2019

Epidemiology and Emerging Infections

Reportable Infectious Diseases Reference Manual

ROUTINE REPORTABLE INFECTIOUS DISEASE FOLLOW-UP FOR CT STATE AND LOCAL HEALTH DEPARTMENT STAFF

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Table of Contents

Important Documentation

For the most up to date reportable disease information and forms, please visit the DPH website https://portal.ct.gov/DPH.

Documents for the information below, with the exception of the FDA Food Code, are attached for your convenience and are current as of August 2019.

Attachments

A - Physician Reportable Diseases List

B - Reportable Disease Confidential Case Report Form (PD-23)

C - Laboratory Reportable Significant Findings List

D - Reportable Laboratory Findings Form (OL-15C)

E - Example of a Confidentiality Pledge

F - Food Protection Program

- For the following FDA guidance please visit: https://portal.ct.gov/DPH/Food-Protection-Program/Main-Page

  FDA Food Code FAQ

  FDA Food Code 2017

G - GEDIF for Salmonella and Campylobacter

H - GEDIF for Shigella

I - GEDIF for Yersinia

J - GEDIF for Cryptosporidium

K - Cholera and Other Vibrio Illness Surveillance Report

L - Hepatitis A Case Report Form

- Hepatitis A Case Contact Management Form is the last page of the Case Report Form

M - Typhoid and Paratyphoid Fever Surveillance Report

The information on this page includes a list of documents that you will need when conducting some disease follow-up or investigations.

Please keep in mind that the Reportable Diseases List and the list of Reportable Laboratory Findings are reviewed annually, and may be updated, as are the Confidential Disease Reporting Form - PD23 and the Reportable Laboratory Findings Form OL-15C.

To assure you have the most up-to-date information concerning reportable diseases, please visit the Reporting of Diseases, Emergency Illnesses, Health Conditions, and Laboratory Findings webpage at: https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

For the most current reportable disease forms, please visit: https://portal.ct.gov/DPH/Communications/Forms/Forms and select the form for your specific needs.

The purpose of this reference manual:

The Connecticut Epidemiology and Emerging Infections (EEIP), Reportable Infectious Diseases Reference Manual (the manual) describes infectious disease investigation and follow-up recommendations of the Connecticut Department of Public Health (DPH) EEIP, and outlines the responsibilities of the DPH and local health department (LHD). Primary users include Connecticut local health directors, public health nurses, sanitarians, and other LHD personnel, and DPH employees.

The focus of the manual is on routine follow-up of the reportable infectious diseases that are not covered by the STD/HIV/Hepatitis Programs, Immunizations Program or the Tuberculosis Program, which have their own disease-specific recommendations. The manual does not specifically address possible agents of bioterrorism, except by providing URLs to the Connecticut Public Health Emergency Response Plan (https://portal.ct.gov/DPH/Planning/Public-Health-Preparedness-and-Response/Public-Health-Emergency-Response-Plan), and to the resources available on the Centers for Disease Control and Prevention (CDC) website (https://emergency.cdc.gov/bioterrorism/).

For follow-up instructions on other reportable infectious diseases, contact the responsible program directly:

Healthcare Associated Infections Program	860-509-7995
HIV Prevention Program	860-509-7807
Immunization Program	860-509-7929
Sexually Transmitted Diseases (STD) Program	860-509-7920
Tuberculosis Program	860-509-7801

We recommend that all users of the manual have their own copies of the following resources as they will be needed to begin investigations by reviewing the appropriate sections:

- Control of Communicable Diseases Manual, 20th Edition (American Public Health Association, David L. Heymann, MD, Editor), or most recent edition;
- Red Book: 2018 Report of the Committee on Infectious Diseases, 31st Edition (American Academy of Pediatrics, David W. Kimerlin, MD, FAAP, Editor), or most recent edition.

Much of the disease-specific information in the manual is derived from these two resources, and from materials available on the CDC website (https://www.cdc.gov/). The manual is intended to provide supplemental information that will help public health practitioners in Connecticut implement nationally recognized disease prevention and control measures for reportable infectious diseases.

DPH staff conducts follow-up on all reportable vector-borne diseases.

