



Yakima Health District BULLETIN

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Tuberculosis Morbidity in Yakima County, 2003-2005

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During 2003 through 2005, 34 cases of TB were diagnosed and reported in Yakima County. Annual case rates remain stable at 4-5 cases per 100,000 population. With an average of 12 cases per year, Yakima County consistently ranks fourth among Washington counties in number of cases, behind King (125-150), Pierce (25-30), and Snohomish (20-25) Counties.

As usual, pulmonary TB was the most common site of involvement (32 cases). Four of 32 pulmonary cases also had extrapulmonary (EP) involvement and two cases had EPTB only. Sites of extrapulmonary involvement included cervical lymphatic, pleural, genitorurinary, meningeal, and miliary (disseminated).

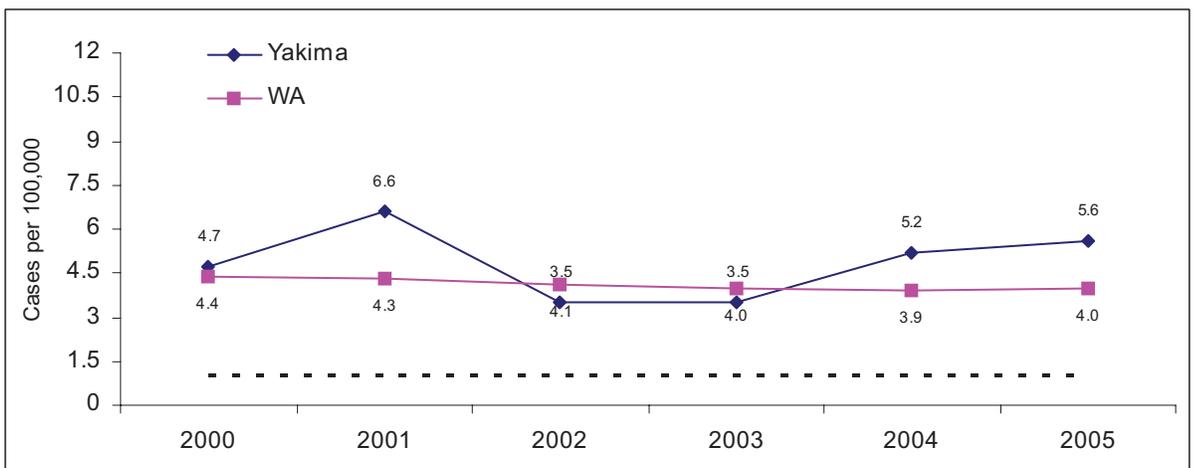
Eighteen (53%) cases were among individuals 25-64 years of age and 8 (24%) were ≥ 65 years; this is similar to the age distribution of cases for the entire state. Four cases (12%) were reported in children under 5 years of age; all were discovered during contact investigations conducted among infectious adults. Although the number of cases among children 0-4 years of age was small, the rate (6.9/100K) is nearly an order of magnitude higher than the state rate (0.9/100K) for this age group.

Twenty-eight cases (82%) in Yakima County occurred among men, in contrast to 60% of cases among men statewide. Some of this exaggerated

gender difference locally was due to the fact that 8 cases (24%) were among homeless men here in Yakima County. Still, overall in the United States, men typically have TB rates about 50% higher than women. This is mostly due to more frequent presence in environments where TB is transmitted, as well as a higher prevalence of underlying medical risk factors for reactivation of latent TB. Twenty-two cases (65%) were unemployed and 12 (35%) had substance abuse problems. One was HIV infected.

Nine (26%) cases were among foreign-born individuals, in contrast to state and national trends, where about 70% of cases occur among the foreign-born. Eight of Yakima's nine foreign born cases were from Latin America (mostly Mexico). Although immigrants from Asia and Africa are at an approximately 10-fold higher risk of TB than those from Latin America, Yakima County has very few such immigrants. Only two cases (6%) were migrant workers; the rest were stable or permanent residents of Yakima County (even if they were homeless). Self-reported race/ethnicity-specific rates (per 100K population) were as follows: white, 4.2; Latino, 6.1; Native American, 22. Figures were too small to calculate rates for Asians (zero cases) and African Americans (one case).

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Tuberculosis Morbidity cont'd.

Drug resistance was not found on initial diagnosis among any of the cases reported 2003-2005. However, one developed isoniazid monoresistance due to drug malabsorption while on directly observed therapy (DOT). During the prior six-year interval (1997-2002), six (8%) of 78 cases were resistant to isoniazid and one was resistant to both isoniazid and rifampin (multiple drug resistant/MDR). All patients were treated under DOT. Four cases (11%) died at diagnosis or during therapy, and the remainder completed adequate treatment.

These data highlight several key features and challenges with respect to TB control in Yakima County. Homelessness and its attendant risks for exposure to TB in congregate settings, combined with its associations with substance abuse, poor underlying health, and lack of access to medical care, remains the leading risk factor for TB in Yakima County. Such cases often come to diagnosis after long delays prior to seeking health care and are very difficult to treat, both in terms of medical management and in terms of ensuring adherence to therapy. Delayed pursuit of medical care and delayed diagnosis among adult cases is potentially fatal, leads to prolonged exposure among contacts, and is probably contributory to the relatively high rate of TB among young children in Yakima County.

