1999; 67:945–951. [PubMed: 10596515]
- Houston E, McKirnan DJ. Intimate partner abuse among gay and bisexual men: Risk correlates and health outcomes. *Journal of Urban Health*. 2007; 84:681–690. [PubMed: 17610158]
- Hudson W, Mc Intosh S. The assessment of spouse abuse: Two quantifiable dimensions. *Journal of Marriage and Family*. 1981; 11:873–888.

- Hughes TL. Lesbians' drinking patterns: Beyond the data. *Substance Use & Misuse*. 2003; 38:1739–1758. [PubMed: 14582576]
- Hughes TL, Haas AP, Avery L. Lesbians and mental health: Preliminary results from the Chicago Women's Health Survey. *Journal of the Gay and Lesbian Medical Association*. 1997; 1:137–148.
- Hughes TL, Haas AP, Razzano L, Cassidy R, Matthews A. Comparing lesbians' and heterosexual women's mental health: A multi-site survey. *Journal of Gay & Lesbian Social Services*. 2000; 11:57–76.
- Jinich S, Paul JP, Stall R, Acree M, Kegeles S, Hoff C, Coates TJ. Childhood sexual abuse and HIV risk-taking behavior among gay and bisexual men. *AIDS and Behavior*. 1998; 2:41–51.
- Kipke MD, Kubicek K, Weiss G, Wong C, Lopez D, Iverson E, Ford W. The Health and health behaviors of young men who have sex with men. *Journal of Adolescent Health*. 2007; 40:342–350. [PubMed: 17367727]
- Lehavot K, Walters KL, Simoni JM. Abuse, mastery, and health among lesbian, bisexual, and two-spirit American Indian and Alaskan Native women. *Cultural Diversity and Ethnic Minority Psychology*. 2009; 15:275–284. [PubMed: 19594256]
- Lenderking WR, Wold C, Mayer KH, Goldstein R, Losina E, Seage GR III. Childhood sexual abuse among homosexual men: Prevalence and association with unsafe sex. *Journal of General Internal Medicine*. 1997; 12:250–253. [PubMed: 9127231]
- Marshal MP, Friedman MS, Stall R, King KM, Miles J, Gold MA, Morse JQ. Sexual orientation and adolescent substance use: A meta-analysis and methodological review. *Addiction*. 2008; 103:546–556. [PubMed: 18339100]
- Matthews AK, Hughes TL, Johnson T, Razzano LA, Cassidy R. Prediction of depressive distress in a community sample of women: The role of sexual orientation. *American Journal of Public Health*. 2002; 92:1131–1139. [PubMed: 12084697]
- Mimiaga MJ, Noonan E, Donnell D, Safren SA, Koenen KC, Gortmaker S, Mayer KH. Childhood sexual abuse is highly associated with HIV risk-taking behavior and infection among MSM in the EXPLORE study. *Journal of Acquired Immune Deficiency Syndromes*. 2009; 51:340–348. [PubMed: 19367173]
- Moore CD, Waterman CK. Predicting self-protection against sexual assault in dating relationships among heterosexual men and women, gay men, lesbians, and bisexuals. *Journal of College Student Development*. 1999; 40:132–140.
- Moracco KE, Runyan CW, Bowling JM, Earp JA. Women's experiences with violence: a national study. *Womens Health Issues*. 2007; 17:3–12. [PubMed: 17321942]
- Morris JF, Balsam KF. Lesbian and bisexual women's experiences of victimization: mental health, revictimization, and sexual identity development. *Journal of Lesbian Studies*. 2003; 7:67–85.
- Mustanski B, Garofalo R, Herrick A, Donenberg G. Psychosocial health problems increase risk for HIV among urban young men who have sex with men: Preliminary evidence of a syndemic in need of attention. *Annals of Behavioral Medicine*. 2007; 34:37–45. [PubMed: 17688395]
- Paul JP, Catania J, Pollack L, Stall R. Understanding childhood sexual abuse as a predictor of sexual risk-taking among men who have sex with men: The Urban Men's Health Study. *Child Abuse & Neglect*. 2001; 25:557–584. [PubMed: 11370726]
- Rankow EJ, Cambre KM, Cooper K. Health care-seeking behavior of adult lesbian and bisexual survivors of childhood sexual abuse. *Journal of the Gay and Lesbian Medical Association*. 1998; 2:69–76.
- Roberts SJ, Sorensen L. Prevalence of childhood sexual abuse and related sequelae in a lesbian population. *Journal of the Gay and Lesbian Medical Association*. 1999; 3:11–19.
- Robohm JS, Litzenberger BW, Pearlman LA. Sexual abuse in lesbian and bisexual young women: Associations with emotional/behavioral difficulties, feelings about sexuality, and the 'coming out' process. *Journal of Lesbian Studies*. 2003; 7:31–47.
- Rodriguez Madera S, Toro-Alfonso J. Description of a domestic violence measure for Puerto Rican gay males. *Journal of Homosexuality*. 2005; 50:155–173. [PubMed: 16368669]
- Rosario M, Schrimshaw EW, Hunter J. A model of sexual risk behaviors among young gay and bisexual men: Longitudinal associations of mental health, substance abuse, sexual abuse, and the coming-out process. *AIDS Education & Prevention*. 2006; 18:444–460. [PubMed: 17067255]

