

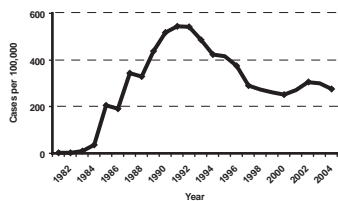
AN EPIDEMIOLOGY PUBLICATION OF THE OREGON DEPARTMENT OF HUMAN SERVICES

## HIV PREVENTION IN THE CLINICAL SETTING

**A**LTHOUGH many HIV infections are not reported to public health until years after the event, the annual incidence can be approximated using the date of the patient's first positive test. By this metric, the number of new HIV diagnoses increased in Oregon from 2 in 1981 to 544 in 1991, then declined rapidly until 1997. Since 1997, approximately 300 new cases are diagnosed per year (Figure).

Highly active anti-retroviral therapies (HAART) have improved life for persons with HIV. Nevertheless, each new infection represents a projected loss of 7–11 quality-adjusted years of life and lifetime medical costs of \$154,000–\$195,000.<sup>4</sup> In Oregon, sex between men continues to be the most common mode of transmission: 65% of all reported cases first diagnosed during 2002–2004 occurred among men who have sex with men (MSM). In this epistle, we review data on risky sex and strategies for HIV prevention.

**Oregon HIV and AIDS Cases by Year of First HIV Diagnosis**



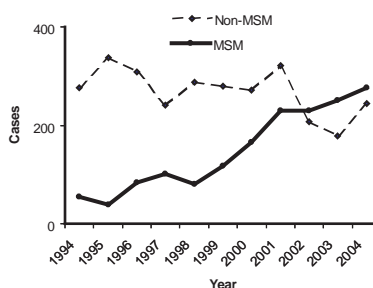
### RISKY SEX

Ironically, prevention may be more difficult because of the success of HAART. By the end of 2004, more than 4000 Oregon residents were living with HIV, and are increasingly able to sustain an active sex life. HAART does reduce the risk of HIV transmission for any given episode of unprotected sex,<sup>5</sup> but this salutary

effect seems to have been offset by an increase in unsafe sex.<sup>6</sup> In San Francisco, MSM with AIDS treated with HAART were 4.1 times as likely to acquire an STD than were men with AIDS not treated with HAART.<sup>7</sup>

Unfortunately, the uninfected may also have become less concerned about HIV. In San Francisco, unprotected anal intercourse among MSM increased and condom use declined from 1996–1999.<sup>6</sup> In Oregon, a recent survey found that 45% of MSM had engaged in unprotected anal intercourse at their last sexual encounter, and only 30% of MSM who had sex with more than one partner in the previous two months always used condoms.<sup>8</sup> Syphilis and gonorrhea are both markers of high-risk sex and cofactors for HIV transmission.<sup>9</sup> During 2002–2004, an average of 37 primary, secondary and early latent syphilis cases occurred among MSM in Oregon — up from 3.5 such cases during 1994–2001. A similar rise in gonorrhea among MSM has been observed (Figure). Anecdotes also suggest that increasing combined use of methamphetamine and phosphodiesterase inhibitors (i.e., sildenafil, tadalafil, vardenafil) go hand-in-hand with unprotected sex and multiple partners.<sup>10</sup>

**Gonorrhea Among Males by Sexual Lifestyle — Oregon, 1994–2004**



### WHAT CAN WE DO ABOUT IT?

Recent evidence-based guidelines recommend strategies for incorporating HIV prevention into the medical care of HIV-infected persons. (Box, *versus*).<sup>1</sup>

#### TESTING

Many HIV infections are still diagnosed late. Since 2002, about 40% of Oregonians newly diagnosed with HIV infection have had AIDS at or within 12 months of diagnosis. In a retrospective review of 221 new cases in one medical system, all had risk factors, symptoms or signs that should have triggered earlier HIV testing.<sup>11</sup> Patients unaware of their HIV infection may unknowingly transmit it. Clinicians of all specialties should consistently ask patients about HIV risks and initiate testing upon minimal provocation.

#### RISK ASSESSMENT AND COUNSELING

Physicians should regularly address risk reduction with their HIV-infected patients, but many do not. One survey found that only 10% of the infectious-disease-trained and 21% of non-ID-trained physicians reported always talking to their patients about condom use.<sup>12</sup> One out of every four HIV-positive men surveyed reported never having received safer sex counseling from their health-care provider.<sup>13</sup>

#### PARTNER NOTIFICATION

Confidential notification of sex and needle-sharing partners after HIV diagnosis presents a great opportunity to test and counsel others who may be at risk, and to identify new cases for early referral to treatment. However, a randomized trial of partner notification found that newly diagnosed patients aren't reliable in this matter: they notified only 7% of their named partners (each named about



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4); but when the task was assigned to the local health department or shouldered by an intrepid health-care provider, 50% of partners were notified. Overall, 23% of partners tested positive.<sup>14</sup>