Early suspicion and diagnosis permits identification, evaluation, and chemoprophylaxis among contacts (especially young children), thereby preventing secondary cases and outbreaks. Directly observed therapy with public health nurse case management and medical consultation through YHD achieves a high level of treatment completion and prevents secondary cases and emergence of drug resistance from occurring.

Targeted testing and treatment for latent TB infection by primary care providers, focusing on groups with a high rate of TB (e.g., homeless, foreign born, Native American) and individual patients with medical risk factors for TB reactivation (e.g., diabetes mellitus, immunosuppression), remains an indispensable component of TB control efforts by shrinking the pool of latent TB infections from which active cases emerge.

For more information on how to conduct targeted testing and treatment for latent TB, visit:

www.yakimapublichealth.org
 www.cdc.gov/nchstp/tb/
<http://www.doh.wa.gov/cfh/TB/guidelines.htm>
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5415a1.htm>
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5415a4.htm>

Please remember that all suspected and confirmed active TB cases must be reported to and tracked by YHD. Unreported cases are a common cause of delayed contact investigations and secondary transmission, especially to young children. Call the YHD TB Control Program at (509) 249-6532 to:

report suspected or confirmed cases; arrange clinical consultation, public health nurse case management, and DOT for cases of active TB; and obtain technical or clinical consultation in diagnosis and management of latent TB

West Nile Virus

West Nile Virus recently has been detected serologically in a magpie and five horses in Yakima County. At least one horse died, and the condition of the others is being determined. No human cases have been reported locally, but Washington State's first-ever locally acquired cases were recently diagnosed in a Pierce County couple. The cases experienced a non-fatal febrile rash illness in July and had positive serologic evidence of recent WNV infection in August; they had not traveled outside of Washington State during the two-week maximum incubation period for the illness. The reason for Washington State's relative escape from human cases while neighboring states are affected remains unexplained. As of September 14, 2006, Idaho had reported 710 human cases (10 deaths) and Oregon, 45. To the north in Canada, 6 human and 19 horse cases have been reported this year in Alberta, but neither horse nor human cases have been reported in British Columbia.

This serves as a reminder to consider serologic testing for WNV infection during the summer and fall months among individuals with unexplained febrile illnesses. Rash and/or neurologic manifestations (e.g., meningoencephalitis and/or extrapyramidal movement disorders). Prevention messages remain unchanged: reduce standing water and mosquito breeding habitats in yards, avoid mosquito exposure, and wear repellants when exposure is unavoidable. WNV, like other arborviral diseases, is a reportable condition in Washington State; contact YHD at (509) 249-6541 to report cases.

For more information on WNV visit...

<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>
<http://www.doh.wa.gov/Notify/nc/wnv.htm>

Local Public Health System Survey Results

The Yakima Health District recently conducted an internet survey asking Local Public Health System partners to indicate what services they provide and where they provide them. These Local Public Health System partners also were asked to complete a survey asking what health, socioeconomic, and environmental health problems were most adversely affecting Yakima County. The results were finalized and presented to the Board of Health on September 27, 2006. Some of the issues that were identified as problems in Yakima County include drug use, poverty, mental health, obesity, and access to health care. To see the full report, please visit our web site at www.yakimapublichealth.org

Please feel free to contact Jessica Johnson, Public Health Assessment Specialist, at (509)249-6516 if you have any questions or would like a hard copy sent to you. The Yakima Health District is launching a community wide health assessment project which will lead to a comprehensive county assessment. If you are interested in participating or learning more about that effort, please contact Jessica.

Influenza Vaccine Recommendations Updated

Each year in the United States, approximately 200,000 hospitalizations and 35,000 deaths are associated with influenza. Annual vaccination for high risk groups is the primary means of preventing this morbidity and mortality. A recent analysis estimated that influenza vaccination costs society about \$1000 per quality adjusted life year saved among individuals over 65 years of age. When transportation costs are excluded from the analysis, influenza immunization is cost-saving in this age group (Maciosek, et. al. Am J Prev Med 2006;31:72). Each year, the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices updates its recommendations for influenza prevention. ACIP's 2006 recommendations include the following clinically relevant changes or updates:

- Healthy children aged 24--59 months and their household contacts and out-of-home caregivers should be vaccinated against influenza. This change extends the recommendations for vaccination of children so that all children aged 6--<59 months receive annual vaccination.
- ACIP emphasizes that all children aged 6 months--<9 years who have not been previously vaccinated at any time with either live, attenuated influenza vaccine (LAIV) or trivalent inactivated influenza vaccine (TIV) should receive 2 doses of vaccine.
- Those children aged 6 months--<9 years who receive TIV should have a booster dose of TIV administered ≥ 1 month after the initial dose, before the onset of influenza season, if possible.
- Those children aged 5--<9 years who receive LAIV should have a second dose of LAIV 6--10 weeks after the initial dose, before the influenza season, if possible. If a child aged 6 months--<9 years received influenza vaccine for the first time during a previous season but did not receive a second dose of vaccine within the same season, only 1 dose of vaccine should be administered this season.
- ACIP recommends that neither amantadine nor rimantadine be used for the treatment or chemoprophylaxis of influenza A in the United States because of recent data indicating widespread resistance of influenza virus to these medications. Oseltamavir or zanamivir may be prescribed if antiviral treatment or chemoprophylaxis of influenza is indicated.

