



# Yakima Health District BULLETIN

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## Smoking Rates in Yakima County and Washington State

Since the implementation of the Washington State Department of Health's (DOH's) comprehensive Tobacco Prevention and Control Program, adult smoking in Washington has steadily declined from 22.4 percent in 1999 to a new low of 16.5 percent in 2007. This figure falls below the national rate of 19.8% and ranks 6<sup>th</sup> among states nationally. Washington's approximate 25% decline in the proportion of adults who smoke translates into about 240,000 fewer smokers and an estimated \$2.1 billion saved in future health care costs. Meanwhile, Yakima County has seen similar declines in adult smoking, from 20.3% in 2003 to 16.1 percent in 2007, representing about 7,000 fewer smokers and estimated future health care savings of about \$60 million.

gum, and prescription medications written by their doctor. To receive the benefit, people on Medicaid can call the toll-free Tobacco Quit Line at 1-800-QUIT-NOW (1-877-2NO-FUME in Spanish).

*Acknowledgement: This report was adapted from the DOH Tobacco Prevention and Control Program and from CDC's Behavioral Risk Factor Surveillance System.*

### Progress in Implementation of Expedited Partner Therapy for Chlamydia and Gonorrhea

In early 2008, YHD launched a project in collaboration with the University of Washington and the Department of Health STD Control Program to promote and facilitate expedited partner therapy (EPT) for sexual contacts of individuals diagnosed with *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoea* infections (GC).<sup>1</sup>

From January 1-October 31, 2008, the following has occurred in conjunction with this project:

Event	N (%)
Reports of CT and/or GC to YHD	968
Partner management plan indicated on case report form	326 (34%)
<ul style="list-style-type: none"> <li>Provider indicated plan to manage partners directly (options 2&amp;3)</li> </ul>	196 (60%)
<ul style="list-style-type: none"> <li>Provider deferred partner management to YHD (option 1)</li> </ul>	130 (40%)

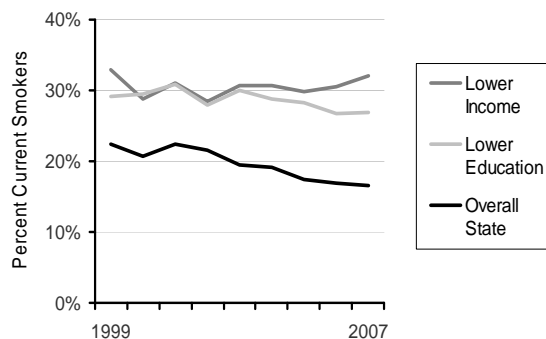
The proportion of case reports indicating a management plan for partners has increased steadily over the course of the year, with over 80% of reports now electing one of the form's options (see figure and insert from STD case report).

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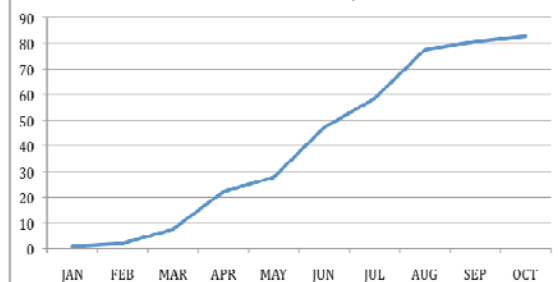
\*Data are from the Washington State Behavioral Risk Factor Surveillance System.  
NOTE: Lower Income was defined as a yearly household income of less than \$25,000.  
Lower Education was defined as a high school degree or less among respondents 25 and older.

DOH reports that the majority of people who smoke in Washington are either low income (i.e., earn less than \$25,000 per year) or have a lower level of education (i.e., earned a high school diploma or less). Smoking among these groups has not dropped significantly in recent years.

DOH reports that since 1999, the greatest reductions in smoking rates have been seen among those with an income of \$50,000 or more and among those with a college degree or more. The Department of Health has also made progress in reducing the number of youth who smoke. Since the program began in 2000, the youth rate has dropped by about 50 percent overall and there are 65,000 fewer youth smoking. Stratification of CDC smoking data by age, income and education are not available at the county level at this time.

The Department of Social and Health Services provides a smoking cessation benefit to Medicaid clients. The benefit includes access to free counseling, nicotine patches or

PERCENT OF GC/CT CASES WITH  
MANAGEMENT PLAN ON CASE REPORT  
YAKIMA COUNTY, 2008



In a research component of the project, all partners of cases referred to YHD for management plus a random sample of partners managed by private providers are interviewed. The data obtained suggest that (1) about 60% of identified partners are being treated, (2) two-thirds of partner treatment is via PDPT, and (3) about 60% of EPT recipients accessed it via the diagnosing clinician of the original case. No adverse medical events have been reported as a result of EPT project activity in Yakima County.

