

WISCONSIN AIDS/HIV PROGRAM NOTES

March 2010

Investigation and Community Response to Cluster of HIV Cases in the Wisconsin Fox Valley Area

Background

In May 2009, staff of the Wisconsin AIDS/HIV Program and the AIDS Resource Center of Wisconsin (ARCW) in Appleton noted an increase in cases of HIV in the Fox Valley area. In response, state, local health department, and ARCW staff collaborated on an investigation that began in August 2009 in order to better understand the epidemiology of the outbreak and to assist in developing more effective prevention strategies to reduce HIV transmission.

The investigation “cluster” was defined as:

1. HIV/AIDS cases (index clients) in a three-county region that were reported to the Wisconsin AIDS/HIV Program between December 1, 2008 and September 30, 2009 and
2. sex- or needle-sharing partners of index clients.

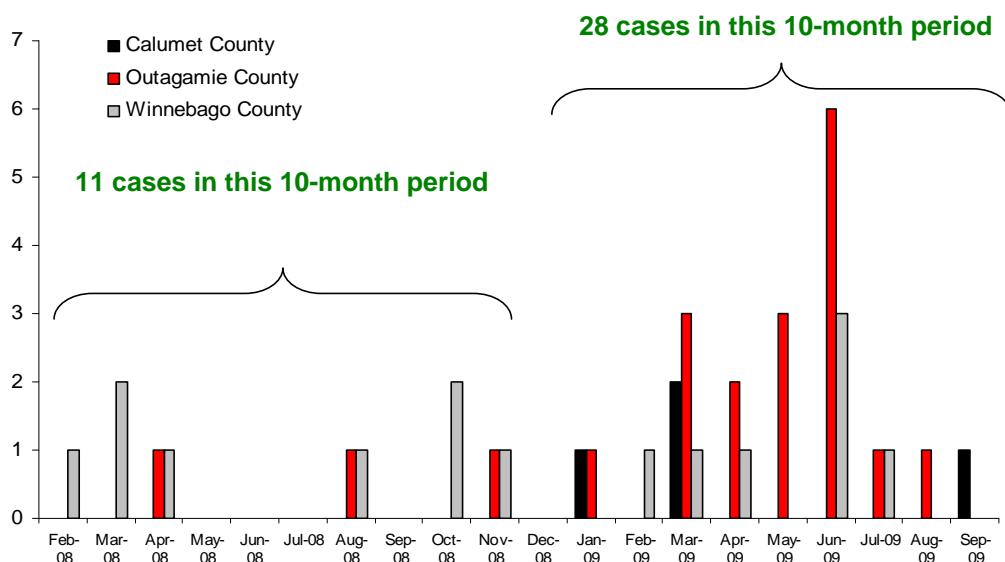
The region included Outagamie, Winnebago, and Calumet counties. Twenty-six clients and 34 partners were included in the investigation.

Methods and results

HIV Surveillance data

During the period December 1, 2008 through September 30, 2009, 28 cases of HIV were identified in the three-county area of Outagamie, Calumet, and Winnebago counties compared to 11 cases identified during the previous ten-month period. The increases occurred entirely in Outagamie and Calumet counties.

Figure 1: Reported cases of HIV infection in three counties in northeastern Wisconsin by month and year of report, February 2008 to September 2009



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After eliminating deceased and out-of-jurisdiction cases, the investigation comprised 26 cases, including 23 males and three females. The median age was 27 years old, with a range from age 18 to 57. Individuals were predominantly White (18); four were African American; three were Hispanic/Latino; and one American Indian. More than half (15 of the 26) of the cases were reported from Outagamie county. The 26 cases included 22 men who have sex with men (MSM), two heterosexuals, and two injection drug users.

Enhanced Partner Services Survey

Enhanced Partner Services Survey (EPSS) interviews with index clients and their partners were conducted face-to-face or by telephone, with \$25 incentive coupons for completed interviews. A total of 37 individuals completed the EPSS (18 of 24 index clients and 19 of 36 disclosed partners) for an overall response rate of 62%.

Select highlights of EPSS findings included the following:

- Respondents described themselves predominantly as gay (75%) of which 58% reported being partnered, but only 26% reported living with a partner. The men were most likely to spend their time with gay friends (68%), straight friends (52%), partner/spouse (45%), and family (39%).
- Thirty-one of the 37 respondents (84%) answered questions about sexual behavior. Of those, 58% reported engaging in receptive anal sex, 65% in insertive anal sex, and 65% in oral sex. The most popular venues for locating new partners were the Internet (48%), bars/clubs (45%) and through friends (45%).
- Half of the respondents (52%) reported always using condoms, and 36% of the respondents reported using condoms either most of the time or sometimes during sex. More than half of the respondents stated that they were under the influence of alcohol (sometimes or most of the time) before having sex.
- Regarding beliefs about HIV infection, 85% of the respondents who were HIV-negative or had not been tested recently believed that they were "very unlikely" or "somewhat unlikely" to become HIV-infected in their lifetime. Two-thirds of respondents stated that they 'definitely knew' which partner exposed them to the infection.
- Nine of the 17 HIV-positive respondents were connected to a medical provider before they tested positive and all of these tested positive at their private provider. This finding points to a need to ensure that gay men are linked to regular health care and take part in routine annual HIV and STD testing consistent with guidelines of Center for Disease Control and Prevention (CDC).¹ It also demonstrates the need for collaboration with providers in implementing effective prevention messages and strategies.
- In response to an open-ended question, several respondents identified the need for greater visibility of prevention messages, as poignantly stated by a recently-infected MSM:
"When I lived in [large city out of state], there was much heavier focus on HIV prevention messages everywhere. When I moved to Appleton, I felt safe here with less messages."

