

Change to the List of Reportable Diseases, Emergency Illnesses and Health Conditions and the List of Reportable Laboratory Findings

Effective February 5, 2020, Commissioner Renée D. Coleman-Mitchell, M.P.H. of the Connecticut Department of Public Health (DPH) amended the List of Reportable Diseases, Emergency Illnesses and Health Conditions and the List of Reportable Laboratory Findings by adding "2019 Novel Coronavirus" to such lists.

This action was taken pursuant to Connecticut General Statutes Section 19a-2a and Section 19a-36-A7 of the Regulations of Connecticut State Agencies. This was done to assess and manage risk of potential exposures to 2019-nCoV and implement public health control actions based on a person's risk level and whether they have an illness consistent with the novel coronavirus.

On February 11, 2020, the World Health Organization named the disease associated with this novel virus "coronavirus disease 2019" or "COVID-19." The International Committee on Taxonomy of Viruses (ICTV) has named the novel coronavirus virus "SARS-CoV-2." The DPH will use this new terminology.

Henceforth, COVID-19 is a category 1 disease and should be reported immediately to DPH and to the local health department (LHD) in the case-patient's town of residence by phone on the day of recognition or strong suspicion. Laboratories are required to immediately contact the DPH with positive laboratory findings for SARS-CoV-2.

The COVID-19 report form is available on the DPH [website](#). This should be completed on suspect and confirmed cases of COVID-19. DPH will share the report with the appropriate LHD. Healthcare providers can refer questions about reporting COVID-19 to the DPH Epidemiology and Emerging Infections Program at 860-509-7994 or 860-509-8000 after hours.

Additional information can be found on the Centers for Disease Control and Prevention [website](#).

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An Outbreak of Sapovirus Associated With the Consumption of Raw Oysters

In December 2018, the Connecticut Department of Public Health (DPH) was notified of a possible foodborne outbreak among a group of 7 persons who experienced gastrointestinal (GI) illness after dining at a local food service establishment (Restaurant A). The DPH Epidemiology and Emerging Infections Program (EEIP), Food Protection Program (FPP), local health department (LHD), and Department of Agriculture, Bureau of Aquaculture (DA/BA) conducted an investigation to determine the source of the outbreak, extent of illnesses, and implement control measures.

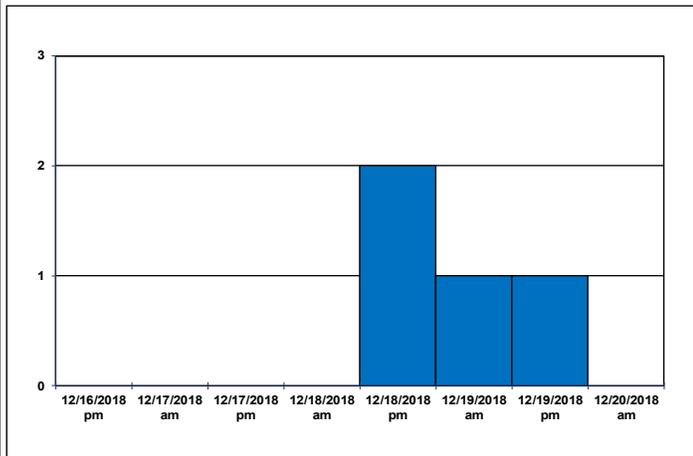
Epidemiologic Investigation

Staff of EEIP conducted telephone interviews with all 7 dinner attendees. A case was defined as an attendee who developed vomiting and/or diarrhea (≥ 3 loose stools within 24 hours) within 3 days after exposure to Restaurant A or a positive laboratory result in the absence of these symptoms.

Of the 7 attendees, 4 met the case definition. The median age of case-patients was 28.5 years (range 25-30); 2 (50%) were female. Onset of illness ranged from December 18-19 (Figure, page 6). The median incubation period was 57 hours (range 43.5-67.5), and median duration of illness was 57 hours (range 18-96). Two case-patients reported still being ill at the time of interview. All 4 case-patients experienced diarrhea, nausea and fever, and 3 (75%) had vomiting. None sought medical attention.

All 4 case-patients consumed a shared raw oyster appetizer. Consumption of raw oysters (Relative Risk=undefined, $p = 0.03$) was associated with illness. Attendees who did not eat raw oysters remained well.