- Russell ST, Franz BT, Driscoll AK. Same-sex romantic attraction and experiences of violence in adolescence. *American Journal of Public Health*. 2001; 91:903–906. [PubMed: 11392932]
- Saewyc EM, Bearinger LH, Blum RW, Resnick MD. Sexual intercourse, abuse and pregnancy among adolescent women: Does sexual orientation make a difference? *Family Planning Perspectives*. 1999; 31:127–131. [PubMed: 10379429]
- Saewyc EM, Bearinger LH, Heinz PA, Blum RW, Resnick MD. Gender differences in health and risk behaviors among bisexual and homosexual adolescents. *Journal of Adolescent Health*. 1998; 23:181–188. [PubMed: 9730361]
- Saewyc EM, Skay CL, Bearinger LH, Blum RW, Resnick MD. Sexual orientation, sexual behaviors, and pregnancy among American Indian adolescents. *Journal of Adolescent Health*. 1998; 23:238–247. [PubMed: 9763160]
- Saewyc EM, Skay CL, Pettingell SL, Reis EA, Bearinger L, Resnick M, Combs L. Hazards of stigma: the sexual and physical abuse of gay, lesbian, and bisexual adolescents in the United States and Canada. *Child Welfare*. 2006; 85:195–213. [PubMed: 16846112]
- Sandfort TG, Melendez RM, Diaz RM. Gender nonconformity, homophobia, and mental distress in Latino gay and bisexual men. *Journal of Sex Research*. 2007; 44:181–189. [PubMed: 17599275]
- Scheer S, Parks CA, McFarland W, Page-Shafer K, Delgado V, Ruiz JD, Klausner J. Self-reported sexual identity, sexual behaviors and health risks: Examples from a population-based survey of young women. *Journal of Lesbian Studies*. 2003; 7:69–83.
- Schneider BE. Put up and shut up: Workplace sexual assaults. *Gender & Society*. 1991; 5:533–548.
- Simoni JM, Walters KL, Balsam KF, Meyers SB. Victimization, substance use, and HIV risk behaviors among gay/bisexual/two-spirit and heterosexual American Indian Men in New York City. *American Journal of Public Health*. 2006; 96:2240–2245. [PubMed: 16670237]
- Stoddard JP, Dibble SL, Fineman N. Sexual and physical abuse: A comparison between lesbians and their heterosexual sisters. *Journal of Homosexuality*. 2009; 56:407–420. [PubMed: 19418332]
- Stotzer RL. Violence against transgender people: A review of United States data. *Aggression and Violent Behavior*. 2009; 14:170–179.
- Straus M, Hamby S, Boney-McCoy B, Sugarman D. The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*. 1996; 17:283–316.
- Thiede H, Valleroy LA, MacKellar DA, Celentano DD, Ford WL, Hagan H, Torian LV. Regional patterns and correlates of substance use among young men who have sex with men in 7 US urban areas. *American Journal of Public Health*. 2003; 93:1915–1921. [PubMed: 14600066]
- Tjaden P.; Thoennes, N. Survey (No. NCJ 181867). Washington, DC: U.S. Department of Justice; 2000. Extent, nature, and consequences of intimate partner violence: findings from the National Violence Against Women.
- Tjaden P, Thoennes N, Allison CJ. Comparing violence over the life span in samples of same-sex and opposite-sex cohabitants. *Violence & Victims*. 1999; 14:413–425. [PubMed: 10751048]
- Todahl J, Linville D, Bustin A, Wheeler J, Gau J. Sexual assault support services and community systems-Understanding critical issues and needs in the LGBTQ community. *Violence Against Women*. 2009; 15:952–976. [PubMed: 19491287]
- Tomeo ME, Templer DI, Anderson S, Kotler D. Comparative data of childhood and adolescence molestation in heterosexual and homosexual persons. *Archives of Sexual Behavior*. 2001; 30:535–541. [PubMed: 11501300]
- Toro-Alfonso J. Domestic violence among same sex partners in Puerto Rico: Implications for HIV intervention. *Journal of Gay and Lesbian Social Services*. 1999; 9:69–78.
- Toro-Alfonso J, Rodriguez-Madera S. Domestic violence in Puerto Rican gay male couples: Perceived prevalence, intergenerational violence, addictive behaviors, and conflict resolution skills. *Journal of Interpersonal Violence*. 2004; 19:639–654. [PubMed: 15140316]
- Turell SC. A descriptive analysis of same-sex relationship violence for a diverse sample. *Journal of Family Violence*. 2000; 15:281–293.
- Centers for Disease Control and Prevention. RPE Prevention and Education Grant Program. 2009. Retrieved July 6, 2009, from <http://www.cdc.gov/ncipc/profiles/rpe/>
- Waldner-Haugrud L, Gratch LV. Sexual coercion in gay/lesbian relationships: Descriptives and gender differences. *Violence and Victims*. 1997; 12:87–98. [PubMed: 9360290]