YHD thanks local clinicians for their increasing diligence in developing partner management plans for cases of CT and GC, for communicating those plans on the case report, and for making use of the EPT system. YHD anticipates that EPT will continue to help increase the proportion of partners treated, reduce the incidence of re-infection, and stem the transmission of CT and GC in the community. To obtain more information on how to make use of the EPT system, to report a case, or to access other information about sexually transmitted infections in Yakima County, please contact YHD at (509) 249-6531.

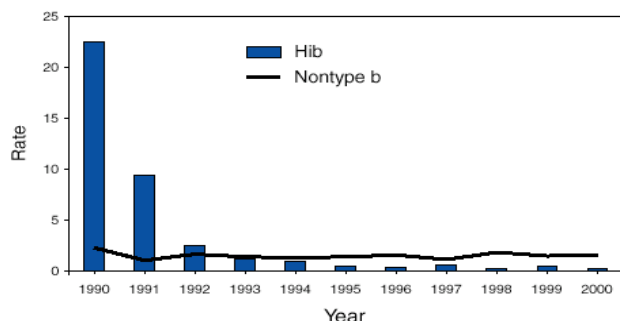
*Acknowledgement: University of Washington project staff, Roxanne Piper-Kerani, Cheryl Malinski, and Matthew Golden, MD; , Alex Popov, DOH STD Control Program.*

<sup>1</sup>*Expedited Partner Therapy for Chlamydia and Gonorrhea Infections, YHD Bulletin, June 2008; <http://www.yakimacounty.us/health/info/publications.htm>*

### Haemophilus influenzae type b Surveillance

*H. influenzae* disease can be caused by any of six serotypes (a, b, c, d, e, and f) or by non-typeable organisms. Until 1988, when *H. influenzae* type b (Hib) vaccine was introduced, serotype b caused approximately 95% of cases of *H. influenzae* invasive disease among children aged <5 years; after introduction of the vaccine, during 1989--1995, the incidence of Hib disease decreased 95% among children in that age group (see "Figure 2", courtesy of CDC).

**FIGURE 2. Race-adjusted incidence rate,\* of *Haemophilus influenzae* type b (Hib) and nontype b† invasive disease detected through Active Bacterial Core surveillance (ABCs) among children aged < 5 Years — United States, 1990–2000**



\*Per 100,000 persons.

†Hi isolates with unknown serotype not included.

In December 2007, Merck recalled certain lots of PedvaxHIB and Comvax and suspended production of these vaccines because the company was unable to assure the sterility of equipment used during manufacture of those lots. In October 2008, Merck further disclosed that the company had identified the need for an additional manufacturing change and associated regulatory approval and did not expect to restore

**← Instructions**

**PARTNER MANAGEMENT PLAN**  
- Select method of ensuring partner treatment

1.  Health Department to assume responsibility for partner treatment.

**HEALTH DEPARTMENT ASSISTANCE ONLY RECOMMENDED IF:**

- Patient has had 2 or more sex partners in the last 60 days, or
- Patient does not think he/she will have sex again with sex partners from the last 60 days, or
- Patient is unable or unwilling to contact one or more partner, or
- Patient is a man who has sex with other men.

2.  Provider will ensure all partners treated (**FREE medications available**). Indicate number to be treated (\_\_\_\_)

3.  All partners have been treated. Indicate number treated (\_\_\_\_)

availability of these vaccines until mid-2009. Sufficient vaccine exists in the United States to provide the primary series and booster dose for high risk children through at least mid-2009.

Interim Hib vaccine recommendations by CDC and endorsed by DOH and YHD stipulate that until vaccine supply is restored, vaccination providers should defer administering the 12-15 month booster dose of Hib to children who are not at increased risk for Hib disease. Those at increased risk who should continue to receive a booster dose despite the shortage include the following: Native American/Alaska Native children and children with certain immunosuppressive conditions (asplenia, sickle cell disease, human immunodeficiency virus infection, other immunodeficiency syndromes, and malignant neoplasms). The recommendations also state that providers should log and track children for whom the booster was deferred to facilitate recalling them for vaccination once supply problems are resolved.

To assess Hib surveillance in the United States in the light of this prolonged deferral of the Hib booster, CDC has reviewed the completeness of *H. influenzae* serotype information reported nationally during January 2007-September 2008. Washington State law does not currently require laboratories to submit *H. influenzae* isolates for further testing. Consequently, DOH and local communicable disease epidemiologists routinely work on a case-by-case basis to ensure that *H. influenzae* isolates from children under five years of age are voluntarily forwarded to DOH's Public Health Laboratories (PHL) for serotyping. Recent results from these surveillance efforts are set forth in the following table.

