



# Yakima Health District

## BULLETIN

Volume 14, Issue 3

September 2015

### The Yakima Health District and Lower Valley Groundwater Citizens Group Offer Free Private Well Testing

#### Actions Requested

- Encourage patients to learn the source of their drinking water and, if they are served by a private or shared well, to submit water for nitrate and bacterial testing at least annually.
- Encourage Lower Valley patients with inability to pay for such testing of their private-or-shared well to make use of free well assessments and water testing by calling the Yakima Health District Help Desk at 509-249-6508.
- Recommend that pregnant women and infants served by private-and-shared wells use bottled water for drinking and food preparation unless their well has been tested and had satisfactory results within the preceding 12 months.

The Yakima Health District (YHD), in partnership with the Lower Yakima Valley Groundwater Advisory Committee (GWAC), is conducting free well assessment surveys of private and shared wells in the Lower Yakima Valley. Free testing for nitrate and coliform bacteria in water samples will also be performed as part of the assessment. Private and shared wells are not regulated in Washington State. Their maintenance and safe operation are the responsibility of the well owner. Private wells serve single households and shared wells serve two households.

This is the second year the Health District and the GWAC have teamed up to help residents in the Lower Valley learn more about the water quality and impact to public health of the area's drinking water. Results from nitrate testing through August 21, 2014, are as follows:

Level (mg/L or ppm)	Number	Percent
0.00-2.49	51	29.7
2.50-4.99	49	28.5
5.00-9.99	44	25.6
<b>Subtotal &lt;10</b>	<b>144</b>	<b>83.7</b>
10.00-14.99	14	8.1
15.00-19.99	12	7.0
20.00-24.99	2	1.2
≥25.00	0	0.0
<b>Subtotal ≥10</b>	<b>28</b>	<b>16.3</b>
<b>Total</b>	<b>172</b>	<b>100.0</b>

With respect to bacterial testing, 28 (16%) of 172 tested wells have yielded unsatisfactory

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results and only 1 (<1%) had fecal coliform contamination. Only 4 (14%) of 28 unsatisfactory bacterial samples also had nitrate levels exceeding 10mg/L. Users of wells with nitrate results  $\geq 10\text{mg/L}$  or unsatisfactory bacterial results are advised to use another source for drinking water until the well is remediated.

The main health concerns regarding nitrate contamination of drinking water are methemoglobinemia in infants and spontaneous abortion and birth defects in pregnant women. No cases of methemoglobinemia have been reported to YHD since July 2014, when the condition became reportable by health care providers and laboratories in Yakima County. Preliminary findings from the Washington State Department of Health's ongoing investigation of elevated anencephaly rates in the Yakima-Benton-Franklin tri-County area have not shown an association with this class of wells. The vast majority of affected women have been served by regulated and monitored public water systems with nitrate levels below the 10mg/L maximum contaminant level established by the Environmental Protection Agency.

The information collected from this second year of testing will help the GWAC understand the conditions that exist around the wells and how to best help the residents ensure drinking water that meets prevailing standards. The free survey runs through February 2016. To set up an appointment to participate, Lower Valley residents are invited to call the Yakima Health District Help Desk at 509-249-6508.

To learn more about the GWAC and this program, please visit: <http://www.yakimacounty.us/gwma/>

## **Influenza Immunization Recommendations and Disease Reporting Requirements**

### Requested Actions

- Recommend annual influenza immunization for all patients  $\geq 6$  months of age beginning as soon as product becomes available and continuing until the influenza season has ended in Spring 2016.
- If you do not provide influenza immunization in your setting, refer your eligible patients to a setting that does.
- If offering live attenuated influenza vaccine, recognize the contraindications to its use.<sup>1</sup>
- Consult ACIP guidelines for details of proper influenza vaccination among patients who report an allergy to eggs.<sup>1</sup>
- Report confirmed influenza deaths, novel influenza infections, and outbreaks in institutional settings to YHD by calling (509) 249-6541.