- Waldner LK, Berg J. Explaining antigay violence using target congruence: An application of revised routine activities theory. *Violence & Victims*. 2008; 23:267–287. [PubMed: 18624094]
- Waterman CK, Dawson LJ, Bologna MJ. Sexual coercion in gay male and lesbian relationships: Predictors and implications for support services. *Journal of Sex Research*. 1989; 26:118–124.
- Weingourt R. A comparison of heterosexual and homosexual long-term sexual relationships. *Archives of Psychiatric Nursing*. 1998; 12:114–118. [PubMed: 9573639]
- Wilsnack SC, Hughes TL, Johnson TP, Bostwick WB, Szalacha LA, Benson P, Kinnison KE. Drinking and drinking-related problems among heterosexual and sexual minority women. *Journal of Studies on Alcohol & Drugs*. 2008; 69:129–139. [PubMed: 18080073]
- Wilson H, Widom C. Does physical abuse, sexual abuse, or neglect in childhood increase the likelihood of same-sex sexual relationships and cohabitation? A prospective 30-year follow-up. *Archives of Sexual Behavior*. 2010; 39:63–74. [PubMed: 19130206]
- World Health Organization. *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization, Department of Violence and Injury Prevention; 2002.

Table 1

Description of Articles Reviewed that Report Estimates of the Prevalence of Sexual Assault Against GLB People (N=71)

Author(s) and year of publication	Number of non-heterosexual respondents in sample*	Population for Sexual Assault Results	Location	Sexual Assault Victimization Type
Probability and Census Samples (n=25)				
Arreola, Neilands, Pollack, Paul and Catania (2005)	2,881	GB	San Francisco, New York, Los Angeles, Chicago	CSA, ASA
Arreola, Neilands, Pollack, Paul and Catania (2008)	2,881	GB	San Francisco, New York, Los Angeles, Chicago	CSA
Arreola, Neilands and Diaz (2009) ^d and Sandfort, Melendez, and Diaz (2007)	912	GB	Los Angeles, Miami, New York	CSA
Berg, Mimiaga, and Safren (2004)	56	GB	Boston	LSA
Berg, Mimiaga, and Safren (2008)	92	GB	Boston	LSA
Brennan, Hellerstedt, Ross, and Welles (2007)	936	GB	Upper Midwest	CSA
Doyle, Frank, Saltzman, McMahon, and Fielding (1999)	4,501	LB	US (National)	LSA
Feldman, Ream, Diaz, and El-Bassel (2007) ^a	912	GB	New York, Miami, Los Angeles	CSA, IPSA
Friedman, Marshal, Stall, Cheong, and Wright (2008)	1,383	G	San Francisco, New York, Los Angeles, Chicago	CSA
Goodenow, Netherland, and Szalacha (2002) ^b	3,267	GB	Massachusetts	CSA
Goodenow, Szalacha, Robin, and Westheimer (2008) ^b	3,973	LB	Massachusetts	CSA
Jinich et al. (1998)	1,941	GB	Portland, Tucson	CSA
Kipke et al. (2007)	526	GB	Los Angeles County	LSA
Moracco, Runyan, Bowling, and Earp (2007)	1,800	LB	US (48 contiguous states)	ASA
Paul, Catania, Pollack, and Stall (2001)	2,881	GB	San Francisco, New York, Los Angeles, Chicago	CSA, ASA
Saewyc, Skay, Bearinger, Blum, and Resnick (1998) ^b	394	GLB	Minnesota	CSA
Saewyc, Bearinger, Blum, and Resnick (1999) ^b	3,816	LB	Minnesota	CSA
Saewyc et al. (2006) ^{b,c}				
Sample 1 (MSS92)	1,710	GLB	Minnesota	CSA
Sample 2 (MSS98)	1,987	GLB	Minnesota	CSA
Sample 3 (SEA95)	325	GLB	Seattle	CSA
Sample 4 (SEA99)	314	GLB	Seattle	CSA