### Invasive *H. influenzae* Surveillance among Children <5 years of age, United States and Washington State, January 2007-September 2008

	United States	Washington
<b>Total invasive <i>H. influenzae</i> case reports</b>	748	8
<b>Hib</b>	45 (6%)	3*
<b>Non-type b (a, c-f and non-typeable)</b>	425 (57%)	5
<b>Serotype missing</b>	278 (37%)	0

\*cases included (1) a neonate, (2) a three-month old infant with onset prior to Hib dose #2, and (3) an unvaccinated 14-month old.

CDC estimates that the average annual rate of invasive Hib disease reported in children aged <5 years during January 2007-October 2008 was 0.12 cases per 100,000 children. Based on the three Hib cases reported in Washington State, the estimated statewide annual Hib rate for the same period is 0.03 per 100,000. During 1998-2000, the period of CDC's last published analysis of Hib data, annual rates were about 0.3 cases per 100,000. This analysis, therefore, suggests no increase in invasive Hib disease in children aged <5 years since the December 2007 vaccine recall.

The primary Hib vaccine series protects infants against invasive Hib disease. However, serum antibody levels decrease by age 12-15 months in children who have completed the primary series, and the Advisory Committee on Immunization Practices (ACIP) recommends that children receive a booster dose at that age. Higher concentrations of serum antibodies might be required to interrupt Hib transmission and colonization of the upper respiratory tract than to protect against invasive Hib disease. Thus, the booster dose can be of particular importance for indirect protection and promotion of herd immunity against Hib disease. What effect continued deferral of the

Hib booster might have on the incidence of invasive Hib disease in young children in the United States is unknown. However, the United Kingdom's experience with the impact of prolonged deferral of the booster dose on increased colonization and resurgence of disease rates warrants ongoing vigilance by both clinicians and the public health system.

In the event of a case of invasive *H. influenzae* disease in a child under five years of age, please work with YHD communicable disease staff to arrange for submission of the isolate to DOH PHL for serotyping and to collect detailed vaccination history information.

CDC's full report on this subject can be viewed at: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5746a2.htm?s\\_cid=mm5746a2\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5746a2.htm?s_cid=mm5746a2_e)

*Acknowledgement: Chas DeBolt, DOH Communicable Diseases Epidemiology, for her report to YHD on statewide H. influenzae surveillance; this article was adapted from her report and the above-cited MMWR article.*

### Surveillance for Severe and Fatal Infections Associated With Influenza

CDC investigators recently published an article in Pediatrics summarizing national surveillance data for pediatric influenza-associated mortality. They reported an increase over recent years in the number of fatal pediatric influenza deaths, with a specific increase in influenza and *Staphylococcus aureus* co-infections.

From October 1, 2004 through September 30, 2007, 39 states and two local health departments reported a total of 166 influenza-associated pediatric deaths in the United States. Isolation of *S. aureus* from these children increased from one case during the 2004–2005 season and three cases in 2005–2006 to 22 cases in 2006–2007. One methicillin-resistant *S. aureus* (MRSA) isolate was found among these cases in 2004–2005, but 13 were found in 2007–2008. The cases with influenza and *S. aureus* co-infection during 2006–2007 had a median age of ten years.

This five-fold increase over three seasons in pediatric deaths associated with influenza and *S. aureus* co-infection emphasizes the importance of preventing such severe infections through both influenza immunization and prompt institution of appropriate anti-microbial therapy if indicated. An observation from the article was that the influenza-associated deaths occurred rapidly, with almost half the cases dying within 72 hours of symptom onset and a similar proportion dying at home or in the emergency department. Few of the children with indications for influenza vaccination had received vaccine that season. However, the majority of cases were previously healthy children for whom vaccination was not yet recommended. As of 2008 almost all children are included among those recommended for annual influenza vaccination.

As of December 15, YHD is aware of only a single case of influenza that was diagnosed during the week of December 8. That case was reported through our local voluntary laboratory surveillance program for tracking RSV and influenza <http://www.yakimacounty.us/health/commhealth/immproviders.htm>. Our surveillance data indicates that RSV has been circulating in the community since mid-November.

Statewide and regional influenza surveillance indicates that activity as of December 6, was nil-to-sporadic. At a national level, transmission also has been low. However, preliminary data show that virtually all influenza A (H1N1) isolates tested were resistant to oseltamivir (24 of 25), sensitive to zanamivir, and sensitive to adamantanes (amantadine, rimantadine). All influenza A (H3N2) and influenza B isolates tested were sensitive to oseltamivir and zanamivir. Results also showed universal resistance of A (H3N2) to the adamantanes, which also are not effective against influenza B viruses. These are preliminary

data based upon very limited samples sizes. Implications of emergence of oseltamivir resistance among A (H1N1) isolates remains to be elucidated and, as of this writing, CDC has not made any changes in routine chemotherapy and chemoprophylaxis recommendations. YHD will provide updates as further information and recommendations come forth.

