

The Epi Chronicle

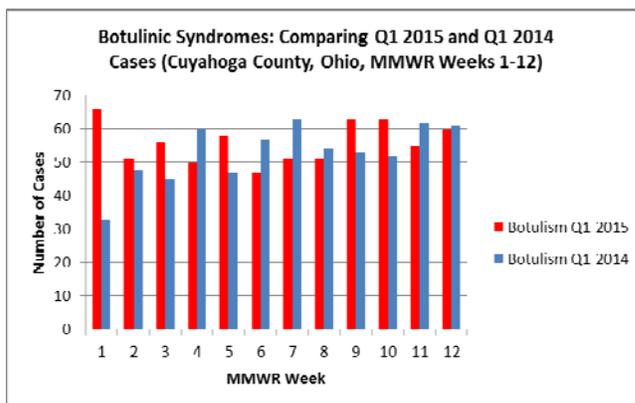


IN THE NEWS: Botulism

Authors: Vino Sundaram, MPH and Brent Styer, MPH

Botulism is a rare but serious paralytic illness caused by a nerve toxin that is produced by the bacterium *Clostridium botulinum*. There are five types of botulism: foodborne, wound, infant, adult intestinal toxemia, and iatrogenic. Symptoms include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness. The Centers for Disease Control and Prevention, Ohio Department of Health and Fairfield Health Department are working together with hospitals on investigating a suspected botulism outbreak following a church potluck meal on April 19, 2015.

The graph to the right compares the number of Botulinic cases reported at hospital emergency rooms and urgent cares in Cuyahoga County for Quarter 1 2014 and 2015



INSIDE THIS ISSUE

Recall Notice	2
Recall: Spotlight: Listeriosis	2
Disease Spotlight: Shigella	3
Syphilis on the Rise	4
HIV in Indiana	4
Ebola Update	4
Local Outbreak Feature	5
Quarter 1 Surveillance	6

SPECIAL POINTS OF INTEREST

- Want to learn how you can prevent foodborne illness this summer? See tips on page 3
- STD prevention tips on page 4



RECALL NOTICE

Notable Recalls:

March 16, 2015: Frontier Co-op Organic Garlic Powder- Possible Salmonella contamination

March 17, 2015: Trader Joe's Company Raw Walnuts- Possible Salmonella contamination

March 17, 2015: Kraft Food Groups Macaroni & Cheese- Metal pieces may be contained in boxes

April 8, 2015: Sabra Hummus- Possible Listeria contamination

Further information regarding these recalls and others can be found at www.fda.gov/Safety/Recalls/

"The company is ceasing all sales and closing all scoop shops until all products are ensured to be 100% safe."

WHAT IS LISTERIOSIS?

Listeriosis, a serious infection usually caused by eating food contaminated with the bacterium *Listeria monocytogenes*, is an important public health problem in the United States. A person with Listeriosis usually has fever and muscle aches, sometimes preceded by diarrhea or other gastrointestinal symptoms. Almost everyone who is diagnosed with Listeriosis has "invasive" infection, in which the bacteria spread beyond the gastrointestinal tract.

RECALL FOCUS: LISTERIOSIS

Author: Vino Sundaram, MPH

There are several food recalls regarding Listeriosis:

-On April 20, 2015, Blue Bell Creameries voluntarily recalled all of its products currently on the market made at all of its facilities, including ice cream, frozen yogurt, sherbet, and frozen snacks, because they have the potential to be contaminated with *Listeria monocytogenes*. Blue Bell announced this recall after sampling conducted by the company revealed that Chocolate Chip Cookie Dough Ice Cream half gallons produced on March 17, 2015 and March 27, 2015 contained the bacteria.

-Jeni's Splendid Ice Creams has initiated a voluntary recall of all ice creams, frozen yogurts, sorbets, and ice cream sandwiches for all flavors and containers because of the possible presence of *Listeria monocytogenes*. The company is ceasing all sales and closing all scoop shops until all products are ensured to be 100% safe.