The diseases are listed alphabetically with each topic including information for routine follow-up and URL addresses to websites that include additional information as well as fact sheets. Attachments include forms and questionnaires that are necessary for proper follow-up.

Additional Resources for Control Related Follow-up

Control Measures

- Nationally Notifiable Infectious Diseases case definition website: https://wwwn.cdc.gov/nndss/conditions/

Educational Resources

- Centers for Disease Control and Prevention online: https://www/cdc/gov
- Connecticut Department of Public Health online: https://www.ct.gov/dph
- U.S. Department of Health and Human Services. U.S. Food & Drug Administration. "Bad Bug Book – Foodborne Pathogenic Microorganisms and Natural Toxins Handbook." https://www.fda/gov/food/foodborneillnesscontaminants/causesofillnessbadbugbook/

Reportable Disease Follow-up in Connecticut

Reportable Diseases Listing

Connecticut General Statutes (CGS) §19a-2A(9), and §19a-36-A2 (https://portal.ct.gov/-/media/sots/regulations/Title_19a/036pdf.pdf?la=en) of the Connecticut Public Health Code (CPHC) mandate the Commissioner of the DPH to annually issue a list of reportable diseases, emergency illnesses and health conditions and a list of reportable laboratory findings. The Commissioner shall also prepare printed forms that include instructions to report and return. An advisory committee of public health officials, clinicians, and laboratorians contribute to the process.

Mandated Reporting

CGS §19a-215b, and §19a-36-A3 of the CPHC require that health care providers, including administrators of health care facilities, report the diseases listed in the List of Reportable Diseases, Emergency Illnesses, and Health Conditions (https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/infectious_diseases/pdf_forms_/ReportableDiseases.pdf?la=en). These reports are confidential (pursuant to CGS §19a-25 and §19a-215d,e). As indicated in §19a-36-A4 of the CPHC, diseases fall into two categories:

- **Category 1**: These diseases must be reported immediately by telephone on the day of recognition or strong suspicion, due to the need for timely public health action. On weekdays, contact the DPH Epidemiology and Emerging Infections Program (EEIP) at 860-509-7994, and the LHD of the patient's town of residence. [A list of local health departments can be found at: https://portal.ct.gov/DPH/Local-Health-Admin/LHA/Local-Health-Administration---Site-Map.] On evenings, weekends, and holidays, contact the DPH's afterhours and emergency number at 860-509-8000. A Reportable Disease Confidential Case Report Form (PD-23) or a disease specific report form must be completed and mailed to both the DPH and LHD within 12 hours. Forms are found on the DPH website at: https://portal.ct.gov/DPH/Communications/Forms/Forms.
- **Category 2**: These diseases must be reportable by mail within 12 hours of recognition or strong suspicion to both the DPH and LHD.

Section 19a-36-A3 of the CPHC requires that directors of clinical laboratories must report to the DPH and LHD any laboratory evidence suggestive of diseases on the Reportable Laboratory Finding list (https://portal.ct.gov/DPH/Infectious-Diseases/DiseaseReporting/Laboratory-Reporting). A completed Reportable Laboratory Findings Form OL-15C (https://portal.ct.gov/DPH/Communications/Forms/Forms) must be mailed to both the DPH and LHD of the patient's town of residence. Laboratories participating in Electronic Laboratory Reporting (ELR) (https://portal.ct.gov/DPH/Infectious-Diseases/Electronic-Laboratory-Reporting/Electronic-Laboratory-Reporting) do not need to submit OL-15C forms.

Authority to Conduct Case Follow-up

CGS §19a-215d grants authority to the DPH and the LHD director or his/her authorized personnel to contact the reporting physician and the person with a reportable condition for the purposes of disease control. All information collected, as part of this follow-up investigation, is considered confidential, pursuant to §19a-25.

Reportable Disease Follow-up Responsibilities by the State and Local Health Departments

The following reflects the recommendations of the DPH Infectious Diseases Section regarding responsibility for the routine follow-up of reportable infectious diseases to obtain additional surveillance data and implement control measures.

