



# Yakima Health District

## BULLETIN

Volume 13, Issue 2

May, 2014

### Institutional Viral Gastroenteritis Outbreaks

#### Summary

Two recent institutional outbreaks of norovirus-like gastroenteritis highlight the potential for transmission between facilities when patient transfers occur from a facility with an ongoing outbreak. In addition to imposition of contact precautions, restriction of ill staff from work, hand hygiene, and environmental sanitation, YHD recommends interruption of non-essential transfers between facilities until 96 hours after resolution of the last case.

#### Report

Long term care facility (LTCF) A experienced an outbreak of norovirus-like illness involving 39 (46%) of 84 residents and 15 (34%) of 44 staff during a 29-day period earlier this spring. On or about day 7 of the outbreak, an ill resident was transferred from LTCF A to LTCF B. LTCF B subsequently reported 7 (11%) of 62 residents and 7 staff with onset of illness during a ten-day period beginning three days after the transfer. In total, nine hospitalizations and no deaths were reported between the two facilities. The initial recorded case in both facilities was an LTCF staff member. Norovirus nucleic acid was detected in a stool specimen obtained from one of two ill residents at LTCF B.

Norovirus outbreaks are typically characterized by diarrhea, nausea, and vomiting, with or without fever. Elderly or cognitively impaired patients are at increased risk for dehydration or aspiration resulting in hospital admission. Almost 1-in-4 ill residents from LTCF A were hospitalized during the outbreak. Because of the high viral titers in stool and vomitus ( $\geq 10^8$  particles/uL) and the low infectious dose ( $\leq 10^2$  particles), high attack rates are common--especially when living quarters are shared. The incubation period is 12-48 hours and infectiousness continues until at least 48 hours after resolution of symptoms. Viral shedding has been recorded as long as two weeks after resolution of illness, but the significance of that long-term shedding for contagiousness remains to be defined.

In the absence of laboratory confirmation, criteria for attributing a gastroenteritis outbreak to norovirus include the following:

- a mean (or median) illness duration of 12 to 60 hours, and
- a mean (or median) incubation period of 24 to 48 hours, and
- more than 50% of people with vomiting, and
- no bacterial agent found.

When all four criteria are present, it is very likely that the outbreak was caused by norovirus. However, about 30% of norovirus outbreaks do not meet these criteria. (<http://www.cdc.gov/norovirus/php/responding.html>; Centers for Disease Control and Prevention, 2014)

YHD's recommendations for norovirus outbreak control in health care facilities include the following:

- Begin active case finding when two or more cases of acute gastroenteritis are detected within a 96-hour period.
- Collect stool and/or vomitus from a sample of ill residents or staff for routine bacterial pathogen culture and norovirus detection by nucleic acid amplification testing.
- Place patients on contact precautions in a single occupancy room if they have symptoms consistent with norovirus gastroenteritis. Cohort ill residents if single-room contact precaution accommodations are not available.

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- Exclude ill staff members from working in the facility or in other health care settings.
- Maintain contact precautions for residents and exclusion of ill staff until a minimum of 48 hours after the resolution of symptoms.
- Stop admissions from other facilities and non-essential transfers to other facilities until at least 96 hours after the last case's illness has resolved.
- Consider interruption of congregate dining and other non-essential group activities until at least 96 hours after the last case's illness has resolved.
- Promote pre- and post-patient care handwashing among staff, residents and visitors, with posting of signs and availability of soap-and-water handwashing stations.
- Supplement hand hygiene by making FDA-compliant alcohol-based hand sanitizers readily available for other hand sanitizing indications.
- Wear personal protective equipment (ie, gloves, mask, and gown) while cleaning vomitus or stool using 5000ppm (0.5%) hypochlorite solution.
- Limit aerosolization of bodily fluids by soaking up vomitus or stool with disposable cloths followed by disposal in impervious bags.
- Increase the frequency of cleaning and disinfection of patient care areas and frequently touched surfaces during outbreaks of norovirus gastroenteritis.

Comprehensive guidelines for prevention and control of norovirus outbreaks in health care settings can be viewed at [http://www.cdc.gov/hicpac/norovirus/002\\_norovirus-toc.html](http://www.cdc.gov/hicpac/norovirus/002_norovirus-toc.html).

A Centers for Disease Control Expert Commentary five-minute video, *Norovirus: Protecting the Vulnerable*, can be viewed at <http://www.medscape.com/viewarticle/778880>.

Norovirus outbreaks of suspected food- or water-borne origin must be reported to YHD at (509) 249-6541. YHD can also provide technical assistance to LTCF infection control practitioners managing person-to-person transmitted outbreaks of norovirus and outbreaks of other communicable diseases in LTCFs.

