Supplemental Table 1: PrEP search strategy

* Databases Searched (platform): Search years 2000 – 2016 run in the databases March 2017
	1. MEDLINE (OVID)
	2. EMBASE (OVID)
	3. PsycINFO (OVID)
	4. CINAHL (EBSCOhost)

\*Full electronic search strategy for MEDLINE, including any limits used, provided in this appendix. Please contact the corresponding author for the searches of EMBASE, PsycINFO and CINAHL.

* Manual Search:
	1. Hand Search 52 Journals (Quarterly) January 2017 – September 2017
	2. Check reference list of included citations (ongoing)
	3. PubMed ad hoc keyword searches (ongoing)
	4. Table of contents alerts from journals (ongoing)
* Search Development: 24 Citations used to develop the search
	1. Anderson PL, Glidden DV, Liu A, Buchbinder S, Lama JR, Guanira JV*, et al.* Emtricitabine-tenofovir concentrations and pre-exposure prophylaxis efficacy in men who have sex with men. *Sci Transl Med* 2012,4:151ra125.
	2. Baeten JM, Donnell D, Ndase P, Mugo NR, Campbell JD, Wangisi J*, et al.* Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. *N Engl J Med* 2012,367:399-410.
	3. Flash C, Landovitz R, Giler RM, Ng L, Magnuson D, Wooley SB*, et al.* Two years of Truvada for pre-exposure prophylaxis utilization in the US. *J Int AIDS Soc* 2014,17:19730.
	4. Golub SA, Kowalczyk W, Weinberger CL, Parsons JT. Preexposure prophylaxis and predicted condom use among high-risk men who have sex with men. *J Acquir Immune Defic Syndr* 2010,54:548-555.
	5. Grant RM. Antiretroviral agents used by HIV-uninfected persons for prevention: pre- and postexposure prophylaxis. *Clin Infect Dis* 2010,50 Suppl 3:S96-101.
	6. Grant RM, Anderson PL, McMahan V, Liu A, Amico KR, Mehrotra M*, et al.* Uptake of pre-exposure prophylaxis, sexual practices, and HIV incidence in men and transgender women who have sex with men: a cohort study. *Lancet Infect Dis* 2014,14:820-829.
	7. Grant RM, Buchbinder S, Cates W, Jr., Clarke E, Coates T, Cohen MS*, et al.* AIDS. Promote HIV chemoprophylaxis research, don't prevent it. *Science* 2005,309:2170-2171.
	8. Hoots BE, Finlayson T, Nerlander L, Paz-Bailey G. Willingness to Take, Use of, and Indications for Pre-exposure Prophylaxis Among Men Who Have Sex With Men-20 US Cities, 2014. *Clin Infect Dis* 2016,63:672-677.
	9. Hosek SG, Siberry G, Bell M, Lally M, Kapogiannis B, Green K*, et al.* The acceptability and feasibility of an HIV preexposure prophylaxis (PrEP) trial with young men who have sex with men. *J Acquir Immune Defic Syndr* 2013,62:447-456.
	10. Kellerman SE, Hutchinson AB, Begley EB, Boyett BC, Clark HA, Sullivan P. Knowledge and use of HIV pre-exposure prophylaxis among attendees of minority gay pride events, 2004. *J Acquir Immune Defic Syndr* 2006,43:376-377.
	11. Khanna AS, Michaels S, Skaathun B, Morgan E, Green K, Young L*, et al.* Preexposure Prophylaxis Awareness and Use in a Population-Based Sample of Young Black Men Who Have Sex With Men. *JAMA Intern Med* 2016,176:136-138.