¹Centers for Disease Control and Prevention. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR Morb Mortal Wkly Rep. 2006; 55(RR14);1-17. Available from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>.

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Counseling, testing and referral data

The number of HIV tests conducted at publicly funded HIV test sites (ARCW and local health department sites) during the period December 1, 2008 through September 30, 2009 represented an 81% increase (655 tests) over the previous ten-month period (362). Twelve people were reported as HIV positive in the recent period compared to four in the previous timeframe, a 200% increase.

HIV care data

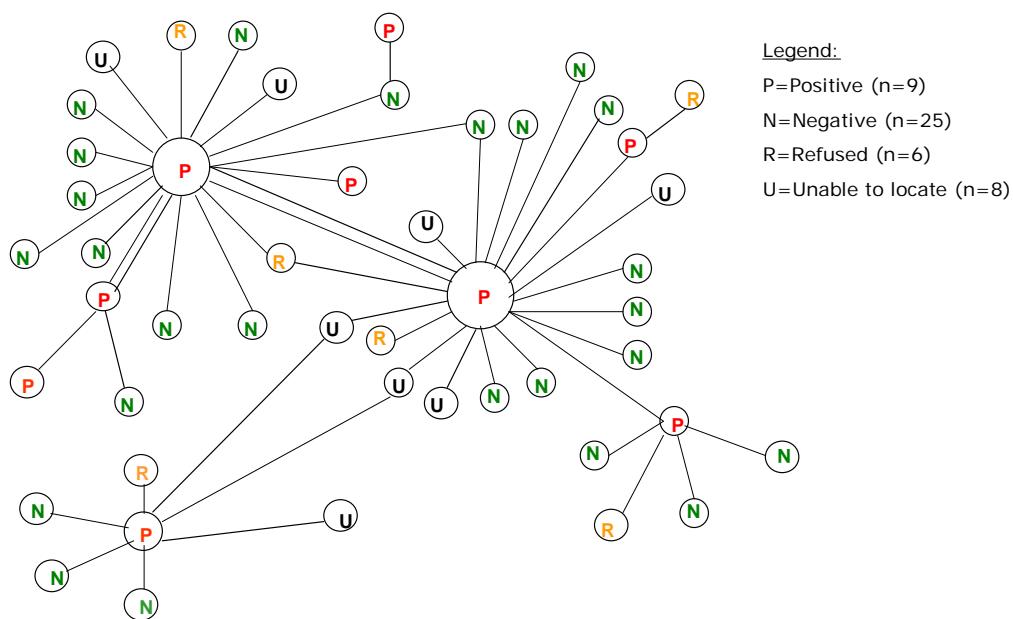
A review of several databases determined that 22 (79%) of the 28 persons reported with HIV in the three counties during the period December 2008 through September 2009 were in medical care as of February 2010 and one individual had died (of non-HIV related causes). In order to be identified as "in medical care," a client had to have one or more of the following:

- an HIV-related laboratory specimen,
- a claim with the Wisconsin AIDS/HIV Health Insurance Premium Subsidy Program in the previous 6 months,
- a claim with the Wisconsin AIDS/HIV Drug Reimbursement Program in the previous 6 months, or
- having told HIV Partner Services staff that they were receiving medical care for HIV infection.

Partners Services cluster

The diagram below shows the cluster of cases and partners from two individuals who originally tested HIV positive at the AIDS Resource Center of Wisconsin in Appleton. The two cases named 17 and 13 partners respectively, including one another.

Figure 2: Cluster diagram of cases tested at ARCW in Appleton



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Public health and local community response

The public health response occurred primarily through partner elicitation and partner services. In addition, the director of the DPH AIDS/HIV Program conducted a conference call early in the investigation with infectious disease physicians to alert them to the cluster and encourage them to discuss the importance of HIV Partner Services with patients at risk or infected with HIV.

Local community partners provided a variety of responses to learning that there was an increase in HIV infections in the Fox Valley among MSM. As a result, word regarding the increase in cases of HIV spread quickly on a community level. Components of the community response included:

HIV testing

There was an increase in HIV testing, with ARCW taking the lead. Sites for increased or new testing included ARCW on-site and mobile locations, local gay bars, the local LGBT youth and adult groups hosted at a local café, and a local university.

Information dissemination

Community partners distributed messages through print and electronic media in the gay community, and notices in venues popular with gay men. Messages focused on several key points:

- the increase in HIV infections among young gay men in the Fox Valley;
- information about opportunities for HIV testing and referral; and
- sexually active gay men should get tested for HIV annually, as recommended by Centers for Disease Control and Prevention (CDC).

Conclusion

Active monitoring of HIV surveillance and Partner Services data by Wisconsin AIDS/HIV Program staff as well as diligence on the part of the local ASO led to detection of the cluster. Collaborative efforts between state and local public health and community organizations enabled a rapid investigative and community response directed at averting further transmission. The outbreak and investigation highlighted the need for:

- developing strategies to increase routine testing through social networks and venue-based testing;
- providing messages to continue informing testing site staff and educating the community about CDC's recommendations of annual testing for MSM;
- expanding prevention messages in universities and colleges by strengthening collaborations with student health care services and LGBT student organizations; and
- educating communities about the HIV prevention function that local health departments perform, particularly via HIV Partner Services.

An expanded report of the Fox Valley cluster investigation is located on the Wisconsin AIDS/HIV Program website at

http://dhs.wi.gov/aids-hiv/Stats/FoxValleyHIVClusterRprt_03_25_10.pdf.