LHD Primarily Responsible for:

The LHD is responsible for completing state and/or CDC case report forms if indicated, and for assuring that appropriate control measures are being taken independently of any assistance from the DPH. The LHD has primary responsibility for obtaining surveillance data on diseases in the following list:

Foodborne – 860-509-7994*

*See annual FoodNet/FoodCORE letter (Attachment N) for yearly updates on respective follow-up responsibilities.

- Campylobacteriosis (NOT reported by Quest Diagnostics)
  - ^Special Note on Campylobacter: Beginning in 2018, Campylobacter cases reported by Quest Diagnostics will be interviewed by DPH. LHDs must check CTEDSS in order to know which cases will be interviewed by DPH. A message indicating "CASE TO BE INTERVIEWED BY DPH" will be entered into the "Notes" field in CTEDSS for selected Campylobacter cases targeted for DPH interview. LHDs should interview all other Campylobacter cases. See annual FoodNet/FoodCORE letter for additional information.
- Cryptosporidiosis
- Giardiasis
- Salmonella (unless LHD defers to FoodCORE)
- Typhoid fever
- Yersiniosis

Hepatitis – 860-509-7900

- Hepatitis B
- Hepatitis C

Sexually Transmitted Diseases – 860-509-7920

- Chancroid
- Chlamydia
- Gonorrhea

Joint Responsibility

For some diseases, follow-up for both investigation and control is a joint responsibility between the LHD and DPH. In general:

- The role of the LHD is to take the necessary *action*. The DPH may take necessary actions if the LHD does not have the resources.
- The primary role of the DPH is to *assure* that appropriate investigation and control actions are taken for each case.

Chickenpox/Measles/Mumps/Pertussis/Polio/Rubella/Diphtheria – 860-509-7929

The DPH Immunization Program staff assures that appropriate diagnostic work has been done and works with LHD staff to assure that contacts to each case have been identified, and that appropriate recommendations for vaccination, exclusion, etc., have been made.

Haemophilus influenza disease/Meningococcal disease – DPH EEIP – 860-509-7994

The DPH EEIP staff assures that the appropriate diagnostic work has been done, and works with LHD staff to assure that close contacts have been identified and referred to their primary care provider for prophylactic treatment.

Hepatitis A – DPH EEIP – 860-509-7994

The DPH EEIP staff conduct case investigations and work with LHD staff who oversee and implement control measures when appropriate.

Tuberculosis – 860-509-7801

The DPH TB Control Program staff work with LHD staff to ensure that a treatment plan is developed, a contact investigation is done on each case, those infected are offered preventive therapy, and progress with completing therapy is monitored.

DPH Primarily Responsible for:

The DPH is responsible for obtaining additional case data for all other diseases on the list of Reportable Diseases, Emergency Illness, and Health Conditions. All diseases on the list are nationally reportable to the CDC, and some receive federal funding to enable follow-up specifically for surveillance purposes.

The assistance of the LHD is usually not required, unless initiation of control measures is needed concurrently, as could be the case in a foodborne outbreak.

Surveillance Systems

What is CTEDSS/Maven?

Maven is Connecticut's web-based electronic disease surveillance system (CTEDSS). Direct entry of interview data into CTEDSS for foodborne disease follow-up allows LHDs to complete follow-up forms online without the need to submit paper reports to the DPH. CTEDSS allows the sharing of information between LHDs and the DPH, and gives LHD staff the ability to generate reports of case data for their jurisdiction.

The DPH continues to expand disease reporting in CTEDSS. One significant benefit of the system is that it is able to received electronic disease reports. The implementation of CTEDSS allows LHDs to access laboratory information on patients residing within their jurisdiction only.

What is FoodNet?

The Foodborne Diseases Active Surveillance Network (FoodNet) is a collaborative project between the DPH, CDC, and the Yale University Emerging Infections Program (EIP). It is the foodborne disease component of the CDC's EIP. The objectives of FoodNet are to describe the epidemiology of emerging foodborne pathogens, estimate the frequency and severity of foodborne diseases that occur in the United States each year, and determine the proportion of specific foodborne diseases associated with certain foods.

