

Supplemental Information: The 5 automated searches and the manual search that comprise the CDC Prevention Research Synthesis (PRS) database annual search

- Risk reduction (1988 – 2023)
 1. MEDLINE (OVID)*
 2. EMBASE (OVID)
 3. PsycInfo (OVID)
 4. Sociological Abstracts (ProQuest)
- Linkage to, retention in, and reengagement to HIV care (1996 - 2023)
 1. MEDLINE (OVID)*
 2. CINAHL (EBSCOhost)
 3. EMBASE (OVID)
 4. PsycInfo (OVID)
- Medication adherence (1996 – 2023)
 1. MEDLINE (OVID)*
 2. CINAHL (EBSCOhost)
 3. EMBASE (OVID)
 4. PsycInfo (OVID)
- Overview of reviews (1988 – 2023)
 1. MEDLINE (OVID)*
 2. CINAHL (EBSCOhost)
 3. EMBASE (OVID)
 4. PsycInfo (OVID)
 5. Sociological Abstracts (ProQuest)
 6. Global Health (OVID)
- Preexposure prophylaxis (2000 – 2023)
 1. MEDLINE (OVID)*
 2. CINAHL (EBSCOhost)
 3. EMBASE (OVID)
 4. PsycInfo (OVID)
- Manual search (n = 28 journals) (occurs quarterly for previous 3 months)

Notes:

- Each search update is implemented annually for the previous 2 years to cover publication lag. The 2023 publications for the current year located through manual search methods.
- The 5 searches as implemented in MEDLINE (OVID)* provided in this Supplemental Information. The searches translated to the other databases are available from the corresponding author.
- The manual search for citations includes a hand search of 28 journals with a high yield of subject-specific citations, contacts in the field, and reference list checks.

Risk Reduction Search Strategy — MEDLINE (OVID)

Key:

/ = index term * = focus
\$ = truncation adj = adjacency
ab = abstract ti = title
/ut = utilization subheading
/pc = prevention and control subheading

HIV/AIDS/STDs MeSH

1. *HIV infections/pc
2. *Acquired Immunodeficiency Syndrome/pc
3. *Sexually Transmitted Diseases/pc
4. *Sexually Transmitted Diseases, bacterial/
5. *Sexually Transmitted Diseases, viral/
6. AIDS Serodiagnosis/ut
7. *HIV Seropositivity/
8. or/1–7

Prevention/Intervention/Evaluation/ Education MeSH and Keywords

9. Primary Prevention/
10. Preventive Health Services/
11. Health Promotion/
12. Program Evaluation/
13. Randomized Controlled Trials/
14. Evaluation Studies/
15. Contact Tracing/
16. Case management/
17. Needle-Exchange Programs/
18. Intervention Studies/
19. Follow-Up Studies/
20. Longitudinal Studies/
21. Multicenter Studies/
22. Random Allocation/
23. control group.ti,ab
24. control trial.ti,ab
25. controlled trial.ti,ab
26. (rct or rcts).ti,ab
27. case management.ti,ab
28. contact tracing.ti,ab
29. (counseling or counselling).ti,ab
30. (detox or detoxification).ti,ab

31. (drug\$ adj4 treatment\$).ti,ab
32. education\$.ti,ab
33. (effect or effects or effective or effectiveness).ti,ab
34. efficacy.ti,ab
35. evaluation\$.ti,ab
36. impact\$.ti,ab
37. intervention\$.ti,ab
38. needle exchang\$.ti,ab
39. network\$.ti,ab
40. outreach\$.ti,ab
41. partner notification.ti,ab
42. (partner\$ adj4 contact\$ adj4 referral\$).ti,ab
43. (notif\$ adj4 partner\$).ti,ab
44. prevention\$.ti,ab
45. program\$.ti,ab
46. random\$.ti,ab
47. rehab\$.ti,ab
48. skill\$.ti,ab
49. syringe exchang\$.ti,ab
50. methadone.ti,ab
51. test\$.ti,ab
52. training.ti,ab
53. trial\$.ti,ab
54. or/9-53

Behavior/Outcomes MeSH and Keywords

55. Behavior/
56. Behavior Therapy/
57. Health Behavior/
58. Risk Reduction Behavior/
59. Risk-Taking/
60. Contraception Behavior/
61. Coitus/
62. Sexual Abstinence/
63. Sexual Behavior/
64. Sexual Partners/
65. Safe Sex/
66. Unsafe sex/
67. Heroin Dependence/pc
68. Needle Sharing/

