Yakima Health District BULLETIN

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Sexually Transmitted Diseases in Yakima County

In 2007, 1146 cases of chlamydia were reported in Yakima County, essentially unchanged from the 1120 cases reported in 2006. Chlamydia remains the leading notifiable condition, accounting for 62% of all reports to YHD. Gonorrhea is fourth, accounting for 6% of all notifiable conditions. Eighty-seven percent of chlamydia cases and 75% of gonorrhea cases occur among individuals aged 15-29 years. Peak incidence for both infections in men and women is observed at 20-24 years of age; the next highest age-specific incidence is observed among 15-19 year-olds.

Figures 1-4 (insert) show recent temporal trends for chlamydia and gonorrhea among both women and men. Over the past decade, chlamydia rates have gradually increased among women and men at local, state, and national levels. State and national STD control officials have attributed this to improvements in recognition and screening of at-risk patients by health care providers, transition from use of antigen detection assays and viral culture to more sensitive nucleic acid amplification techniques, and improved reporting systems. Yakima County's chlamydia rates exceed both state and national rates by a considerable margin, provoking the notion that a true increase in transmission may also be playing a role in the trends observed. The three primary means by which transmission could be increasing include prolonged duration of infectiousness (i.e., worsening delays or omissions in screening and treatment), increased frequency of partner change, and reduced use of condoms. These concerns overlap with those related to reproductive health outcomes discussed in the March 2007 YHD Bulletin (http://www.co.yakima.wa.us/health/info/publications.htm).

Additional perspective comes from data generated by a key component of chlamydia control efforts, the state- and federally-funded Region X Infertility Prevention Project, which provides chlamydia screening for approximately 3000 women and 300 men annually through family planning, teen clinic, and youth detention settings in Yakima County. Among Women, IPP also provides treatment for infections detected, which account for about 30% of all chlamydia case reports in Yakima County. IPP prevalence rates for chlamydia in Yakima County have been stable across the past 10 years at about 9% (Figure 5). In comparison, the chlamydia prevalence for all women tested in Region X (Alaska, Idaho, Oregon, and Washington) IPP during 2006 was 6.6%; that figure also has been stable for about a decade. Due to smaller numbers, measured prevalence is less stable among men, but has averaged about 20% over the six-year interval shown (Figure 6). The overall stable prevalence of chlamydia across time suggests that true incidence is probably also stable (not increasing). We do not have data to shed light on partner change and condom use among youth because Washington State has not conducted the Youth Risk Behavior Survey since 2000 due to lack of school districts' participation. National data, however, do suggest that regular condom use among sexually active youth is actually increasing over time. The relatively higher incidence and prevalence of chlamydia and gonorrhea in Yakima County invites further exploration into behavioral risk factors, as well as access to and utilization of local services for sexually transmitted disease (STD) diagnosis, treatment, and partner follow-up.

Data for other STDs are limited but reassuring. No cases of infectious syphilis were reported in 2007; three were reported in 2006 and two in 2005. Syphilis transmission continues in the greater Seattle and Portland metropolitan areas and is largely associated with men who have sex with men, of whom about 50% are also HIV-positive in Seattle. YHD's main strategy in this light is early detection of imported cases with prompt investigation and prophylactic treatment of local sex partners in order to eliminate transmission. Reports of initial herpes simplex virus cases fell from 99 in 2005, to 70 in 2006 and 46 in 2007. Because this condition is not reportable by laboratories and is therefore fully dependent on clinician reporting, it is difficult to assess the validity of this decline. Routine public health surveillance for human papillomavirus infection does not exist in Washington State.

Key things clinicians can do to control the transmission and impact of STDs in Yakima County include:

- Provide testing for chlamydia and gonorrhea using urine- and/or genital swab-based nucleic acid amplification technology to patients meeting the following criteria:
  - sexually active and age < 25, OR
  - age ≥ 25 and new partner or multiple partners, OR
  - pregnancy, OR
  - symptoms or clinical findings suggestive of urethritis in men or cervicitis in women, OR
  - reported recent sexual contact with a case of chlamydia or gonorrhea.
- Chlamydia and gonorrhea cases should also be invited back for re-testing 3-4 months after treatment to detect re-infection (e.g., from an untreated partner).