## **Measles & Other Vaccine Preventable Disease Immunity for Health Care Workers**

### Summary

Recent measles cases in northwestern Washington counties, as well as ongoing outbreaks in British Columbia and the Philippines, demonstrate that occupational exposure to vaccine preventable diseases can and likely will continue to occur in the health care setting. Such exposures carry the potential for further transmission to or mandatory furloughs for susceptible health care workers (HCWs). Make sure that you and your staff have annual influenza vaccination and documentation of immunity to measles, mumps, rubella, varicella, pertussis, and hepatitis B as set forth in the table below.

### Report

In early April 2014, YHD alerted health care providers to two outbreaks involving what are now 13 cases of laboratory confirmed measles in Whatcom, San Juan, and Kitsap Counties with rash onsets of March 15 through April 9. The Whatcom County cases are linked to an outbreak in the Fraser Valley of British Columbia, where almost 400 cases have occurred in 2014. The San Juan-Kitsap County cases are linked to a returning visitor to the Philippines. Nearly one full maximum incubation period (21 days) has passed since the onset of the most recent case. This suggests that further transmission may not have occurred. However, a margin-of-error for safety generally warrants sustained vigilance for two full incubation periods (e.g., through late May 25). Thus far, no suspected measles cases have been reported in Yakima County since this began.

As the incidence of childhood vaccine preventable disease has fallen and HCWs are increasingly from age cohorts for whom natural immunity is not universal, the risk of occupational exposure and subsequent illness or work disruptions in health care settings increases. For example, a measles-susceptible HCW who comes into contact with a measles case must be excluded from work during days 7-21 after exposure. If a healthcare workplace has a weak system for ensuring and documenting immunity of staff, an exposure to multiple staff members could result in sufficient furloughs to substantially interrupt clinical operations--even if no transmission occurs as a result of the exposure.

Consequently, YHD wants to remind all health care providers and their employers of key recommendations addressing vaccine preventable diseases.

Disease	Definition of Immunity	Exclusion Period for Susceptible HCWs
<b>Measles</b>	<ul style="list-style-type: none"> <li>• 2 doses of live measles or MMR vaccine administered at least 28 days apart, OR</li> <li>• laboratory evidence of immunity, OR</li> <li>• laboratory confirmation of disease, OR</li> <li>• birth before 1957</li> </ul>	Days 7-21 after exposure
<b>Mumps</b>	<ul style="list-style-type: none"> <li>• 2 doses of live mumps or MMR vaccine administered at least 28 days apart, OR</li> <li>• laboratory evidence of immunity, OR</li> <li>• laboratory confirmation of disease, OR</li> <li>• birth before 1957</li> </ul>	Days 12-25 after exposure
<b>Rubella</b>	<ul style="list-style-type: none"> <li>• 1 dose of live rubella or MMR vaccine, OR</li> <li>• laboratory evidence of immunity, OR</li> <li>• laboratory confirmation of rubella infection or disease, OR</li> <li>• birth before 1957</li> </ul>	Days 7-23 after exposure
<b>Varicella</b>	<ul style="list-style-type: none"> <li>• written documentation of vaccination with 2 doses of varicella vaccine, OR</li> <li>• laboratory evidence of immunity or laboratory confirmation of disease, OR</li> <li>• diagnosis or verification of a history of varicella disease by a health-care provider, OR</li> <li>• diagnosis or verification of a history of varicella or zoster by a health-care provider</li> </ul>	Days 8-21 after exposure
<b>Pertussis</b>	Single dose of Tdap <b>Note:</b> Vaccination does not provide absolute immunity and close exposure to a case still merits chemoprophylaxis even if immunized.	<ul style="list-style-type: none"> <li>• Not applicable</li> <li>• Post-exposure chemoprophylaxis + 21 days of monitoring for illness if exposed</li> </ul>
<b>Hepatitis B</b>	<ul style="list-style-type: none"> <li>• 3 doses @ 0, 30 and 180 days, OR</li> <li>• anti HBs positive, OR</li> <li>• anti-HBc positive</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> <li>• Post exposure immunoprophylaxis + standard precautions</li> </ul>
<b>Influenza</b>	Annual vaccination of all who lack <i>bona fide</i> contraindications <b>Note:</b> Vaccination does not provide absolute immunity but reduces risk of severe disease and helps to control transmission and mitigate sick leave burden.	Not applicable aside from special situations

The full recommendations of CDC's *Recommendations for Immunization of Health Care Personnel* can be viewed at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6007a1.htm>.

## Anencephaly Update

### Summary

Anencephaly incidence in the south central Washington region has remained about four times the expected rate during 2010-2013 compared to national rates. The initial case-control study conducted in 2013 by the Washington State Department of Health (DOH) identified no cause, but it did note very low utilization of prenatal vitamins early in pregnancy among both cases and controls. DOH is convening an advisory group to provide technical guidance for further investigation and prevention and will hold a listening session at Sunnyside Community Center on May 13 at 6:00PM-8:00PM to gather community input to forward to the advisory group.