	12. Khawcharoenporn T, Kendrick S, Smith K. HIV risk perception and preexposure prophylaxis interest among a heterosexual population visiting a sexually transmitted infection clinic. *AIDS Patient Care STDS* 2012,26:222-233.
	13. Kuo I, Olsen H, Patrick R, Phillips G, 2nd, Magnus M, Opoku J*, et al.* Willingness to use HIV pre-exposure prophylaxis among community-recruited, older people who inject drugs in Washington, DC. *Drug Alcohol Depend* 2016,164:8-13.
	14. Kwakwa HA, Bessias S, Sturgis D, Mvula N, Wahome R, Coyle C*, et al.* Attitudes Toward HIV Pre-Exposure Prophylaxis in a United States Urban Clinic Population. *AIDS Behav* 2016,20:1443-1450.
	15. Liu A, Glidden DV, Anderson PL, Amico KR, McMahan V, Mehrotra M*, et al.* Patterns and correlates of PrEP drug detection among MSM and transgender women in the Global iPrEx Study. *J Acquir Immune Defic Syndr* 2014,67:528-537.
	16. Liu AY, Vittinghoff E, Chillag K, Mayer K, Thompson M, Grohskopf L*, et al.* Sexual risk behavior among HIV-uninfected men who have sex with men participating in a tenofovir preexposure prophylaxis randomized trial in the United States. *J Acquir Immune Defic Syndr* 2013,64:87-94.
	17. Marcus JL, Glidden DV, Mayer KH, Liu AY, Buchbinder SP, Amico KR*, et al.* No evidence of sexual risk compensation in the iPrEx trial of daily oral HIV preexposure prophylaxis. *PLoS One* 2013,8:e81997.
	18. Psaros C, Haberer JE, Katabira E, Ronald A, Tumwesigye E, Campbell JD*, et al.* An intervention to support HIV preexposure prophylaxis adherence in HIV-serodiscordant couples in Uganda. *J Acquir Immune Defic Syndr* 2014,66:522-529.
	19. Smith DK, Toledo L, Smith DJ, Adams MA, Rothenberg R. Attitudes and program preferences of African-American urban young adults about pre-exposure prophylaxis (PrEP). *AIDS Educ Prev* 2012,24:408-421.
	20. Snowden JM, Chen YH, McFarland W, Raymond HF. Prevalence and characteristics of users of pre-exposure prophylaxis (PrEP) among men who have sex with men, San Francisco, 2014 in a cross-sectional survey: implications for disparities. *Sex Transm Infect* 2017,93:52-55.
	21. Stirratt MJ, Gordon CM. Adherence to biomedical HIV prevention methods: considerations drawn from HIV treatment adherence research. *Curr HIV/AIDS Rep* 2008,5:186-192.
	22. Tangmunkongvorakul A, Chariyalertsak S, Amico KR, Saokhieo P, Wannalak V, Sangangamsakun T*, et al.* Facilitators and barriers to medication adherence in an HIV prevention study among men who have sex with men in the iPrEx study in Chiang Mai, Thailand. *AIDS Care* 2013,25:961-967.
	23. Whiteside YO, Harris T, Scanlon C, Clarkson S, Duffus W. Self-perceived risk of HIV infection and attitudes about preexposure prophylaxis among sexually transmitted disease clinic attendees in South Carolina. *AIDS Patient Care STDS* 2011,25:365-370.
	24. Wilson EC, Jin H, Liu A, Raymond HF. Knowledge, Indications and Willingness to Take Pre-Exposure Prophylaxis among Transwomen in San Francisco, 2013. *PLoS One* 2015,10:e0128971.

