

Botulism Cases Summary

Grant County Health District is working on concluding its investigation of two **Grant County residents' deaths** that occurred in February 2016. Washington State Public Health Laboratory recently confirmed that both patient samples submitted were positive for *Clostridium botulinum* (botulism) toxin. The specific food source has not been confirmed but home-canned or prepared food continues to be suspected as the most likely source. GCHD worked closely with the family to find and properly destroy any unopened home-canned food found in the residence. It is not believed that any of the home-canned food was shared with other households. No other cases of botulism have been reported.

Foodborne botulism is a public health emergency.

Classic symptoms of botulism are symmetrical cranial neuropathies including:

- Double Vision
- Blurred Vision
- Drooping Eyelids
- Difficulty Swallowing
- Dry Mouth
- Difficulty Breathing or shortness of breath
- Muscle weakness

If untreated, these symptoms may progress to cause paralysis of the respiratory muscles, arms, legs, and trunk and ultimately death.

In foodborne botulism, symptoms generally begin 12 to 36 hours after eating a contaminated food, but they can occur as early as 6 hours or as late as 10 days.

Botulism Diagnosis

Consider the diagnosis if the patient's history and physical examination suggest botulism. Botulism should be

suspected in any adult with a history of acute onset of cranial nerve (diplopia, dysarthria, dysphagia), autonomic nervous system (e.g., dry mouth, difficulty focusing) and gastrointestinal dysfunction, especially if ingestion of home-canned food within the prior 48 hours is ascertained. Botulism is frequently misdiagnosed, most often as a polyradiculoneuropathy (Guillain-Barre or Miller-Fisher syndrome), myasthenia gravis, or other diseases of the central nervous system. Proper clinical diagnosis requires a thorough history and physical examination and is crucial for timely treatment. Clinicians should immediately contact GCHD to report suspected cases and inquire about testing and treatment.

Treatment

Prompt diagnosis is essential.

- Antitoxin is effective in reducing the severity of symptoms, if administered early. Supply of antitoxin against botulism is maintained by the CDC.
- Washington State Department of Health will contact CDC to arrange for a clinical consultation by phone, and (if indicated) the release of the antitoxin.
- Supportive care as needed, including mechanical ventilation.

Prevention and Outreach

Persons who do home canning should follow strict hygienic procedures to reduce contamination of foods, and carefully follow instructions on safe home canning including the use of pressure canners/cookers as recommended through county extension services or from the US Department of Agriculture.

GCHD and WSU Grant-Adams Extension are developing plans for

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TO REPORT A NOTIFIABLE CONDITION:

PHONE

(509) 766-7960

FAX

(509) 764-2813

24 HOUR REPORTING LINE

(509) 398-2083

offering pressure-canner lid testing this spring.

Go to WSU Food Safety web site for more information on proper home canning methods. <http://ext100.wsu.edu/grant-adams/health/food-preservation-safety>
Call Margaret Viebrock, Douglas County WSU Extension 509-745-8531 for questions about pressure canners.

Clinical Consult: Lois Swenson, RN
PHN (509) 766-7960 ext 13

Food/Environmental Consult: Amber McCoy, RS EHS (509) 766-7960 ext 14

Resources:

www.cdc.gov/nczved/divisions/dfbmd/diseases/botulism/

www.doh.wa.gov/Emergencies/EmergencyPreparednessandResponse/Factsheets/Botulism

Changes to Hepatitis C Case Definition and Reporting

Beginning January 2016 hepatitis C is a single disease with a continuum. National case classifications for acute and chronic hepatitis C changed. The new hepatitis C case definitions apply to cases with onsets (acute) or years of diagnosis (chronic) starting January 3rd, 2016.

Classifying criteria reflect the presence or absence of acute symptoms and type of laboratory test that was positive; all cases require at least one positive test result. Acute and chronic hepatitis C case definitions both have Confirmed and Probable classifications; the Probable classification is new for acute hepatitis C.

GCHD staff receiving only a positive laboratory report for hepatitis C will attempt to obtain additional information on each new case. The provider will be contacted to assign a diagnosis (acute or chronic

Classification of Hepatitis C Infections	Discrete onset of symptom(s) [headache, malaise, fever, anorexia, vomiting, diarrhea, or abdominal pain] AND either jaundice or ALT > 200 IU/L	
	Present	Absent
Any HCV nucleic acid test positive OR HCV antigen or genotype positive OR test conversion in past 12 months	Confirmed, Acute	Confirmed, Chronic
HCV antibody positive only	Probable, Acute	Probable, Chronic

hepatitis C) and provide basic clinical case information. For consultation contact Lois Swenson, RN PHN at 509-766-7960 ext 13 or lswenson@granthealth.org

STIs

Because of the ongoing gonorrhea outbreak and high syphilis rates in Grant County, it continues to be essential to correctly diagnose, treat and timely report STDs /STIs. In addition, we encourage all providers who identify patients with STDs to also test for HIV.