-Amy's Kitchen, Inc. has voluntarily recalled approximately 73,897 cases of select code dates and manufacturing codes of their products. This recall was based on a recall notice from one of Amy's organic spinach suppliers that Amy's may have received organic spinach with the possible presence of *Listeria monocytogenes*. More information can be found at <http://www.fda.gov/Safety/Recalls/ucm439397.htm>

DISEASE SPOTLIGHT: *SHIGELLA*

Author: Brent Styer, MPH

Number of Shigella Cases Reported this Quarter in Cleveland: 24

What is Shigella?

Shigellosis is an infectious disease caused by a group of bacteria called Shigella. When you are infected with Shigella bacteria it can commonly cause diarrhea (sometimes bloody), fever, and stomach cramps. These symptoms usually begin within 1-2 days of being exposed to the bacteria. In some individuals, mainly young children, the elderly and the immune-compromised, the diarrhea can be severe enough that the patient needs to be hospitalized. In some individuals, it is possible to be infected with Shigella bacteria and have no symptoms at all, but the person can still pass the bacteria to others.

How do I get Shigella?

Shigella bacteria can be passed from one infected person to another. The bacteria is found in the stool of an infected individual while they are ill and possibly for a week or two afterwards. Most infections are caused by consuming the bacteria orally from direct contact with an infected person or by touching a surface containing the bacteria and not washing your hands properly before eating or touching your mouth. Foods can also be contaminated with the bacteria. This can occur when food is prepared by food handlers who are infected and did not wash their hands after using the restroom. Vegetables can become contaminated if they are harvested in fields with sewage in it and flies can also carry the bacteria and contaminate your food. Lastly, infection can possibly occur by drinking or swimming in contaminated water. Water can become contaminated if sewage runs into it, or if someone with Shigella swims in it.

How is Shigella Treated?

Shigella can typically be treated with antibiotics. The antibiotics that are commonly used include ampicillin, trimethoprim/sulfamethoxazole, nalidixic acid, or ciprofloxacin. When antibiotics are given, it will shorten the length of the illness. However, antibiotic usage should be limited only to those who are experiencing the most severe cases. Individuals with mild infections should not need to use antibiotics because they will recover on their own. It should be noted that anti-diarrheal medications should not be used because they can actually make the illness worse.

How can I Prevent Shigella?

The best way to prevent the spread of Shigella is through frequent and careful handwashing by infected individuals with soap and water. Frequent, supervised handwashing of all children should be followed in day care centers and in homes with children who are not completely toilet-trained. If a child is still in diapers, make sure the diaper is properly disposed of and hands are washed immediately afterwards. Basic food safety precautions and consumption of treated or boiled water should always be used.

STEPS TO AVOID FOODBORNE DISEASES THIS SUMMER

- Thoroughly cook all meat and egg dishes. Avoid meat that is pink in the middle or eggs that are runny.
- Avoid cross-contamination of food (especially raw vegetables and fruits) with raw meat juices
- Always wash your hands before eating or cooking food, after using the bathroom, and after changing a diaper.
- Watch the hand washing of toddlers and young children.
- Drink only water from safe sources.
- Do not swallow water when swimming.
- Throw away diapers in waste cans with covered lids.
- People who go to developing countries should drink only treated or boiled water and eat only cooked food or fruits that the traveler peels him/herself.

SYPHILIS ON THE RISE

4

STD PREVENTION TIPS

- Abstinence
- Receive Hepatitis B and HPV vaccines
- Form a mutual agreement with your partner to only be sexually active with that partner
- Reduce your number of sexual partners
- Correct use of condoms every time
- Talk with your doctor about STD testing and encourage your partner to do the same

Author: Paul Zivich

Syphilis is a sexually transmitted disease that is caused by the bacterium, *Treponema pallidum*. If left untreated, syphilis can cause serious long-term problems. Syphilis is spread by direct sexual contact with a partner who has syphilis. Pregnant women may also spread syphilis to their unborn child. The symptoms of syphilis are highly variable, but have several stages. During the primary stage, sores may be present. If untreated, the disease will progress to the secondary stage. In this stage, a rash may appear on various parts of the body, including hands and feet. The following stage is called the latent or hidden stage. Symptoms will disappear but the individual will still have bacteria in their body. If left untreated, some affected individuals will develop late stage syphilis after 10 to 20 years from the original infection. The disease can lead to lasting damage in organs like the eyes, heart, and liver. The damage can even lead to death in some cases.