Author(s) and year of publication	Number of non-heterosexual respondents in sample*	Population for Sexual Assault Results	Location	Sexual Assault Victimization Type
Sample 5 (Add Health)	n/a	LB	US	CSA
Sandfort et al. (2007) ^a	912	GB	New York, Miami, Los Angeles	IPSA
Scheer et al. (2003)	2,438	LB	Northern California	LSA
Tjaden, Thoennes, and Allison (1999)	744	GL	US (50 states and Washington, DC)	CSA, ASA, LSA, IPSA ⁶
Non-Probability Samples (n=50)				
Aaron and Hughes (2007)	416	L	Chicago	CSA
Austin et al. (2008)	63,028	LB	US (14 states)	CSA
Balsam, Rothblum, and Beauchaine (2005)	1,245	GLB	US	CSA, ASA
Bamey (2003) ^{a,b}	5,602	G	US (33 states)	CSA
Bartholow et al. (1994)	1,001	GB	Chicago, Denver, San Francisco	CSA
Bernhard (2000)	215	L	Midwest urban area	LSA, IPSA
Bradford, Ryan, and Rothblum (1994) and Descamps, Rothblum, Bradford, and Ryan (2000) ^e	1,925	L	US (50 states)	CSA, ASA, LSA, IPSA
Carballo-Diequez and Dolezal (1995) ^a	182	GB	New York City	CSA
Comstock (1989)	291	GL	US (31 states & DC)	HC
Corliss, Cochran, Mayes, Grealand, and Seeman (2009)	2,001	LB/non-het	Los Angeles County & San Francisco/Bay area	CSA
D'Augelli, Grossman, and Starks (2006) ^b	528	GLB	New York City	HC
Dibble, Sato, and Haller (2007) ^a	29	L	California	CSA, ASA
Dolezal and Carballo-Diequez (2002) ^a	307	GB	New York City	CSA
Duncan (1990)	412	GLB	Midwest	LSA
Feldman and Meyer (2007)	193	GB	New York City	CSA
Freedner et al. (2002) ^b	521	GLB	Northeast	IPSA
Garcia, Adams, Friedman, and East (2002)	138	GLB	San Diego	LSA
Griffith, Myers, Cusick, and Tankersley (1997)	115	L	N/A	CSA
Heidt, Marx, and Gold (2005)	307	GLB	N/A	CSA, ASA
Herek, Gillis, and Cogan (1999)	2,259	GLB	Sacramento	HC
Houston and McKimman (2007)	817	GB	Chicago	IPSA
Hughes, Haas, and Avery (1997)	418	L	Chicago	CSA, IPSA

