# Supporting/Supplementary material

Supplement Table 5. Search Strategies.

| **Electronic Bibliographic Database Searches** |
| --- |
| Concepts | MeSH | CINAHL | PsycINFO | Free-Text |
| MSM/at-risk | Homosexuality, MaleBisexualityUnsafe sex NOT pregnancyRisk-taking | HomosexualityHomosexuals, maleBisexualityUnsafe sex NOT pregnancyRisk taking behavior | Male homosexualityBisexualitySame sex intercourseAt risk populationsRisk takingRisk management | GayMen who have sex with menHIV riskBisexual |
| Internet | InternetSocial media | Internet | InternetSocial mediaComputer mediated communication | OnlineWorld wide webweb |
| **Grey Literature Searches** |
| * The Agency for Healthcare Research Quality (AHRQ; www.ahrq.gov)
* AIDS.gov
* The United States Preventative Task Force (USPTF) (www.uspreventiveservicestaskforce.org)
* The Centers for Disease Control and Prevention (www.cdc.gov), including the Effective Behavioral Interventions (EBI) Web site (www.effectiveinterventions.org/en/Home.aspx)
* The U.K. National Health Service (NHS; [www.nhs.uk/Pages/HomePage.aspx](http://www.nhs.uk/Pages/HomePage.aspx)) , including the National Institute for Health and Care Excellence (NICE; www.nice.org.uk )
* Canadian Agency for Drugs and Technologies in Health (CADTH; www.cadth.ca)
* Australian Government Department of Health (www.health.gov.au)
* SAMHSA (www.samhsa.gov)
* NIH Office of AIDS Research (www.oar.nih.gov)
* NIMH HIV Prevention Science Branch (www.nimh.nih.gov/about/organization/dar/hiv-prevention-science-branch/hiv-prevention-science-branch.shtml)
* World Health Organization (WHO; www.who.int/en/)
* National Library of Medicine AIDS database ([www.nlm.nih.gov/databases/databases\_aids.html](http://www.nlm.nih.gov/databases/databases_aids.html))
* New York State Department of Health HIV/AIDS website (www.health.ny.gov/diseases/aids/)
* University of California, San Francisco HIV/AIDS website (hiv.ucsf.edu)
* United National Educational, Scientific, and Cultural Organization (UNESCO) HIV/AIDS database ([www2.unescobkk.org/elib/search/searchaids2.htm](http://www2.unescobkk.org/elib/search/searchaids2.htm))
 |

Supplement Table 6. Customized GRADE Assessment Factors and Criteria to Determine Strength of Evidence.

| Factor | Assessment | Rating Change | Criteria for Determination |
| --- | --- | --- | --- |
| **Starting Point** |
| Study design type |  | - | Study design type determined using criteria of Zaza and colleagues[2] |
| **Lower Rating** |
| Risk of bias as determined using critical appraisal tool | Serious limitation  | -1 | Items 1, 2, or 8 (**Table 4**)  |
| Very serious limitations | -2 | Items 1, 2, 8, plus additional criteria are not satisfied |
| Inconsistency | Important | -1 | The studies do not agree in terms of overall finding. In meta-analysis, there is statistically significant heterogeneity. |
| Directness | Some uncertainty | -1 | The population may not pertain to internet-using MSM in the US |
| Major uncertainty: too uncertain to support an evidence-based conclusion. | -2 | The population clearly does not pertain to internet-using MSM in the US. *Such studies are excluded from the evidence base.* |
| Sparse data | Serious limitation | -1 | Two studies compose the evidence base  |
| Very serious limitation: too sparse to support an evidence-based conclusion | -2 | One study composes the evidence base. No conclusions are drawn when only one study addresses a key question due to preclusion of assessment of inconsistency. |
| Lack of robustness | Serious limitation | -1 | For meta-analyses, sensitivity analyses suggest the summary effect size is not stable. Not assessed for analysis of factors associated with testing patterns. |
| Reporting bias | High probability | -1 | For meta-analysis, statistical findings suggest publication bias *and* the adjusted summary effect size is statistically significantly different from the unadjusted effect size. |
| **Increase Rating** |
| Consistency across different evidence types | Increases confidence in findings | +1 | Consistency across meta-analysis and findings within primary research  |

Adapted from: Guyatt, G. H., et al. (2008). "GRADE: an emerging consensus on rating quality of evidence and strength of recommendations." BMJ 336(7650): 924-926.