Currently, FoodNet conducts active laboratory surveillance for nine foodborne/enteric pathogens: *Campylobacter*, *Cryptosporidium*, *Cyclospora*, *Listeria*, *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC) O157 and STEC non-O157, *Shigella*, *Vibrio*, and *Yersinia*. Data collected through DPH FoodNet are electronically submitted to the CDC and contribute to national efforts to implement new food safety programs and regulations. Each year, as part of multi-site foodborne disease research studies, FoodNet staff may interview cases of specific types of foodborne disease to determine risk factors for acquiring infection. The DPH notifies directors of health of these activities each year to request continued collaboration on follow-up interviews of cases to minimize the potential for duplication of efforts.

What is FoodCORE?

In 2012, the DPH was awarded federal funding through the CDC to become one of currently ten centers to join the Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE). FoodCORE focuses on developing new and better methods to detect, investigate, response, and control local and multi-state foodborne disease outbreaks. A primary focus of FoodCORE is on outbreaks caused by bacteria, including Salmonella, STEC, and Listeria (SSL). FoodCORE will also help strengthen the detection and investigation of viral and parasitic foodborne disease outbreaks.

Confidentiality

The information that public health officials collect as part of disease follow-up pursuant to CSG §19a-215, may contain personally identifiable information (PII). PII is **any** health information that makes the individual or organization supplying it identifiable. Pursuant to CGS §19a-25, PII "*shall be confidential and shall be used solely for the purposes of*":

- reducing the morbidity or mortality from any cause or condition
- disease prevention and control by the LHD and DPH
- medical or scientific research
- such information shall not be admissible in any court action

Both state and local public health officials are required to make every effort to limit the disclosure of PII to the minimal amount necessary to accomplish the public health purpose. Administrative and support staff, interns, and local board of health members who may be aware of person information on a case should be familiar with maintaining confidentiality.

We encourage all LHDs to have a written confidentiality policy on file, and a standard confidentiality pledge for all LDH staff involved in infectious disease follow-up and control to read and sign. This includes directors, epidemiologists, clerical staff who open mail, and information technology (IT) staff with system administrator privileges. Please see attachment B for the confidentiality pledge the DPH uses.

The DPH also encourages LHDs to utilize a confidential fax machine for infectious disease reporting, investigation, and control. This machine should be located in a secured area where disease control staff work, and should not be accessible to the general public.

All confidential disease records should be stored in a locked file cabinet and, when possible, a room that can be locked. All computers used to enter confidential disease information into must be password protected to ensure confidentiality.

Important Points Regarding Confidentiality

- The information that public health officials collect as part of disease follow-up contains personally identifiable information (PII).
- Limit the disclosure of PII to the minimal amount necessary to accomplish the public health purpose.
- Confidential information can be released only to those who "need to know" to accomplish the public health purpose. Those to whom it is released must maintain confidentiality.
- Clearly mark envelopes with "CONFIDENTIAL", when mailing reports. If reporting by fax, be certain that the receiving number is a confidential fax.

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

Background

The privacy provisions of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), apply to health information created or maintain by health care providers who engage in certain electronic transactions, health plans, and health care clearinghouses. The federal Department of Health and Human Services (HSS) issues the "Standards for Privacy of Individually Identifiable Health Information", applicable to entities covered by HIPAA. The intent of HIPAA, was to establish national standards for consumer privacy protection and insurance market reform. There has been some confusion about the intent and implementation of the rules. This has resulted in health care providers refusing public health officials access to patient records, and is having unintended consequences on some of the core functions of public health.

Connecticut General Statutes

Hospitals and providers must be compliant with HIPAA requirements. Due to the importance of protecting the public's health, state and LHDs are authorized by law to collect personal information as part of such activities. However, because of HIPAA, hospitals and providers may question our ability to collect this information. The following statement, developed by DPH attorneys, can be used to answer questions from hospital staff or health care providers about the ability of the DPH or LHDs to collect personal information on their patients with reportable diseases without their consent.

"Pursuant to Connecticut General Statues §19a-2a and §19a-215 and the Regulations of Connecticut State Agencies §19a-36-A3-4, the requested information is required to the Department of Public Health."