**MEDLINE (OVID) PrEP Search**

Symbol Key

/ = MeSH term

ti = title ab = abstract

$ = truncation

**HIV or AIDS or STD MeSH and keywords**

1. HIV infections/
2. AIDS/
3. Sexually Transmitted Diseases/
4. HIV seropositivity/
5. HIV seronegativity/
6. AIDS serodiagnosis/
7. Hepatitis C/
8. HIV.ti,ab
9. (AIDS not hearing).ti,ab
10. Hepatitis C.ti,ab
11. HCV.ti,ab
12. Sexually transmitted disease$.ti,ab
13. Sexually transmitted infection$.ti,ab
14. (STD or STDs or STI or STIs).ti,ab
15. or/1-14

**Pre Exposure Prophylaxis MeSH and Keywords**

1. Pre-Exposure Prophylaxis/
2. Chemoprevention/
3. Pre exposure prophylaxis.ti,ab
4. Preexposure prophylaxis.ti,ab
5. PrEP.ti,ab
6. (Chemoprophylaxis or Chemo prophylaxis or chemoprevention).ti,ab
7. or/16-21
8. 15 and 22

Years = 2000 to 2016 (run in March 2017)

* Query of the PRS Database: Last run December 2017
	+ Citations tagged by PRS coders as the following
		- ( ( {Specify HIV/AIDS/STD/HBV/HCV prevention focus} = ( [PrEP/PEP] OR [PrEP] ) OR {Keywords} = [PrEPCQ] ) ) AND {Specify HIV/AIDS/STD/HBV/HCV prevention focus} NOT [Policy / Commentary / Advocacy (non-behavioral)])

