

Sexually-transmitted infections in Oregon: Everything you wanted to know

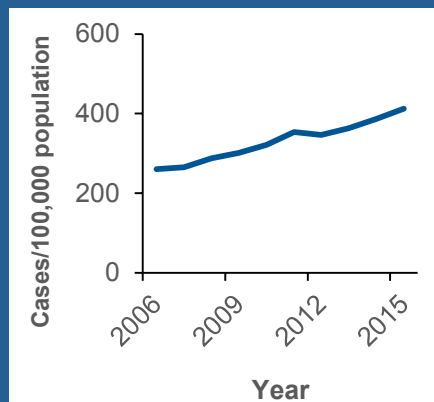
Chlamydia — Is More Less?

Healthcare providers and laboratories reported more than 16,000 cases (412 per 100,000 people) of *Chlamydia trachomatis* infection (henceforth 'chlamydia') during 2015, helping it to easily retain its position as the most commonly reported communicable disease in Oregon and continuing nearly uninterrupted annual increases of 5% for more than a decade (Figure 1). Chlamydia occurs most frequently in young people (Figure 2); 65% of all reported cases in Oregon during 2006–2015 were in men and women <25 years old, and 91% of cases were in people <35 years of age.

Paradoxically, increases in reported chlamydia don't necessarily mean more chlamydia infections. Nowadays almost all chlamydia cases are reported electronically — and automatically — by clinical laboratories. Reduced reliance on beleaguered healthcare providers to report cases probably leads to better 'capture' of incident diagnoses. Abundant, convenient, affordable, and accurate screening for chlamydia contributes to increases in the proportion of infections that are recognized. More people have access to screening through health insurance; and chlamydia screening is a healthcare quality indicator. This "more-screening-leads-to-more-reported-cases-leads-to-fewer-prevalent-cases" logic finds support in data from the National Health and Nutrition Examination Survey (NHANES), which suggest that overall prevalence of chlamydia (<2%) among the U.S. population aged 14–39 years did not increase between 2007–2012.¹ Chlamydia might be an example of a reportable condition for which more is less.

Unfortunately, as case burdens mount and resources dwindle, public health personnel in most parts of Oregon lack capacity to interview patients to verify treatment, identify and offer testing or treatment to recent sex partners. More than ever, if healthcare providers don't treat cases and inquire about partners and encourage them to be tested and treated, it simply doesn't get done. In Oregon, healthcare providers can employ expedited partner therapy (EPT), also known as patient-delivered partner therapy, to give treatment (or a prescription) to a patient for use by one or more

Figure 1. Chlamydia incidence, Oregon 2006–2015



of his or her sex partners. This can increase the likelihood that partners get treated and prevent further spread. In addition, one of the most efficient ways to find and treat cases of chlamydia is to systematically re-test everyone with a diagnosed infection three months after treatment. Re-infection is quite common and another reason to sprinkle EPT liberally.

Providers can find more information on EPT, including guidelines, frequently asked questions, and patient brochures at: www.healthoregon.org/std.

All syphilis, all the time

Syphilis continued its emphatic recrudescence during 2015, perhaps exacting retribution for audacious aspirations to eliminate it in 1999 (Figure 3).² After a statewide nadir of 26 cases (<1 per 100,000 population) in 2007, reported cases of early and potentially infectious syphilis (primary, secondary and early latent syphilis infections) increased by over 1500% through the end of 2015 to 537 cases (13.5/100,000, a 29% increase over 2014).

Men aged 25–54 years continue to account for the most reported infections (Figure 4). During the past decade, 60% of men with early syphilis who were asked reported that they had had sex with another man, and 41% of those same men (and a few women) with early syphilis also had pre-existing HIV infection. We recommend that providers take and record a sexual history from all adult patients, even if limited to inquiring about the gender(s) of their sex partners and number of recent partners. Men who have sex with other men, people who have HIV and people who use illicit drugs such as (but not limited to) heroin, methamphetamine, and cocaine should be tested at least once a year regardless of self-reported sexual history, and every three months if they are sexually active with multiple partners. Doing anything four times a year can be difficult, so OHA has created a web-based system called Oregon Reminders (www.oregonreminders.org) that anyone can use to set up reminders to take medicines or to get screening.