Please note that the Connecticut General Statutes §52-146(b) (1) authorizes the release of these records to the Department without the patient's consent. Additionally, HIPAA also authorizes you to release this information without an authorization, consent, release, opportunity to object by the patient, as information (i) required by law to be disclosed [HIPAA Privacy regulation 45 CFR §164, 512 (a)] and (ii) as part of the Department's public health activities (HIPAA Privacy regulation §164.512(b)). The requested information is what is minimally necessary to achieve the purpose of the disclosure, and you may rely upon this representation in releasing the requested information, pursuant to 45 CFR §64.514(d)(3)(iii)(A) of the HIPAA Privacy regulations.

Bioterrorism Response

BIOTERRORISM

In a bioterrorism event, the DPH will be in direct contact the LHD about roles and responsibilities.

Information concerning bioterrorism can be found in the Connecticut Public Health Emergency Response Plan

https://portal.ct.gov/DPH/Planning/Public-Health-Preparedness-and-Response/Public-Health-Emergency-Response-Plan

Agent-specific resources are available on the Centers for Disease Control and Prevention (CDC) bioterrorism website: https://emergency.cdc.gov/bioterrorism/index.asp

Foodborne/Enteric Response

BOTULISM

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 1 DISEASE – REPORTED IMMEDIATELY TO DPH & LHD

A. Etiologic Agent

Botulism is caused by exposure to a neurotoxin produced by *Clostridium botulinum*. *C. butyricum* and *C. baratii* bacteria can at times produce the toxin as well. Although the bacteria that make botulinum toxin is naturally in many places, it rarely causes people to become sick. Also, the spores do not usually cause people to be sick when they're eaten. However, under the following conditions, the spores can grow and make this lethal toxin:

- Low-oxygen or no oxygen (anaerobic) environment
- Low acid (pH<4)
- Low sugar
- Low salt
- A certain temperature range
- A certain amount of water

Examples include improperly home-canned, fermented, or preserved food. The CDC categorizes human cases into four transmission categories: foodborne, wound, infant, and other (which includes adult intestinal toxemia, and iatrogenic botulism). There are seven distinct types of botulinum toxin (A-G). Types A, B, E, and rarely F, cause human botulism. Type A causes the most human illness and is the most potent.

C. botulinum toxin is considered a potential bioterrorist agent. If acquired, and properly disseminated, botulinum toxin could cause a serious public health challenge in terms of casualties and controlling the spread of disease.

B. Description of Illness

General facts: *C. botulinum* toxin is one of the most potent and lethal substances known. The main transmission categories include: foodborne botulism, infant botulism, wound botulism, adult intestinal toxemia, and iatrogenic botulism. The site of toxin production is different for each form, however, they all share flaccid paralysis that results from exposure to botulinum toxin.

Foodborne botulism: occurs by eating foods contaminated with botulinum toxin.

Infant (intestinal) botulism: occurs when spores are eaten, and the toxin is formed in the intestines. The disease is usually confined to infants aged <1 year.

Wound botulism: occurs when spores of the bacteria get into a wound and produce the toxin, which is then absorbed into the bloodstream.

Adult intestinal toxemia: is very rare and occurs when spores of the bacteria get into an adult's intestines. The spores will grow and produce toxin.

Iatrogenic botulism: occurs as a side effect of too much injected botulinum toxin for cosmetic or medical reasons.

Occurrence: Sporadic cases, and outbreaks of botulism occur worldwide. In the U.S., since 1973 a median of 24 cases of foodborne botulism, 3 cases of wound botulism, and 71 cases of infant botulism have been reported annually to the CDC. Recently, use of black tar heroin by chronic drug users has led to a dramatic increase in the number of cases of wound botulism since 1994.

Incubation period: The incubation period is variable, but neurological symptoms of foodborne botulism usually appear within 18-36 hours (range: 6 hours to 10 days) after eating contaminated food. The median incubation period for wound botulism is generally longer than for foodborne botulism, with a median of 7 days and a range of 4-14 days. Shorter incubation periods generally mean a more severe illness. For infant botulism, if infection is related to a food ingestion, like honey, symptoms generally appear within 18-36 hours. However, the incubation is not generally known because it is usually not known when the spores were ingested.

