

Combating Syphilis and HIV Among Users of Internet Chatrooms

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The recent resurgence of syphilis among men-who-have-sex-with-men (MSM) and concerns about a potential increase in HIV incidence have sparked public health authorities to search for new approaches to address this converging problem. Epidemiologic investigations suggest that the Internet plays an important role in facilitating syphilis outbreaks. The experience of this pilot will help the public health community learn more about how to reach targeted online audiences, and will contribute toward understanding the role of the Internet in risk reduction strategies aimed at persons who use the Internet to meet sex partners.

The recent resurgence of syphilis among men-who-have-sex-with-men (MSM) (Centers for Disease Control and Prevention [CDC], 2001, 2002) and concerns about a potential increase in human immuno deficiency virus (HIV) incidence have sparked public health authorities to search for new approaches to address this converging problem. Epidemiologic investigations suggest that the Internet plays an important role in facilitating syphilis outbreaks. McFarlane and her colleagues have noted that persons seeking sex online were more likely to have had a sexually transmitted disease (STD), and to have had more sexual partners than those seeking sex offline (McFarlane, Bull, & Rietmeijer, 2000). Other studies have linked some syphilis outbreaks to persons meeting partners online to arrange for sex (CDC, 2003; Klausner, Wolf, Fischer-Ponce, Zolt, & Katz, 2000).

In light of ongoing concerns about the potential role of the Internet in facilitating syphilis outbreaks, the National Center for HIV, STD, and TB Prevention (NCHSTP) at the CDC approached America Online (AOL), a major Internet service provider (ISP), in November 2002, seeking an opportunity to meet and explore mutually agreeable options for combating the spread of syphilis among users of the AOL service. Initial contact was made informally to determine the most appropriate official within AOL to whom correspondence should be addressed. This required a clarification of AOL's corporate structure and reporting lines. Connection was made between the lead of the government affairs function at AOL and the Office of the Director, NCHSTP.

The potential benefits of collaboration between traditional public health communities and ISPs were further explored at a scientific meeting held in August 2003, jointly sponsored by CDC and the National Coalition of STD Directors (NCSDD). The meeting provided an opportunity for researchers, practitioners, and

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public health authorities to delve into the role of the Internet in traditional disease control and health promotion practices, an area of emerging inquiry and practice (STD/HIV Prevention and the Internet Conference, 2003).

Prior to CDC's contact with AOL, other public health authorities had approached the ISP, requesting that they conduct an education and awareness campaign (Angwin, 2001). As such, AOL already had been sensitized to several of the overarching public health issues prior to its first meeting with CDC. During this first meeting, CDC representatives met with officials at AOL corporate headquarters. Attendees represented government affairs and health promotion areas from AOL; health policy, health communications, and behavioral science were represented from CDC. Items discussed included public health information and messages around syphilis, the capacity to link interested persons to websites that contained information on sexual health, and HIV/STD testing resources (and how Internet users could access information about local resources).

A major focus of initial discussions centered on AOL's concerns about maintaining the privacy of its clients and not considering approaches that would be considered offensive or intrusive by its clients. Although some local health departments have used the Internet to foster partner notification approaches for sexually active MSM (CDC, 2004; Constant, 2004), it was mutually agreed upon that the subject of partner notification would not be explicitly considered during the initial collaboration. This decision was based on concerns about consumer privacy. Clearly, partner notification remains an essential element of successful syphilis control, and CDC applauds local jurisdictions that have made progress in adapting partner notification activities to the Internet (CDC, 2003; Toomey, & Rothenberg, 2000). Nevertheless, an essential element in CDC's successful collaboration with AOL was a willingness to recognize organizational boundaries and to respect differences in organizational philosophies and backgrounds.

After a series of meetings, AOL presented to CDC a number of potential activities on which the two organizations might collaborate to advance syphilis control efforts for sexually active MSM. The activities included information dissemination, public service advertising using AOL "house ads" (advertising space reserved by AOL internally to promote itself), entry message banners in ISP-sponsored chat rooms, self-assessment/quizzes, and offers to convene partnership meetings to bring together non-Internet-related media partners from radio and television to discuss these issues in community settings. Also discussed were messages directed toward women, as a means of providing links to health topics of concern to both genders.

In follow-up meetings, it was jointly decided that short health messages, placed in key AOL ISP-generated chatrooms where MSM gathered online, would be emphasized. Member-generated chatrooms were not able to be included in this messaging because of technical issues. Available chatrooms included "Gay Men 20s," "Bisexual Friends," "A Crowded Room," and others. The CDC's previously developed KNOW NOW campaign (a pilot effort to increase awareness of HIV testing in several local communities in the United States) provided consumer-tested messages and audience demographics (Bonds et al, 2001). The KNOW NOW messages previously developed and tested for MSM at risk of acquiring HIV were adapted for use in an online setting, thus streamlining the formative stage of the process. AOL offered to run these small banner advertisements and provide data on use to inform future efforts to attract the attention of high-risk chatroom participants. It was decided that direct messages sent from CDC or AOL to users would be perceived

as junk mail or “spam” and therefore would be automatically deleted, or result in concerns about invasion of privacy by AOL users, both strong arguments against this method of health promotion.