Supplement Table 7. Summary of Included Studies.

| **Study** | **Target Population** | **Recruitment Strategy and Sampling Method** | **Participant Inclusion Criteria** | **Age (Years)**1 | **Ethnicity / Race**1 | **Education** | **Income** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Akin et al. 2008[23] | MSM, Hispanic in Miami-Dade County(n=470) | In-person or Internet-based recruitment from venues and Web sites catering to or geared to Hispanic MSM Enrolled 10/2003 – 02/2005 | Men At least 18 years oldSelf-identified as Hispanic/LatinoHad sex with a man last 5 yearsSouth Florida residentApproached by staffVisited field offices for screening and enrollment  | Mean 32  | 100% Hispanic, immigrants from Latin American countries | 69% (325/470) Greater than High School | 57% (268/470) >$1,500/month |
| Barriers to Online Prevention Research (BOPR) Sullivan, et al. 2011[24]  | MSM, internet-using(n=9005) | Banner ads on their MySpace pages; displayed to viewers based on self-reported demographic information Ads placed 3/19/2009 – 4/16/2009 | MenAt least 18 years oldU.S. residentsMySpace pages indicating they are gay, bisexual, or unsureHad sex with a man in the previous year | Mean 24, Median 21 (Range 18-80) years68% (n=6157) 18-24 16% (n=1446) 25-296% (n=573) 30-34 7% (n=623) 35-452% (n=206) >45  | n=8552 reported:41% (n=3473) White, non-Hispanic 15% (n=1293) Black, non-Hispanic 33% (n=2809) Hispanic 2% (n=208) Asian / Pacific Islander2% (n=184) Native American / Alaska Native5% (n=452) Multiracial2% (n=133) Other  | n=8357 reported:8% (n=628) Less than high school 35% (n=2914) High school or GED 42% (n=3531) Some college/associate degree15% (n=1284) College/ postgraduate | Not reported |
| CyBER/ M4MRhodes et al. 2010[25] | MSM(n=210) | During random two-hour shifts, educators entered one of five predetermined geographically oriented chat rooms and announced their purpose and offered HIV information and availability to answer questions. Educators were in chat rooms an average of 6 to 12 hours per week. Recruitment and intervention over 18 months in 2004 and 2005 | Chatters who contacted educators were invited to participate in study | Mean 31 (SD 11) years | n=202 reported:56% (n=114) White38% (n=76) Black or African American3% (n=6) Hispanic or Latino0.5% (n=1) Asian 1% (n=2) American Indian/Alaska Native2% (n=3) Multiracial/ethnic | 79% (n=160) Some college or higher | n=210Annual Income20% (n=41) <$10,00015% (n=30) $10,000-$19,99928% (n=56) $20,000-$39,99922% (n=45) $40,000-$59,9996% (n=13) $60,000-$79,9998% (n=17) ≥$80,000  |
| Dew and Chaney 2005[26] | MSM who use internet chat(n=513) | Researchers entered chat rooms, introduced selves and survey, and provided survey access through linkEthnically diverse chat rooms (e.g., geared to Asian or Latino users) were oversampledRecruitment dates NR | Men At least 18 years old | Mean 36 (SD 11) | n=511 reported:81% (n=416) Caucasian6% (n=31) African American5% (n=27) Hispanic2% (n=11) Asian2% (n=10) Native American3% (n=15) Other | 22% (n=113) Trade school or High School 48% (n=246)Associates degree or Bachelor’s degree25% (n=128) Graduate degree(s) | Median income range $20,000 - $39,999 |