Author(s) and year of publication	Number of non-heterosexual respondents in sample*	Population for Sexual Assault Results	Location	Sexual Assault Victimization Type
Hughes, Haas, Razzano, Cassidy, and Matthews (2000)	829	L	Chicago; Minneapolis/St. Paul; New York	CSA, IPSA
Hughes (2003)	120	L	Chicago	CSA, ASA
Lenderking, Wold, Mayer, Goldstein, Losina, and Seage III (1997)	327	GB	Boston	CSA
Lehavot, Walters, and Simoni (2009) ^a	152	LB	7 cities	CSA, LSA
Matthews, Hughes, Johnson, Razzano, and Cassidy (2002)	829	L	Chicago; Minneapolis/St. Paul; New York	CSA
Mimiaga et al. (2009)	4,244	GB	6 cities	CSA
Moore and Waterman (1999)	152	GL	N/A	ASA, IPSA
Morris and Balsam (2003)	2,431	LB	US (every state)	CSA, ASA, LSA, IPSA, HC
Mustanski, Garofalo, Herrick, and Donenberg (2007) ^b	310	GB	Chicago	LSA, IPSA
Rankow, Cambre, and Cooper (1998)	567	LB	North Carolina	CSA
Roberts and Sorensen (1999)	1,633	L	US (50 states, Washington, DC and PR)	CSA, LSA
Robohm, Litzenberger, and Pearlman (2003)	227	LB	US (National)	CSA
Rodriguez-Madera and Toro-Alfonso (2005) ^a	302	GB	New York, Puerto Rico	IPSA
Rosario, Schrimshaw, and Hunter (2006) ^b	80	GB	New York City	LSA
Saewyc, Bearinger, Heinz, Blum, and Resnick (1998) ^{a,b}	3,749	GLB	US (National)	CSA
Schneider (1991)	372	L	New England, New York City, Middle Atlantic states	LSA
Simoni, Walters, Balsam, and Meyers (2006) ^a	71	GB	New York City	IPSA
Stoddard, Dibble, and Fineman (2009)	324	LB	California	CSA, ASA, LSA
Thiede et al. (2003) ^b	3,492	GB	7 US cities	LSA
Tomeo, Templer, Anderson, and Kotler (2001)	942	GL	Central California	CSA
Toro-Alfonso (1999) ^a	151	G	Puerto Rico	IPSA
Toro-Alfonso and Rodriguez-Madera (2004) ^a	199	GB	Puerto Rico	IPSA
Turrell (2000)	499	GLB	SE Texas	IPSA
Waldner and Berg (2008) ^a	297	GLB	US (13 states)	HC
Waldner-Haugrud and Gratch (1997) ^a	273	GL	US (14 states)	IPSA
Waterman, Dawson, and Bologna (1989)	70	GL	Northeastern US	IPSA
Weingourt (1998) ^a	94	L	N/A	CSA

Author(s) and year of publication	Number of non-heterosexual respondents in sample*	Population for Sexual Assault Results	Location	Sexual Assault Victimization Type
Wilsnack et al. (2008)	953	LB	Chicago, US (National)	CSA

Note: ASA: adult sexual assault; B: bisexual; CSA: childhood sexual assault; G: gay; HC: hate crime-related sexual assault; L: lesbian; LSA: lifetime sexual assault; IPSA: intimate partner sexual assault.

^b Adolescent sample.

^a Racially or ethnically specific sample.

^c This study reports on findings from five different samples of U.S. youth. In this review, results from each of the five samples are considered separately.

^d This study reports the prevalence of IPSA for females only.

^e These two studies used the same sample but present results on different forms of sexual violence.

Table 2
 Summary of Prevalence Estimates of Sexual Assault Among Gay or Bisexual (GB) Men

Study	Childhood Sexual Assault	Adulthood Sexual Assault	Lifetime Sexual Assault	Intimate Partner Sexual Assault	Hate Crime Related Sexual Assault
Arreola et al. (2005)	29.4%	11.0–15.0%	--	--	--
Arreola et al.(2008)	21.0%	--	--	--	--
Arreola et al. (2009) and Sandfort et al. (2007)	15.8%	--	--	--	--
Balsam et al. (2005)	31.8–44.1%	11.6–44.7%	--	--	--
Barney (2003)	13.3%	--	--	--	--
Bartholow et al. (1994)	34.0%	--	--	--	--
Berg et al. (2004)	--	--	30.4%	--	--
Berg et al. (2008)	--	--	25.0%	--	--
Brennan et al. (2007)	15.5%	--	--	--	--
Carballo-Dieguez and Dolezal (1995)	18.0%	--	--	--	--
Comstock (1989)	--	--	--	--	10.0%
D'Augelli et al. (2006)	--	--	--	--	14.0%
Dolezal and Carballo- Dieguez (2002)	33.0%	--	--	--	--
Duncan (1990)	--	--	11.8%	--	--
Feldman and Meyer (2007)	34.0%	--	--	--	--
Feldman et al. (2007)	35.0%	--	--	10.0%	--
Freedner et al. (2002)	--	--	--	13.9–14.3%	--
Friedman et al. (2008)	21.0%	--	--	--	--
Garcia et al. (2002)	--	--	14.0–36.0%	--	--
Goodenow et al. (2002)	59.2%	--	--	--	--
Heidt et al. (2005)	18.6%	16.9%	--	--	--
Herek et al. (1999)	--	--	--	--	3.0–7.0%
Houston and McKimman (2007)	--	--	--	18.5%	--
Jinich et al. (1998)	28.0%	--	--	--	--
Kipke et al. (2007)	--	--	20.0%	--	--
Lenderking et al. (1997)	35.5%	--	--	--	--
Mimiaga et al. (2009)	39.7%	--	--	--	--
Moore and Waterman (1999)	--	13.0%	--	13.0%	--