Evaluation was designed into the intervention, using the technology that supports online banner advertising. When clients see online advertising, they can “click” on the ad using the mouse and cursor and immediately be referred to a sponsoring organization’s website, or another place in cyberspace. These click-throughs are recorded by the ISP, and can be used as a process evaluation measure. Although this type of data can give evidence of use by unique visitors, and the general traffic to and through websites, they do not offer much in the way of impact evaluation. Key questions about the influence of the viewed materials on behavior or in modification of subsequent actions could be evaluated using surveys or other methods of feedback, but these tools were not available nor applied in this initial project.

CDC technical experts proposed two primary audiences, six messages, AOL message locations, and websites that could be visited for additional information or linkage to local HIV testing resources. The two audiences selected were MSM at high risk for syphilis or HIV and African American and Hispanic women at known risk or partnered to men with unknown risk. The audiences, messages, concepts, desired outcomes, and links were the following:

Audience One: MSM at High Risk of Syphilis or HIV

Chatroom/s targeted: “Gay Men 30s” (and others) in the AOL gay/lesbian town hall area.

Example/Message 1: “I can’t change where I’ve been, . . . but I can change where I’m going . . .” [See Figure 1.]

Concept: Take charge of your future by learning your HIV serostatus.

Desired outcome: The first message was followed by a panel that said, “Get an HIV test. Get the results. Always protect yourself.” When one clicked the ad, one would be referred to a resource for locating local HIV testing, www.hivtest.org, a site maintained by the CDC through a contract.

Example/Message 2: “It’s hard to know. It’s hard to tell.” [See Figure 2.]

Concept: Play on words about asymptomatic nature of many STDs, including HIV and syphilis.

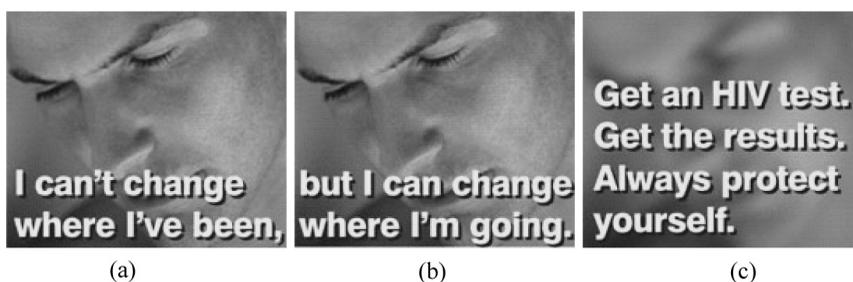


Figure 1. “I can’t change where I’ve been . . .” banner ad to encourage HIV testing.



Figure 2. “It’s hard to know...” banner ad to encourage person to learn more about syphilis.



Figure 3. “How do you score?” banner ad to encourage persons to assess their own risk for acquiring HIV.

Desired outcome: Clicking this message led one to a client-friendly fact sheet on MSM and syphilis placed by AOL on their web property WebMD: <http://my.webmd.com/content/article/79/96227.htm?lastselectedguid={5FE84E90BC774056-A91C-9531713CA348.}>

Example/Message 3: “How do you score?” [See Figure 3.]

Concept: Play on words to take an assessment quiz to find out if you are at risk for HIV.

Desired outcome: Following the online link lead a person to a self-administered HIV risk assessment tool maintained at www.gayhealth.com.

Audience Two: African American and Hispanic Women Who Are Either at Risk Themselves of HIV and Syphilis or Are Engaged in a Relationship With a Man Whose Infection Status is Unknown

Example/Message 4: “Did you know? At least 1 in 4 Americans will contract an STD at some point in their life.” [See Figure 4.]

Concept: This message, aimed at African American women, is both educational and a link to more information on STDs.

Desired outcome: This message, and two variations were designed to lead an interested person to the STD resources available at the American Social Health Association (ASHA) website at <http://www.ashastd.org/stdfaqs/index.html>.

After the messages and audiences were selected and draft banner ads were composed, AOL began to place the ads in chatrooms on a pro bono basis. The CDC learned that in online advertising, pro bono banner advertisements work differently than in broadcast media; in order for the pro bono advertisements to be shown,

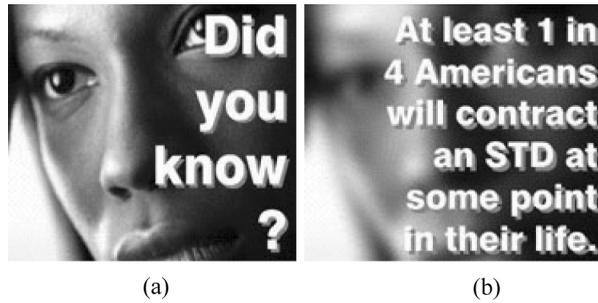


Figure 4. “Did you know?” banner ad to encourage persons to learn more about STDs.

inventories of paid advertisements must be fully depleted first. This was demonstrated to be a rare occurrence, prompting the AOL team partners to begin placing the banner ads as if they were paid media, beginning in January 2004. From January 1, 2004, through July 21, 2004, AOL reported to CDC 142,090,988 impressions in chatrooms and message boards, with 69,721 click-throughs from ads to destination sites, for a click-through rate of 0.05%. This rate is in the low normal range when compared with other recent public health online advertising efforts (Klausner, Levine, & Kent, 2004). AOL has committed to delivering 240 million impressions during this pro bono effort.