| Fernandez et al. 2007[27] | MSM Hispanic who live in Miami-Dade County, Florida, and who use chat rooms (n=294 internet-recruited) | Internet sampling: Researchers entered chat rooms to recruit potential participants (every 5th screen name) by inviting them to look at the project web site and inviting them to field offices for full screening and enrollmentRecruitment 10/15/2003 to 12/19/2004 | Men At least 18 years oldSelf-identified as Hispanic or LatinoHad sex with a man last 5 yearsResident of South FloridaApproached by research staffVisited one of assessment sites for screening and enrollment | Mean 32 | 100% Hispanic | 6.5% (n=190) Less than High School75% (n=145) Greater than High School 26% (n=77) Some College7% (n=23) Vocational Graduate30% (n=87) (College Graduate)11% (n=120) Post-College Schooling | Income <$1500/month 42.2%Income <$2500/month 72.8% |
| Frontiers in PreventionBalan et al. 2013[28] | MSM, internet-using, ‘bare-backing’ interest, HIV negative, from New York City metropolitan area(n=89) | IMs and e-mails from ‘barebacking’ Web sites were sent to users that directed them to study web site and directed them to call for eligibility screening. Aimed to oversample HIV-negative men and to sample similar proportions of European-American, African-American, Latino, and Asian/Pacific Islander men.Recruitment April 2005 – March 2006 | Men At least 18 years oldSelf-identified as “barebacker” or “into barebacking” (undefined in screener)Resident of New York City Metro areaUse one of 6 popular barebacking Internet sitesUse Internet to seek sexual partners at least 2 times per month for the past few monthsHad intentional condomless anal sex with man met over the internet | Mean 32 (SD 10) years, range 18-63 | 27% (n=24) White/European-American21% (n=19) African-American25% (n=22) Latino18% (n=16) Asian/Pacific Islander2% (n=2) Native American7% (n=6) Other  | Level of education mean (SD) 14.85 (3.06) years; range 2-20 years | Income median (IQR) $25,000 ($34,250); range $0-$100,001 |
| Grov et al. 2013[29] | MSM with new oral or anal sex partner at last sexual encounter(n=2865) | Banner Ads on eight gay-oriented Web sites with links to consent form and then surveyRecruitment 2004 - 2005 | MenHad sex within the last yearMost recent oral or anal sexual encounter was with another man with whom he had not previously had sexU.S. resident | Median 38 (range 18 to 78) years22% (n=629) 18-2934% (n=973) 30-3933% (n=938) 40-4911% (n=325) >50 | n=2819 reported80% (n=2268) White, non-Hispanic4% (n=117) Black, non-Hispanic9% (n=244) Hispanic/Latino3% (n=72) Asian/Pacific Islander4% (n=118) Mixed/Other | Not reported | Not reported |
| Healthy Young Men’s Study (HYM)Kubicek et al. 2011[30] | MSM, aged 18-24(n=499) | Recruited from public venues using stratified probability sampling designRecruitment dates NR | MenHave sex with menAged 18-24 years Self-identified as gay, bisexual or uncertain; and/or had sex with another manLA county residents and expected to live in LA for next 6 months Caucasian, African American, or Latino-Mexican descent  | 29% (n=143) 18-19 37% (n=186) 20-21 34% (n=170) 22-24 | 38% (n=188) Caucasian23% (n=115) African American39% (n=196) Mexican descent | Not reported | Not reported |
| HIVBIGDEAL pilot study Chiasson 2009[31] | MSM(n=1003) | Banner ads on subscription gay sexual meeting site (unspecified)Recruitment October 2005 | MenHave sex with men At least 18 years oldFor analysis: Reported sex on baseline and follow-up questionnaires | n=83022% (n=183) 18-29 36% (n= 299) 30-3942% (n=349) >40 | n=943 reported:72% (n= 692) White6% (n=61) Black14% (n=137) Hispanic5% (n=40) Asian and Other2% (n=13) Multiple | N=968 reported49% (n=474) No college degree51% (n=494) College degree or higher | Not reported |