For the full text of the new guidelines:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr55e628a1.htm>

Plan B to Go OTC

On August 24 the U.S. Food and Drug Administration (FDA) announced approval of Plan B as an over-the-counter (OTC) option for women aged 18 and older. When used as directed, Plan B effectively and safely prevents pregnancy if taken up to 72 hours after sexual intercourse. The regimen consists of two levonorgestrel 0.75mg tablets taken 12 hours apart. Plan B has been available to women under delegated prescriptive authority granted to pharmacists for over 5 years in Washington State.

The approval came after the FDA, in May 2004, issued a "not approvable" letter in response to the original application, submitted by the manufacturer of Plan B, Barr Laboratories. The approval requires Barr to monitor the effectiveness of the age restriction and the safe distribution of OTC Plan B to consumers ≥ 18 years of age and prescription Plan B to women under <18 years. Barr has agreed to send "anonymous shoppers" into pharmacies to test compliance with the age restriction, to distribute with the drug a booklet about its proper use, and to exclude gas stations and convenience stores from selling the drug.

A cursory survey of major national chain pharmacies in the Yakima County area suggests that most, if not all, will make the product available to consumers once the FDA-required OTC packaging becomes available some time this coming winter. Women under 18 years of age will still need to obtain the product through the existing delegated prescriptive arrangements already in place.

While ready access to OTC and prescription Plan B for women should further reduce barriers to preventing unintended or unwanted pregnancies following contraceptive failure or sexual assault, it does not address the comprehensive health needs of women in such situations. Consequently, it remains important that women receive anticipatory education about the importance of obtaining follow-up evaluation and prophylaxis for sexually transmitted infections following such occurrences. Furthermore, victims of sexual abuse or assault of all ages should also be encouraged to report such crimes to law enforcement officials and to seek safe harbor from perpetrators when the offense is ongoing.

For more information:

<http://www.fda.gov/cder/drug/infopage/planB/default.htm>
<http://www.womenshealth.gov/faq/econtracep.htm#a>

Local resources for battered/sexually abused women:

YWCA (Young Women's Christian Organization) 509-248-7796
<http://www.ywca.org/site/pp.asp?c=jkJYJfO5F&b=84293>

YAKIMA HEALTH DISTRICT

104 N 1st Street, Suite 204
Yakima, WA 98901



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>

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| Condition (includes confirmed and probable cases) | Cases | | | Total Cases by Year | |
|---|---------|---------|---------|---------------------|---------------------|
| | Jan-Aug | Jan-Aug | Jan-Aug | Total Cases by Year | Total Cases by Year |
| | 2006 | 2005 | 2004 | 2005 | 2004 |
| Campylobacteriosis | 131 | 55 | 62 | 115 | 99 |
| Cryptosporidiosis | 3 | 2 | 1 | 7 | 2 |
| Enterohemorrhagic E. coli | 2 | 1 | 2 | 3 | 3 |
| Giardiasis | 12 | 12 | 20 | 28 | 30 |
| Salmonellosis | 17 | 35 | 21 | 49 | 36 |
| Shigellosis | 17 | 5 | 5 | 25 | 7 |
| Hepatitis A acute | 1 | 1 | 2 | 3 | 2 |
| Hepatitis B acute | 3 | 1 | 3 | 1 | 3 |
| Hepatitis B chronic | 9 | 10 | 15 | 14 | 22 |
| Hepatitis C acute | 2 | 1 | 2 | 1 | 2 |
| Hepatitis C chronic | 137 | 144 | 141 | 214 | 219 |
| Meningococcal | 1 | 0 | 1 | 2 | 3 |
| Pertussis | 20 | 97 | 21 | 197 | 62 |
| Tuberculosis | 8 | 11 | 8 | 14 | 12 |
| HIV New | 2 | 6 | 10 | 5 | 10 |
| HIV Deaths | 0 | 1 | 1 | 2 | 1 |
| HIV Cumulative Living | 142 | 133 | 126 | 140 | 128 |
| Chlamydia | 625 | 556 | 578 | 973 | 1002 |
| Genital Herpes—Initial | 47 | 54 | 84 | 99 | 125 |
| Gonorrhea | 102 | 81 | 105 | 138 | 198 |
| Primary and Secondary Syphilis | 3 | 0 | 0 | 2 | 0 |

**Notifiable
Conditions
Summary
Jan-August,
2006**