69. Condoms/ut
 70. Condoms, female/ut
 71. Contraceptive devices, male/ut
 72. Contraceptive devices, female/ut
 73. Substance abuse, intravenous/pc
 74. Substance-related disorders/pc
 75. Cocaine-related disorders/pc
 76. Health services/ut
 77. heroin.ti,ab
 78. cocaine.ti,ab
 79. opiate\$.ti,ab
 80. opium.ti,ab
 81. paraphernalia.ti,ab
 82. (treatment\$ adj2 entry).ti,ab
 83. (treatment\$ adj2 enter\$).ti,ab
 84. (abstin\$ or abstain\$).ti,ab
 85. drug\$.ti,ab
 86. substance.ti,ab
 87. (idu or idus or ivdu or ivdus).ti,ab
 88. ((behavior\$ or behaviour\$ or activit\$ or access\$ or utiliz\$ or use\$ or using\$ or test\$ or risk\$ or outcome\$) adj4 (reduc\$ or declin\$ or chang\$ or effect\$ or increas\$ or decreas\$ or impact\$ or modif\$ or lower\$ or maintain\$ or maintenance)).ti,ab
 89. bleach\$.ti,ab
 90. clean\$.ti,ab
 91. condom\$.ti,ab
 92. contracept\$.ti,ab
 93. crack\$.ti,ab
 94. disclos\$.ti,ab
 95. incidence.ti,ab
 96. inject\$.ti,ab
 97. intention\$.ti,ab
 98. intercourse.ti,ab
 99. needle\$.ti,ab
 100. infect\$ adj4 (new\$ or rate\$ or declin\$ or reduc\$ or prevent\$ or lower\$ or decreas\$).ti,ab
 101. partner\$.ti,ab
 102. seroconver\$.ti,ab
 103. sex\$.ti,ab
 104. syring\$.ti,ab
 105. test\$.ti,ab
 106. or/55-105
107. 8 and 54 and 106
- No Language Limit**
Year Limit: 1988–2023

Linkage to, Retention in, and Reengagement in HIV Care (LRC) Search Strategy MEDLINE

Key:

/ = index term \$ = truncation
adj = adjacency ab = abstract
ti = title

Subheadings

/co = complications /dt = drug therapy
/di = diagnosis /nu = nursing
/pc = prevention and control /th = therapy
/px = psychology /tm = transmission

HIV/HIV-Positive Person MeSH and Keywords

1. HIV infections/co, dt, di, nu, pc, px, th, tm
2. HIV infect\$.ti,ab
3. (HIV adj4 diagnos\$).ti,ab
4. HIV positiv\$.ti,ab
5. (HIV adj4 care).ti,ab
6. (HIV adj4 treatment\$).ti,ab
7. living with HIV.ti,ab
8. or/1-7

Linking and Retention in Care MeSH and Keywords

9. (access\$ adj4 care).ti,ab
10. (access\$ adj4 barrier\$).ti,ab
11. (access\$ adj4 (treatment or service\$)).ti,ab
12. (barrier\$ adj4 care).ti,ab
13. case management.ti,ab
14. case manager\$.ti,ab
15. (decreas\$ adj4 barrier\$).ti,ab
16. (engag\$ adj4 (care or service\$)).ti,ab
17. (enroll\$ adj4 care).ti,ab
18. ((enter\$ or entry) adj4 care).ti,ab
19. ((enter\$ or entry) adj4 service\$).ti,ab
20. (improv\$ adj4 access\$).ti,ab
21. (improv\$ adj4 retention).ti,ab
22. ((kept or keep\$ or return\$) adj4 appointment\$).ti,ab
23. (link\$ adj4 (retain\$ or retent\$)).ti,ab
24. (link\$ adj4 care).ti,ab
25. (link\$ adj4 case).ti,ab
26. (link\$ adj4 treatment).ti,ab
27. (link\$ adj4 service\$).ti,ab

28. (outreach adj4 (care or link\$ or program\$)).ti,ab
29. ((provision or provid\$) adj4 (care or service\$)).ti,ab
30. (reduc\$ adj4 barrier\$).ti,ab
31. ((re engag\$ or reengag\$) adj4 (care or treatment or service\$)).ti,ab
32. ((re enter\$ or reenter\$) adj4 (care or treatment or service\$)).ti,ab
33. ((refer or refers or referred or referral\$) adj4 (care or medical or treatment or clinic or service\$)).ti,ab
34. ((retain\$ or retent\$) adj4 care).ti,ab
35. (seek\$ adj4 (care or treatment\$)).ti,ab
36. (utiliz\$ adj4 (treatment or care or service\$)).ti,ab
37. ((medical) adj4 (care or treatment or service\$)).ti,ab
38. (gap\$ adj2 care).ti,ab
39. (visit adj2 (constan\$ or consist\$)).ti,ab
40. (appointment\$ adj2 adher\$).ti,ab
41. ((follow-up or follow up) adj2 discontin\$).ti,ab
42. ((miss\$ or schedul\$) adj2 (visit\$ or appointment\$)).ti,ab
43. (\$contin\$ adj2 care).ti,ab
44. or/9-43
45. 8 and 44