| HIVBIGDEAL RCTMargolis et al. 2012[32] | MSM (n=8040) | Banner Ad or e-mail on 4 gay-oriented sexual networking sitesRecruitment April 2008-June 2008 | MenAt least 18 years oldU.S. residentValid email addressReported enough information to assess HIV testing history and history with at least one anal or vaginal sexual partnerReported oral or anal sex with a man | Median 39 (SD 11.7) (range 18 to 81)n=8039 reported:15% (n=1196) 18-24 years85% (n=6843) ≥25 | n=8,004 reported:82% (n=6578) White3% (n=211) Black8% (n=679) Hispanic2% (n=152) Asian or Native Hawaiian / Other Pacific Islander5% (n=384) Mixed/ Other | Not college graduate 46% (n=3655)College graduate 54% (n=4363) | Not reported |
| Horvath et al. 2006[33]  | MSM, rural(n=663) | Banner ads on gay.com primary method; also used internet chat rooms, Internet bulletin boards, Internet groups, advertisements, and in-person referralsProject enrollment January 2002 through June 2003. | Men At least 18 years oldSelf-identify as bisexual or gay or reporting sex with a man in the last yearLive in rural area (population <75,000 and >60 minutes from urban area) | 33% (n=216) 18-24 27% (n=178) 25-34 23% (n=149) 35-44 18% (n=120) >45 | n=656 reported:90% (n=588) White10% (n=68) Non-White | Reported for n=66117% (n=110) High school or less40% (n=265) Technical degree or some college43% (n=286) College degree | Reported for n=55930% (n=180) <$15,000025% (n=150) $15,000-$24,99936% (n=216) $25,000-$49,99919% (n=113) ≥$50,000 |
| Horvath et al. 2008[34] | MSM(n=2716) | Banner Ads throughout high-subscription-volume Web site, PlanetOutSeptember to November 2005 | Men At least 18 yearsU.S. ResidentHad sex with a man in past 3 months | n=2713 reported:36% (n=979) 18-24 25% (n=690) 25-29 27% (n=724) 30-39 9% (n=249) 40-493% (n=71) ≥50 | 27% (n=728) White16% (n=445) Black25% (n=683) Latino19% (n=512) Asian13% (n=348) Other | Not reported | 21% (n=560) <$10,00025% (n=648) $10,001-$25,00028% (n=729) $25,001-$45,00026% (n=677) ≥$45,001 |
| Horvath et al. 2010[35] | MSM(n=1725) | Banner Ads to “Participate in University Research on Sex and Alcohol and Earn $30” posted on two unnamed Web sites targeted to gay and bisexual men to meet sex partners 3.5 months in 2008 | Men At least 18 years oldEver had sex with a man | 7% (n=121) 18-20 41% (n=707) 21-3024% (n=414) 31-4028% (n=483) 41-70 | 1725 reported:76% (n=1311) White15% (n=259) Hispanic 8% (n=138) Other | 11% (n=190) High school or less37% (n=638) Technical/some college34% (n=587) College degree18% (n=311) Graduate degree | Not reported |
| Horvath et al. Diary StudiesHorvath et al. 2006[36] | MSM in Western states(n=45) | Chat room profile on gay.com with link to study website; Ad on back page of The Stranger, a Seattle LGBT-oriented newspaperRecruitment dates NR | Men At least 18 years old Have sex with man 2-4 times monthlyHave daily access to internet and use it >twice weeklyDaily-checked email | 22% (n=10) 18-23 11% (n=5) 24-27 38% (n=17) 28-36 29% (n=13) ≥37 | 76% (n=34) White24% (n=11) Non-White | 20% (n=9) High school or less33% (n=15) Technical/some college27% (n=12) College degree20% (n=9) Graduate degree | <$15,0000 24% (n=11)58% (n=26) $15,000-$49,99918% (n=8) ≥50,000 |