Common Symptoms

Generally, botulism toxin attacks the nervous system, and symptoms usually begin with weakness of the muscles that control the face, eyes, mouth, and throat. It can cause paralysis of muscles involved in breathing. This severe illness will require ventilator assistance and a long recovery period. All types of botulism are considered medical emergencies because of the potential for severe illness and death. Botulism generally doesn't increase blood pressure, heart rate or cause fever or confusion. However, wound botulism may cause an elevated temperature.

Foodborne botulism signs and symptoms include difficulty swallowing or speaking, dry mouth, facial weakness, blurred or double vision, drooping eyelids, trouble breathing, nausea, vomiting and abdominal cramps, and paralysis. The clinical symptoms are similar no matter which toxin is responsible for the illness, but type A has been associated with higher case-fatality rate than B, E or F. In general, the case-fatality rate for foodborne botulism is 5-10%. Recovery may take months.

Wound botulism usually presents with the same clinical picture as foodborne botulism, however dry mouth and gastrointestinal symptoms are generally absent. Also, the wound may not appear red and swollen as it usually does with other types of infection.

Infant botulism usually presents first with constipation. Muscle weakness causes trouble controlling the head, which causes a floppy movement and gives rise to the term "floppy baby syndrome." Infants may also have a weak cry, be irritable, drool, have drooping eyelids, fatigue, have difficulty sucking or feeding, and paralysis. In some cases, respiratory insufficiency and respiratory arrest may occur. Infant botulism present with a range of severity, from mild illness to sudden death.

Treatment

Botulism can be treated with an antitoxin that blocks the action of the toxin circulating in the blood stream. Immune globulin for infants is available from the California Department of Public Health (BabyBIG®), and antitoxin for older children and adults is available through the CDC. Information

about BabyBIG is available on the Federal Drug Administration (FDA) website: https://www.fda.gov/biologicsbloodvaccines/bloodbloodproducts/approvedproducts/licensedproductsblas/fractionatedplasmaproducts/ucm089339.htm. Patients usually require ventilator support, which is commonly needed for 2-8 weeks. For wound botulism, in addition to antitoxin, the wound should be debrided and/or drainage established, with appropriate antibiotics (e.g., penicillin). For infant botulism, meticulous supportive care is essential.

C. Reservoirs

C. botulinum spores are ubiquitous in soils worldwide. The spores can survive indefinitely in soil under almost any environmental condition. Spores are also found in marine sediment.

D. Modes of Transmission

Foodborne botulism is acquired by ingesting pre-formed toxin. This usually occurs as a result of ingesting food that has been inadequately processed and then inadequately prepared before being eaten. The most frequent source is home-canned foods, but outbreaks have also been attributed to baked potatoes in foil, minced garlic in oil and sautéed onions held under a layer of butter. The toxin is destroyed by boiling.

Wound botulism occurs when wounds are contaminated with dirt or gravel containing botulism spores. Wound botulism has also been reported among drug abusers.

Infant botulism, which is the most common form of botulism in the U.S., occurs as a result of ingestion of the spore form of the bacteria, which then goes on to germinate and produce toxin in the intestines. This can happen through ingestion of food, soil, or dust contaminated with botulism spores. Honey often contains *C. botulinum* spores. Some cases of infant botulism have occurred in children living in areas of construction and earth disruption.

E. Period of Communicability

Despite excretion of C. botulinum toxin and organism at high levels (about 106 organisms/gram) in the feces of intestinal botulism cases weeks to months after onset of illness, no instance of person-to-person spread has ever been documented for botulism. Foodborne botulism cases typically excrete the toxin for shorter periods.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Botulism is physician reportable by telephone immediately on the day of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD) of the patient's town of residence. A mailed report is also required within 12 hours. The director of any clinical laboratory must also report laboratory evidence of botulism to both the DPH and the LHD. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Foodborne botulism

- **Probable Case**: a clinically compatible case with an epidemiologic link (e.g., ingestion of a home-canned food within the previous 48 hours).
- **Confirmed Case**: a clinically compatible case that is laboratory confirmed by isolation of *C. botulinum* from stool or detection of botulinum toxin in serum, stool, or patient's food or that occurs among persons who ate the same food as persons who have laboratory-confirmed botulism.