No Language Limit

Year Limits: 1996-2023

Medication Adherence (MA) Search Strategy MEDLINE (OVID)

Key:

/ = index term \$ = truncation
adj = adjacency ab = abstract
ti = title

HIV/AIDS MeSH and Keywords

1. HIV Infections/
2. AIDS/
3. HIV Seropositivity/
4. (living adj4 (hiv or aids)).ti,ab
5. HIV positiv\$.ti,ab
6. HIV infected.ti,ab
7. or/1–6

Intervention MeSH and Keywords

8. Intervention Studies/
9. Case management/
10. Directly Observed Therapy/
11. intervention\$.ti,ab
12. (therapy or therapies).ti,ab
13. (treatment or treatments).ti,ab
14. medication event monitor\$.ti,ab
15. mems.ti,ab
16. modified directly observed.ti,ab
17. mdot.ti,ab
18. directly administered.ti,ab
19. daart.ti,ab
20. directly observed therapy.ti,ab
21. dot.ti,ab
22. or/8-21

HAART MeSH and Keywords

23. Anti-HIV agents/
24. Anti-Retroviral Agents/
25. Antiviral Agents/
26. Antiretroviral Therapy, Highly Active/
27. haart.ti,ab
28. arv.ti,ab
29. art.ti,ab
30. antiretroviral\$.ti,ab
31. anti retroviral\$.ti,ab
32. antiviral\$.ti,ab
33. anti viral\$.ti,ab
34. (medication or medications).ti,ab
35. or/23-34

Adherence MeSH and Keywords

36. Patient Compliance/
37. Medication Adherence/
38. adher\$.ti,ab
39. nonadher\$.ti,ab
40. non adher\$.ti,ab
41. complian\$.ti,ab
42. non complian\$.ti,ab
43. noncomplian\$.ti,ab
44. viral load.ti,ab
45. (cd4 adj2 (count or counts)).ti,ab
46. or/36–45

47. 7 and 22 and 35 and 46

No Language Limit

Year Limits: 1996–2023

Overview of Reviews (ORP) Search Strategy MEDLINE (OVID)

Key:

/ = index term \$ = truncation
pt = publication type adj = adjacency
ab = abstract ti = title

HIV or AIDS or STD MeSH and keywords

1. *HIV infections/
2. *AIDS/
3. *Sexually transmitted diseases/
4. *HIV Seropositivity/
5. *AIDS Serodiagnosis/
6. HIV infect\$.ti,ab
7. HIV positiv\$.ti,ab
8. HIV care.ti,ab
9. (HIV adj4 incidence).ti,ab
10. (HIV adj4 prevent\$).ti,ab
11. (HIV adj4 risk\$).ti,ab
12. (HIV adj4 prevalen\$).ti,ab
13. (HIV adj4 new\$ infect\$).ti,ab
14. (HIV adj4 new\$ diagnos\$).ti,ab
15. (HIV adj4 transm\$).ti,ab
16. Sexually transmitted disease\$.ti,ab
17. Sexually transmitted infection\$.ti,ab
18. (STD or STDs or STI or STIs).ti,ab
19. (living adj4 HIV).ti,ab
20. (living adj4 (AIDS not hearing)).ti,ab
21. or/1-20

Systematic Review MeSH and keywords

22. Review/ OR Review.pt (Same Search)
23. Systematic review as topic/ or Systematic reviews.pt
24. Meta Analysis/ OR Meta-Analysis.pt
25. or/22–24
26. (MEDLINE or MEDLARS or EMBASE or PubMed or Cochrane).ab
27. (PsychINFO or PsycINFO).ab
28. (Sociofile or Sociological Abstracts).ab
29. CINAHL.ab

30. ((hand adj2 search\$) or (manual\$ adj2 search\$)).ab
31. ((electronic or bibliographic or computer\$ or online or automat\$) adj3 database\$).ab
32. or/26–31

33. 25 and 32

34. (meta-anal\$ or meta anal\$ or metaanal\$).ti,ab
35. (systematic\$ adj4 review\$).ti,ab
36. (systematic\$ adj4 overview\$).ti,ab
37. (systematic\$ adj4 synthes\$).ti,ab
38. literature review.ti,ab
39. (literature\$ adj4 overview\$).ti,ab
40. (literature\$ adj4 synthes\$).ti,ab
41. (quantitativ\$ adj4 review\$).ti,ab
42. (quantitativ\$ adj4 overview\$).ti,ab
43. (quantitativ\$ adj4 synthes\$).ti,ab
44. (qualitative\$ adj4 review\$).ti,ab
45. (qualitative\$ adj4 overview\$).ti,ab
46. (qualitative\$ adj4 synthes\$).ti,ab
47. (methodolog\$ adj4 review\$).ti,ab
48. (methodolog\$ adj4 overview\$).ti,ab
49. (methodolog\$ adj4 synthes\$).ti,ab
50. (review\$ adj4 article\$).ti,ab
51. (review\$ adj4 (study or studies)).ti,ab
52. (review\$ adj4 evidence).ti,ab
53. (review\$ adj4 updat\$).ti,ab
54. (review\$ adj4 (analy\$ or anali\$)).ti,ab
55. (research adj4 review\$).ti,ab
56. (research adj4 overview\$).ti,ab
57. (research adj4 synthes\$).ti,ab
58. or/34–57
59. 33 or 58
60. 21 and 59