Figure 1: Onset of illness among Sapovirus cases associated with a common restaurant- Connecticut, 2018



Environmental Investigation

LHD made an onsite visit to Restaurant A on December 21, 2018 to conduct an environmental assessment. During the visit, LHD interviewed all food workers (FWs) for potential illness, and reviewed storage and service of oysters. Restaurant A employed FWs known as “shuckers” whose primary responsibility is to shuck shellfish for appetizer orders and raw bar. On the day of exposure, the establishment employed one shucker. This employee was given a stool collection kit for a sample to be tested at the State Public Health Laboratory (SPHL).

During interviews, no FWs admitted to recent symptoms of illness. Storage of shellstock at the establishment was deemed adequate. LHD asked the establishment for oysters consumed on the exposure date. None were available; copies of shellstock tags and invoices associated with the product were available and collected. A traceback by DA/BA determined oysters served during the meal were harvested from Connecticut and Rhode Island.

The stool specimen provided by the shucker tested positive at SPHL. The shucker was re-interviewed, again denied recent illness, and denied eating any foods while working on the exposure date.

Laboratory Investigation

Stool samples were collected from three case-patients and the shucker; all tested positive for sapovirus using a multiplex polymerase chain reaction (PCR) GI screening panel (BioFire

FilmArray) at SPHL and negative for routine enteric bacterial culture (*Campylobacter*, *Escherichia coli* O157, *Salmonella*, and *Shigella*).

SPHL forwarded positive specimens to the Minnesota Department of Health Laboratory (MDPHL) for further characterization. MDPHL confirmed the positive results by RT-PCR; three specimens were the same genotype (SAV GI.I).

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Editorial

The epidemiologic, environmental, and laboratory findings suggest an outbreak of sapovirus occurred among a group of patrons who ate at a restaurant in Hartford County in December 2018. Sapovirus was first identified in 1977 in a home for infants in Sapporo, Japan during an outbreak of infectious diarrhea (1). Outbreaks have since been identified in adult populations. Sapovirus and norovirus belong to the family *Caliciviridae* and cause acute gastroenteritis in humans. It is necessary to perform laboratory testing, most commonly reverse transcription-PCR (RT-PCR), to differentiate sapovirus and norovirus outbreaks (2). Despite similar symptomology, the incubation period (range 44-68 hours) in this outbreak was longer than typically seen in norovirus outbreaks (range 24-48 hours). The difference in incubation periods is supported in a systematic review in which norovirus had a median of 1.2 days incubation versus 1.7 days for sapovirus (3).

Genetically indistinguishable sapoviruses are found in shellfish (oysters and clams), environmental water samples (i.e., sewage and river water), and human specimens (4), likely caused by human waste discharged into environmental waters where shellfish live. Sapovirus is more prevalent in humans during colder months, when virus is detected more frequently and with higher viral load in environmental water samples.

This is the first shellfish-related sapovirus outbreak identified in Connecticut. Limitations to this investigation include unavailability of oysters for testing. The shucker tested positive for sapovirus

and claimed not to have symptoms or to have consumed any foods from Restaurant A on the exposure date. These limitations contributed to uncertainty whether this outbreak can be attributed to the FW or contamination from the growing area.

To help prevent spread of sapovirus, it is important to handle and prepare food safely. Before eating, carefully wash fruits and vegetables and thoroughly cook shellfish (clams, mussels, oysters) until shells open (5, 6). Fully cooked shucked clams and oysters will appear opaque and firm. Other prevention practices include washing hands with soap and water, especially before preparing or eating foods and after using the bathroom, and cleaning and disinfecting contaminated surfaces (5).

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Hepatitis A Case Investigation — Connecticut, 2018

On September 10, 2018, a man admitted to a Connecticut hospital for acute liver failure tested positive for IgM antibodies to hepatitis A virus (HAV). The patient, aged 40–49 years, presented with jaundice and complained of nausea, diarrhea, and dark urine; liver enzymes were elevated (alanine aminotransferase: 2327 IU/L [normal, 11–47 IU/L]; aspartate aminotransferase: 1264 IU/L [normal, 13–33 IU/L]). On September 11, the Connecticut Department of Public Health (DPH) Epidemiology and Emerging Infections Program (EEIP) and a local health department (LHD) investigated this case to prevent spread of hepatitis A infection.