### Report

In the September 2013 edition of the *Bulletin*, YHD reported on the findings to-date regarding the observation that anencephaly rates in the Yakima-Benton-Franklin tri-county region exceeded expected (i.e., national) rates by about four-fold during 2010-2012. A case-control study based on medical record reviews and conducted by DOH found no significant differences between affected and unaffected pregnancies with respect to a host of factors, including race-ethnicity, location of residence, maternal and paternal occupations, maternal smoking and alcohol use, pregnancy health conditions (e.g., anemia, diabetes, or infectious diseases), parity, gravidity, pre-pregnancy height and weight, medication use (including over-the-counter remedies, vitamins, and folic acid supplementation), and tap water source. However, use of prenatal vitamins in early pregnancy was low (~15%) among both case and control mothers in the study. This is similar in quality but greater in magnitude to findings from DOH's Pregnancy Risk Assessment Monitoring System, which found folate intake among pregnant women in the region to be ~50% locally versus ~60%

statewide. The full report, published September 6, 2013, in *Morbidity and Mortality Weekly Reports*, can be viewed at [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a5.htm?s\\_cid=mm6235a5\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a5.htm?s_cid=mm6235a5_w).

Follow-up active surveillance by DOH during 2013 found that anencephaly rates remained higher than expected. The seven additional cases detected in the tri-county region during 2013 (8.7 per 10,000 births) is down slightly from the previous year but remains about four times the expected number based on a national rate of 2.1 per 10,000 births. During 2010-2013, a total of 26 cases of anencephaly have been found among 31,803 pregnancies (8.2 per 10,000 births). Of these, 13 have occurred among Yakima County's 16,650 births (7.8 per 10,000). The incidence of two other neural tube defects, spina bifida and encephalocele, is not above national rates.

DOH is convening an advisory group to review the situation and provide recommendations on further investigation and prevention. The advisory group will include state and local health officials, CDC and academic birth defects experts, and others. DOH and YHD will co-host an open listening session to help ensure that community concerns and insights are brought to the advisory group's attention. This event will be held on Wednesday, May 13, 6:00-8:00PM, at the Sunnyside Community Center (1521 S 1<sup>st</sup> Street, Sunnyside).

Meanwhile, both DOH and YHD are urging women of childbearing age to follow federal recommendations for taking folic acid (e.g., 400-600 micrograms daily). Users of small private water systems are also strongly encouraged to test their water annually for nitrates and bacteria. If elevated levels are found, an alternate source of water for drinking and cooking should be found until the well is remediated.

Clinicians can assist by encouraging women of childbearing age to follow these recommendations, encourage early prenatal care and appropriate screening for detectable congenital anomalies, and provide education and counseling to help prospective mothers and families balance appropriate concern and action toward prevention and detection without generating excessive fear of these real but remote risks due to anencephaly (~0.01%) or other congenital anomalies (~3%).

More information on anencephaly is available at <http://www.cdc.gov/ncbddd/birthdefects/anencephaly.html>.

## Hepatitis C Screening for Medicaid and Medicare Recipients

### Summary

Surprisingly, Medicare does not reimburse for HCV screening. The Centers for Medicaid and Medicare Services (CMS) has proposed covering HCV screening for Medicare beneficiaries and this could become effective as soon as 2015. The Washington State Department of Social and Health Services (DSHS) already reimburses for HCV testing in Medicaid recipients.

### Report

CMS has proposed that "*the evidence is adequate to conclude that screening for hepatitis C virus (HCV), consistent with the grade B recommendations by the United States Preventive Services Task Force is reasonable and necessary for the prevention or early detection of an illness or disability and is appropriate for individuals entitled to benefits under [Medicare] Part A or enrolled under Part B.*" The public comment period for this proposal closed in April 2014 and implementation of the proposal would seem likely to follow by the beginning of 2015.

As the cohort born during 1945-1965 ages into Medicare eligibility, this CMS proposal will cover a growing proportion of this largest category of patients for whom HCV screening is indicated. Note that DSHS is already reimbursing for HCV testing among Medicaid recipients. DSHS reimburses a viral hepatitis panel (80074; anti-HCV, HBsAg, anti-HBc, anti-HAV) for approximately \$95.