| Jozkowski et al. 2010[37] | MSM(n=25,159) | Recruitment email with link to study website sent to U.S. residents with accounts at an MSM-focused internet-based social and sexual networking site. Recruitment July 2009 | Questionnaire completers who answered the questionnaire item on circumcision statusAt least one current male sex partner  | n=24,90014% (n=3560) 18-23 18% (n=4435) 24-29 23% (n=5762) 30-39 28% (n=6970) 40-49 13% (n=3318)50-59 3% (n=855) 60+ | n=25,027 reported:82% (n=20,650) White4% (n=1014) Black7% (n=1857) Hispanic/ Latino3% (n=729) Asian/ Pacific Islander3% (n=777) Other | (n=25,104)11% (n=2817) High school or less34% (n=8485) Some college or associates degree32% (n=8112) Bachelor’s degree15% (n=3826) Master’s degree7% (n=1625) Professional1% (n=239) Other  | Not reported |
| Khosropour et al. 2013[38] | MSM, internet-using, with mobile phone(n=710) | Banner ads on social networking and internet dating sites: Facebook, MySpace, Black Gay Chat, Adam4AdamRecruitment August to December 2010 | Men At least 18 yearsHad sex with man last 12 months Had mobile phone with texting Willing to receive at-home HIV testNo plans to move outside U.S. during next yearRace/ethnicity white non-Hispanic, black non-Hispanic, or HispanicReturned HIV test kit sent as part of studyTested negative on HIV test kit sent as part of study | 37% (n=263) 18-24 37% (n=262) 25-34 15% (n=107) 35-4411% (n=78) 45-54  | 66% (n=470) White15% (n=106) Black19% (n=134) Hispanic | 18% (n=130) High school or less83% (n=580) Greater than high school or GED | Not reported |
| Khosropour and Sullivan 2013[39] | MSM(n=6104) | Banner advertisements placed on social networking and internet dating websites (including Facebook, MySpace, Black Gay Chat, Adam4Adam). Recruitment August to December 2010 | Men At least 18 years old Reported sex with a male during the last 12 monthsSubset of those who completed condom receipt and use questions | 12% (n=728) 18-1930% (n=1830) 20-24 29% (n=1765) 25-34 15% (n=937) 35-44 10% (n=640) 45-54 3% (n=204) 55+  | 45% (n=2737) White, Non-Hispanic 23% (n=1407) Black, Non-Hispanic 15% (n=903) Hispanic 4% (n=225) Asian/ Pacific Islander 2% (n=135) Native American/Alaska Native8% (n=458) Multiracial 4% (n=239) Other  | 4% (n=221) Less than high school21% (n=1099) High school or GED38% (n=2029) Some college/associate degree37% (n=1973) College/postgraduate | 34% (n=1632) ≤$14,99930% (n=1417) $15,000-$39,99920% (n=956) $40,000-$74,99916% (n=762) ≥$75,000 |
| MINTS-IIWilkerson et al. 2010[40] | MSM(n=2578) | Banner advertisements in Spanish and English on Gay.com that linked to study website, where potential participants answered questions to screen for inclusion criteria.Men of color were oversampled so that the final sample contained approximately equal numbers of Asian, Latino, Black and White men.Recruited for 3 months during 2005 | Men At least 18 years Had sex with at least one other man U.S. residents HIV-negative  | n=2575 reported:37% (n=959) 18-2426% (n=664) 25-2926% (n=670) 30-3911% (n=282) >40 | 25% (n=638) Latino American19% (n=496) Asian American16% (n=408) Black or African American27% (n=701) White13% (n=335) Other | 14% (n=351)≤12 years (High School or Less) 60% (n=1556)13-16 years 26% (n=671) ≥17 years  | Not reported |
