

Changes to the Lists of Reportable Diseases, Emergency Illnesses and Health Conditions, and Reportable Laboratory Findings.

In May 2015, the World Health Organization reported the first transmission of Zika virus in the Western hemisphere. Since then, the virus has spread to 25 countries and territories. Zika virus will likely continue to spread, therefore, pursuant to the requirements of Connecticut General Statute 19a-2a and Section 19a-36-A7 of the Public Health Code, Raul Pino, MD, MPH, Commissioner of the Connecticut Department of Public Health has considered and hereby amends the Lists of Reportable Diseases, Emergency Illnesses and Health Conditions and Reportable Laboratory Findings to include Zika virus effective February 15, 2016.

Although most people infected either do not become ill or develop a mild clinical illness, Zika virus has been associated with birth defects in infants born to women infected during pregnancy. The main mosquito vector, *Aedes aegypti*, is not established in Connecticut but are present in the southern U.S. A related species, *Aedes albopictus*, is found in the state and may possibly transmit the virus. State surveillance will identify infections acquired in the continental U.S. and among travelers to foreign endemic areas.

An Outbreak of Norovirus Among Students and Staff of an Academic Institution - Connecticut, October 2015

On October 29, 2015, the Connecticut Department of Public Health (DPH) received notification of a possible foodborne outbreak among students and faculty of an academic institution. The school reported that they were aware of over 30 gastrointestinal illnesses among attendees of catered luncheons provided by the school's dining services during October 26-27. The DPH Epidemiology and Food Protection Programs assisted the local health

In this issue...	Page No.
Changes to the Lists of Reportable Diseases, Emergency Illnesses and Health Conditions, and Reportable Laboratory Findings	5
An Outbreak of Norovirus Among Students and Staff of an Academic Institution - Connecticut, October 2015	5
A Pilot Pre-Exposure Prophylaxis (PrEP) Program for the Prevention of HIV - Connecticut, January—June, 2015	7

department (LHD) in the investigation to determine the extent and source of the outbreak, and implement control measures.

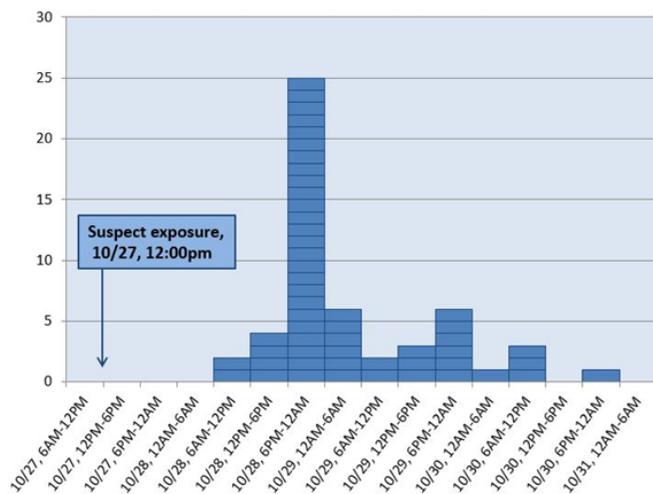
Epidemiologic Investigation

A standardized questionnaire was developed and administered to all students and staff via Survey Monkey[®]. A case was defined as vomiting or diarrhea (two or more stools in a 24 hour period) in a student or staff member with symptom onset during October 28-30, 2015. The survey was distributed to approximately 750 students and staff. Among these, 236 (approximately 31%) completed the survey. Of those who completed the survey, 22 reported illness which did not meet the case definition and were excluded from analysis. Of the remaining 214 respondents, 53 (25%) met the case definition. The median age of case-patients was 26 years (range 21 – 63); 33 (62%) were male. Cases included 41 (77%) students and 12 (23%) staff.

Onset of illness ranged from October 28-30, 2015 (Figure, see page 6). The median incubation period was 35 hours (range 22-81), and median duration of illness was 24 hours (range 3-99). Symptoms among case-patients included nausea (100%), vomiting (79%), diarrhea (76%), headache (70%), muscle aches (69%), cramps (67%), chills (67%), and fever (64%) (4 had recorded temperatures between 99.4 – 100). Six case-patients sought medical attention; no hospitalizations or deaths were reported.

From October 26-27, the school's dining service catered a total of nine events. Catered foods

Figure: Number of cases by date and time of onset from an outbreak at an academic institution, Connecticut-October 2015



consisted of a variety of sandwiches, salads, fruits, and dessert items. Eating at one specific catered event of the four which occurred on October 26, or four specific events of the five which occurred on October 27 was significantly associated with illness. However, after stratification, consumption of food from any of the four October 27 events, independent of food from the one October 26 event, was significantly associated with illness [summary odds ratio (sOR) 28.35, 95% confidence interval (95% CI) 10.62-75.67, p-value <0.0001]. Consuming any type of sandwich at an October 27 event was found to be significantly associated with illness (OR=17.24, 95% CI 8.02-37.06, p-value <0.0001).