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- Encourage all patients to know or learn their HIV status, especially those aged 20-59 years of age and those presenting for STD care.
- Offer vaccination against HPV types 6, 11, 31 and 33 (Gardasil) to all females aged 11-26 years, focusing on adolescents.
- Encourage all sexually active patients, especially those 15-44 years of age, to consider serologic testing for herpes simplex virus type 2 (e.g., glycoprotein G2) in order to know their serostatus and to discuss their serostatus with sex partners.
- Encourage consistent and correct condom use among all sexually active adolescents and adults who are not in a mutually monogamous relationship of long standing (e.g., ≥ 6 months).
- Develop a plan for the management of sex-partners of every patient diagnosed with STD (for more information, see the next article).

The most recent Department of Health Summary for Yakima County STD Morbidity can be downloaded at: http://www.co.yakima.wa.us/health/documents/bulletin/YAKIMA06.pdf

For more information on STDs, including testing and treatment guidelines, visit:
http://www.doh.wa.gov/cfh/STD/default.htm

Expedited Partner Therapy for Chlamydia and Gonorrhea

Difficulty achieving consistent and timely ascertainment and treatment of partners remains a considerable barrier to controlling the transmission of chlamydia and gonorrhea and to reducing the impact of their sequelae. Traditional partner notification methods employ trained health investigators who interview the patient and elicit information about recent sex partners so that those partners can be located and provided with clinical evaluation and chemoprophylaxis. This resource-intense method can be effective, especially in outbreak or hyperendemic settings of bacterial sexually transmitted infections and in settings where cases are unlikely to subsequently interact with exposed sex partners. However, the current public health infrastructure falls far short of having the capacity to so investigate all chlamydia and gonorrhea cases. New strategies are needed to confront the contribution which untreated partners make to re-infection of the original patient and to ongoing transmission in the community.

The Washington State Department of Health (DOH) promulgates guidelines for treating the sex partners of gonorrhea and chlamydia cases. Standard therapy for persons exposed to chlamydia is azithromycin 1gm PO; standard therapy for gonorrhea contacts is cefpodoxime 400mg PO (plus azithromycin 1gm PO, unless chlamydia has been excluded in the source patient). As part of these guidelines, YHD now recommends that all heterosexual patients be offered medications to give to their sex partners if the diagnosing clinician cannot otherwise be certain that partners will be evaluated and treated. This method is called “expedited partner therapy” (EPT) and is applied to all persons with whom the patient has had sexual contact during the 60 days preceding diagnosis. EPT is supported by the results of three randomized clinical trials, guidelines from the Centers for Disease Control and Prevention, the Washington State Medical Association, the Washington State Board of Medical Quality Assurance, and the Washington State Pharmacy Board.

- A new, initiative from DOH, YHD, and the University of Washington aims to promote access to EPT. This initiative is funded by the National Institutes of Health and includes the following elements:
  - referral of partners to local participating pharmacies for the purpose of conducting EPT,
  - referral to YHD of selected, high-risk patients to receive assistance notifying partners (see details below), and
  - a new STD case report form which now includes a field for reporting clinicians to indicate how the patient's partners have been managed.

A list of local participating pharmacies can be viewed at http://www.doh.wa.gov/cfh/std/ept.htm. Prescription forms are attached to the new case report form. To prescribe medication through one of these pharmacies, simply call or fax the prescription to one of the listed pharmacies. When submitting prescriptions by telephone, please let the pharmacy know that you want to prescribe the "free Public Health partner management medications".

Experts in the field caution against the use of EPT for the management of syphilis cases, men who have sex with men, and HIV-infected individuals. YHD endorses that concern and requests that all such patients continue to be referred to YHD for interview and counseling when a notifiable STD is diagnosed. Because some other patients also need help ensuring their partners’ treatment, YHD would also like to speak with the following types of gonorrhea and chlamydia cases:

- those who had more than one sex partner in the last 60 days, OR
- those who had a partner that they do not think they will have sex with again.

If your patient has one or more of these risk factors, please indicate on the case report form that you want YHD to help ensure their partners’ treatment (option #1). If a patient indicates to you that they will give medications to one partner but not to another, please provide them with medications or a prescription for the partner they are able to help get treated. Also, please remember that EPT guidelines and resources are limited to gonorrhea and chlamydia (i.e., not other cases of STD) and that YHD provides no direct clinical services for STD care.