During the first quarter of 2015, the City of Cleveland had 27 cases of syphilis diagnosed. All cases were male. Twenty of the cases were among African Americans (74%) and the remaining seven were among Caucasians (26%). The overall rate for syphilis in Cleveland is 6.8 cases per 100,000 people. To put it in perspective, the US syphilis rate for 2013 was 5.5 cases per 100,000 persons. Syphilis can be treated by your healthcare provider with antibiotics. Antibiotics will stop any further damage caused by syphilis but it will not reverse the damage of late stage syphilis. It is best to be treated as soon as possible.

Syphilis also has the potential to re-infect, so regular testing for you and your partners is important. If you notice symptoms, please visit your healthcare provider. In order to reduce your risk of syphilis and other STDs, please refer to the side article, "STD Prevention Tips."

PROTECT YOURSELF AND YOUR PARTNER
From diseases passed from person to person by sexual contact.

Sexual and Reproductive Health Clinic

Please arrive early. We can see only a limited number of people each day, and we see people in the order they arrive.
Appointments are welcome.

J. Glen Smith Health Center
11100 St. Clair Ave., Room 219
Cleveland, Ohio 44108
216-664-7095

T. F. McCafferty Health Center
4242 Lorain Ave., Room 233
Cleveland, Ohio 44113
216-664-6603

CLINIC HOURS

J. Glen Smith Health Center
Clinic Hours: Monday, 8 a.m.–4:30 p.m.
Wednesday, Thursday and Friday,
8 a.m.–4:30 p.m.
*Closed 12:30–4:30 p.m. on 3rd Wed.
of each month

T. F. McCafferty Health Center
Clinic Hours: Monday 12:30–5 p.m.
Tuesday, Wednesday and Friday,
8 a.m.–4:30 p.m.
*Closed 12:30–4:30 p.m. on 3rd Wed.
of each month

Extended Clinic Hours
Tuesday, 12–8 p.m.

Extended Clinic Hours
Thursday, 12–8 p.m.

HIV OUTBREAK IN INDIANA

Author: Paul Zivich

In the rural Indiana county of Austin, there has been a large increase in the number of new cases of HIV. The increase in cases was originally noted in January 2015, with 11 new cases. As of April 21, the Indiana State Health Department has diagnosed 135 cases. Before the HIV outbreak, intravenous drug use had begun to rise in Austin, Indiana. With a lack of drug treatment centers in the county, up to three generations of one family used injection drugs together. In addition, rural communities often lack necessary public health infrastructure. These factors led to the outbreak that is currently ongoing in Indiana. Most of the transmission is believed to be from needle sharing. In order to help combat the spread, the Centers for Disease Control and Prevention have sent public health officials to Indiana. In addition, the Governor of Indiana has approved a needle exchange for the county. Education campaigns will also play an important role in resolving this outbreak. This outbreak serves as a warning for other small communities, and the need for doctors and health resources for rural regions. If you or someone you know would like to be tested for HIV or other STDs, the J. Glen Smith Health Center (11100 St. Clair Ave.) and T.F. McCafferty Health Center (4242 Lorain Ave.) provide low cost testing for Cleveland residents. Please call 216-664-7096 (J. Glen), 216-664-6603 (T.F.), or visit http://www.clevelandhealth.org/network/health/sexually_transmitted_diseases.php for more information. Walk-ins are welcome but you may also call to schedule an appointment.