Laboratory Investigation

Stool specimens were collected from 3 ill attendees and all 14 food employees at the school's dining service. Specimens were tested at the DPH State Laboratory for routine enteric bacterial pathogens and norovirus. One ill student and 2 food employees tested positive for norovirus genogroup I (NoV GI). NoV GI-positive specimens were forwarded to the New York state public health laboratory for further testing; sequence analysis identified the genotype as GI/5.

Environmental Investigation

From November 2-5, an environmental investigation and onsite evaluation of the school's dining services was conducted by staff of the LHD and DPH Food Protection Program. Interviews of

food employees, collection of stool specimens, and assessment of food handling practices and procedures were included. All food employees were interviewed and submitted stool specimens for testing. The 2 food employees who tested positive for NoV both reported a history of gastrointestinal illness. The first food employee, with primarily janitorial and dishwashing duties, indicated onset of illness on the evening of either October 27 or 28 and consumption of a veggie wrap made for one of the catered luncheon events on October 27. The second positive food employee indicated onset of diarrhea and vomiting on the morning of October 27 and continued to work that day. This person was the only food employee responsible for preparing all of the sandwiches/wraps and salads for the events.

Reported by

Local Health Department Staff; and staff of the Epidemiology and Emerging Infections Program, Food Protection Program, and State Public Health Laboratory, Connecticut Department of Public Health.

Editorial

Noroviruses cause an estimated 19-21 million cases of gastroenteritis in the United States annually and are often spread through contaminated food or water (1). Transmission of norovirus occurs primarily via fecal-oral route and food contamination by infectious food handlers is a frequent cause of norovirus outbreaks (2). Given the low infectious dose and high concentration of norovirus in the stool of an acutely ill individual, even a limited contamination event can result in substantial outbreaks. Ready-to-eat foods that require handling but no subsequent cooking, such as sandwiches and salads, pose greater risk.

The epidemiologic, environmental, and laboratory evidence indicate that a foodborne outbreak occurred at an academic institution during October 2015. The symptoms, incubation period, and duration of illness were consistent with norovirus. Consumption of foods, most specifically sandwiches, from four specific catered events on October 27 was significantly associated with illnesses. Furthermore, the environmental investigation determined that there was only one food employee responsible for preparing all of the sandwiches provided at the catered events. This food employee worked while having symptoms of diarrhea and vomiting, and subsequently tested

positive for norovirus. The same genotype (GI/5) was isolated from an ill student and another food employee who was likely a victim of the outbreak. It is important to note this employee had paid sick leave but did not associate the symptoms experienced with being ill, and thus did not report symptoms to the person in charge.

Contamination of food by an ill food employee was the most likely cause of this outbreak. The findings of this outbreak investigation reinforce the need for those in charge to train and closely supervise staff on reporting of illness and refraining from handling food when ill. An employee health policy, consistent with the [2013 Food and Drug Administration \(FDA\) Food Code](#), should be developed and implemented by each food establishment (3). Employee health policies apply to all staff and should clearly identify the responsibility of food employees for personal cleanliness and to report certain illnesses and/or symptoms to the person in charge, identify the responsibility of the person in charge to report illnesses to the regulatory authority, and include clear instructions for exclusion of ill workers and criteria for reinstatement.

References

1. Centers for Disease Control and Prevention (CDC). Norovirus U.S. Trends and Outbreaks. <http://www.cdc.gov/norovirus/trends-outbreaks.html>. Accessed January 7, 2016.
2. CDC. Vital Signs: Foodborne Norovirus Outbreaks—United States, 2009–2012. *MMWR* 2014; Vol. 63(22):491–495. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6322a3.htm?s_cid=mm6322a3_w. Accessed January 7, 2016.
3. U.S. Food and Drug Administration. Food Code 2013: <http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/ucm374275.htm>. Accessed January 7, 2016.

A Pilot Pre-Exposure Prophylaxis (PrEP) Program for the Prevention of HIV - Connecticut, January–June, 2015

Human immunodeficiency virus (HIV) attacks the immune system and can lead to acquired immunodeficiency syndrome (AIDS). The virus enters the body through unsafe sex or injection drug use. Each year, about 300 Connecticut residents are diagnosed with HIV. Through 2012, the CDC estimated that 13,500 adult and adolescent Connecticut residents were living with HIV infection. Of these, nearly 10% were unaware of their HIV status (1).

In 2004, the U.S. Food and Drug Administration (FDA) approved a combination medication, brand name Truvada[®], for treatment of HIV. Studies reported during 2009–2011 showed the medication might reduce the risk of HIV infection by 92 percent. In July 2012, the FDA approved the drug for pre-exposure prophylaxis (PrEP). PrEP is a prevention method for people at high risk of acquiring HIV who do not yet have it. (2).

When exposure to HIV happens through sex or injection drug use, PrEP can help stop the virus from establishing a permanent infection (3). PrEP is a powerful HIV prevention tool. Combined with condoms and other prevention methods it can provide greater protection than when used alone. People who use PrEP must take the drug daily and see their health care provider every 3 months for HIV testing and other follow-up (4).