The new STD case report form can be downloaded at: http://www.co.yakima.wa.us/health/documents/bulletin/Yakima%20casereport.pdf

For more information on EPT, visit: http://www.doh.wa.gov/cfh/STD/EPT.htm

If you have any questions regarding EPT or this program, please call Alex Popov at (509) 249-6531

Emergency Biologics

An inventory of emergency biologics (i.e., various immune globulins, antitoxins, and antivenoms) indexed by agent and supplying pharmacy can be downloaded from the YHD website at http://www.co.yakima.wa.us/health/documents/bulletin/EmergBiol2008.pdf.

Most, but not all, of the agents listed are available from one or more hospital pharmacies in the region. Notable exceptions are botulism and diphtheria antitoxins which have more restricted access.

For assistance in obtaining these and other emergency biologics, please call (509) 249-6541 during working hours and (509) 575-4040 #1 @ prompt after hours.

Vector Surveillance and Control in Yakima County

Animal Bites, Rabies Surveillance and Rabies Prophylaxis

In 2007, a total of 323 animal bites or exposures were reported to the Yakima Health District (YHD), virtually unchanged from the 324 bites reported in 2006. Of these, 232 were dog bites, 81 cat bites, 5 bat exposures, and 5 exposures to other animals. Incidents were reported to YHD by urgent care clinics, hospital emergency departments, private and group practice clinics, veterinary clinics, schools, camps, individuals, police, and animal control agencies.

While the number of exposures remained steady, the number of specimens tested for rabies tripled, increasing from 7 in 2006 to 21 in 2007. Of those, 7 were dogs, 9 cats, 3 bats, 1 chipmunk/squirrel and 1 skunk. None of the specimens submitted to the Washington State Public Health Laboratories by YHD tested positive for rabies during 2007. In recent history, about 5-10% of tested bats and virtually no terrestrial animals submitted to the PHL have been positive for rabies. However, there is no systematic laboratory surveillance for rabies in Washington State; the current method of exposure-based testing is not robust enough to guarantee the absence of terrestrial rabies.

Six Yakima County residents received rabies post-exposure immunoprophylaxis (PEP) in 2007. Two were treated after exposure to bats that were unavailable for testing. The other four – all from the same family- were treated after being attacked by their pet dog whose specimen was found to be unsuitable for testing by the PHL.

Please report all animal bites and plans to administer PEP to YHD at (509) 249-6509. YHD is also available to provide case-specific consultation on indications for PEP upon request.

Please note that there is currently a shortage of rabies vaccine, consequently priority use of rabies vaccine will be limited to PEP. As of June 17th, 2008, Novartis Vaccines, maker of RabAvert, has temporarily ceased providing rabies vaccine (for pre-exposure vaccination and PEP). Sanofi Pasteur, maker of IMOVAX Rabies (Rabies Vaccine), will continue to supply vaccine for PEP. Vaccine available for pre-exposure vaccination is limited, and will be distributed on approval from state and federal public health authorities for those with a critical need and in consideration of available rabies vaccine supplies. These measures will allow responsible management of currently limited supplies of this vaccine. It is expected that additional RabAvert will be available to the market by approximately July 2008. It is hoped that the demand for pre-exposure vaccine supplies will be met at this time. For more information about availability of rabies vaccine, call (509) 249-6550.

Relapsing Fever Case

One case of locally-acquired relapsing fever was confirmed in a Yakima County resident in August 2007. The victim, a 16-year old female, reported a tick-exposure incident on July 21, 2007 while attending Camp Cispus in Randle, WA (Lewis County). Her symptoms included recurring fever, chills, headache, muscle pain, and fatigue, among others. She was treated with a 15-day regimen of doxycycline.

West Nile Virus Surveillance and Prevention

Eleven birds were submitted by or on behalf of YHD to the Washington Animal Disease Diagnostic Laboratory (WADDL) for West Nile virus (WNV) testing in 2007. Of these, only one hawk tested positive – the only bird in the state for the year. Our county veterinary partners also submitted equine and canine samples for testing. Of these samples, eight horses and one dog (the first ever identified in the county or state) tested positive for WNV. All of these cases were located in or near the White Swan area. YHD also partnered with the Yakima County Mosquito Control District #1 to conduct regular mosquito trapping for WNV surveillance from July to September 2007. Although none of the pools collected tested positive for WNV, a species never before identified in Washington was found by DOH in one of the pools. Unfortunately, the sample was inadvertently destroyed during testing before species confirmation could be performed by WADDL.