While accounting for fewer than 10% of cases during 2015, cases among women doubled again during 2015 over 2014, continuing a 4-year long trend. Unfortunately, 82% of reported early cases among women during 2006–2015 occurred in women of child-bearing age (20–44 years). After being mostly absent from Oregon for years, congenital syphilis reappeared in Oregon during 2014 (2 cases) and 2015 (6 cases), including one stillbirth and one live, premature baby with intrauterine growth delay and other syphilis-related abnormalities born to an untreated mother (Figure 5). Other reported congenital cases met epidemiologic case definitions, and were appropriately treated but fortunately, lacked outward evidence of congenital abnormalities related to syphilis.

Figure 2. Chlamydia cumulative incidence by age group, Oregon, 2006–2015

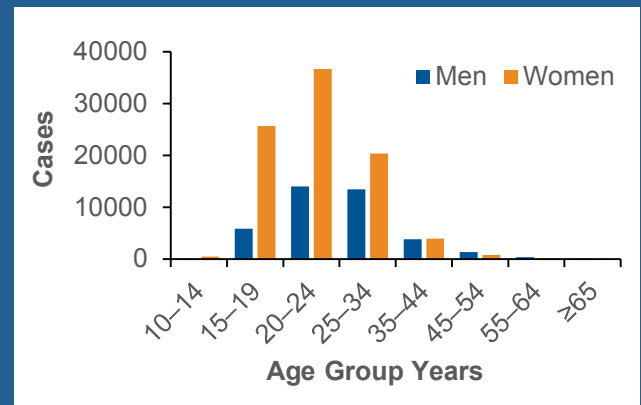
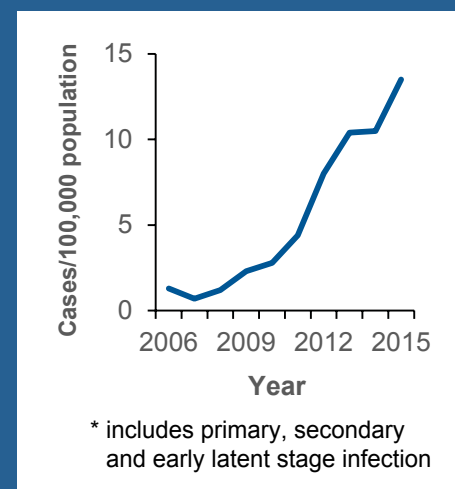


Figure 3. Early syphilis* incidence, Oregon 2015



The Centers for Disease Control and Prevention, American College of Obstetrics and Gynecology and U.S. Preventive Services Task Force all recommend screening of pregnant women for syphilis at the beginning of the third trimester (28 weeks' gestation) and at delivery in addition to universally recommended screening during the first trimester (typically before 12 weeks gestation) in "communities and populations in which the prevalence of syphilis is high." While absolute numbers of congenital syphilis cases remain low in Oregon, the relative increase from a baseline of fewer than 1 case in three years to 4 cases per year during 2014–2015 is very large. Consequently, we recommend that prenatal providers in Oregon test pregnant women for syphilis at 28 weeks and again at delivery. We recognize that evidence for this recommendation is sparse, and cost-effectiveness questionable.³ On the other hand, congenital syphilis is a catastrophe and the cost of screening is low. Three of Oregon's eight congenital infections during the past two years could conceivably have been prevented had their provider conducted a second screening at 28 weeks after an early pregnancy screen was negative. Risk-based or geographically targeted screening would miss cases: only 50% of (80) infections in women during 2013–2015 occurred in women who reported a known risk factor such as previous sexually transmitted infection or illicit substance use. Geographically, cases occurred in 5 different counties, some well-outside the metropolitan area.

Providers can find resources on implementing screening, syphilis trends in Oregon, and interpretation of test results on the OHA Website at www.healthoregon.org/std. In addition, OHA created a website for the public and for providers to learn about syphilis and syphilis screening (www.syphaware.org). Visitors can learn about the syphilis epidemic and take a quiz to find out whether they should be screened.

Gonorrhea. If not for syphilis...