The Connecticut Department of Public Health (DPH) HIV Prevention program with assistance from other HIV prevention and care organizations in Connecticut held a PrEP Implementation Summit on December 10, 2014 and a follow-up summit on October 29, 2015. Summit participants included HIV support service providers, HIV specialist providers, HIV prevention program managers/directors, non-HIV specialist medical providers (MD, APRN, RN, PA), HIV prevention providers, and other participants such as disease intervention specialists (DIS), researchers and HIV/AIDS program administrators. The goal of these PrEP Summits was to educate the Connecticut HIV/AIDS prevention and care community regarding PrEP, especially on how to implement PrEP in their community and in an existing medical setting.

From January–June 2015, one clinic recruited 24 patients into its PrEP program. Data that included a patient's HIV risk factors and a sexually transmitted disease (STD) diagnosis within the last 12 months was used by the clinic as criteria for identifying potential patients. The median age of participants was 38 years (range: 25–59 years); all were male. The majority of the patients were White (70.8%), with 4.2% Black/African American, and 4.2% unknown race. Five (20.5%) reported being Hispanic/Latino (Table, see page 8). A total of 21 clients resided in Connecticut; all others were from New York State.

The HIV risk category identified for all patients was men who have sex with men (MSM) with several types of behavioral risk factors reported. Of the 24 patients, 25% were diagnosed with a sexually transmitted disease (STD) within the previous 12 months. Patients had a median of 2 PrEP visits to the program during the pilot period. There were no HIV seroconversions.

Reported by

R Rodriguez-Santana, MBA, MPH, M Buchelli, MPH, MBA, Connecticut Department of Public Health HIV Prevention Program, L Sosa, MD, Connecticut Department of Public Health, STD Control Program

Editorial

The DPH is aligning with the National HIV/AIDS Strategy for the United States updated to 2020, which supports the full access to comprehensive PrEP services with support for medication adherence (5). At present, the DPH is working with 12 healthcare providers to implement PrEP in a variety of medical settings in the state. It is important for the DPH to know where in-state PrEP is being offered so barriers to implementation can be addressed and outcomes can be monitored. For the most updated list of PrEP providers in Connecticut, visit www.PrEPNowCT.org. Healthcare providers interested in learning more about implementing PrEP in their setting can contact the DPH HIV Prevention program at (860) 509-7801.

References

1. H. Irene Hall, Qian An, Tian Tang, et al. Prevalence of Diagnosed and Undiagnosed HIV Infection - United States, 2008–2012. *MMWR Morb Mortal Wkly Rep* 2015; 64: 657-662
2. U.S. Food and Drug Administration. FDA approves first drug for reducing the risk of sexually acquired HIV infection. Available at <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm312210.htm>.
3. Centers for Disease Control and Prevention. Fact Sheet: Pre-Exposure Prophylaxis for HIV Prevention. Available at http://www.cdc.gov/hiv/pdf/PrEP_fact_sheet_final.pdf.
4. Centers for Disease Control and Prevention. Pre-exposure Prophylaxis for the Prevention of HIV Infection in the United States – 2014 Clinical Practice Guideline. Available at <http://www.cdc.gov/hiv/pdf/guidelines/PrEPguidelines2014.pdf>.

5. S. Office of National AIDS Policy. National HIV/AIDS Strategy: Updated to 2020. Available at <https://www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-update.pdf>.

Table. Characteristics of Patients in a Pilot PrEP Program, January–June, 2015

Characteristics	Frequency (%)
Gender	
Male	24 (100.0)
Female	0 (–)
Age Group	
Age 20 to 29	6 (25.0)
Age 30 to 39	8 (33.3)
Age 40 to 49	3 (12.5)
Age 50 to 59	7 (29.2)
Race/Ethnicity	
Hispanic/Latino	5 (20.8)
Black/ African American	1 (4.2)
White	17 (70.8)
Don't Know	1 (4.2)
HIV Risk Category	
MSM	24 (100.0)
Patients HIV Risk Behaviors*	
Anal Sex without a Condom with a Male	18 (75.0)
Anal Sex with HIV-Positive Male	12 (50.0)
Unprotected anal sex with a person who is HIV positive	9 (37.5)
Unprotected sex with Multiple Partners	10 (41.7)
Diagnosed with a sexually transmitted disease (STD) in the previous 12 months	
No	18 (75.0)
Yes	6 (25.0)

*Patient could report more than one risk behavior

<p>Raul Pino, MD, MPH Acting Commissioner of Public Health</p> <p>Matthew L. Cartter, MD, MPH State Epidemiologist</p> <p>Lynn Sosa, MD Deputy State Epidemiologist</p>	<p>Epidemiology and Emerging Infections 860-509-7995</p> <p>Healthcare Associated Infections 860-509-7995</p> <p>HIV & Viral Hepatitis 860-509-7900</p> <p>Immunizations 860-509-7929</p> <p>Sexually Transmitted Diseases (STD) 860-509-7920</p> <p>Tuberculosis Control 860-509-7722</p>	<p>Connecticut Epidemiologist</p> <p>Editor: Matthew L. Cartter, MD, MPH</p> <p>Assistant Editor & Producer: Starr-Hope Ertel</p>
---	--	--