No Language Limit

Year Limits: 1988–2023

Preexposure Prophylaxis (PrEP) Search Strategy MEDLINE (OVID)

KEY:

/ = index term \$ = truncation
ti = title ab = abstract

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

Preexposure Prophylaxis MeSH and keywords

16. Pre-Exposure Prophylaxis/
17. Chemoprevention/
18. Pre exposure prophylaxis.ti,ab
19. Preexposure prophylaxis.ti,ab
20. PrEP.ti,ab
21. (Chemoprophylaxis or Chemo prophylaxis or chemoprevention).ti,ab
22. or/16–21
23. 15 and 22

No Language Limit

Year Limit: 2000–2023

PRS Manual Search Journal List (N=28)

AIDS	JAIDS Journal of Acquired Immune Deficiency Syndromes
AIDS and Behavior	Journal of HIV/AIDS & Social Services
AIDS Care	Journal of the Association of Nurses in AIDS Care
AIDS Education and Prevention	Journal of the International AIDS Society
AIDS Patient Care and STDs	Lancet HIV
American Journal of Public Health	Open Forum Infectious Diseases
BMC Infectious Diseases	PLoS Medicine
BMJ Open	PLoS ONE
Clinical Infectious Diseases	Public Health Reports
Cochrane Database of Systematic Reviews	Sexual Health
Current HIV/AIDS Reports	Sexually Transmitted Diseases
Current Opinion in HIV and AIDS	Sexually Transmitted Infections
HIV Medicine	Systematic Reviews
International Journal of STD & AIDS	

Search in the PRS Database on the coding by team members for interventions specifically designed for transgender persons:

- Trained coders screened title and abstract of all citations in the database to identify HIV prevention intervention reports.
- Trained coders screened the intervention reports with the full reports locating interventions implemented for transgender persons.
- Searched the PRS database for all citations screened as prevention intervention reports for transgender persons pre-published or published 2000 - 2023, last searched PRS database in December 2023.
- Citations coded by team member screening as (1) Population Group: Transgender OR (2) Sex of Study Participant: Transgender were collected by the search on these codes.

Supplemental Information: Modified Newcastle Cohort for Pre-Post Studies

SELECTION – assessing bias in selection of participants into the study

(1) Is the recruitment approach appropriate to ensure participants are representative of the target population?

- a. Yes – e.g., use multiple approaches to recruit participants from the target population
- b. Probably yes
- c. Probably no
- d. No – e.g., rely on single staff member through their personal or professional association
- e. No info

COMPARABILITY - Comparability of Before-and-After Intervention Cohorts on the Basis of the Design or Analysis

(2) Adequacy of Follow Up of Cohorts: were outcome data available for all, or nearly all, participants? from ROBINS-I 5.1. “Nearly all” should be interpreted as “enough to be confident of the findings”, and a suitable proportion depends on the context. In some situations, availability of data from 95% (or possibly 90%) of the participants may be sufficient, providing that events of interest are reasonably common in both intervention groups. One aspect of this is that review authors would ideally try and locate an analysis plan for the study.

- a. Yes
- b. Probably Yes
- c. Probably no
- d. No
- e. No info

(3) Are the participants in the pre-intervention and the post-intervention cohorts similar with regard to demographics, behavioral characteristics, or other potential confounders?

- a. Yes – e.g., attrition analysis shows no differences between those who retained vs not retained
- b. Probably Yes – e.g., low attrition (in a study with large sample)
- c. Probably no - e.g., high attrition (in a study with small sample)
- d. No
- e. No info

(4) Are differences or potential confounders adjusted/controlled in the analysis?

- a. Yes
- b. Probably Yes
- c. Probably no
- d. No
- e. No info
- f. Not applicable – if answering yes/probably yes to (3) above

OUTCOME**(5) Assessment of Outcome – from NewCastle scale**

- a) Independent or blind assessment stated in the paper, or confirmation of the outcome by reference to secure records (e.g., medical records)
- b) Record linkage (e.g. identified through ICD codes on database records)
- c) Self-report
- d) Interviewer administered
- e) No info