In 2015 in Washington State there were 28,557 cases of Chlamydia trachomatis (Chlamydia) reported, 7,181 cases of Neisseria gonorrhoeae (Gonorrhea) reported and 1,079 cases of Treponema pallidum (Syphilis) reported. Grant County STI cases through December 2015: Chlamydia 382, Gonorrhea 117, Syphilis 18. [It would be good to add rates per 100,000 residents for WA and Grant](#)

Providers should continue to screen at least annually all sexually active adolescent females and women under 25 years of age, women with multiple partners, men who have sex with men (MSM), and other risk groups, even if symptoms are not present. Consult screening

recommendations on the CDC website for more information: www.cdc.gov/std/prevention/screeningreccs.htm

Dual (two-antibiotic) treatment of gonorrhea infection is necessary, regardless of the presence or absence of chlamydial co-infection. The recommended treatment of a gonorrhea case is ceftriaxone AND azithromycin. CDC treatment guidelines do not recommend a single-drug treatment of gonorrhea.

GCHD asks that you make every effort to help patients assure that their partners are treated; either by seeing the partners yourself or by offering patients free medication to give to their partners (expedited partner therapy or EPT). You may also refer partners to GCHD for treatment. Due to limited resources and the number of reported Chlamydia cases, Health District staff are NOT able to follow up on untreated partners of Chlamydia patients.

EPT for all sex partners of diagnosed individuals is critical to control these infections. Sex partners of heterosexual patients who test positive for chlamydia or gonorrhea should be offered free medication and treated for infections to which they were exposed. Currently EPT is not used for males who have sex with other men.

There are two types of EPT packets: one for chlamydia and one for gonorrhea. The packets include: Azithromycin 1g (chlamydia packet), OR Azithromycin AND Cefixime 400mg (gonorrhea packets only), allergy warning (English & Spanish), condoms and information on gonorrhea and/or chlamydia.

The EPT packets provided by DOH STD Services are available in pharmacies throughout the state. GCHD would like to partner with you to make EPT packets available. To request packets for your ER, urgent care, clinic, and pharmacy contact Sheri Tyler at GCHD 509-766-7960 ext. 33 or styler@granthealth.org.

Zika Virus

As of 2/29/16, two Washington State residents have been confirmed to have Zika virus after traveling to areas where the virus is spreading. One was a Spokane woman, the other a Mason County man. Washington State does not have the species of mosquitoes (*A. aegypti* and *A. albopictus*) that carry Zika virus, therefore there is currently no risk for local mosquito transmission. However, people who travel to and from areas where Zika is spreading can return with Zika illness.

Many countries in the Americas are experiencing simultaneous outbreaks of arboviral diseases that can cause febrile illness with rash, myalgia, or arthralgia. Agents include dengue, chikungunya, and Zika viruses. Laboratory testing is essential to identify the etiology. Because of the similar geographic distribution and clinical presentation of these conditions, patients with symptoms consistent with Zika should be evaluated for the other two agents. No commercial assay is currently available for detecting Zika virus; cross-reactivity is strong among Zika, dengue, and other flaviviruses. Testing at CDC must be coordinated through the GCHD.

Criteria for testing among persons with travel to an area with known Zika virus transmission (www.cdc.gov/zika/geo/index.html):

All persons (regardless of pregnancy status) reporting two or more of the following symptoms: acute onset of fever, maculopapular rash, arthralgia, or conjunctivitis, during or within 2 weeks of travel. Obtain specimens during the 1st week of illness if possible.

Pregnant women (at any trimester of pregnancy) With clinical illness consistent with Zika virus disease - testing recommended during the first

week of illness if possible
Asymptomatic –testing can be offered 2-12 weeks after pregnant women return from travel If fetal ultrasounds detect microcephaly or intracranial calcifications, pregnant women who originally tested negative for Zika virus infection following travel should be retested for Zika virus infection. Consider amniocentesis for testing. Women experiencing fetal loss with travel to an area with known Zika virus transmission during pregnancy if not previously tested (pending CDC guidance on specimens after 12 weeks) Babies born to women with a history of travel during pregnancy to an area with Zika virus transmission, with evidence of maternal infection (mothers with positive or inconclusive test results for Zika virus infection) or fetal infection (infants with microcephaly^b or intracranial calcifications OR two or more of the following symptoms within 2 weeks of delivery: acute onset of fever, maculopapular rash, arthralgia, or conjunctivitis, and maternal travel within 2 weeks of delivery)

^aThe interpretation of results in asymptomatic persons is complex. Because of cross-reactivity among flaviviruses (including West Nile virus, endemic in some parts of WA), a positive IgM result can be difficult to interpret. A negative IgM result obtained 2-12 weeks after travel does not definitively rule out Zika virus infection.