### Influenza Vaccine Overview

Annual influenza vaccination is currently recommended for everyone 6 months of age and older who does not have a contraindication to the vaccine.<sup>1</sup> Highest priority for vaccination is among the following groups:

- Children 6 months – 59 months of age;
- People 50 years of age and older;
- People with chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus);
- People who are immunosuppressed (including immunosuppression caused by medications or by human immunodeficiency virus);
- Pregnant women;
- People who are aged 6 months through 18 years and receiving long-term aspirin therapy and who therefore might be at risk for experiencing Reye syndrome after influenza virus infection;
- Long term care facility residents;
- Native Americans;
- People who are morbidly obese (body-mass index is 40 or greater);
- Health care providers and other health facility personnel;
- Household contacts and caregivers of children younger than 5 years and adults aged 50 years and older, with particular emphasis on vaccinating contacts of children aged younger than 6 months; and
- Household contacts and caregivers of people with medical conditions that put them at higher risk for severe complications from influenza.

Each year is slightly different from the last in timing and severity of activity, but influenza viruses usually begin circulating in Pacific Northwest in December with the peak of activity in January or February. While it is best to be vaccinated before flu starts to circulate, influenza immunization should continue throughout the influenza season. Influenza activity usually continues through spring, and there are sporadic cases year round. Influenza vaccine can be used until the vaccine expires (for multi-dose vials, that is usually June 30).

The vaccine formulation this season is different from last season. The vaccine strains in the trivalent 2015-16 formulation are:

- A/California/7/2009 (H1N1)pdm09-like virus
- A/Switzerland/9715293/2013 (H3N2)-like virus
- B/Phuket/3073/2013-like virus

Some of the 2015-2016 flu vaccine is quadrivalent vaccine and also protects against an additional influenza B virus (B/Brisbane/60/2008-like virus). All of the live-attenuated nasal spray and the intradermal vaccine are quadrivalent. The Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) expresses no preference for quadrivalent or trivalent vaccine in its recommendations.

Children 6 months through 8 years of age who have not received at least two doses of seasonal influenza vaccine during their lifetime should receive two doses of the 2015-16 seasonal influenza vaccine. The two doses should be administered a minimum of 28 days apart.

High-dose vaccine (Fluzone) has been available for people aged 65 years and older. In large studies, the high-dose vaccine was found to be nearly 25% more effective in preventing influenza than the standard preparation and nearly 20% more effective than standard dose in preventing overall serious flu-related events (death, hospitalization or prolonged hospitalization).<sup>2-3</sup> CDC has not expressed a preference for this vaccine over any other influenza preparation for seniors. Following CDC guidelines, most people who are allergic to eggs can be vaccinated. See the full guidance and an easy to read algorithm for immunization of egg-allergic people.<sup>1</sup>

### Influenza Reporting Requirements

Please report the following to the Yakima Health District by calling (509) 249-6541:

- Laboratory positive influenza deaths in persons of all ages (within 3 days).
- Patients suspected to have a novel influenza virus such as avian influenza A (H5N1) virus (immediately).
- Outbreaks of influenza-like illness or laboratory positive influenza in institutional settings, such as long term care facilities (within 24 hours).

### Influenza Surveillance Updates

Weekly updates will be posted on our website summarizing submission and positivity rates for influenza and respiratory syncytial virus (RSV) from local participating laboratories.

[http://www.yakimacounty.us/yakimahealthdistrict/rsv\\_flu\\_stats.php](http://www.yakimacounty.us/yakimahealthdistrict/rsv_flu_stats.php)

Additional regional, statewide and national surveillance summaries that are updated weekly can be viewed at the following sites:

Clinical Virology Laboratory, University of Washington - <http://depts.washington.edu/rspvirus/respiratory.htm>

Washington State Department of Health -

<http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/CommunicableDiseaseSurveillanceData/InfluenzaSurveillanceData>

Centers for Disease Control and Prevention - <http://www.cdc.gov/flu/weekly/>

### Sources

<sup>1</sup>Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices, United States, 2015–16 Influenza Season. *MMWR* 2015; 64(30);818-825. [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.htm?s\\_cid=mm6430a3\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.htm?s_cid=mm6430a3_e)

<sup>2</sup>DiazGranados CA, et al. Prevention of serious events in adults 65 years of age or older: A comparison between high-dose and standard-dose inactivated influenza vaccines. *Vaccine*, Volume 33, Issue 38, Pages 4988-4993

<sup>3</sup>DiazGranados CA, et al. Efficacy of high-dose versus standard-dose influenza vaccine in older adults. *N Engl J Med* 2014; 371(7):635–645.