Study	Childhood Sexual Assault	Adulthood Sexual Assault	Lifetime Sexual Assault	Intimate Partner Sexual Assault	Hate Crime Related Sexual Assault
Mustanski et al. (2007)	--	--	32.3%	11.0%	--
Paul et al. (2001)	20.6%	14.7%	--	--	--
Rodriguez-Madera and Toro-Alfonso (2005)	--	--	--	25.0%	--
Rosario et al. (2006)	--	--	54.0%	--	--
Saewyc, Bearinger, et al. (1998)	17.8%	--	--	--	--
Saewyc, Skay, et al. (1998)	4.1–16.7%	--	--	--	--
Saewyc et al. (2006)	--	--	--	--	--
Sample 1 (MSS92)	17.7–21.7%	--	--	--	--
Sample 2 (MSS98)	22.0–27.5%	--	--	--	--
Sample 3 (SEA95)	17.4–31.3%	--	--	--	--
Sample 4 (SEA99)	30.5–31.6%	--	--	--	--
Sandfort et al. (2007)	--	--	--	9.5%	--
Simoni et al. (2006)	--	--	--	10.0%	--
Thiede et al. (2003)	--	--	34.8%	--	--
Tjaden et al. (1999)	15.4%	10.8%	26.2%	--	--
Tomeo et al. (2001)	49.2%	--	--	--	--
Toro-Alfonso (1999)	--	--	--	10.0–16.0%	--
Toro-Alfonso and Rodriguez-Madera (2004)	--	--	--	25.0%	--
Turrell (2000)	--	--	--	12.0%	--
Waldner and Berg (2008)	--	--	--	--	19.8%
Waldner-Haugrud and Gratch (1997)	--	--	--	57.0%	--
Waterman et al. (1989)	--	--	--	12.1%	--

Table 3
 Summary of Prevalence Estimates of Sexual Assault Among Lesbian or Bisexual (LB) Women

Study	Childhood Sexual Assault	Adulthood Sexual Assault	Lifetime Sexual Assault	Intimate Partner Sexual Assault	Hate Crime Related Sexual Assault
Aaron and Hughes (2007)	31.0%	--	--	--	--
Austin et al. (2008)	33.0–36.0%	--	--	--	--
Balsam et al. (2005)	43.6–47.6%	11.3–53.2%	--	--	--
Bemhard (2000)	--	--	54.0%	12.5–14.0%	--
Bradford et al. (1994) and Descamps et al. (2000)	21.0%	15.0%	41.0%	2.8%	--
Comstock (1989)	--	--	--	--	5.0%
Corliss et al. (2009)	22.5–23.4%	--	--	--	--
D'Augelli et al., 2006	--	--	--	--	5.0%
Dibble et al. (2007)	34.7%	17.9%	--	--	--
Doyle et al. (1999)	--	--	15.6–15.8%	--	--
Duncan (1990)	--	--	30.6%	--	--
Freedner et al. (2002)	--	--	--	14.5–21.9%	--
Garcia et al. (2002)	--	--	24.0–53.0%	--	--
Goodenow et al. (2008)	44.8%	--	--	--	--
Griffith et al. (1997)	49.1%	--	--	--	--
Heidt et al. (2005)	22.0%	21.1%	--	--	--
Herek et al. (1999)	--	--	--	--	2.0–4.0%
Hughes et al. (1997)	29.0%	--	--	3.0%	--
Hughes et al. (2000)	41.0%	--	--	16.0%	--
Hughes (2003)	68.0%	39.0%	--	--	--
Lehavot et al. (2009)	76%	--	85%	--	--
Matthews et al. (2002)	30.0%	--	--	--	--
Moore and Waterman (1999)	--	27.0%	--	27.0%	--
Moracco et al. (2007)	--	22.2–47.1%	--	--	--
Morris and Balsam (2003)	39.3%	36.2%	53.1%	1.3–4.8%	<2%
Rankow et al. (1998)	34.0%	--	--	--	--
Roberts and Sorensen (1999)	39.0%	--	45.8%	--	--
Robohm et al. (2003)	37.9%	--	--	--	--