Supplemental Table 2: Included studies by locations, CDC’s PrEP indications, and study years (N=72)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study yeara |  | Sample size | Number of PrEP users | Prevalence (%) | Recall periodb | Target population | Locations | Quality scorec |
| ***US-based Study (n=55)*** |
| *Met CDC PrEP indicati*ons*d (k=22)* |
| 2006 | Koblin, 2011 [1] | 645 | 15 | 2.3 | Ever | Substance using MSM | Chicago, ILLos Angeles, CANew York City, NYSan Francisco, CA | 4 |
| 2007 | Mansergh, 2010 [2] | 454 | 9 | 2.0 | 6 mo | MSM | Chicago, ILLos Angeles, CANew York City, NYSan Francisco, CA | 3 |
| 2008 | Golub, 2010 [3] | 180 | 3 | 1.7 | Ever | MSM | New York City, NY | 3 |
| 2011 | Dolezal, 2015 [4] | 228 | 0 | 0 | Ever | MSM | Boston, MAPittsburgh, San Juan, PR | 4 |
| 2011 | Krakower, 2012 [5] | 2,243 | 25 | 1.1 | Ever | MSM | Online | 3 |
| 2011 | Saberi, 2012 [6] | 212 | 10 | 4.7 | Ever | MSM HIV-serodiscordant/HIV-concordant(positive) couple | San Francisco, CA | 4 |
| 2012 | Kuo, 2016 [7] | 66 | 0 | 0 | 12 mo | Older PWID (NHBS) | Washington, DC | 3 |
| 2012 | Mimiaga, 2014 [8] | 40 | 4 | 10.0 | Ever | Substance using MSM | Boston, MA | 3 |
| 2013  | Chan, 2015 [9] | 78 | 2 | 2.6 | Ever | MSM tested for HIV/STI | Providence, RI | 2 |
| 2013 | Cohen, 2015 [10] | 557 | 17 | 3.1 | Ever | MSM, Transwomen | Miami, FLSan Francisco, CA Washington, DC | 3 |
| 2013 | Eaton, 2015 [11] | 436 | 6 | 1.4 | Ever | Black MSM | Atlanta, GA | 4 |
| 2013 | Golub, 2017 [12] | 160 | 5 | 3.1 | Current | MSM | New York City, NY | 3 |
| 2013 | Kuhns, 2016 [13] | 111 | 5 | 4.5 | Ever | Young transwomen | Chicago, ILBoston, MA | 3 |
| 2013 | Oldenburg, 2016 [14] | 254 | 13 | 5.1 | Ever | Substance using MSM | Boston, MA | 4 |
| 2014 | Hoots, 2016 [15] | 3,721 | 216 | 538 | 12 mo | MSM (NHBS) | Atlanta, GABaltimore, MDBoston, MAChicago, ILDetroit, MIDallas, TXDenver, COHouston, TXLos Angeles, CAMiami, FLNassau-Suffolk, NYNewark, NJNew Orleans, LANew York City, NYPhiladelphia, PASan Diego, CASan Francisco, CASan Juan, PRSeattle, WAWashington, DC | 3 |
| 2014 | Kurtz, 2016 [16] | 31 | 1 | 3.2 | Ever | Young substance using MSM who use GPS-based social networking applications (ex. Grindr®) | Miami, FL | 2 |
| 2014 | Marks,2017 [17] | 2,032 | 76 | 3.7 | Ever | Young MSM | Online | 4 |
| 2014 | Strauss, 2017 [18] | 759 | 66 | 8.7 | Ever | Young MSM | Online | 4 |
| 2015 | Kuhns, 2017 [19] | 284 | 41 | 14.4 | Ever | Young MSM | Chicago, ILHuston, TX | 4 |
| 2016 | Biello, 2017\* [20] | 36 | 13 | 36.1 | Ever | Young MSM/transgender | Boston, MAChicago, IL Los Angeles, CA | 3 |
|  |  |  | 7 | 19.4 | Current |  |  |
| 2016 | Newcomb, 2018 [21] | 132 | 30 | 22.73 | 6 mo | Young MSM HIV-seroconcordant couple | Chicago, IL | 4 |
| 2016 | Okafor, 2017 [22] | 185 | 37 | 20.0 | 6 mo | MSM | Los Angeles, CA | 3 |
| *Not or Unknown Met CDC PrEP indicationsd(k=47)* |
| 2004 | Chen, 2016e [23] | 1,211 | 0 | 0 | 12 mo | MSM (NHBS) | San Francisco, CA | 3 |
| 2004 | Kellerman, 2006 [24] | 1,041 | 50 | 4.8 | Ever | Minority Gay Pride attendees | Baltimore,Detroit, MIOakland, CASan Francisco, CA | 3 |
