



Yakima Health District MONTHLY BULLETIN

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WEST NILE VIRUS SURVEILLANCE

Mosquito season is approaching and the Washington State Department of Health is ramping up WNV surveillance efforts. Specific activities include:

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- trapping and identifying mosquitoes,
- tracking the number of dead bird reports,
- collecting certain dead birds for laboratory testing,
- notifying health care providers to look for and report symptoms of West Nile virus in patients,
- notifying veterinarians to look for and report horse and other animals with signs of West Nile virus, and
- distributing information on the virus and how to control mosquitoes.

For reasons that are not completely clear, our state has still not had a well-documented locally acquired human case despite evidence of WNV transmission in neighboring states. Given the airborne nature of its mosquito vector and bird victim, this would seem unlikely to continue indefinitely. Please consider WNV and other arthropod borne agents in your differential diagnosis when evaluating patients with febrile illnesses, especially if neurologic symptoms are present. Testing for WNV is based upon serology in serum or CSF collected eight days after onset of illness. Private laboratories should be relied upon for these services, with the Washington State Department of Health confirming positive or equivocal results in clinically compatible cases. Suspected cases of arboviral disease, including WNV, are a notifiable condition; please call YHD at (509) 249-6541 to report such cases or to obtain consultation. For more patient education materials or clinical guidance, visit the following websites:

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

REPELLENTS

Repellents are an important tool to assist people in protecting themselves from mosquito-borne diseases.

A wide variety of insect repellent products are available. CDC recommends the use of products containing active ingredients which have been registered with the US Environmental Protection Agency (EPA) for use as repellents applied to skin and clothing.

Of the active ingredients registered with the EPA, two have demonstrated a higher degree of efficacy in the peer-reviewed, scientific literature. Products containing these active ingredients typically provide longer-lasting protection than others:

- DEET (N, N-diethyl-m-tolumamide)
- Picaridin (KBR 3023)

EPA recommends the following precautions when using insect repellents:

- Apply repellents only to exposed skin and/or clothing (as directed on the product label). Do not use repellents under clothing.
- Never use repellents over cuts, wounds or irritated skin.
- Do not apply to eyes or mouth, and apply sparingly around ears. When using sprays, do not spray directly on face—spray on hands first and then apply to face.
- Do not allow children to handle the product. When using on children, apply to your own hands first and then put it on the child. You may not want to apply to children's hands.
- Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation are generally unnecessary for effectiveness. If biting insects do not respond to a thin film of repellent, then apply a bit more.
- After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, wash treated clothing before wearing it again. (This precaution may vary with different repellents—check the product label).

Note that the label for products containing oil of lemon eucalyptus specifies that they should not be used on children under the age of three years. Other than those listed above, EPA does not recommend any additional precautions for using registered repellents on pregnant or lactating women, or on children.

Please continue to remind patients to eliminate mosquito breeding grounds by removing locations for standing water, along with reducing exposure to mosquitos at dusk and dawn, the times they are most active. For additional prevention information, please visit our website at: <http://www.co.yakima.wa.us/health/commhealth/vwnv.htm> or call Allison Schletzbaum at (509) 249-6550.

RESIRATORY DISEASE SURVEILLANCE

Based upon local laboratory surveillance data, influenza and respiratory syncytial virus transmission appears to have peaked in mid-to-late February and has now ceased. Influenza cases were split equally between types A and B, with an early season predominance of A giving way to type B during February and March. The last laboratory confirmed influenza case occurred during the third week of April and last case of RSV during the second week of May. For more information, visit <http://www.yakimapublichealth.org> and click on RSV & Flu Statistics.

Pertussis transmission continues to occur, however, with sporadic cases and familial or social clusters being reported. Since the beginning of 2005, 40 cases have been reported (historical average 2002-2004: 21 cases). As previously recommended by YHD, please consider the diagnosis in any patient with persistent cough greater than two weeks in duration or cough of any duration with associated with features suggestive of pertussis (paroxysms, post-tussive vomiting, inspiratory whoop, apnea). A history of vaccination, which is only about 80% efficacious and wanes with time, does not eliminate pertussis from the differential diagnosis. Diagnostic efforts should focus on collections of nasopharyngeal swab or lavage for PCR and culture. DFA has limited sensitivity and specificity and a negative DFA result does not exclude the diagnosis. YHD recommends that health care providers collecting such specimens wear a mask capable of protecting against exposure to large droplets; outbreaks have affected, and even been propagated by, health care workers exposed to infectious patients. Treatment is with a macrolide or azalide, and patients should be considered infectious until completion of five days of treatment. Please report cases immediately to YHD at (509) 249-6541 so that we can ensure appropriate management of exposed person to prevent further transmission. For more detailed information on treatment and other aspects of pertussis control, please review our article in the January 2005 edition of the Bulletin (http://www.co.yakima.wa.us/health/documents/bulletin/bulletin4_1.pdf).

THANK YOU TO HOSPITAL LABORATORIES!

Because of your efforts this season, YHD was able to compile comprehensive information about the prevalence of respiratory disease, specifically Flu & RSV, in our community.

Specifically, we would like to thank Marie Clark of Memorial Hospital, Jim Gretner of Sunnyside Community Hospital, and Vern Graham, who reported for both Yakima Regional and Toppenish Community Hospital. We would also like to thank all of their staff members who assisted with this project for the past 30+ weeks.

You can view the results of their efforts by visiting www.yakimapublichealth.org and clicking on RSV & Flu Statistics.

