



Yakima Health District BULLETIN

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National Poison Prevention Week

March 15-21 is National Poison Prevention Week. This year's theme is "It's Time to Call Mr. Yuk." The winning entry from

Washington Poison Center's (WPC's) 2009

Poster Contest, co-sponsored by YHD, will be displayed on billboards throughout the state (including a Spanish-language version in Yakima). The goal of Poison Prevention Week is to reduce illnesses, injuries, and deaths due to poisonings; build safer communities; and reduce unnecessary health care costs for everyone. A list of ideas for activities related to Poison Prevention Week can be viewed at:

<http://www.yakimacounty.us/health/documents/bulletin/PoisonPrevWeek.pdf>.

In 2007, over 1000 Washington State residents died due to poisoning. This number exceeds injury deaths occurring as a result of falls (750), transportation (685), firearms (544), suffocation (306), and drowning (103). The vast majority of these poisonings (801; 75%) were unintentional (See Figure Below). In 2008, WPC handled nearly 95,000 calls from residents, health care providers, and first response personnel. The majority of these (76,000) were related to exposures, of which 53% involved young children. Consistent with the mortality data cited below in the Figure, 45% of exposure reports involved drugs. Common over-the-counter remedies, prescription drugs, and household products (e.g., acetaminophen, ibuprofen, benzodiazepines, cleaning products) were the leading

causes for calls. Nationwide, 73% of calls to poison centers were adequately handled over the telephone, thereby avoiding unnecessary medical visits (and assuring prompt referral for those cases that did require immediate evaluation).

In summary, the vast majority of poisoning exposures and deaths involve recreational, prescription, and over-the-counter medications. The rate of fatal poisonings appears to be increasing over the past decade. Washington's Poison Center services are more important now than ever, providing urgent consultation to consumers and health care providers, as well as prevention materials and community education to diverse audiences. WPC's leadership includes two local members among its Board of Directors: Shawnie Haas (Yakima Heart Center) and Dennis Klukan (YHD Administrator).

For patient information materials and further information about poisoning prevention and the Washington Poison Center, visit: www.wapc.org 1-800-222-1222

Local Influenza Activity Documented

Laboratory surveillance revealed the abrupt onset of local influenza activity during the second week of February, with positivity rates among submitted specimens increasing from zero to about 10% over the course of one-to-two weeks (<http://www.yakimacounty.us/health/commhealth/immproviders.htm>).

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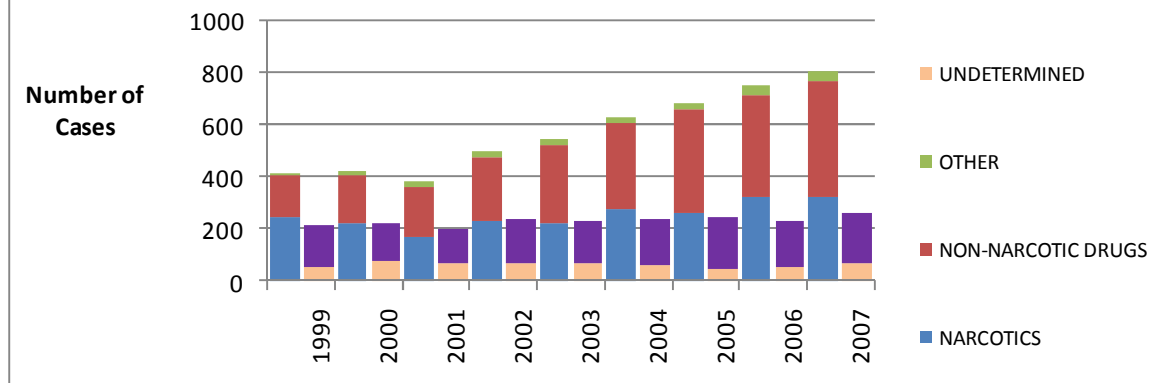
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Poisoning Deaths in WA State 1999-2007



This is a much later onset of influenza activity than in recent years. Type A has accounted for the vast majority of cases locally, statewide and nationally. Among those type A isolates that have been further sub-typed by the Washington State Public Health Laboratories and the Centers for Disease Control and Prevention (CDC), over 90% are H1N1 (as opposed to H3N2). Please recall that national surveillance data from Fall 2008 indicated that virtually all H1N1 isolates were resistant to oseltamivir; H1N1 isolates appear to remain sensitive to zanamivir. Consequently, when anti-viral therapy will be offered to patients with suspected influenza, the preferred regimen for influenza of unknown type, type A not-further-specified, and type A(H1N1) is zanamivir. For a full consideration of this topic please review the applicable Health Advisory distributed by YHD on December 19, 2008 <http://www.yakimacounty.us/health/providersonly/documents/BulletinUpdateflutreatmentDEC2008.pdf>.