^bMicrocephaly is defined as occipitofrontal circumference <3rd %, based on standard growth charts for sex, age, and gestational age at birth. **If an infant's occipitofrontal circumference is \geq 3rd % but is notably disproportionate to the length of the infant, or if the infant has CNS deficits (including visual or hearing deficits), additional evaluation for Zika virus**

infection might be considered.

Testing should also be considered for symptomatic persons who have a male sexual partner who has traveled to an area with Zika transmission.

For patients meeting any of the testing criteria, call GCHD at (509) 766-7960 ext.0 to arrange for Zika virus testing.

It is important to obtain the date of illness onset, dates of specimen collection, specimen type, description of illness, travel history, flavivirus (e.g., yellow fever) vaccination history, and contact information for the submitter.

Prevention-CDC recommends special precautions for pregnant women. In any trimester, they should consider postponing travel to areas where Zika virus is spreading. A pregnant woman traveling to one of these areas should talk to her health care provider first and strictly follow steps to prevent mosquito bites. Only pregnant women or individuals planning a pregnancy are encouraged to delay their travel. All others are urged to protect themselves from mosquito bites. Individuals returning to the U.S. from Zika-affected areas who are pregnant or having symptoms of Zika illness should contact their health care provider. Men returning from an area with Zika who have a pregnant partner, or who have a partner whose pregnancy status may not yet be known, should use a condom during sex or not have sex during pregnancy.

Information and guidelines on Zika Virus are evolving quickly, more information can be found at:
www.cdc.gov/zika/hc-providers/
www.cdc.gov/zika/
www.doh.wa.gov/YouandYourFamily/IllnessandDisease/ZikaVirus



Public Health
Prevent. Promote. Protect.

Grant County Health District

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Grant County Notifiable Conditions		
	Jan-Feb	Jan-Feb
DISEASE/CONDITION	2016	2015
Botulism	2	0
Blood Lead – Child	1	0
Campylobacter	1	4
Chlamydia	56	62
Cryptosporidium	0	0
Shiga toxin E. coli (STEC)	0	1
Giardia	0	0
Gonorrhea	17	22
Hepatitis A	0	0
Hepatitis B (chronic)	0	1
Hepatitis C (chronic)	11	4
Hantavirus	0	0
Herpes Simplex	3	3
HIV	0	0
Influenza Deaths	0	3
Listeriosis	0	0
Malaria	0	0
Measles	0	0
Meningococcal	0	0
Mumps	0	0
Pertussis	0	3
Rabies PEP	0	0
Relap. Fever/Lyme	0	0
Rubella	0	0
Salmonella	0	0
Shigella	1	0
Syphilis	2	3
Tuberculosis	0	0
Yersiniosis	0	0
West Nile Virus	0	0
Unexplained Death	0	0
Totals	92	106

Hantavirus, Salmonella, and Rabies

Spring is the time for baby animals, cleaning out barns, sheds, garages, and chicken coops. These common spring activities pose a risk of potential exposure to Hantavirus, Salmonella, and Rabies.

Rabies is thought to be in about 1 percent of all bats. However, bats that interact with humans tend to be sick or injured, and of those, we find about five to 10 percent are rabid. Bats with rabies have been found in every part of Washington. One recommendation for Rabies PEP was given in 2015 in Grant County.

Cases of Salmonellosis are often associated with exposures to animals such as newly hatched chicks in the spring. Ten cases of Salmonella were reported in Grant County in 2014.

Hantavirus is rare, but in 2012 two Grant County residents died as a result of Hantavirus-like pulmonary disease. The only reservoir for hantavirus in Washington is the Deer Mouse.

It is important to encourage patients to protect themselves from being exposed to these diseases.

Please educate your patients to wash their hands after interacting with animals, not interact with or touch bats, open windows and doors to allow space to air out for several hours before cleaning areas such as sheds and animal pens, use a surgical mask and gloves while cleaning these areas, and use a 10% bleach solution on any area that is visibly contaminated with rodent droppings, nesting materials, or urine.