| 2005 | Voetsch, 2007 [25] | 397 | 1 | 0.3 | Ever | Hispanic/Latino(a) or non-white Men who attended Minority Gay Pride | Detroit, MIJackson, MSSan Francisco, CAWashington, DC | 3 |
| 2008 | Chen, 2016e [23] | 407 | 0 | 0 | - | - | - | - |
| 2009 | Barash, 2010 [26] | 215 | 5 | 2.3 | Ever | MSM  | Seattle, WA | 4 |
| 2010 | Hood, 2016 [27] | 681 | 5 | 0.7 | Ever | MSM | Washington state | 2 |
| 2010 | Krakower, 2012 [5] | 289 | 2 | 0.7 | - | - | - | - |
| 2011 | Chen, 2016e [23] | 371 | 0 | 0 | - | - | - | - |
| 2011 | Fallon, 2017 [28] | 399 | 0 | 0 | 12 mo | MSM (NHBS) | Baltimore, MD | 4 |
| 2011 | Krakower, 2012 [5] | 3,385 | 29 | 0.9 | - | - | - | - |
|  |  | (1,142)g | (4) | 0.3 |  |  |  |  |
| 2011 | Patrick, 2017f [29] | 602 | 1 | 0.2 | 12 mo | MSM (NHBS) | Washington, DCMiami, FL | 3 |
| 2011 | Rucinski, 2013 [30] | 329 | 2 | 0.6 | 6 mo | Young MSM | New York City, NY | 3 |
| 2012 | Bauermeister, 2013 [31] | 1,507 | 11 | 0.7 | Ever | Young MSM | Online | 4 |
| 2012 | Brooks, 2015 [32] | 224 | 0 | 0 | Ever | Low socioeconomic status black MSM | Los Angeles, CA | 4 |
| 2012 | Hoff, 2015 [33] | 340 | 33 | 9.6 | Ever | MSM HIV-serodiscordant/HIV-concordant couple | San Francisco, CANew York City, NY | 4 |
| 2012 | Kuo, 2016 [7] | 304 | 0 | 0 | - | - | - | - |
|  |  | (238)g | (0) | 0 |  |  |  |  |
| 2013 | Chan, 2015 [9] | 538 | 10 | 1.9 | - | - | - | - |
|  |  | (460)g | (8) | (1.7) |  |  |  |  |
| 2013 | Garnett, 2018 [34]  | 1,739 | 33 | 1.9 | Ever | Black substance using MSM/Transwomen | New York City, NY | 4 |
| 2013 | Gupta, 2017 [35] | 270 | 6 | 2.2 | Ever | MSM | New York City, NY | 4 |
| 2013 | Kuhns, 2016 [13] | 180 | 9 | 5.0 | - | - | - | - |
|  |  | (69)g | (4) | (5.8) |  |  |  |  |
| 2013 | Lancki, 2018h [36] | 300 | 12 | 4.0 | Ever | Young Black MSM | Chicago, IL | 4 |
| 2013 | Mayer, 2016 [37] | 4,043 | 61 | 1.5 | Ever | MSM | Online | 4 |
| 2014 | Calabrese, 2016 [38] | 154 | 0 | 0 | Ever | Adults in general  | Online | 3 |
| 2014 | Eaton, 2017 [39] | 1,274 | 58 | 4.6 | Current | Black MSM/Transwomen | Atlanta, GADetroit, MIHouston, TX | 4 |
| 2014 | Hoots, 2016 [15] | 6,483 | 237 | 3.7 | - | *-* | - | *-*  |
|  |  | (2,762)g | (21) | (0.8) |  |  |  |  |
| 2014 | Khanna, 2016 [40] | 622 | 22 | 3.5 | Ever | Young Black MSM | Chicago. IL | 3 |
| 2014 | Kuhns, 2017 [19] | 21 | 3 | 14.3 | - | - | - | - |
| 2014 | Marks, 2017 [17] | 2,347 | 80 | 3.4 | - | - | - | - |
|  |  | (315)g | (4) | 1.3 |  |  |  |  |
| 2014 | Mayer, 2016 [37] | 2,737 | 62 | 2.3 | - | - | - | - |
| 2014 | Merchant, 2016 [41] | 209 | 6 | 2.9 | Ever | MSM | Providence, RI | 3 |
| 2014 | Parsons, 2016 [42] | 948 | 68 | 7.2 | Ever | MSM, MSM/W | Online | 4 |
|  |  |  | 56 | 5.9 | Current |  |  |  |
| 2014 | Sevelius, 2016 [43] | 30 | 0 | 0 | Ever | Transwomen | San Francisco, CA | 3 |
| 2014 | Wilson, 2016 [44] | 67 | 1 | 1.5 | Current | Yount transwomen | San Francisco, CA | 1 |
| 2015 | Arrington-Sanders, 2016 [45] | 147 | 12 | 8.2 | Current | Young Black MSM  | Online | 3 |
| 2015 | Eaton, 2017 [46] | 285 | 21 | 7.4 | Current | Black/White MSM, Black/White transwomen | Southeastern US | 4 |