...Gonorrhea would make us sad and blue, we wouldn't even see the floor. Indeed we're plagued by concurrent gonorrhea and syphilis epidemics (syndemic?) in Oregon, and the U.S. as a whole. Reported cases of gonorrhea rose from 39.8 (1460 cases) in 2006 to 82.0 (3254) per 100,000 population in 2015 (Figure 6). In the recent past (c. 2005), gonorrhea was an endemic illness among young heterosexuals with women making up more of the reported cases, probably because they're substantially more likely to receive prenatal care and to seek routine medical care, which

Figure 4.
Early syphilis* incidence by age group, Oregon, 2006–2015

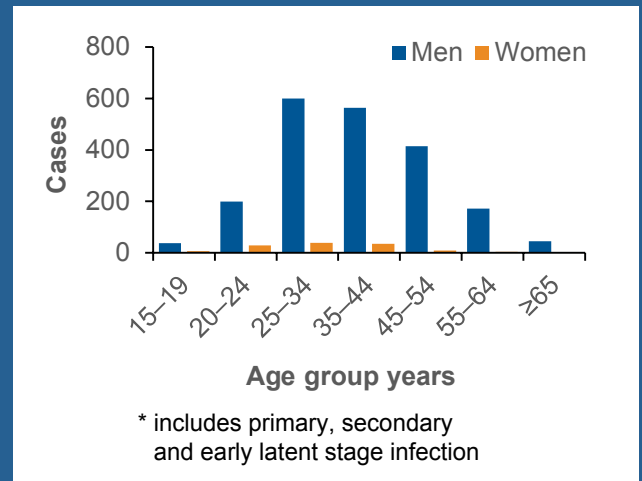
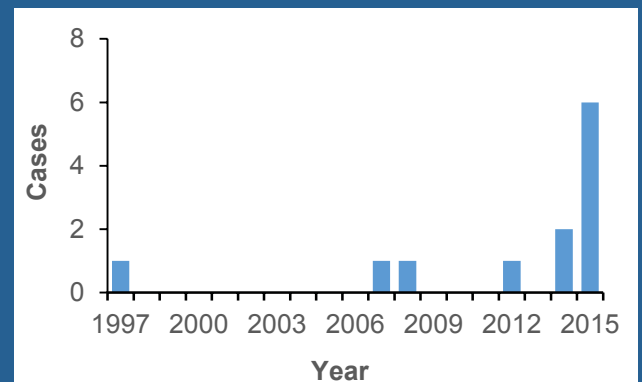


Figure 5.
Reported cases of congenital syphilis, Oregon 1997–2015



presents an opportunity for diagnosis. Gonorrhea incidence in Oregon was stable — approximately 30 cases per 100,000 (Figure 7). While cases among that demographic have risen slightly since 2006, they are now augmented by even greater numbers of cases among men aged 25–50 years, many of whom have sex with other men, the same population currently at highest risk of syphilis. Again, like syphilis, people with HIV comprise a disproportionate share of reported gonorrhea cases.

Dear departed 2015 did leave us a smidge of comfort.

Apprehension persists about the potential for emergence of antimicrobial resistance among *N. gonorrhoeae*, but elevated minimum inhibitory concentrations of cephalosporins remained absent among isolates tested by the national Gonococcal Isolate Surveillance Project (GISP). Oregon is one of 20 states that participates in GISP with the Multnomah County STD Clinic serving as a sentinel site for the project.

Emergency Rule:

Cadmium-positive urine results now reportable

The Oregon Health Authority, Public Health Division is temporarily amending OAR 333-018-0015 to add to the list of reportable diseases: “cadmium demonstrated by laboratory testing of urine.” This rule is effective February 18, 2016–August 15, 2016.

The OHA is working with the Oregon Department of Environmental Quality on an investigation into elevated environmental levels of heavy metals (e.g. cadmium and arsenic) found in some neighborhoods in the Portland metro area. This rule allows public health officials to identify elevated urine cadmium results so that we can assess risk to the public and, if necessary, advise remedial actions.