Study	Childhood Sexual Assault	Adulthood Sexual Assault	Lifetime Sexual Assault	Intimate Partner Sexual Assault	Hate Crime Related Sexual Assault
Saewyc, Bearinger, et al. (1998)	42.4%	--	--	--	--
Saewyc, Skay, et al. (1998)	14.9–30.7%	--	--	--	--
Saewyc et al. (1999)	22.1%	--	--	--	--
Saewyc et al. (2006)					
Sample 1 (MSS92)	23.9–32.4%	--	--	--	--
Sample 2 (MSS98)	39.2–39.8%	--	--	--	--
Sample 3 (SEA95)	26.3–40.7%	--	--	--	--
Sample 4 (SEA99)	17.4–26.9%	--	--	--	--
Sample 5 (Add Health)	27.5–32.8%	--	--	--	--
Scheer et al. (2003)	--	--	50.0–55.0%	--	--
Schneider (1991)	--	--	54.0%	--	--
Stoddard et al. (2009)	26.6%	17.2%	34.9%	--	--
Tjaden et al. (1999)	16.5%	25.3%	35.4%	11.4%	--
Tomeo et al. (2001)	42.5%	--	--	--	--
Turrell (2000)	--	--	--	12.0%	--
Waldner and Berg (2008)	--	--	--	--	12.3%
Waldner-Haugrud and Gratch (1997)	--	--	--	45.0%	--
Waterman et al. (1989)	--	--	--	30.6%	--
Weingourt (1998)	55.5%	--	--	--	--
Wilsnack et al. (2008)	57.9–73.8%	--	--	--	--

Table 4

Summary of Prevalence Estimates Reported Across Studies Reviewed, by Gender of Population Studied and Type of Sexual Assault

Type of sexual assault	Range		
	Low	High	Median ^a
Using all available estimates (n=75)			
Gay/bisexual males			
Childhood SA	4.1%	59.2%	22.7%
Adult SA	10.8%	44.7%	14.7%
Lifetime SA	11.8%	54.0%	30.4%
Intimate partner SA	9.5%	57.0%	12.1%
Hate crime-related SA	3.0%	19.8%	14.0%
Lesbian/bisexual females			
Childhood SA	14.9%	76.0%	34.5%
Adult SA	11.3%	53.2%	23.2%
Lifetime SA	15.6%	85.0%	43.4%
Intimate partner SA	3.0%	45.0%	13.3%
Hate crime-related SA	1.0%	12.3%	5.0%
Using population-based/census estimates only (n=25)			
Gay/bisexual males			
Childhood SA	4.1%	59.2%	21.0%
Adult SA	10.8%	15.0%	14.7%
Lifetime SA	20.0%	30.4%	26.2%
Intimate partner SA	9.5%	10.0%	--
Hate crime-related SA	--	--	--
Lesbian/bisexual females			
Childhood SA	14.9%	44.8%	28.2%
Adult SA	22.2%	47.1%	--
Lifetime SA	15.6%	55.0%	35.4%
Intimate partner SA	11.4%	11.4%	--
Hate crime-related SA	--	--	--
Using non-population based (community-based) estimates only (n=50)			
Gay/bisexual males			
Childhood SA	13.3%	49.2%	33.5%
Adult SA	11.6%	44.7%	13.0%
Lifetime SA	11.8%	54.0%	34.8%
Intimate partner SA	10.0%	57.0%	13.0%
Hate crime-related SA	3.0%	19.8%	10.0%
Lesbian/bisexual females			
Childhood SA	21.0%	76.0%	38.5%
Adult SA	11.3%	53.2%	24.0%
Lifetime SA	24.0%	85.0%	45.8%

Type of sexual assault	Range		
	Low	High	Median ^a
Intimate partner SA	1.3%	45.0%	12.0%
Hate crime-related SA	1.0%	12.3%	5.0%

^aMedian not calculated where <3 studies available