Infant botulism

- **Confirmed Case**: a clinically compatible case in a child ages <1 year that is laboratory confirmed by detection of botulinum toxin in stool or serum or C. botulinum has been isolated from stool.

Wound botulism

- **Confirmed Case**: a clinically compatible case that is laboratory confirmed by detection of botulinum toxin in serum or isolation of C. botulinum from a wound, in a patient who has no suspected exposure to contaminated food and who has a history of a fresh contaminated wound during the 2 weeks before onset of symptoms, or a history of injection drug use within the 2 weeks before onset of symptoms.

C. Case Investigation

LHD Responsibility: Provide information and educational materials describing the nature of the disease and preventive measures.

DPH Responsibility: Activities include ensuring that appropriate diagnostic evaluation is done, interviewing suspect cases for possible exposures, and coordinating shipment of antitoxins from the CDC.

D. Control Measures

If a bioterrorist event is suspected, the DPH and other response authorities will work closely with LHDs on how to proceed.

For more information

Please visit the CDC website: https://www.cdc.gov/botulism

CAMPYLOBACTERIOSIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Campylobacteriosis is a gastrointestinal disease caused by *Campylobacter* bacteria. Most cases are caused by *C. jejuni* or *C. coli*, however, illnesses can be caused by other species of *Campylobacter*.

B. Description of Illness

General facts: Campylobacter is the number one cause of the bacterial diarrheal illness in the U.S. Infection occurs more frequently in summer, and children <5 years of age have the highest national incidence rate. It is also an important cause of diarrhea in travelers returning to the U.S..

Occurrence: It is estimated that 1.3 million persons are affected annually in the U.S. with most cases occurring as sporadic events, not as part of recognized outbreaks.

Incubation period: Usually about 2-5 days after exposure (range 1-10 days).

Common symptoms: Diarrhea (often bloody), abdominal pain, malaise and fever, are the predominant symptoms. Infection can range from mild gastroenteritis to severe infection that mimics acute inflammatory bowel disease.

Treatment: For children with diarrhea, rehydration and electrolyte replacement are essential. Antimicrobial therapy (azithromycin, erythromycin) may shorten the duration of illness. If antibiotics are used, they should be selected on the basis of antimicrobial susceptibility tests. The recommended duration for antibiotic treatment is 3-5 days.

C. Reservoirs

Campylobacter bacteria are endemic in animals, most notably poultry and cattle. A very large percentage of raw poultry is contaminated with *C. jejuni*. Domestic animals (puppies, kittens, other pets), livestock (sheep, pigs), rodents, and birds may also be sources of human infection.

D. Modes of Transmission

The most common mode of transmission is ingestion of contaminated food or water. This includes raw and undercooked poultry or pork, unpasteurized milk products, and inadequately treated water. Other foods may be cross-contaminated from poultry, especially through the use of common cutting boards. Common source outbreaks associated with undercooked chicken, unpasteurized milk, and non-chlorinated water have occurred. In addition, animals-to-person transmission can occur through contact with infected pets (e.g., puppies with diarrhea) and farm animals. Person-to-person spread occurs occasionally, particularly from very young children.

E. Period of Communicability

The disease is communicable for as long as the infected person excretes *Campylobacter* bacteria in their stool. This typically lasts 2-3 weeks without antibiotic treatment, to as long as 7 weeks after symptom onset.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Campylobateriosis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the DPH and the LHD of the patient's town of residence. The director of any clinical laboratory must also report laboratory evidence of *Campylobacter* to both the DPH and the LHD. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

- Confirmed Case = Isolation of *Campylobacter* from any clinical specimen.
- Probable Case = Detection of *Campylobacter* spp. in a clinical specimen using a culture independent diagnostic test (CIDT).

C. Case Investigation

LHD is responsible for cases **NOT** reported by Quest Diagnostics. Use the "General Enteric Diseases Interview Form" (GEDIF) specific to *Salmonella* and *Campylobacter* (Attachment G). Also found at, https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/infectious_diseases/FoodNET/PDF/GEDIF_Salmonella_Campylobacter.pdf?la=en) to interview cases and identify individuals in high-risk occupations or settings (see below). Completed GEDIF forms should be entered into CTEDSS or faxed to the DPH at 860-509-7910.