#### MEDICAL MORBIDITY MONITORING PROJECT (MMP)

Oregon is one of 20 states participating in this new surveillance designed by CDC and HRSA to gather representative statewide data on clinical care—including healthcare access, unmet needs, transmission risk behavior and outcomes—of patients with HIV. Approximately 40 HIV care facilities and practices and 400 HIV patients in Oregon will be selected randomly during each of the next 3 years. If your practice is selected, we ask that you participate, as this is Oregon's first opportunity to gather these needed data. For more information contact Rochelle Lynam, Project Coordinator; or Sean Schafer, MD, Oregon Principal Investigator, in the HIV/STD/TB Program, 971/673-0153.

#### REFERENCES

1. Recommendations for incorporating human immunodeficiency virus (HIV) prevention into the medical care of persons living with HIV. *Clin Infect Dis* 2004;38:104-21.
2. Kourtis AP. Prevention of perinatal HIV transmission: current status and future developments in antiretroviral therapy. *Drugs* 2002;62:2213-20.
3. Palella FJ, Jr., Delaney KM, Moorman AC, et al. Declining morbidity and mortality among patients with advanced human immunodeficiency virus infection. HIV Outpatient Study Investigators. *N Engl J Med* 1998;338:853-60.
4. Holtgrave DR, Pinkerton SD. Updates of cost of illness and quality of life estimates for use in economic evaluations of HIV prevention programs. *J*

#### Steps You Can Take to Reduce HIV Transmission in Oregon

##### Testing

- Test all patients in high-risk settings for HIV such as sexually transmitted disease clinics, or healthcare locations where significant numbers of men who have sex with men or injection drug users are treated.
- Test patients with HIV risk factors in all settings.

##### Risk Assessment and Counseling

- Ask HIV-infected patients about sex and drug use at every visit.
- Talk to patients about ways to reduce their risk of transmitting HIV to, or acquiring a new strain from sex or drug partners
- Reinforce incremental changes to safer sex or drug use behaviors
- Refer patients for assistance like substance abuse treatment or counseling to reduce risky sex. (Assistance with behavior change, substance abuse, and diagnosis and treatment of other sexually transmitted diseases may be available from your local health department. Find the number at <http://oregon.gov/DHS/ph/lhd/CountyDirectory.pdf>.)

##### Diagnose and treat other sexually transmitted diseases

- Refer patients to local health departments for assistance with partner notification, counseling and testing; or offer to do it yourself. (Voluntary, confidential partner counseling and referral is available through your local health department or by contacting the Oregon HIV/STD/TB Program at 971/673-0153.)

Acquir Immune Defic Syndr Hum Retrovirology 1997;16:54-62.

5. Elford J, Bolding G, Maguire M, Sherr L. Combination therapies for HIV and sexual risk behavior among gay men. *J Acquir Immune Defic Syndr* 2000;23:266-71.
6. Katz MH, Schwarcz SK, Kellogg TA, et al. Impact of highly active antiretroviral treatment on HIV seroincidence among men who have sex with men: San Francisco. *Am J Public Health* 2002;92:388-94.
7. Scheer S, Chu PL, Klausner JD, Katz MH, Schwarcz SK. Effect of highly active antiretroviral therapy on diagnoses of sexually transmitted diseases in people with AIDS. *Lancet* 2001;357:432-5.
8. Moon DB, Lindstrom S, KO. Understanding HIV risk among Oregon's MSM (men who have sex with men). Program Design and Evaluation Services, Portland, OR, October 2004. Available at: <http://www.dhs.state.or.us/publichealth/hiv/index.cfm>.
9. Craib KJ, Meddings DR, Strathdee SA, et al. Rectal gonorrhoea as an independent risk factor for HIV infection in a cohort of homosexual men. *Genitourin Med* 1995;71:150-4.
10. Specter M. Crystal meth, the Internet, and dangerous choices about AIDS. *The New Yorker* May 23, 2005.
11. Liddicoat RV, Horton NJ, Urban R, Maier E, Christiansen D, Samet JH. Assessing missed opportunities for HIV testing in medical settings. *J Gen Intern Med* 2004;19:349-56.
12. Duffus WA, Barragan M, Metsch L, et al. Effect of physician specialty on counseling practices and medical referral patterns among physicians caring for disadvantaged human immunodeficiency virus-infected populations. *Clin Infect Dis* 2003;36:1577-84.
13. Margolis AD, Wolitski RJ, Parsons JT, Gomez CA. Are healthcare providers talking to HIV-seropositive patients about safer sex? *Aids* 2001;15:2335-7.
14. Landis SE, Schoenbach VJ, Weber DJ, et al. Results of a randomized trial of partner notification in cases of HIV infection in North Carolina. *N Engl J Med* 1992;326:101-6.