Respiratory syncytial virus detection appears to be leveling off, with about 40% of submitted specimens from February testing positive.

<http://www.yakimacounty.us/health/commhealth/immproviders.htm>
<http://www.doh.wa.gov/EHSPHL/Epidemiology/cd/fluupdate.htm>
<http://www.cdc.gov/flu/weekly/>

Childhood Tooth Decay

Although tooth decay is a preventable disease, people continue to suffer from it. For children it is the single most common chronic disease. According to CDC, the proportion of young children who had a history of dental caries in their primary teeth increased from 18 percent during 1988-1994 to 24 percent during 1999-2004. Statistics from Yakima County are even more compelling. According to the 2005 Smile Survey data, 57 percent of 3-5 year old children in Head Start or ECEAP programs already had decay experience (cavities and/or fillings). 27 percent of these children had untreated dental decay and 32 percent had a history of rampant dental decay (decay experience in 7 or more teeth). Compared to Washington State's Smile Survey, Yakima County had higher prevalence of any decay, rampant decay, and untreated decay. For Washington State, the figures were 45%, 25%, and 15% respectively.

These observations reinforce the notion that parents need to be educated on how to care for their children's teeth from a young age. One important first step is for parents to bring their child to a dentist on or before their first birthday. This is the perfect time to educate parents on nutrition, getting rid of the bottle at age 1, and brushing their child's teeth twice daily. This visit can be performed in a medical office as well as a dental office.

The procedure for a first year dental visit is quite easy and takes very little time. The practitioner lays the infant's head in his lap while he is knee to knee with the parent. The child can then stretch out across the two adults. The parent can help with holding the child while the practitioner lifts the child's lip to look for decay and shows the parent how to brush the teeth. Fluoride varnish can be applied at this visit to prevent decay.

Scheduling a child for a first year dental visit has never been easier in Yakima County. We have recently seen access to dental care for children age 0-18 in Yakima expand tremendously. We have had the ABCD (Access to Baby and Child Dentistry) program in Yakima for almost 10 years now. It is managed by the Yakima Valley Dental Society. The program provides Medicaid eligible children from birth through age six the opportunity for dental

prevention and treatment services through participating providers. The newest pediatric dental services in Yakima County include Yakima Pediatric Dentistry, Summitview Pediatric Dentistry, Apple Valley Dental, and Sunnyside Community Dental Clinic. All of these offices cater to young children. From their bright décor and themed rooms to their game rooms, children will love going to the dentist! A complete list of pediatric dentists can be found at the Yakima County Health District website: www.yakimapublichealth.org.

For further information about access to dental care in Yakima County, please contact Heather Young, Oral Health Coordinator for Yakima County, at 509-952-2206. To learn more about the ABCD program, please contact Susanna Sandoval at (509) 248-1305 or 1-800-964-9889.

<http://www.yakimacounty.us/health/childhealth/ohoverview.htm>
<http://www.doh.wa.gov/Data/Oral.htm>

Submitted by Heather Young, Oral Health Coordinator for YHD

Listeriosis Update for Health Care Providers

In the preceding five weeks, two mother-infant pairs from Yakima County and another from Klickitat County have been diagnosed with listeriosis. Impact on pregnancy outcome has been significant: one stillbirth occurred and one preterm infant died shortly after birth; the sole surviving child was in intensive care but has since recovered and has been discharged home. DNA fingerprinting demonstrates a single strain affecting all three mother-infant pairs, as well as a fourth pair recently diagnosed in King County. Investigation of how the cases are linked and pursuit of the possible common source of infection continues by the Yakima Health District, Klickitat County Health Department, and Washington State Department of Health (DOH). The similar location, timing, and common strain are strongly suggestive of an association. The operating assumption is that they acquired infection from a common food product. Additional information obtained in working with DOH suggests that similar cases in Washington State matching this DNA fingerprint over the past two years have been associated with consumption of soft style cheeses.