| MINTS-II LatinoRosser et al. (2009) [41] | Latino MSM(n=1026) | Banner advertisements in Spanish and English on Gay.com that linked to study website, where potential participants answered questions to screen for inclusion criteria.Recruited November-December 2002 | Latino men At least 18 yearsHad sex with at least one other man U.S. residents  | Mean 28 (SD 9)  | 100% Latino | 20% (n=205) High school or less80% (n=798) More than high school | Gross annual income14% (n=108) $1-$1000017% (n=133) $10,001-$20,00023% (n=182) $20,001-$30,00017% (n=135) $30,001-$40,00011% (n=88) $40,001-$50,0005% (n=37) $50,001-$60,0004% (n=28) $60,001-$70,0009% (n=69) >$70,000 |
| Mustanski 2007[42] | MSM(n=113) | Link to study web page (including informed consent form and questionnaire) posted on casual sex-seeking website for MSM, web site for sexually addicted individuals, Kinsey Institute website, and an internet-based comprehensive listing of gay and lesbian university organizations. A few weeks later, a randomly selected sub-sample of questionnaire completers were contacted and invited to participate in a daily diary study. Recruitment dates not reported | Men Agreed to daily diary study participationReported they were not in exclusive or monogamous relationships | 48% (n=54) 18-24 12% (n=14) 25-29 20% (n=23) 30-39 20% (n=22) >40  | 85% (n=96) White, Non-Hispanic 4% (n=5) Black3% (n=3) Hispanic8% (n=9) Other | 7% (n=8) High school completed52% (n=59) Some college or technical school41% (n=46) College graduate or higher | 30% (n=33) Lower54% (n=60) Middle16% (n=18) Upper |
| Online Health and Technology SurveyBaselineWagenaar, et al. 2012[43] | MSM(n=5980) | Study banner advertisements target to on MySpace.com users who reported male gender, age 18 or older, and sexual orientation of gay, bisexual, or unsure. Recruitment March and April 2009 | MenAt least 18 years oldHIV-negative Reported at least one male sexual partner in the previous 12 monthsProvided informed consentFor follow-up:White, Black, or Hispanic[39] | 68% (n=4083) 18-2416% (n=957) 25-29 7% (n=401) 30-34 7% (n=404) 35-45 2% (n=135) >45 | 43% (n=2582) White, Non-Hispanic 13% (n=778) Black, Non-Hispanic 32% (n=1897) Hispanic11% (n=664) Other 1% (n=59) Unknown | 7% (n=421) Less than high school34% (n=2017) High school or GED42% (n=2557) Some college, associate’s, or technical degree15% (n=918) College, post graduate, or professional school1% (n=67) Don’t know or prefer not to answer | Not reported |
| Project SPINGrov, et al. 2008[44] | MSM, internet-using, sexually compulsive, in New York City(n=183) | Pop-up and banner ads shown to Grindr users logged in to their accounts, with links to surveyRecruitment period 2 days in December 2012 | Men At least 18 years oldNew York City area residentReported having sex with menDid not report being HIV-positive.  | Mean 36 (SD 8) (Range 19-63)  | 60% (n=109) White/European 19% (n=34) African American1% (n=2) Arab/Middle Eastern2% (n=4) Asian/Pacific Islander19% (n=34) Hispanic/Latino | 10% (n=19) High school or less26% (n=47) Some college or Associates Degree40% (n=73) Bachelor’s Degree23% (n=42) Graduate School | 19% (n=35) <$10,00016% (n=29) $10,000-$19,99914% (n=25) $20,000-$29,99916% (n=30) $30,000-$39,9997% (n=12) $40,000-$49,99915% (n=28) $50,000-$74,99913% (n=23) >$75,000 |
| Rendina Jimenez, et al. 2013[45] | MSM(n=1351) | Advertisement on free online sexual networking site for MSM, Grindr, linked to informed consent information and survey.Recruitment during 2 days in December 2012 | Men Male sex at birthMale gender identityAt least 18 years old U.S. resident Reported sex with another man in last 90 daysNot HIV positive or in a known serodiscordant relationshipIdentified as gay or bisexual  | Mean 30 (range 18 to 67) years  | 49% (n=666) White12% (n=155) Black21% (n=279) Hispanic /Latino6% (n=86) Asian/Pacific Islander10% (n=133) Multiracial2% (n=32) Other | Not reported | Not reported |