## Tdap in 3<sup>rd</sup> Trimester of Pregnancy—One Shot, Two Beneficiaries

### Requested Action

- Recommend pertussis booster vaccination with Tdap for all women during the third trimester during each and every pregnancy.
- If you do not directly provide the booster vaccine in your setting, make the recommendation still, provide a referral and/or write a prescription to the setting that will administer the vaccine (e.g., pharmacy, primary care), and track the outcome at the next patient encounter.

### Background

With just nine cases reported from January through July, Yakima County has escaped the recent surge of pertussis cases being reported statewide in 2015 (see Table 1). This follows by several years a 2012-2013 statewide outbreak that led to almost 600 cases in Yakima County. Maintaining an adequately immunized population is key to mitigating transmission if and when introductions of the organism into the community occur.

Table 1. Pertussis Morbidity, Yakima County & Washington State, 2011-2015

Time Period	Yakima County		Washington State	
	Cases	Rate (per 100K)	Cases	Rate (per 100K)
2011	11	5	962	14
2012	493	200	4,916	72
2013	101	41	748	11
2014	17	7	601	9
Jan-Jul 2015	9	6*	1086	27*

\*Rate is annualized for comparison to prior years

Because unimmunized infants <6 months are the most vulnerable to developing severe and potentially fatal complications (e.g., pneumonia, hypoxia, respiratory failure, seizures, encephalopathy), making sure that family members and care providers of such infants are completely immunized is a top disease control priority. Furthermore, evidence demonstrates that passive antibody transfer from 3<sup>rd</sup> trimester maternal boosting with acellular pertussis vaccine (Tdap) affords substantial benefits in reducing transmission and severe complications of pertussis in infants and is not associated with increased risk of harm to the mother or fetus. This practice is now formally recommended by CDC.<sup>1</sup> Several studies have suggested that passively acquired maternal pertussis antibodies can reduce active pertussis-specific antibody production after administration of DTaP. However, this has not been deemed or observed to be of substantial public health impact. Shifting any risk from early infancy to later is generally considered a favorable trade, and subsequent booster doses should render moot this potential concern.<sup>1-3</sup>

Table 3. Infant Pertussis Cases, Yakima County, 2011-2015

Year	Cases <365 day of age
2011	2
2012	42
2013	17
2014	2
2015*	2
*January-July only	

### Local Maternal 3<sup>rd</sup> Trimester Tdap Data

YHD conducted a retrospective assessment of maternal Tdap booster history in a convenience sample of 20 consecutive births registered in Yakima County during April 23 through May 9, 2015. As Table 2 shows, at best only one-half of new mothers had been appropriately boosted.

Table 2. Tdap History among 20 Consecutive Registered Births, Yakima County, 2015

Tdap in 3 <sup>rd</sup> Trimester?	Number	Percent (%)	
		Total	Known Status
Yes	8	40	53
No*	7	35	47
Unknown/No Response	5	25	--
Total	20	100	100
*includes 1 boosted in the 1 <sup>st</sup> trimester			

### Statewide Quality Improvement Project

The Washington State Department of Health is working to more precisely estimate the percentage of pregnant women at delivery that had received Tdap vaccine during their current pregnancies. The goal of the project is to improve our understanding of current practices for ensuring that pregnant women receive Tdap and influenza vaccine during their pregnancies or at delivery in order to tailor future public and provider education in support of these recommendations.

For more information on Tdap boosting in pregnancy, visit:

CDC. Guidelines for Vaccinating Pregnant Women. <http://www.cdc.gov/vaccines/pubs/preg-guide.htm>

Washington State Department of Health. Tdap Vaccine. <http://www.doh.wa.gov/YouandYourFamily/Immunization/DiseasesandVaccines/TdapTetanusDiphtheriaPertussisVaccine>

### Sources

<sup>1</sup>CDC. Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine (Tdap) in Pregnant Women and Persons Who Have or Anticipate Having Close Contact with an Infant Aged <12 Months. *MMWR* 2011; 60(41):1424-1426. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6041a4.htm>

<sup>2</sup>Ladhani SN, et al. Antibody Responses After Primary Immunization in Infants Born to Women Receiving a Pertussis-containing Vaccine During Pregnancy: Single Arm Observational Study With a Historical Comparator. *Clin Infect Dis* 2015 (in press).

<sup>3</sup>Cherry J. The Effect of Tdap Vaccination of Pregnant Women on the Subsequent Antibody Responses of Their Infants (editorial). *Clin Infect Dis* 2015 (in press).