Listeriosis is caused by *Listeria monocytogenes*, a gram-positive bacillus that is most commonly associated with disease in pregnant women, neonates, and immunocompromised individuals. Clinical manifestations include chorioamnionitis and septic abortion or pre-term delivery in pregnant women and meningococcal sepsis in infants and immunocompromised individuals. Febrile gastroenteritis is occasionally observed in otherwise healthy non-pregnant individuals. Pregnant women may present with only a mild febrile illness that is difficult to differentiate from other less worrisome conditions. Post-partum courses are usually uneventful for affected women, but mortality can approach or exceed 50% among affected infants and immunocompromised individuals. Diagnosis is based upon clinical suspicion and isolation of the organism from affected fluids or tissues (e.g., blood, cerebrospinal fluid, meconium, placenta). **The microbiology laboratory should be notified when listeriosis is suspected so that its isolation is specifically pursued and growth is not mistaken for saprophytic organisms (e.g., diphtheroids).** Management includes administration of ampicillin and gentamicin and supportive care (usually intensive care for neonates and immunocompromised). Alternative treatment for penicillin-allergic patients includes trimethoprim-sulfamethoxazole.

Cephalosporins are not effective against *L. monocytogenes*.

Listeriosis is most often acquired by ingestion of the following contaminated animal products: soft cheeses, unpasteurized milk and foods made from it, uncooked hot dogs, ready-to-eat delicatessen meats, and pâtés. The organism can multiply in contaminated foods even when held at refrigeration temperatures. Prevention focuses on basics of good food handling and avoidance of the aforementioned food products by pregnant women and immunocompromised individuals. Prior to consumption by high-risk individuals, any such foods must be heated until steaming hot. Pasteurized milk and milk products, hard cheese, processed cheese, cream cheese, cottage cheese, and yoghurt need not be avoided.

If you suspect listeriosis in a patient, please be sure to collect appropriate specimens for culture. If the diagnosis is confirmed, please ask the laboratory to save the isolate. Report confirmed cases to YHD on the same or next working day by calling (509) 249-6541.

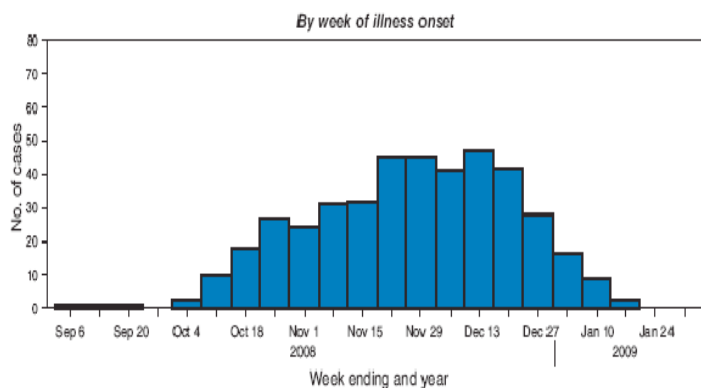
Informational materials targeted at pregnant women are available on the YHD web page or by calling the number listed above. Thank you for your consideration of this matter.

Peanut-associated Salmonellosis

As of February 24th, 2009, the national *Salmonella enterica* (serovar Typhimurium) outbreak associated with peanut products has reached 666 cases nationwide, including 116 (18%) hospitalizations and nine deaths. Given the Centers for Disease Control's estimate that less than 10% of all salmonellosis cases are reported, these numbers represent a minimum estimate of the health impact of the outbreak. Case incidence is decreasing, with the last confirmed case reporting an onset of February 3 (not shown in Figure 1). Nineteen Washington State residents from 15 counties have been affected. Federal health officials remain concerned that cases are ongoing due to consumers' ingestion of affected products currently located in their homes but which have not yet been discarded.