Resources on clinical aspects of HCV screening and follow-up:

*Hepatitis C Update & Recommendations for Routine Testing of 1945-1965 Birth Cohort* (YHD Bulletin, March 2013)  
<http://yakimacounty.us/yakimahealthdistrict/bulletins.php>

*Hepatitis C Update: Clinical Evaluation and Prevention Messages* (YHD Bulletin, June 2013)  
<http://yakimacounty.us/yakimahealthdistrict/bulletins.php>

*Hepatitis C Information for Health Professionals, Centers for Disease Control and Prevention*  
<http://www.cdc.gov/hepatitis/HCV/index.htm>

*Proposed Decision Memo for Screening for Hepatitis C Virus in Adults*  
<http://www.cms.gov/medicare-coverage-database/details/nca-proposed-decision-memo.aspx?NCAId=272>

# YAKIMA HEALTH DISTRICT

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Toll Free: (800) 535-5016 x 541



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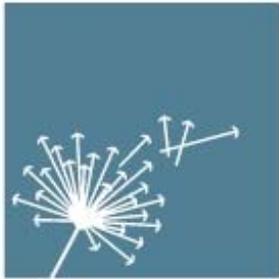
<http://www.yakimapublichealth.org>

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Notifiable Condition <i>(includes confirmed and probable cases)</i>	Cases			Total Cases by Year	
	Jan – Mar	Jan – Mar	Jan – Mar	Total Cases by Year	Total Cases by Year
	2014	2013	2012	2013	2012
Campylobacteriosis	10	14	11	154	108
Chlamydia	362	332	318	1378	1303
Cryptosporidiosis	0	0	1	3	5
Genital Herpes - Initial	12	12	11	56	61
Giardiasis	4	2	4	11	15
Gonorrhea	67	22	19	181	81
Hepatitis A acute	0	0	0	5	2
Hepatitis B acute	0	0	0	0	0
Hepatitis B chronic	*NA	*NA	1	*NA	7
Hepatitis C acute	2	0	2	0	2
Hepatitis C chronic	*NA	*NA	42	*NA	176
HIV/AIDS Cumulative Living	190	185	183	192	185
HIV/AIDS Deaths	0	1	0	4	6
HIV/AIDS New	1	0	1	8	9
Meningococcal Disease	0	0	0	1	2
Pertussis	0	82	17	128	493
Salmonellosis	8	4	2	31	26
Shigellosis	2	2	0	8	1
STEC (enterohemorrhagic E. coli)	2	1	1	26	13
Syphilis - Primary and Secondary	3	2	2	14	6
Tuberculosis	1	0	2	9	5
*NA=Not Available					

**Notifiable  
Conditions  
Summary  
Jan - Mar  
2014**



CURRY  
INTERNATIONAL  
TUBERCULOSIS  
CENTER

UCSF

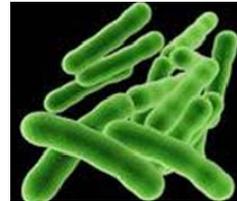
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# SAVE-the-DATE

October 29, 2014

## Washington State Annual TB Educational Conference



The 2014 Annual State TB Educational Conference will be held at the Blackwater Training & Conference Center in Renton, WA.

You may attend at the main meeting site in Renton or you may attend through video conference at one of the Eastern Washington locations (Kittitas County Public Health Department or Spokane Regional Health District).

CMEs/CEUs will be provided through the Curry International Tuberculosis Center for those participating in-person or by video conference.

More details will be available on [our website](#) as the conference nears.

We hope that you, our partners in the elimination of TB, are able to attend.



# News Release

**For immediate release:** May 1, 2014

(14-060)

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360-236-4072

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## **Birth defects at high rate subject of public forums in Yakima, Tri-Cities**

*Listening sessions scheduled for the evenings of May 13 and 14*

**OLYMPIA** — State and local health officials will hold listening sessions in May to gather community concerns about high rates of anencephaly in three counties in Eastern Washington.

The sessions will be held from 6 to 8 p.m. on May 13 at the Sunnyside Community Center and from 6 to 8 p.m. on May 14 at the Benton-Franklin Health District office in Kennewick. The Department of Health encourages interested community members to attend. Staff involved in the anencephaly investigation will be available to listen to concerns and answer questions. The information gathered from local residents will be shared with an advisory committee that will consider what else can be done to prevent anencephaly and to find the cause of the high rates. Spanish language interpretation will be available.

Anencephaly is a rare neural tube birth defect in which a baby's brain and skull don't fully form in the first month of pregnancy. Babies with anencephaly die soon after they're born. The rate of anencephaly in Yakima, Benton, and Franklin counties is 8.7 per 10,000 births, compared to a national rate of 2.1

Department staff worked with local and federal health partners to look for possible causes of the high rates of anencephaly. The investigation looked to see if there were common exposures or experiences among women whose babies had anencephaly and how they differed from women with healthy babies. No significant differences that might indicate what's causing the high rates were found. The investigation used medical records to compare the areas where women live, environmental factors, prenatal care, vitamin use during pregnancy, and other factors.

The [Department of Health website](http://www.doh.wa.gov) (www.doh.wa.gov) is your source for *a healthy dose of information*. Also, [find us on Facebook](#) and [follow us on Twitter](#).

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