Lessons Learned

Frequent Communications Between Public Health Specialists and ISP Representatives Are Necessary to Resolve the Many Issues Around Unfamiliar “Technical Terms” for Both Parties

Translation between AOL and CDC staff around the technical language used to describe online advertising, evaluation, display of information, and the public health need took several meetings to resolve. For example, one of the ad sizes offered was described to be 180×150 , which the CDC eventually learned was the number of pixels wide and high that the ad should be, but the CDC had no template to illustrate exactly how big that was, requiring trial-and-error production of draft ads until the exact size was created.

Radio and TV Public Service Advertising Is Substantially Different Than Online Advertising

Even when online banner ads are running thousands of times a day, the actual chances that an individual will see it vary. Radio and television public service announcements (PSAs) on the other hand are shown around the clock and can be measured by metrics such as time of day shown, channel, and frequency of play, in a given time period. Online ads suffuse the spaces in and around chatrooms on AOL, for a variety of products (e.g., diet plans, computer equipment, upcoming movies). The rotation and frequency of ads seen in the same visual space varies according to the AOL-maintained inventory of ads competing for the same eyes. In a relatively slow site, one might find a given health ad shown time after time, whereas in highly trafficked spaces, an ad may only appear once in 50 viewings.

In the aggregate, tens of thousands of displays of an ad will occur in a given time, but the actual chances of an ad being shown at a particular time in a particular place vary. This was a key difference between purchased ads in online and broadcast media, even though both seek to attract attention to the products and services that pay to advertise in that space, and it took us several discussions to clarify this important distinction.

Persons use the Internet for a variety of functions—entertainment, information, shopping, and so on—and advertising in these spaces will vie for the attention of an increasingly large segment of society. Marketing seeks to engage the consumer where they are: on billboards or over the radio when they are in the car, before the movies when persons are waiting for the show to begin, and in thousands of other places and ways that intersect with consumer behaviors and preferences. Despite the apparent competition, ignoring the potential value of Internet social marketing to public health would deny the opportunity presented to attract consumer interest in this new venue.

Privacy of Individual Clients Identifying Information Is Important Both to ISPs and to Public Health Experts

Although there were technical barriers at the time to posting health messages in member-generated chatrooms, messages shown in ISP-generated chatrooms and message boards were considered less intrusive than email or other direct-to-consumer forms of online advertising. Public health's long tradition of maintaining client confidentiality was not enough of an assurance to allow CDC to investigate possibilities of sponsoring direct emailing campaigns, in partnership with AOL, even to AOL's own subscribers. The concerns over persons who may receive official AOL notifications feeling "targeted" and therefore canceling paid subscriptions to the service were of great concern to the ISP, obviating further discussion on this potential avenue of communication. This is an important, and sensitive, area that will require further discussion and negotiation between the public health and ISP "camps."

Large ISPs Have Large Internal Corporate Structures and Complex Internal Clearance Processes

Like government, industry too has a large, complex bureaucracy. Several internal staff at AOL had to be consulted to bring this project into alignment with its corporate, governmental liaison, public relations, philanthropic, and revenue concerns at several layers in the organization. Early missteps are likely as gatekeepers into these institutions pass requests through channels that ultimately may be incorrect, necessitating restarts, duplicate communications, and time delays. Part of the delay between when AOL agreed to run the Internet ads and when they actually began running was the result of miscommunication between some of these internal AOL entities about the scope and mandate of the pro bono work.

More Research Is Needed in This Form of Public Health Intervention

Evaluation is difficult to conduct in this setting, with huge numbers of visitors possible to uniquely identify, to time, and to follow through the site. But without

assessing behavioral impact, the evaluation using these process measures is bereft of description of actual effect. Use of other methods to assess interest, content, and behavioral intent, coordinated with online advertising will provide much more information about the individuals who use online services.

Radio provided immediacy of news transmission, compared with newspapers, when it emerged and proliferated in the early twentieth century. Television carved out a new niche and added back the value of pictures to describe and tell stories. The Internet, like the telephone before it, adds the dimension of interaction to connect persons with information and one another dynamically. These new technologies have not replaced one another; rather, they have added depth and breadth to the ways persons interact and process information, from the personal to the societal level. The Internet also is evolving, and public health must evolve with it, to capitalize fully on the mission of improving the health of the public, using all available tools.

The experience of this pilot will help the public health community learn more about how to reach targeted online audiences, and will contribute toward understanding the role of the Internet in risk reduction strategies aimed at persons who use the Internet to meet sex partners.

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