| 2015 | Goedel, 2016 [47] | 84 | 10 | 11.9 | Current | MSM who use Grindr® | Atlanta, GA | 3 |
| 2015 | Grov, 2016 [48] | 2,902 | 461 | 15.9 | Ever | MSM, MSM/W | New York City, NY | 3 |
| 2015 | Holloway, 2017[49] | 761 | 74 | 9.7 | Ever | Young MSM | California state | 4 |
| 2015 | Kahle, 2018 [50] | 524 | 11 | 2.1 | Current | MSM | Online | 3 |
| 2015 | Kuhns, 2017 [19] | 359 | 44 | 12.3 | - | - | - | - |
| 2015 | Parsons, 2017 [51] | 1,013 | 100 | 9.9 | Ever | MSM, MSM/W | Online | 4 |
| 2015 | Patel, 2018 [52] | 45 | 6 | 13.3 | Current | Black/White MSM | St. Louis, MO | 2 |
| 2015 | Reisner, 2017 [53] | 121 | 10 | 8.3 | Ever | Young transgender | Baltimore, MDBoston, MAChicago, ILDenver, CODetroit, MIHouston, TXLos Angeles, CAMemphis, TNMiami, FLNew Orleans, LANew York, NYPhiladelphia, PATampa, FLWashington, DC | 2 |
| 2015 | Walters, 2017 [54] | 118 | 1 | 0.8 | 12 mo | Women who inject drugs (NHBS) | New York City, NY | 2 |
| 2016 | Biello, 2017\* [55] | 4,630 | 689 | 14.9 | Ever | MSM, Transgender | Online | 2 |
| 2016 | Kuhns, 2017 [19] | 14 | 1 | 7.1 | - | - | - | - |
| 2016 | Newcomb, 2018 [21] | 3,870 | 342 | 8.83 | - | - | - | - |
| ***Non US-based Study (n=17)*** |
| *Met CDC PrEP indicationsd (k=4)* |
| 2009 | Peng, 2012 [56] | 1,611 | 22 | 1.4 | Ever | Female sex workers | 4 provinces of China | 4 |
| 2010 | Mijiti, 2013 [57] | 351 | 2 | 0.6 | Ever | Heterosexual HIV-serodiscordant couple | Xinjian, China | 4 |
| 2011 | Zablotska, 2013 [58] | 3,677 | 92 | 2.5 | 6 mo | MSM | 5 states in Australia | 3 |
| 2015 | Hugo, 2016 [59] | 40 | 6 | 15.0 | Ever | MSM | Cape Town, South Africa | 2 |
| 2015 | Restar, 2017 [60] | 44 | 0 | 0 | Ever | Sex workers (both male and female) | Mombasa, Kenya | 1 |
| *Not or Unknown Met CDC PrEP indicationsd(k=16)* |
| 2004 | Poynten, 2010 [61] | 1,427 | 0 | 0 | Ever | MSM | Sydney, Australia | 4 |
| 2010 | Leonardi, 2011 [62] | 256 | 0 | 0 | Ever | Men tested for HIV | Toronto, Canada | 2 |
| 2011 | Aghaizu, 2013 [63] | 809 | 17 | 2.1 | Ever | MSM | London, UK | 3 |
| 2011 | Holt, 2012 [64] | 1,161 | 6 | 0.5 | Ever | MSM, MSM/W | Online in Australia | 4 |
| 2013 | Holt, 2014i [65] | 1,223 | 6 | 0.5 | Ever | MSM, MSM/W | Online in Australia | 4 |
| 2013 | Holt, 2018\* [66] | 2,324 | 44 | 1.9 | 6 mo | MSM who use Grindr® | Melbourne and Sydney, Australia | 4 |
| 2013 | Lachowsky, 2016 [67] | 673 | 0 | 0 | Ever | MSM | Vancouver, Canada | 4 |
| 2014 | Holt, 2018\* [66] | 2,030 | 37 | 1.8 | - | - | - | - |
| 2014 | Marra, 2016 [68] | 77 | 1 | 1.3 | Ever | MSM | Online in Netherland | 2 |
| 2015 | Holt, 2016 [69] | 1,251 | 38 | 3.0 | Ever | MSM, MSM/W | Online in Australia | 4 |
| 2015 | Holt, 2018\* [66] | 2,944 | 59 | 2.0 | - | - | - | - |
| 2015 | Wilton, 2016 [70] | 333 | 2 | 0.6 | Ever | MSM | Toronto, Canada | 3 |
| 2016 | Holt, 2018\* [66] | 3,008 | 207 | 6.9 | - | - | - | - |
| 2016 | Lim, 2017 [71] | 990 | 10 | 1.0 | Ever | MSM | Online in Malaysia | 4 |
| 2017 | Hampel, 2017 [72] | 1,893 | 82 | 4.3 | Current | MSM | Online in Switzerland | 4 |
| 2017 | Holt, 2018\* [66] | 3,290 | 783 | 23.8 | - | - | - | - |

