

# Assessing the evidence for HIV prevention strategies

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**Issue:** Clinicians, public health practitioners, policy makers and consumers should use good evidence in making HIV prevention decisions. Systematic reviews of HIV prevention studies can inform stakeholders in making evidence-based decisions, and can identify where gaps in research exist and more research is needed.

**Setting:** The Cochrane HIV/AIDS Group is one of 50 Collaborative Review Groups of the Cochrane Collaboration. The Cochrane HIV/AIDS Group, with editorial bases at the University of California, San Francisco, and the South African Medical Research Council, Cape Town, endeavours to prepare, disseminate, and update systematic reviews of rigorous HIV/AIDS research.



**Project:** We prepared an assessment of the evidence for HIV prevention interventions, analyzing a selection of high-quality systematic reviews and meta-analyses, which met pre-determined criteria of methodologic rigor. Through this analysis, we were able to discern which prevention interventions were shown to be efficacious, not efficacious, and which may even be harmful. We were also able to point out gaps in the research base.

## Results:

- We found that male condoms are effective in preventing sexual transmission of HIV.
- “Targeted” male condom-promotion interventions increase condom use and are the cornerstone of HIV prevention. When combined with one or more of several other interventions, male condom distribution is particularly successful in reducing behavior that places individuals at risk of HIV infection.
- Behavioral interventions provide an efficacious means of HIV prevention for MSM.
- Skills training, gender and cultural sensitivity, and multiple sessions were all components of effective interventions for African-Americans and Latinos in the U.S.
- Programs promoting abstinence were found to be ineffective at increasing abstinent behavior and were possibly harmful; more rigorous research is needed to determine the effectiveness of abstinence programs on HIV risk.
- With regard to transmission of HIV through injection drug use, we found that effective HIV prevention interventions among injection drug users include peer outreach, methadone maintenance and needle exchange programs.
- Effective interventions to decrease HIV transmission among health care workers and the general community include routine HIV antibody screening and interventions aimed at improving compliance with universal precautions, as well as promoting the safe and appropriate use of injections and strengthening the quality of blood for transfusions.
- We were also able to point out the gaps in HIV prevention knowledge. Much more research is needed about post-exposure antiretroviral therapy in sexual partners of HIV-infected individuals; female-controlled HIV prevention techniques; strategies to reduce sexual violence and coerced sex; and interventions designed to reduce drug use and sexual risk taking in injection drug users, among many other areas.



**Lessons Learned:** High quality systematic reviews generate the evidence required to practice evidence-based medicine and public health and guide public policy. Our Evidence Assessment was used in a report to the U.S. Government on the importance of using the best evidence in allocating funds for the President’s Emergency Program for AIDS Relief (PEPFAR). It remains to be seen whether PEPFAR programs will reflect our findings. HIV prevention decisions, at every level, should be made on the basis of strong evidence, and not on fixed ideas or ideology.