Oregon law requires laboratories that send an average of >30 records per month to public health to submit the data electronically. For any questions about setting up electronic reporting of cadmium results, please contact Michelle Barber at elr.project@state.or.us

Resources

- OHA Syphilis Provider Resources: www.healthoregon.org/std
- 2015 CDC STD Treatment Guidelines: www.cdc.gov/std/tg2015
- Gonococcal Isolate Surveillance Project (GISP): www.cdc.gov/std/gisp

Figure 6. Gonorrhea cumulative incidence by age group and sex, Oregon 2006–2015

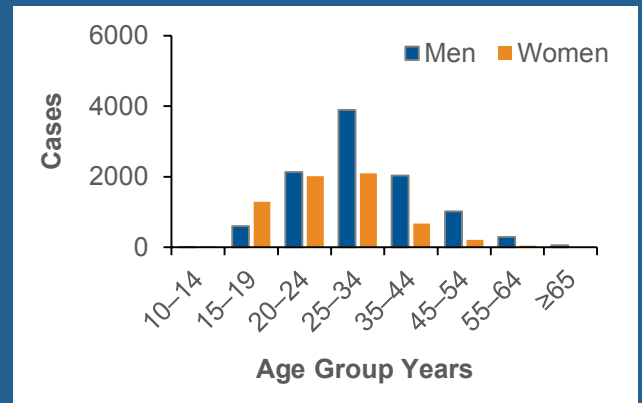
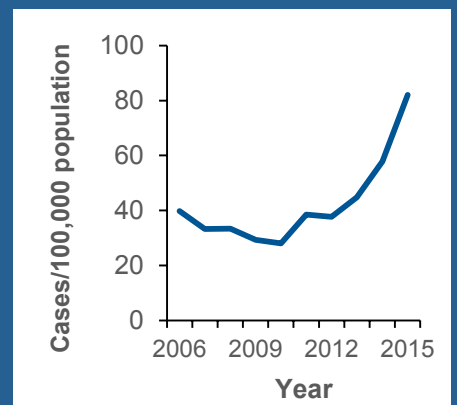


Figure 7. Gonorrhea incidence, Oregon 2006–2015



References

1. Torrone E., Papp J., Weinstock H. Prevalence of Chlamydia trachomatis genital infection among persons aged 14–39 years—United States, 2007–2012. *MMWR*. September 2014;63:834–8.
2. Centers for Disease Control and Prevention. Syphilis Elimination Effort. Available at www.cdc.gov/stopsyphilis. Accessed, January 7, 2015.
3. Albright CM, Emerson JB, Werner EF, Hughes BL. Third-trimester prenatal syphilis screening: A cost-effectiveness analysis. *Obstetrics and Gynecology*. September 2015; 126:479–85.

New CD Summary Format

After more than 40 years, we decided to adapt our *CD Summary* for the electronic age. Welcome to our new format! While we will no longer be printing and mailing the CD Summary, you will receive an e-mail announcing the issue and its availability at www.healthoregon.org/cdsummary as a PDF.

We expect to publish the new *CD Summary* monthly; each issue will typically be 4–6 pages in a larger, easier-to-read format. And, you will still earn CME credits.

Share this with your colleagues and encourage them to subscribe. Write to us at cd.summary@state.or.us and let us know what you think of our new format.

[click for CMS credits](#)

[Click to sign up for CD Summary](#)

[Click to view previous CD summaries](#)

Oregon
Health
Authority

PUBLIC HEALTH DIVISION

This document can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request this publication in another format or language, contact the Public Health Division at 971-673-1222, 971-673-0372 for TTY.

What You Need to Know About Zika Virus

Unless you have been living under a rock you have probably heard about Zika virus. This flavivirus, related to West Nile and Dengue, is transmitted by certain species of *Aedes* mosquitoes that do not live in Oregon. Zika typically causes mild illness, when it causes illness at all, 80% of people infected with Zika are asymptomatic. Symptoms include fever, maculopapular rash, arthralgia, and non-purulent conjunctivitis. The big concerns currently are that Zika infection might increase the risk of Guillain Barré Syndrome and that infection during pregnancy might be linked to fetal loss and slowed intrauterine brain development. Further research is needed to confirm these effects are due to Zika virus infection.

What this means for you:

CDC recommends testing for Zika in certain situations. Your local health department can help you arrange that testing, which, at this point is available only through CDC and requires prior approval.

Never fear. All the information you need to recognize which patients require testing, which samples to collect, and what information will need to accompany the samples is available on our Zika website for healthcare providers at www.bitly.com/zikaoregon. If you suspect you have a Zika case, please review the website and then call your local health department. If you still have questions after notification of the local health department, a state epidemiologist is on-call 24/7 at 971-673-1111.