## **Infection Control Reminder**

### Requested Action

- Be sure that your setting has an appropriately tailored infection control program to protect patients and staff from preventable acquisition of infectious diseases.
- Consult the relevant guidelines listed at the end of this report.

### Background

A recently recognized incident of inadequate sterilization of medical equipment at a health care facility in western Washington has led to the notification of thousands of recent patients to offer testing for bloodborne pathogens.<sup>1</sup> Prior episodes of a similar nature in other settings have caused outbreaks of a variety of infectious diseases

associated with endoscopy, bronchoscopy, hemodialysis and point-of-care glucose testing equipment. While the primary concern is that these lapses can result in nosocomial transmission of potentially serious infections, they may also affect the reputation of the affected facilities in an unjustified manner and they conceivably could undermine patients' confidence in consenting to medically necessary procedures.

### Sources

<sup>1</sup>Safety Issue Information: Bellevue Clinic and Surgery Center.

<http://www.seattlechildrens.org/stay-informed/safety-issue-information-bellevue-clinic-and-surgery-center/>

Links to key setting-specific infection control guidelines are set forth below.

Infection prevention in ambulatory care clinics:

<http://www.cdc.gov/HAI/pdfs/guidelines/Outpatient-Care-Guide-withChecklist.pdf>

2008 Guideline for Disinfection, and Sterilization in Healthcare Facilities

[http://www.cdc.gov/hicpac/Disinfection\\_Sterilization/1\\_sumIntroMethTerms.html](http://www.cdc.gov/hicpac/Disinfection_Sterilization/1_sumIntroMethTerms.html)

Guidelines for Environmental Infection Control in Healthcare Facilities

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm>

Guideline for Hand Hygiene in Healthcare Settings

<http://www.cdc.gov/mmwr/PDF/rr/rr51116.pdf>

2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

[http://www.cdc.gov/hicpac/2007IP/2007ip\\_ExecSummary.html](http://www.cdc.gov/hicpac/2007IP/2007ip_ExecSummary.html)

Guideline for the Prevention of Surgical Site Infection, 1999

<http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/SSI.pdf>

Guidelines for the Prevention of Intravascular Catheter-Related Infections, 2011

<http://www.cdc.gov/hicpac/pdf/guidelines/bsi-guidelines-2011.pdf>

Management of Multi-drug Resistant Organisms in Healthcare Settings, 2006

[http://www.cdc.gov/hicpac/mdro/mdro\\_toc.html](http://www.cdc.gov/hicpac/mdro/mdro_toc.html)

Influenza Vaccination of Health-Care Personnel, 2006

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm>

Guideline for Infection Control in Healthcare Personnel 1998

<http://www.cdc.gov/hicpac/pdf/InfectControl98.pdf>

Recommendations for Preventing Transmission of Infections Among Chronic Hemodialysis Patients available at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm>

Guidelines for Infection Control in Dental Health-Care Settings – 2003 available at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm>

Infection prevention in outpatient oncology clinics

<http://www.cdc.gov/hai/pdfs/guidelines/basic-infection-control-prevention-plan-2011.pdf>

CDC Website on Healthcare-associated infections

[www.cdc.gov/hai](http://www.cdc.gov/hai)

CDC Website on Hand Hygiene in Healthcare facilities

[www.cdc.gov/handhygiene](http://www.cdc.gov/handhygiene)

CDC Website on Injection Safety

[www.cdc.gov/injectionsafety](http://www.cdc.gov/injectionsafety)

CDC's *One & Only Campaign*

[www.oneandonlycampaign.org](http://www.oneandonlycampaign.org)

# 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>

**André Fresco, MPA, Administrator**  
**Christopher Spitters, MD, MPH, Health Officer**  
**Sheryl Di Pietro, Director of Community Health**  
**Ryan Ibach, Director of Environmental Health**  
**Diane Bock, Community Health Supervisor**



