how does the Internet affect HIV prevention?

why the Internet?

The Internet has become a remarkable social networking tool where people who once were unlikely to meet in the physical world are now only a few key strokes away. It is not surprising that many persons with access to the Internet have used it to find love, companionship and sex. In fact, using the Internet to find sexual partners is a widespread practice among men and women of all ages. About 16 million people say they have used websites to meet other people.

Men who have sex with men (MSM)—whose sexual activities traditionally have been stigmatized—have benefited from the privacy of the Internet, with 40% of gay men reporting that they use the Internet to find sexual partners. In online interviews, gay men reported that the Internet has helped them find social support, access resources safely and anonymously, and develop significant personal relationships.

The Internet is important to the HIV prevention field. It is a powerful medium to deliver health and risk-reduction information. Many individuals who engage in risk-taking behaviors use the Internet to meet their sexual partners, and the Internet itself may facilitate such risk-taking behaviors.

does the Internet contribute to risk?

Whether or not the Internet’s unique qualities contribute to risk-taking behaviors is not fully understood. We know that people who use the Internet to meet sexual partners have been found to engage in more risky sexual behavior, be more likely to report a history of STDs, and have greater numbers of sexual partners than those who do not seek sexual partners online. In fact, as early as 1999, outbreaks of syphilis among MSM were traced to users of specific chatrooms, and there are also case reports of HIV transmission from sexual partners met online.

It has been found, though, that men who engage in high-risk behaviors do so regardless of whether they meet their partners online or offline, such as in bars and clubs.

Gay and bisexual men with “psychosocial vulnerabilities” (e.g., safer-sex burnout, depression, and social isolation) may be particularly prone to disengage, or avoid thinking about HIV, in the anonymity of a virtual world where they can meet sexual partners for engaging in high-risk sexual behaviors.

Using the Internet to meet partners outside one’s regular sexual network may also create an environment where sexual mixing between high-risk and low-risk persons occurs. These new, expanded sexual networks can, in turn, increase the rate at which HIV and other STDs are transmitted.

can the Internet help in prevention?

Absolutely. The anonymity of online communication may make it easier to disclose HIV status or discuss safer sex and condom use before meeting in person. A study of Latino MSM found they were significantly more likely to engage in sexual negotiation and serostatus disclosure on the Internet than in person. For HIV+ persons, disclosing HIV status online also helps avoid abuse, discrimination or rejection by partners.

The Internet also provides a way to find sex partners who like the same things and are willing to take the same amount of risk. It may afford more opportunities to chat with a potential partner before having sex. In online ads, individuals can clearly state that they’re looking for partners who agree to safer sex (such as condom use), and they can more easily avoid meeting those who do not. Similarly, online sex-seeking allows HIV+ persons to disclose their status and find partners of the same serostatus (often called serosorting), especially if they intend not to use condoms. Just like in the physical world, however, one cannot be fully trusted to give or even know their accurate HIV status, so serosorting may not be a foolproof HIV prevention strategy, and it also risks transmitting other STDs.

Says who?


4. Rechcigl G, Curotto A, Kegeles S. Exploring the sexual behavior and Internet use of chatroom-using men who have sex with men through qualitative and quantitative research. Presented at the 2003 National HIV Prevention Conference, Atlanta, GA.


10. A publication of the Center for AIDS Prevention Studies (CAPS) and the AIDS Research Institute, University of California, San Francisco. Funding by the National Institutes of Mental Health. Special thanks to the following reviewers of this fact sheet: Anne Bowen, Cari Courtenay-Quirk, Jonathan Elford, Charles King, Jeff Klausner, Mary McFarlane, Greg Millett, Frank Strona.
what’s being done?

Community-Based Organizations (CBOs), researchers, and health departments—occasionally with the support of online service providers—are using the Internet in creative ways to increase HIV-related awareness and knowledge, and to positively influence attitudes, beliefs, and behaviors. Researchers have used the Internet to recruit participants and to collect data. Internet-based programs have also been used to help people anonymously disclosure their HIV/STD status to past sexual partners.

Commonly, CBOs have used e-mail distribution lists or sent outreach workers into popular online meeting venues (such as chat rooms and hook-up sites) to promote their programs, answer questions, deliver educational and safer-sex materials, and encourage dialogue about HIV prevention. A handful of CBOs with dedicated funding created HIV-prevention websites tailored for their communities.13

Launched in 2002, PowerOn (http://depts.washington.edu/poweron/) is a comprehensive site providing access to HIV/AIDS education, support, and referrals to 200 local prevention agencies for the gay, bisexual and transgender community in Seattle/King County, WA. Early PowerOn users showed particular interest in pages about Negotiating Safety Agreements and Putting on a Condom.14

Wrapp.net provides HIV prevention interventions and resources for MSM in the rural US. One NIMH-funded intervention presented a conversation between an HIV- and an HIV- gay man who recently engaged in risk behavior. A randomized controlled trial found it was well accepted and improved participants’ HIV risk-reduction knowledge, safer-sex attitudes, beliefs about what will happen as a result of engaging in certain behaviors, and beliefs about how well they can perform a given task.15

Once computerized online interventions are developed, they can operate cost-effectively around the clock, can be easily modified whenever changes are necessary, and quality control standards can be readily established with little opportunity for human error. Community members with Internet access can use such programs at their convenience and with little risk to their personal privacy.

Many health departments are exploring using the Internet for partner notification, disclosure assistance and referrals.16 InSPOT.org, developed by ISIS, Inc., is a website where men diagnosed with HIV/STDs can send electronic cards to sexual partners to inform them of a potential exposure, conveniently and without intervention by a provider: Cards can be sent anonymously, with or without a personal message. A survey of MSM in San Francisco found that 19% had heard of InSPOT, 5% of those used it to notify a partner and 4% received an e-card.

Popular website owners can also participate in HIV prevention and education activities. Craigslist.org agreed to add a health message and link to the San Francisco City Clinic website for users entering the “men seeking men” and the “casual encounters” pages. This addition did not result in a decline in the number of postings or visitors. Manhunt agreed to place ads on the dangers of crystal meth use and the rise in syphilis cases. Gay.com accepted a request to integrate sexual health messages by linking to “Ask Dr. K,” a question-and-answer sexual-health forum.17

what needs to be done?

New interventions to address the HIV risks associated with the Internet need to be developed and evaluated. Programs that help people think about their motives for seeking partners online, and Web-based, health-related screening and referral tools may be promising approaches. It is crucial to conduct further evaluations of the efficacy of current online prevention programs before any such interventions and approaches can be deemed successful and worth replicating.

Social policies to help prevent Internet-facilitated HIV transmission are also necessary and may come from legislation or from voluntary changes enacted by website operators. Cooperative efforts between online providers, law makers, researchers, program planners and, most importantly, community members could create structural changes to prevent further Internet-facilitated HIV transmissions.18

Options for policy changes include: public-health warnings on websites; changes to the way hookup sites are advertised; encouraging research to measure behavior change from online interventions and the development of tools on dating or hookup sites that facilitate the discussion of HIV and safer sex; and incentives for website operators to cooperate with public-health and other HIV-prevention efforts.

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13. Curotto A, Rebchook G, Kegeles S. Opening a virtual door into a vast real world: Community-based organizations are reaching out to at-risk MSM with creative, online programs. Paper presented at: STD/HIV Prevention and the Internet; August 27, 2003; Washington D.C.