NEW TETRAVALENT MENINGOCOCCAL CONJUGATE VACCINE

Earlier this year, the U.S. Food and Drug Administration (FDA) approved a new quadrivalent *conjugate* vaccine (*Menactra*TM) for the prevention of invasive meningococcal disease caused by *Neisseria meningitidis* serogroups A, C, Y, W-135. The vaccine is licensed for use in adolescents and adults aged 11-55 years. Although the manufacturer is seeking approval for use in those aged 2-10, it is not so approved at this time. A quadrivalent *polysaccharide* vaccine has been available in the U.S. for many years; however, it is not recommended for routine vaccination.

In its February 2005 meeting, CDC's Advisory Committee on Immunization Practices (ACIP) voted to recommend routine vaccination for the preadolescent visit (age 11-12 years). Although no formal "catch-up" campaigns were recommended, routine vaccination is also recommended for previously unvaccinated children at high school entry, matriculating college freshmen living in dormitories, and other groups at high risk (microbiologists routinely exposed to isolates of *N. meningitides*, travellers to or residents of countries with epidemic *N. meningitides*, military recruits, and complement-deficient and asplenic patients). The Committee also recommended that clinicians permit vaccination among others aged 11-55 years who wish to decrease their risk of meningococcal disease.

The Washington State Department of Health Vaccine Advisory Committee is in the process of making recommendations for use and funding of this vaccine. YHD will make you aware of these medical recommendations and funding policies as they emerge.

Product approval information about *Menactra*TM can be found on the FDA website, <http://www.fda.gov/cber/approvltr/mpdtave011405L.htm>.

For manufacturer information, see <http://www.menactra.com/>.

For more information about meningococcal disease and travel, see <http://www.cdc.gov/travel/diseases/menin.htm>.

HANFORD COMMUNITY HEALTH PROJECT

You may recall the January edition of the YHD Bulletin announcing the availability of internet-based continuing education regarding thyroid evaluation in the context of concern about exposure to I-131 via releases from the Hanford Nuclear Reservation. YHD would also like to make you aware of an additional resource for you and concerned patients. The Hanford Community Health Project (HCHP) is an outreach and education initiative sponsored by ATSDR (Agency for Toxic Substances and Disease Registry). The project provides educational resources to individuals and their health care providers, the goal being to facilitate informed health care choices concerning possible exposures. For more information and continuing education opportunities, visit www.hanfordhealth.info. This site includes a new streaming video that addresses the psychological aspects of exposure and how to help patients cope.

Health care providers should visit the Centers for Disease Control and Prevention Web site to review the results of the Hanford Thyroid Disease Study. The study, which was published in the December 1, 2004 issue of the *Journal of the American Medical Association*, was conducted to determine if exposure to I-131 releases from Hanford resulted in an increased incidence of thyroid disease. You can view the final report and relevant background information at www.cdc.gov/nceh/radiation/hanford/htdsweb.

SALMONELLA CASES ASSOCIATED WITH BABY CHICKS

In the past two months, 15 cases of *Salmonella* Ohio, an uncommon serotype, have been reported in Idaho (1), Oregon (6), Washington (6) and California (2). Two of the Washington cases were confirmed in Yakima County residents. Both were children under five years old that had contact with baby chicks. Of the total cases, at least nine also had contact with baby chicks.

Chicks are available in spring and early summer to consumers who purchase them from feed stores and through mail order from hatcheries. Even healthy chicks can be a source of *Salmonella* and other bacteria shed in their feces. Fecal contamination of the birds' environment can also serve as a

source of infection.

Chicks are not an appropriate pet for children, and people of all ages must wash their hands after contact with chicks, other birds, or animal and their environment. Children should be supervised around birds or animals, to avoid exposure and ensure proper hygiene after contact. Eggs and poultry can also be contaminated with bacteria and should be properly prepared and cooked to prevent illness.

In March 2005, the Washington State Department of Health distributed educational materials to feed stores in Washington regarding proper handling of chicks and ducklings. Additional information about these materials is available on our website at <http://www.yakimapublichealth.org>.

Should you see patients with symptoms of fever, diarrhea, chills, and abdominal discomfort and a history of exposure to chicks, we ask that you consider a culture for *Salmonella*. For more information or consultation, please call our Communicable Disease Reporting and Information line at (509) 249-6541.



To download these materials for FREE, please visit our website at <http://www.yakimapublichealth.org> and click on "Publications."

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<http://www.yakimapublichealth.org>

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Condition	Cases March-April			Year-to-date Jan-April		Total Cases by Year	
	2005	2004	2003	2005	2004	2004	2003
Campylobacteriosis	9	13	6	20	30	103	116
Cryptosporidiosis	0	1	0	0	1	2	3
Enterohemorrhagic E. coli	0	1	0	0	1	3	4
Giardiasis	5	4	5	5	6	31	29
Salmonellosis	9	8	9	14	9	36	55
Shigellosis	3	2	1	4	2	7	20
Hepatitis A acute	1	1	0	1	1	2	1
Hepatitis B acute	0	1	0	0	2	4	0
Hepatitis B chronic	4	3	3	5	5	22	22
Hepatitis C acute	0	2	0	0	2	2	2
Hepatitis C chronic	45	33	39	79	69	218	254
Meningococcal	0	0	1	0	1	3	4
Pertussis	16	16	6	35	23	65	17
Tuberculosis	3	2	0	5	7	11	13
HIV New	1	5	2	4	7	13	13
HIV Deaths	0	0	0	0	0	0	1
HIV Cumulative Living	136	128	111	136	128	134	122
Chlamydia	173	162	175	329	338	1002	953
Genital Herpes—Initial	16	30	15	27	51	125	82
Gonorrhea	26	21	13	43	50	198	107
Primary and Secondary Syphilis	1	0	0	2	3	0	2

**Notifiable
Conditions
Summary,
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2005**