EBOLA OUTBREAK UPDATE

Author: Paul Zivich

The Ebola outbreak originally began in December 2013. The Ebola virus is spread through contact with bodily fluids of infected individuals and those who have passed away from the disease. As of May 2015, it has claimed the lives of over 11,000 people. The outbreak has primarily been located in three West African countries (Sierra Leone, Guinea, and Liberia). Liberia was declared Ebola-free by the World Health Organization on May 9, 2015. The outbreak continues in Sierra Leone and Guinea.

To protect the citizens of Cleveland and Ohio, the Ohio Department of Health has taken precautions regarding travelers from the affected countries. Individuals who are arriving in Ohio are monitored for 21 days by their local health department jurisdiction. The monitoring system used is called Direct Active Monitoring. Direct Active Monitoring involves contacting each traveler twice per day for temperature checks. One temperature check is done via phone call or text. The other must be done either in-person or through video chat. For healthcare workers who were in West Africa and had direct contact with Ebola patients, more extensive monitoring and quarantine procedures are used. The Cleveland Department of Public Health has monitored four travelers.

LOCAL OUTBREAK FEATURE

Author: Paul Zivich

In January, the Office of Communicable Disease Surveillance and Epidemiology (OCDSE) received notification of nine cases of Shigella. The notification came from the Ohio Disease Reporting System (ODRS). ODRS is a centralized reporting system for infectious diseases. Healthcare providers or laboratories can send electronic reports through ODRS to health departments. It allows for public health agencies to have immediate access to information regarding outbreaks. This ensures a timely response from local and state health departments. In order to determine potential sources of the increased number of cases, interviews were conducted with confirmed cases by an epidemiologist at the Cleveland Department of Public Health's Office of Communicable Disease Surveillance and Epidemiology (OCDSE).



“...the strain of Shigella in this outbreak was Shigella sonnei. This strain of Shigella is responsible for 70% of cases in the US.”

LOCAL OUTBREAK FEATURE CONTINUED

After the interviews were completed, it was discovered that the cases had attended the same daycare. In response the OCDSE provided the daycare with control measures to take, educational materials regarding Shigella, and stool testing kits. Confirmed cases of Shigella were also excluded from the daycare until two different stool samples tested negative for the bacteria. Antibiotics were given to some of the cases to treat the infection.

In total, there were 22 confirmed or suspected cases. The majority of cases experienced diarrhea, abdominal cramps, or a fever. The youngest case was a child younger than one year old and the oldest was 24 years old. Laboratory testing conducted by the Ohio Department of Health Laboratory indicated that the strain of Shigella in this outbreak was *Shigella sonnei*. This strain of Shigella is responsible for 70% of cases in the US.

In order to prevent future outbreaks, daycares should adhere to state-mandated criteria regarding Shigella. If an outbreak does occur, daycares should complete daily disinfection and cleaning of all toys and surfaces. The daycare staff also needs education regarding Shigella symptoms, hand-washing guidelines and exclusion policies. Hand-washing is vital to prevent Shigella infections. Children and staff need to wash hands after using the restroom and when handling or preparing food. For ways to reduce your risk of Shigella and other food-borne pathogens, see the safety tips on page 3.



COMMUNICABLE DISEASE SYNDROMIC SURVEILLANCE: QUARTER 1 HIGHLIGHTS

OFFICE OF COMMUNICABLE DISEASE SURVEILLANCE AND EPIDEMIOLOGY

The OCDSE is responsible for reducing the incidence of communicable disease (not including tuberculosis, sexually transmitted diseases, and HIV/AIDS) in the City of Cleveland through prevention, surveillance, and outbreak control.