| Rucinski et al. 2013[46] | MSM(n=329) | Banner ads placed on social and sexual networking websites geared to MSM (Gay.com, Black Gay Chat Live, Men4Now, Next Magazine, Gay Ad Network, Logo); targeted to New York City residents by IP address.Recruitment in October and November 2011  | MaleAge 18-40 yearsFull or part-time New York City residents  | 65% (n=213) 18-3035% (n=116) 31-40 | n=324 reported:51% (n=166) White, non-Hispanic19% (n=60) Black, non-Hispanic15% (n=49) Hispanic15% (n=49) Other | 23% (n=75) Some college or less42% (n=137) 4-year degree35% (n=116) Graduate degree | Not reported |
| Schnarrs et al. 2012[47] | MSM, Latino(n=1880) | Email sent to all users of a large online social and sexual online networking site for MSM, linking to study website Recruitment dates NR | Men Has sex with menHave not responded from IP address previously | n=186124% (n=446) 18-2418% (n=335) 25-2929% (n=547) 30-3922% (n=406) 40-49 6% (n=108) 50-59 1% (n=19) >60+ | 100% (n=1880) Latino | n=18741% (n=24) <High school14% (n=265) High school / GED38% (n=712) Some college / Associate’s29% (n=551) Bachelor’s11% (n=205) Master’s5% (n=102) Doctoral1% (n=15) Other | Not reported |
| Stephenson et al. 2010[48] | MSM(n=402) | MySpace Ads with photos of men of various ages and ages shown to men at least 18 years old indicating sexual orientation as gay, bisexual, or unsure, in the United StatesRecruitment dates not reported | Men Age 18-35 yearsHad sex with at least one man in the last year  | 68% (n=273) 18-2421% (n=84) 25-2911% (n=44) 30-35 | 48% (n=193) White/Caucasian 15% (n=61) Black/African American37% (n=150) Hispanic | 5% (n=19) <High school/GED27% (n=108) High school/GED69% (n=275) Some college or higher | Not reported |
| Stephenson et al. 2014[49] | MSM (n=355 US residents) | Banner advertisements on Facebook.com targeted men who said they were interested in men on their Facebook profiles, and linked potential participants to Internet-based survey.Recruitment October 1 to November 30 2010 | Men At least 18 yearsReported sex with men in the last year | n=354 reported60% (n=213) 18-24 17% (n=60) 25-34 8% (n=28) 35-4415% (n=53) >45 | 83% (n=295) White 17% (n=60) Other | 29% (n=103 ) ≤12 years71% (n=252) >12 years | Not reported |
| Wagenaar, Sullivan, et al. 2012[50] | MSM(n=1154 US residents) | Banner ads on Facebook linked to study website.Ads displayed October 1 to November 30 2010. | Men At least 18 years oldU.S. residentsAt least one male sex partner in the last year  | 43% (n=500) 18-2416% (n=183) 25-2914% (n=163) 30-3917% (n=191) 40-4911% (n=117) >50Median 26 (IQR 20) | 48% (n=557) White non-Hispanic33% (n=381) Black/ non-Hispanic9% (n=108) Hispanic9% (n=108) Other | 22% (n=253) High school or less78% (n=901) More than high school | Not reported |
| Wall et al. 2010[51] | MSM(n=6046) | Internet advertisements on sites MySpace Data collected between March and April 2009 | MenAt least 18 years oldU.S. residentsUnknown or negative HIV status | 84% (n=5099) 18-2911% (n=643) 30-394% (n=230) 40-491% (n=74) >50  | 43% (n=2583) White/ Caucasian (non-Hispanic) 13% (n=799) Black/African American (non-Hispanic)32% (n=1942) Hispanic1% (n=722) Other/ Unknown | 24% (n=1465) Less than high school graduate34% (n=2046) High School or GED43% (n=2589) Some college, associate’s degree, or technical school15% (n=919) College, postgraduate, or professional school | Not reported |