During the 2008–2009 respiratory virus season, routine influenza surveillance activities in Yakima County (and Washington State) will include monitoring school absenteeism, sentinel health care provider surveillance for influenza-like illness, and laboratory surveillance for influenza isolates. This year, YHD and DOH are requesting two additional types of surveillance on a voluntary basis:

- Influenza-associated pediatric deaths
  - ⇒Death at age <18
  - ⇒Influenza-like illness
  - ⇒Pre- or post-mortem laboratory confirmation of influenza from respiratory specimens, lung tissue, and/or paired sera
  - ⇒Note: bacterial co-infection, specifically with *S. aureus*\*, is of interest among these fatal pediatric cases.
- Severe pneumonias due to influenza and *S. aureus* co-infection in previously healthy individuals
  - ⇒Age < 50 years old
  - ⇒Previously healthy
  - ⇒Critical illness (e.g., ICU admission or death)
  - ⇒Confirmed respiratory *S. aureus*\* and influenza co-infection

\**S. aureus* isolates should be tested for antimicrobial susceptibility.

DOH PHL can assist with bacterial cultures or testing for influenza on both pre-mortem and post-mortem specimens in such cases. The PHL also requests forwarding of the relevant *S. aureus* isolates for further testing. To report one of these entities or to obtain information or assistance with respect to influenza surveillance, please consult a YHD communicable disease investigator at (509) 249-6541.

### Recommendations for Influenza Vaccination

As a reminder, vaccinating both patients and health care providers for influenza may reduce serious respiratory illnesses and deaths in the community. Recommendations for influenza vaccination were recently expanded. In addition to children 6 months to 4 years included in previous recommendations, all children ages 5 to 18 years of age should be offered vaccination. Children aged 6 months to 8 years should receive two doses of vaccine if they have not been vaccinated previously at any time against influenza. Either trivalent inactivated influenza vaccine (TIV) or live, attenuated influenza vaccine (LAIV) can be used when vaccinating healthy persons aged 2–49 years. LAIV should not be administered to children aged <5 years with possible reactive airways disease, such as those who have had recurrent wheezing or a recent wheezing episode. Children with possible reactive airways disease, persons at higher risk for influenza complications because of underlying medical conditions, children aged 6–23 months, and persons aged >49 years should receive TIV.

For additional clinical information regarding influenza immunization, see the most current ACIP recommendations available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e717a1.htm>.

YHD does not directly provide clinical immunization services. A listing of local influenza immunization clinics can be downloaded at <http://www.yakimacounty.us/health/commhealth/flushots.htm>. For further questions regarding influenza immunization please contact Tess White at (509) 249-6514.

*Acknowledgement: This article was adapted from materials distributed by DOH Communicable Diseases Epidemiology Finelli L, Fiore A, Brammer L, et al. Influenza-Associated Pediatric Mortality in the United States: Increase of Staphylococcal aureus Co-infection. Pediatrics 2008;122(4):805–11.*

# 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, MS, RS, 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 Consultant*



Condition (includes confirmed and probable cases)	Cases			Total Cases by Year	
	Jan-Nov	Jan-Nov	Jan-Nov	Total Cases by Year	Total Cases by Year
	2008	2007	2006	2007	2006
Campylobacteriosis	110	114	198	124	202
Cryptosporidiosis	6	16	6	19	7
Enterohemorrhagic E. coli	11	5	5	5	5
Giardiasis	18	47	28	47	33
Salmonellosis	42	30	32	34	34
Shigellosis	8	23	32	26	32
Hepatitis A acute	1	0	1	0	1
Hepatitis B acute	0	1	5	1	5
Hepatitis B chronic	8	11	11	12	12
Hepatitis C acute	0	1	1	1	1
Hepatitis C chronic	152	209	173	228	176
Meningococcal	1	2	1	2	1
Pertussis	23	37	20	37	21
Tuberculosis	10	12	15	12	16
HIV New	9	10	7	10	10
HIV Deaths	3	1	2	1	2
HIV Cumulative Living	162	152	139	152	142
Chlamydia	1066	1107	1027	1168	1120
Genital Herpes—Initial	65	42	65	46	70
Gonorrhea	83	106	156	119	166
Primary and Secondary Syphilis	1	0	3	0	3

**Notifiable  
Conditions  
Summary  
Jan– Nov,  
2008**