MSM: Men who have sex with men

MSM/W: Men who have sex with men and women

NHBS: CDC National HIV Behavioral Surveillance

PWID: Injection drug users

STI: Sexually transmitted infections

\*Online publication year

aMidpoint of study years if the study were conducted over multiple years.

bDuration of recall period for PrEP use: ever used, current use, or have used in the last 6 or 12 months.

cStudy quality was assessed by using the Modified Newcastle-Ottawa scoring guide that was adapted for this review. The study quality tool has possible scores from 0 to 5 and classifies studies as having low risk of bias (≥3 points) or high risk of bias (<3 points). The questions include: [1) Were participants recruited from multiple locations? 2) Was the sample size equal or greater than 200 participants? 3) Did all participants answer the question on PrEP uptake? 4) Was the PrEP uptake validated by such as medical record? 5) Does the study report descriptive statistics with proper measure of dispersion?]

dU.S. Centers for Disease Control and Prevention (2014) Preexposure prophylaxis for the prevention of HIV infection in the United States-2014: A clinical practice guideline

eOnly data for 2004, 2008 and 2011 were used. Data for 2014 were duplicates of another study (Hoots, 2016)

fOnly data for 2011 were used. Data for 2014 were duplicates of another study (Hoots, 2016)

gDid not meet CDC’s PrEP indications. These numbers were calculated from a total sample size and a number of people who met the indications.

hOnly data for baseline were used for this cohort study.

iOnly data for 2013 were used. Data for 2011 were duplicates of another study (Holt, 2012).

Supplement Figure 1: Flow diagram

Additional records identified through other sources
N = 19

Records identified through database searching
N = 1713

Records screened
N = 1427

Full-text articles assessed for eligibility
N = 467

## Identification

Studies included in this review
N = 72

(k = 83)

Full-text articles excluded, with reasons
N = 395

No report on PrEP prevalence (n=364)

Systematic reviews (n=21)

Duplicate dataset (n=6)

Report only after intervention (n=2)

Not self-reported survey (n=1)

No study year was reported and unable to reach author (n=1)

Duplicates removed
N = 305

Combined
N = 1732

## Included

## Eligibility

## Screening

Records excluded
N = 960

Supplemental Figure 2: Overall prevalence of PrEP use by study year: U.S. vs non-U.S. (k=83)



 \*Online publication year

Included Studies (N=72)

1. Koblin BA, Mansergh G, Frye V, Tieu HV, Hoover DR, Bonner S, et al. **Condom-use decision making in the context of hypothetical pre-exposure prophylaxis efficacy among substance-using men who have sex with men: Project MIX**. *J Acquir Immune Defic Syndr* 2011; 58(3):319-327.

2. Mansergh G, Koblin BA, Colfax GN, McKirnan DJ, Flores SA, Hudson SM. **Preefficacy use and sharing of antiretroviral medications to prevent sexually-transmitted HIV infection among US men who have sex with men**. *J Acquir Immune Defic Syndr* 2010; 55(2):e14-16.

3. Golub SA, Kowalczyk W, Weinberger CL, Parsons JT. **Preexposure prophylaxis and predicted condom use among high-risk men who have sex with men**. *J Acquir Immune Defic Syndr* 2010; 54(5):548-555.