| Welles et al. 2011[52] | MSM, used internet to find sex partners (n=682 US residents)  | Banner advertisements and featured links on Google and other search engines, web sites geared to gay and Black men, and New York and Washington weekly LGBT newsletters.Data collection dates NR. | MaleAt least 18 years oldU.S. residentsLiterate in English languageSex with another man in past 12 months | 20% (n=136) 18-2533% (n=228) 26-35 26% (n=177) 36-45 21% (n=141) >45 | Not Reported | 11% (n=75) ≤High school35% (n=238) Some college / post high school31% (n=213) College graduate22% (n=152) Graduate or professional school | 21% (n=143) Lower42% (n=284) Middle33% (n=226) Upper4% (n=29) Prefer not to answer |
| WHBS New YorkNavejas 2013[53]; Navejas et al. 2012[54] | MSMOverall survey(n=1700)[53]Subgroup who reported sex with a main or casual partner in the past 12 months(n=1124)[54] | Banner advertisements rotated through various social network sites, some geared toward MSM, that when clicked redirected participants toRecruitment April – August 2007  | Born maleAt least 18 years oldNew York City residentReported sex with a man last 12 monthsHIV Factor Analysis[54]Same as online sample criteria above, with additional criteria of reporting meeting at least one sex partner online in the last 12 months and reporting sex with a main or casual partner in the past 12 months. | 62% (n=1053) 18-2923% (n=394) 30-3912% (n=195) 40-49 3% (n=58) >50Mean 29 (SD 9) yearsSubgroup who reported sex with a main or casual partner in the past 12 months: 11% (n=125) 18-1948% (n=534) 20-2924% (n=275) 30-3914% (n=152) 40-49 3% (n=38) >50 | 63% (n=1067) White13% (n=215) Black29% (n=315) Hispanic6% (n=93) OtherSubgroup who reported sex with a main or casual partner in the past 12 months:63% (n=711) White13% (n=142) Black18% (n=203) Hispanic 6% (n=62) Other | Subgroup who reported sex with a main or casual partner in the past 12 months:14% (n=156) ≤High school graduate86% (n=962) >High school | Not reported |
| WHBS San FranciscoRaymond et al. 2010[55] | MSM(n=723) | Banner advertisements on Gay.com, Manhunt, Friendster, MySpace, Facebook, and 19 othersGeographically targeted to San Francisco area Internet venue-based sampling, in which study staff entered online venues frequented by MSM to invite men by online message or email to participate in the survey.Recruitment November 2003 to December 2004  | MenAt least 18 years old San Francisco Bay Area counties residentGay or bisexual, Had sex with a man during the past 12 months. |  9% (n=62) 18-2018% (n=132) 21-2518% (n=129) 26-3014% (n=98) 30-3513% (n=93) 36-4014% (n=101) 41-45 8% (n=55) 46-50 7% (n=53) >50 | n=716 reported72% (n=512) Caucasian2% (n=16) African American13% (n=94) Latino8% (n=56) Asian0.4% (n=3) American Indian1% (n=7) Native Hawaiian/Pacific Islander2% (n=11) Other2% (n=17) Mixed Race | 27% (n=64) High school or less26% (n=191) Some college37% (n=271) College27% (n=192) Post-graduate | 7% (n=52) ≤$9,99915% (n=107) $10,000-$29,00015% (n=112) $30,000-$49,00015% (n=105) $50,000-$69,00012% (n=86) $70,000-$89,00022% (n=158) ≥$90,000 |

1Numbers might not add to total in the ‘Target Population’ column because of missing or unknown data.