Mission Statement:

To provide disease surveillance, data collection, data analysis, health education, preparedness planning, outbreak response, and disease prevention services designed to protect the health of Clevelanders



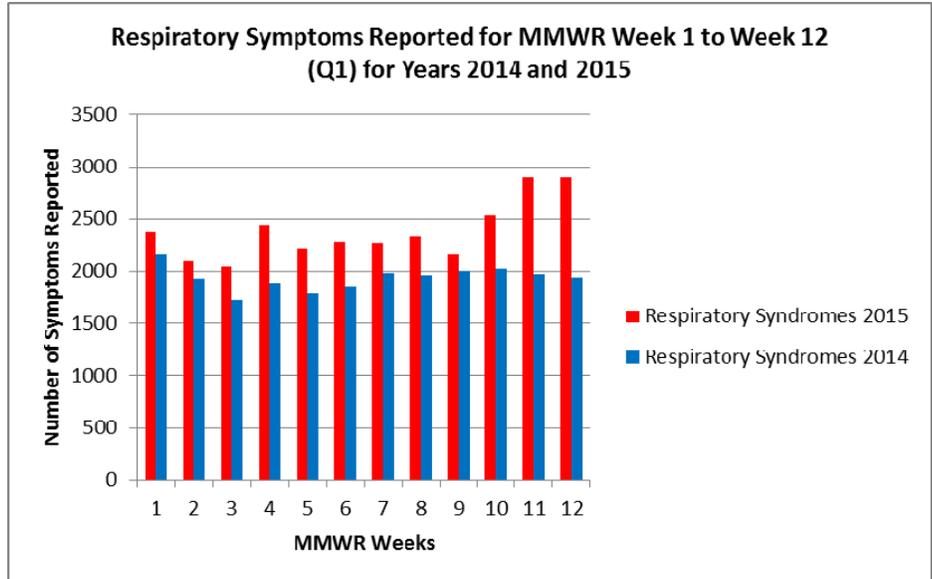
The Office of Communicable Disease Surveillance and Epidemiology

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Fax: 216-664-6159



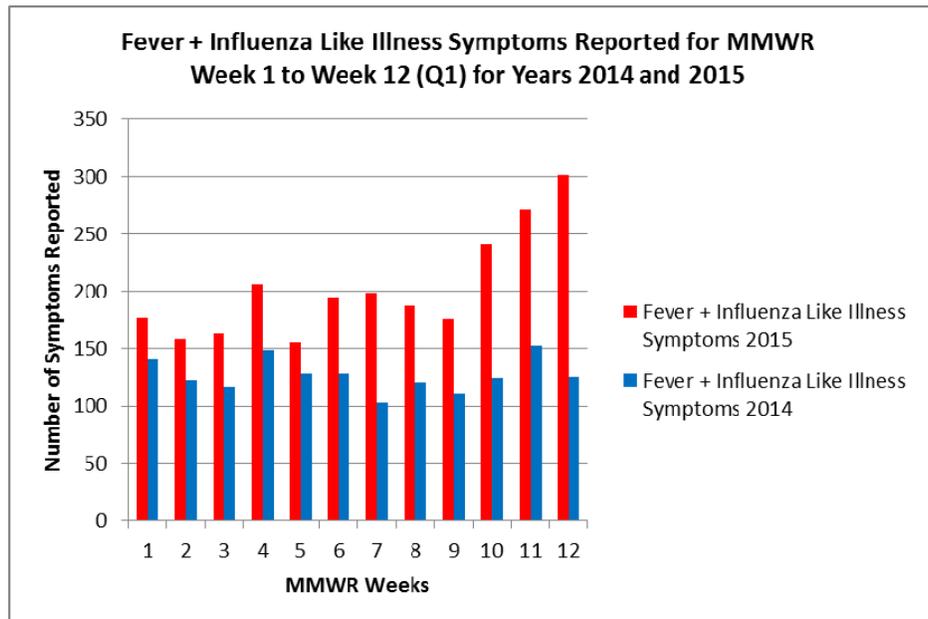
Respiratory Symptoms and Fever + Influenza like Illness Symptoms Reported to EpiCenter by MMWR Weeks for Cuyahoga County

Author: Brent Styer, MPH



Percent change from last year (2014): +49.25%

Respiratory symptoms were higher Q1 2015 compared to the same timeframe in Q1 2014.



Percent change from last year (2014): +140.80%

Fever+ Influenza like illness symptom were higher in Q1 2015 compared to the same timeframe in Q1 2014.