Initial epidemiologic investigations in late 2008 implicated a single, non-retail brand of peanut butter provided to institutions in bulk. Later, packaged retail snacks and candies using peanut paste from the same producer were also implicated. These epidemiologic findings were corroborated by isolation of the identical strain of *Salmonella* from samples of peanut butter and snack products. Extensive product recalls are underway across the country after inspection found deficits at the implicated production facilities (Peanut Company of America [PCA], Atlanta, Georgia; www.peanutcorp.com).

Figure 1. Number of laboratory-confirmed cases of *Salmonella* Typhimurium with peanut product-associated outbreak strain (initial 529 cases reported as of January 29, 2009)



Courtesy of Centers for Disease Control and Prevention

A variety of products containing peanuts or ground peanuts are involved with the recalls, including pet snacks. Major retail peanut butter brands were not involved in the outbreak nor were they included in the recall. For a list of recalls affecting products shipped to Washington visit: <http://www.doh.wa.gov/ehp/food/salmonellaoutbreak.html>

To minimize risk of infection consumers should:

- Discard any recalled products
- Avoid and/or discard any peanut products whose recall status is unknown
- Avoid direct handling of recalled pet products

It is noteworthy that this outbreak was first detected by laboratory surveillance at the national level, when unusual numbers of isolates matching this strain type were observed by a coordinated network of public health laboratories which routinely conduct pulse field gel electrophoresis (DNA fingerprinting) and forward results to a national database managed by CDC. This observation led to more intensive, exploratory interviews of selected cases to generate hypotheses, subsequent case-control investigations to test those hypotheses, and ultimately to identification of the source. This outbreak investigation demonstrates the power of molecular epidemiology to detect and permit earlier control of food-borne disease outbreaks. It also highlights the technical challenges of identifying and controlling sources of infection in our modern food supply where centralized production with wide distribution is common. Finally, it underscores the devastating impact which errors and omissions with respect to sanitation and hygiene in food production can have upon consumers and businesses. Meanwhile, PCA has filed for bankruptcy.

For more detailed information on the outbreak and its investigation and control, please visit:

<http://www.doh.wa.gov/EHSPHL/epitrends/09-epitrends/09-02-epitrends.htm>

<http://www.doh.wa.gov/ehp/food/salmonellaoutbreak.html>

<http://www.cdc.gov/salmonella/typhimurium/update.html>

Adapted from materials provided by the Office of Communicable Diseases Epidemiology, Washington State Department of Health and the CDC.

Haemophilus influenzae type b Surveillance

The previous edition of the YHD Bulletin addressed the shortage of *Haemophilus influenzae* type b (Hib) vaccine, temporary deferral of routine Hib booster doses, and its potential effect on herd immunity. More information has come in from the national perspective. In 2008, the state of Minnesota reported five cases of *Haemophilus influenzae* (Hib) infection among children less than five years of age. During the preceding ten years, Minnesota averaged about one reported case per year. Although changes in small numbers imply broad confidence intervals and limited ability to draw strong conclusions, the concern is that a national vaccine shortage (and delayed booster doses) may have resulted in reduced herd immunity and increased Hib carriage. A forthcoming study will test around 2,000 Minnesota children to determine the prevalence of Hib carriage. No other states, including Washington, reported increases in Hib cases during 2008.

http://www.yakimacounty.us/health/documents/bulletin/bulletin6_12.pdf; <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58e0123a1.htm>

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<http://www.yakimapublichealth.org>

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Notifiable Conditions Summary Jan– Dec, 2008

Condition (includes confirmed and probable cases)	Cases		
	Jan-Dec	Jan-Dec	Jan-Dec
	2008	2007	2006
Campylobacteriosis	120	124	202
Cryptosporidiosis	7	19	7
Enterohemorrhagic E. coli	11	5	5
Giardiasis	22	47	33
Salmonellosis	49	34	34
Shigellosis	8	26	32
Hepatitis A acute	2	0	1
Hepatitis B acute	2	1	5
Hepatitis B chronic	9	12	12
Hepatitis C acute	0	1	1
Hepatitis C chronic	183	227	176
Meningococcal Disease	1	2	1
Pertussis	29	37	21
Tuberculosis	10	12	16
HIV New	9	10	10
HIV Deaths	6	1	2
HIV Cumulative Living	159	152	142
Chlamydia	1163	1168	1120
Genital Herpes—Initial	65	46	70
Gonorrhea	86	119	166
Primary and Secondary Syphilis	1	0	3