Infection with HAV is symptomatic in ~70% of adults and about half result in hospitalizations;

symptoms include anorexia, vomiting, malaise, fever, abdominal pain, and jaundice (1). The average incubation period is 28 days (range: 15–50 days). People at higher risk for HAV infection in the United States include persons who use illicit/recreational drugs, men who have sex with men, persons experiencing homelessness, and travelers to countries with high or intermediate endemicity of HAV infection (2). The Connecticut patient reported recent injection drug use and no other exposure associated with HAV infection.

HAV is transmitted through close personal contact with an infected person or ingestion of HAV-contaminated food or water. HAV shedding in stool is heaviest 1–2 weeks before symptom onset; thus, infected people can spread the virus before they know that they are sick. HAV is highly infectious and can persist in the environment for months (1). Poor sanitation, lack of access to clean water and food, and crowded living conditions facilitate transmission. Before hospitalization, the patient resided in a group housing facility and attended an outpatient substance use disorder (SUD) treatment program. The patient did not participate in food preparation or service. On September 12, EEIP and LHD staff visited the housing and SUD treatment facilities to identify people at risk for HAV exposure.

We identified ~195 people at risk at the two facilities. At the housing facility, the patient had shared a dormitory-style room and bathroom (a single toilet, shower, and sink) with up to 11 other men. At the SUD program, clients had access to two bathrooms (one for each sex, each with two toilets and a sink). EEIP and LHD provided cleaning and sanitizing recommendations to both facilities.

The Centers for Disease Control and Prevention (CDC) recommends HAV postexposure prophylaxis (PEP) for people exposed to HAV who have not been vaccinated; PEP should be administered within two weeks of exposure (2). HAV PEP consists of a single dose of hepatitis A vaccine for healthy people aged ≥12 months, or a hepatitis A vaccine dose and immune globulin simultaneously (in a different anatomical site) for people who are immunocompromised or with chronic liver disease. HAV PEP is recommended for close personal contacts, including household and sex contacts, and persons who have shared drugs. CDC recommends PEP for previously unvaccinated persons when a

confirmed HAV case is identified in a setting where close personal contact occurs regularly and hygiene standards are difficult to maintain (e.g., correctional facility or group home) (2). Based on CDC guidance and observations at the housing and SUD treatment facilities, EEIP and LHD offered hepatitis A vaccine to all residents or clients and staff at both facilities.

On September 14, EEIP and LHD staff returned to the SUD treatment facility to provide educational information about HAV infection and vaccine; a vaccine information sheet and consent form were provided to all residents/clients and staff. Hepatitis A vaccines were administered to 144 people with assistance from LHD Medical Reserve Corps. Immunization cards were given to those vaccinated.

The index patient was discharged from the hospital 8 days after admission. A serum sample from the patient was sent to CDC for genetic sequencing; HAV from the patient’s serum was genotype IIIA and closely related to samples from cases linked to a concurrent outbreak in Massachusetts. No secondary cases of hepatitis A related to this case were reported.

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Editorial

Since 2016, a total of 30 U.S. states, including Massachusetts and New Hampshire, have reported hepatitis A outbreaks among people experiencing homelessness, those who use illicit/recreational drugs, men who have sex with men, or are currently or recently incarcerated (3). As of November 15, 2019, approximately 28,000 cases and 285 deaths related to these outbreaks had been reported to CDC since 2016.

Vaccination is the best way to prevent spread of HAV infection. A single dose of hepatitis A vaccine provides up to 95% seroprotection in healthy people

for up to 11 years (4). In 1996, The Advisory Committee on Immunization Practices (ACIP) first recommended hepatitis A vaccine for adults at high risk for infection, including persons who use illicit/recreational drugs; in 2006, ACIP recommended universal childhood vaccination (1). In 2018, ACIP recommendations were expanded to include persons experiencing homelessness in response to ongoing outbreaks (5). In 2012, only ~12% of adults aged 18–49 years reported receipt of ≥2 doses of hepatitis A vaccine (1).

In 2018, DPH and LHDs launched an initiative to provide vaccine to adults at risk for HAV infection. Connecticut LHDs have conducted 120 vaccination clinics at homeless shelters and SUD treatment programs to reach these populations. Clinicians should consider hepatitis A in persons with signs and symptoms of liver inflammation, especially among those who engage in high-risk behaviors such as substance use or who are experiencing homelessness. Vaccine should be offered to unvaccinated adults at risk. Collaborating with organizations that have trusted relationships with populations at high risk might help to increase vaccine uptake among vulnerable communities.

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