Notifiable Condition <i>(includes confirmed and probable cases)</i>	Cases				
	Jan – Aug	Jan – Aug	Jan – Aug	Total Cases by Year	Total Cases by Year
	2015	2014	2013	2014	2013
Campylobacteriosis	116	57	109	97	154
Chlamydia	1043	993	926	1504	1379
Cryptosporidiosis	4	7	3	7	3
Genital Herpes - Initial	86	40	41	60	56
Giardiasis	16	9	6	16	11
Gonorrhea	242	248	95	406	181
Hepatitis A acute	0	0	3	0	4
Hepatitis B acute	0	0	0	0	0
Hepatitis B chronic	9	7	2	11	6
Hepatitis C acute	1	2	0	2	0
Hepatitis C chronic	157	198	119	300	176
HIV/AIDS Cumulative Living	194	195	188	195	192
HIV/AIDS Deaths	3	0	2	2	4
HIV/AIDS New	2	7	4	8	8
Meningococcal Disease	0	1	0	1	0
Pertussis	10	14	117	18	128
Salmonellosis	34	30	23	53	31
Shigellosis	1	12	3	14	6
STEC (enterohemorrhagic E. coli)	14	10	15	15	21
Syphilis - Primary and Secondary	3	8	9	15	14
Tuberculosis	10	2	1	4	9

**Notifiable  
Conditions  
Summary  
Jan - August  
2015**

## TRAINING DETAILS

This training will consist of interactive lectures, a panel discussion, and case presentations.

Lunch will be provided.

**DATE:** Thursday, November 19, 2015

**TIME:** 10:00 a.m. – 3:30 p.m.  
(Registration begins at 9:30 a.m.)

**PLACE:** SAMARITAN HOSPITAL  
801 East Wheeler Road  
Moses Lake, WA 98837

## AGENDA TOPICS (partial list)

- Screening for TB Infection
- Treatment of TB Infection
- TB epidemiology
- Infection Control

## FACULTY

**Alex Brzezny, MD, MPH**  
Health Officer  
Grant County Health District

**Jacqueline Dawson, PhD**  
Public Health Epidemiologist  
Chelan, Douglas, Grant, Kittitas and  
Okanogan Counties

**Scott Lindquist, MD, MPH**  
State Epidemiologist for  
Communicable Diseases  
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**Ann Raftery, RN, PHN, MS**  
Co-Medical Director  
Curry International TB Center, UCSF

**Christopher Spitters, MD, MPH, MA**  
Health Officer  
Yakima Health District  
Klickitat County Health Department  
Tuberculosis Medical Consultant  
Chelan-Douglas Health District

**Lois Swenson, RN, PHN**  
Public Health Nurse  
Grant County Health District

**Lana Tyer, RN, MSN**  
TB Nurse Consultant  
Washington State Department of Health



## Addressing TB in our Communities



**Thursday, November 19, 2015**

**Moses Lake, WA**

Presented by:

Curry International  
Tuberculosis Center, UCSF

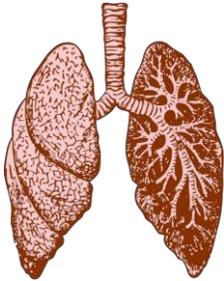
In collaboration with the:

Washington State Department of  
Health, the Grant County Health  
District and the Chelan-Douglas  
Health District



## TARGET AUDIENCE

This training is for nurses, clinicians, and other interested health personnel who provide health services to patients with or at risk for tuberculosis in Washington State.



## TRAINING CREDIT

The Curry International TB Center is approved as a provider of continuing education by the California State Board of Registered Nurses, Provider No. CEP 12308. This training has been approved for up to 6.0 continuing education contact hours. To receive credits, you must provide your license number and degree during the registration process, sign-in the day of training, stay for the entire training and complete an online evaluation. CNE credits are free of charge.

## LEARNING OBJECTIVES (partial list)

Upon completion of this training, participants will be able to:

- State a few features of the current epidemiology of TB globally, nationally and locally
- Discuss several aspects of TB elimination strategies that are applicable to your work setting
- Describe the factors which determine how infectious a tuberculosis patient may be
- Identify the different treatment regimen options for treating TB infection
- Identify at least 3 groups who are at risk for TB and should undergo TB screening to prevent TB disease and transmission
- Describe approved diagnostic tests for TB Infection

## TRAINING REGISTRATION

There is no charge for this training but **pre-registration is required**. To apply, **complete an on-line application by Friday, October 1<sup>st</sup>**, available at:

<http://www.currytbcenter.ucsf.edu/trainings/TBtrainingEWA>

If you do not already have an account on our website, you will need to create one in order to register. Applicants will receive an e-mail confirming registration and the location of the training. If you do not receive an e-mail by October 16<sup>th</sup>, please send an inquiry to **Ann Raftery**

**Email: [Course.CurryTBCenter@ucsf.edu](mailto:Course.CurryTBCenter@ucsf.edu)**



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