Nationwide WNV activity thus far in 2008 has been limited to California and the southern United States. Reductions in federal and state funding for active surveillance of WNV in mosquitoes and birds has declined for 2008, but YHD will still be able to arrange for a limited number of well-targeted tests among dead birds. Nevertheless, last years detection of WNV in a bird, a dog, and multiple horses suggests that our environment has been seeded and we know that competent mosquito vectors are also present. Ultimately, human cases will be reported in Yakima County. YHD's goal is limit the extent to which this might occur. Toward that end, all Yakima County residents are encouraged to minimize mosquito breeding habitats by doing the following:

- regularly empty anything that holds standing water - flower pots, dishes, buckets, cans, toys
- get rid of used tires properly
- change water in birdbaths, wading pools, and animal troughs and dishes at least weekly
- fix leaky outdoor faucets & sprinklers
- clean clogged roof gutters

Mosquito bite prevention tips include:

- wear shoes, socks, long pants, and long sleeved shirts when going into mosquito infested areas
- when possible remain indoors at dawn and dusk when mosquitoes are most active
- use repellents with no more than 30% DEET (10% for children)
- do not allow children to apply repellent themselves and do not spray DEET onto children--use your hands to apply it
- never spray directly onto the face--put on hands first then apply to face and neck

More information about repellent can be found at the EPA DEET page (http://www.epa.gov/pesticides/factsheets/chemicals/deet.htm).

Patient education materials in English and Spanish can be downloaded at:

- http://www.co.yakima.wa.us/health/documents/bulletin/wnv_flyer.pdf
- http://www.cdc.gov/ncidod/dvbid/westnile/posters.htm
- http://www.co.yakima.wa.us/health/documents/bulletin/Fotonovela_repelente.pdf

For more information on diagnosis and management of WNV, visit: http://www.cdc.gov/ncidod/dvbid/westnile/clinicians/.

YAKIMA HEALTH DISTRICT

1210 Ahtanum Ridge Drive
Union Gap, WA 98903

Reporting Line: (509) 249-6541
After hours Emergency: (509) 575-4040 #1
Toll Free: (800) 535-5016 x 541

Confidential Fax: (509) 249-6628

http://www.yakimapublichealth.org

Dennis Klukan, MSEPH, *Administrator*
Christopher Spitters, MD, MPH, *Health Officer*
Marianne Patnode, RN, *Communicable Disease Services Program Coordinator*
Gordon Kelly*, Environmental Health Director*
Wendy Doescher*, Region 2 AIDSNET Coordinator*
Denny Flodin-Hursh, RN, *Public Health Nurse*
Perla Benitez, RN, *Public Health Nurse*
Lela Hansen, RN, *Tuberculosis Consultant*
Jessica Brown, BS, CHES*, Assessment Specialist*
Laura Kramer, BS, *Environmental Health Specialist*
Tess White, RN, *Immunization Specialist*

	Cases			Total Cases by Year	
Condition *(includes confirmed and probable cases)*	**Jan-May**	**Jan-May**	**Jan-May**	**Total Cases by Year**	**Total Cases by Year**
	2008	**2007**	**2006**	**2007**	**2006**
Campylobacteriosis	31	31	100	124	202
Cryptosporidiosis	1	7	2	19	7
Enterohemorrhagic E. coli	3	3	0	7	5
Giardiasis	3	16	8	48	31
Salmonellosis	13	13	8	34	34
Shigellosis	1	6	12	26	32
Hepatitis A acute	1	0	1	0	1
Hepatitis B acute	0	1	4	1	5
Hepatitis B chronic	5	2	6	11	11
Hepatitis C acute	0	1	1	1	1
Hepatitis C chronic	58	89	92	226	176
Meningococcal	1	1	0	2	1
Pertussis	4	8	7	37	21
Tuberculosis	8	7	4	11	16
HIV New	4*	10*	10*	10	10
HIV Deaths	2*	1*	2*	1	2
HIV Cumulative Living	154*	152*	142*	152	142
Chlamydia	522	516	484	1168	1120
Genital Herpes—Initial	31	22	33	46	70
Gonorrhea	57	53	83	119	166
Primary and Secondary Syphilis	1	0	3	0	3

Notifiable Conditions Summary Jan– May, 2008

*2nd Quarter HIV Statistics Not Yet Available