4. Dolezal C, Frasca T, Giguere R, Ibitoye M, Cranston RD, Febo I, et al. **Awareness of Post-Exposure Prophylaxis (PEP) and Pre-Exposure Prophylaxis (PrEP) Is Low but Interest Is High Among Men Engaging in Condomless Anal Sex With Men in Boston, Pittsburgh, and San Juan**. *AIDS education and prevention : official publication of the International Society for AIDS Education* 2015; 27(4):289-297.

5. Krakower DS, Mimiaga MJ, Rosenberger JG, Novak DS, Mitty JA, White JM, et al. **Limited Awareness and Low Immediate Uptake of Pre-Exposure Prophylaxis among Men Who Have Sex with Men Using an Internet Social Networking Site**. *PLoS One* 2012; 7(3):e33119.

6. Saberi P, Gamarel KE, Neilands TB, Comfort M, Sheon N, Darbes LA, et al. **Ambiguity, ambivalence, and apprehensions of taking HIV-1 pre-exposure prophylaxis among male couples in San Francisco: a mixed methods study**. *PLoS One* 2012; 7(11):e50061.

7. Kuo I, Olsen H, Patrick R, Phillips G, 2nd, Magnus M, Opoku J, et al. **Willingness to use HIV pre-exposure prophylaxis among community-recruited, older people who inject drugs in Washington, DC**. *Drug and alcohol dependence* 2016; 164:8-13.

8. Mimiaga MJ, Closson EF, Kothary V, Mitty JA. **Sexual partnerships and considerations for HIV antiretroviral pre-exposure prophylaxis utilization among high-risk substance using men who have sex with men**. *Arch Sex Behav* 2014; 43(1):99-106.

9. Chan PA, Rose J, Maher J, Benben S, Pfeiffer K, Almonte A, et al. **A Latent Class Analysis of Risk Factors for Acquiring HIV Among Men Who Have Sex with Men: Implications for Implementing Pre-Exposure Prophylaxis Programs**. *AIDS patient care and STDs* 2015; 29(11):597-605.

10. Cohen SE, Vittinghoff E, Bacon O, Doblecki-Lewis S, Postle BS, Feaster DJ, et al. **High interest in preexposure prophylaxis among men who have sex with men at risk for HIV infection: baseline data from the US PrEP demonstration project**. *J Acquir Immune Defic Syndr* 2015; 68(4):439-448.

11. Eaton LA, Driffin DD, Bauermeister J, Smith H, Conway-Washington C. **Minimal Awareness and Stalled Uptake of Pre-Exposure Prophylaxis (PrEP) Among at Risk, HIV-Negative, Black Men Who Have Sex with Men**. *AIDS patient care and STDs* 2015; 29(8):423-429.

12. Golub SA, Gamarel KE, Surace A. **Demographic Differences in PrEP-Related Stereotypes: Implications for Implementation**. *AIDS Behav* 2017; 21(5):1229-1235.

13. Kuhns LM, Reisner SL, Mimiaga MJ, Gayles T, Shelendich M, Garofalo R. **Correlates of PrEP Indication in a Multi-Site Cohort of Young HIV-Uninfected Transgender Women**. *AIDS Behav* 2016; 20(7):1470-1477.

14. Oldenburg CE, Mitty JA, Biello KB, Closson EF, Safren SA, Mayer KH, et al. **Differences in Attitudes About HIV Pre-Exposure Prophylaxis Use Among Stimulant Versus Alcohol Using Men Who Have Sex with Men**. *AIDS Behav* 2016; 20(7):1451-1460.

15. Hoots BE, Finlayson T, Nerlander L, Paz-Bailey G. **Willingness to Take, Use of, and Indications for Pre-exposure Prophylaxis Among Men Who Have Sex With Men-20 US Cities, 2014**. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America* 2016; 63(5):672-677.

16. Kurtz SP, Buttram ME. **Misunderstanding of Pre-Exposure Prophylaxis Use Among Men Who Have Sex with Men: Public Health and Policy Implications**. *LGBT health* 2016; 3(6):461-464.

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