The LHD should also provide information and educational materials describing the nature of the disease and preventive measures. Frequent and thorough hand washing should be stressed to all cases and contacts. If symptoms persist, encourage the case to see a physician.

DPH is responsible for cases reported by Quest Diagnostics, and will conduct interviews. For all other cases, the DPH is available to the LHD for assistance, consultation, and guidance, and to ensure that appropriate investigative and control actions are being taken.

D. Control Measures for Individuals in High-Risk Occupations or Settings

Food Worker: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be excluded from direct care of patients until they are asymptomatic. Proper handwashing should be stressed.

Day Care Setting: Symptomatic children and employees should be excluded from day care. Improved sanitation and personal hygiene should be emphasized in day care settings. Proper hand washing by staff and children should be stressed, especially after using the toilet and/or handling soiled diapers, and prior to preparing or eating food.

Household Contacts: Household contacts with diarrhea should be excluded from food handling and the care of children and/or patients until they are asymptomatic. Proper hand washing should be stressed.

For more information

Please visit the CDCs website at: https://www.cdc.gov/campylobacter/faq.html

CHOLERA

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 1 DISEASE – REPORTED IMMEDIATELY TO DPH & LHD

A. Etiologic Agent

Cholera is an acute diarrheal illness caused by enterotoxins produced by *Vibrio cholera* bacteria. Two serogroups, O1 and O139, are responsible for causing extensive epidemics of diseases.

B. Description of Illness

General facts: In the United States, cholera was prevalent in the 1800s but has been virtually eliminated by modern sewage and water treatment systems. Most cases in the U.S. occur among travelers returning from areas experiencing cholera epidemics.

Occurrence: Pandemic cholera has appeared off and on in most parts of the world since the early 19th century. In 1991, an epidemic began in Peru that quickly spread to other countries in South America. In the U.S., most cases occur among travelers returning from areas experiencing cholera epidemics. Sporadic cases have also occurred among persons eating inadequately cooked shellfish harvested from coastal waters along the Texas and Louisiana borders.

Incubation period: Ranges from a few hours to 5 days (commonly 2 - 3 days).

Common symptoms: Infection with V. cholera usually results in asymptomatic or mild illness involving only diarrhea. However, approximately 1 in 20 people infected will develop more severe illness characterized by profuse watery diarrhea, nausea, and some vomiting early in the illness. Because of rapid loss of body fluids, dehydration and shock can occur in most severe cases. Without rehydration therapy, death can result within hours. The case-fatality rate in severe untreated cases may exceed 50%; with proper treatment, the rate is less than 1%.

Treatment*:* Oral or parenteral rehydration therapy to correct dehydration and electrolyte abnormalities is the most important modality of therapy and should be initiated as soon as the diagnosis is suspected. Antimicrobial therapy results in prompt eradication of vibrio, decreases the duration of diarrhea, and decreases requirements for fluid replacement. It should be considered for people who are moderately to severely ill.

C. Reservoirs

Humans are the primary reservoir although environmental reservoirs exist in polluted and non-polluted coastal and estuarine waters of the United States, Ecuador, Guam, Kiribati, Italy, and Portugal.

D. Modes of Transmission

V. cholera is usually transmitted by ingesting food or water contaminated directly or indirectly by feces or vomitus of infected persons (e.g., via sewage). Important vehicles include raw and/or

undercooked seafood, beverages made with contaminated water or ice, and fruits/vegetables washed with contaminated water.

E. Period of Communicability

Although person-to-person spread has not been demonstrated, cholera is presumably transmitted as long as the stool tests positive, usually a few days after recovery from symptoms. Occasionally a carrier state may persist for several months; very rarely, adult chronic biliary infection results in periodic shedding in stool for years. Antibiotics effective against the bacteria shorten the period of communicability.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Cholera is physician reportable immediately by telephone to the Connecticut Department of Public Health (DPH) and the local health department (LHD) on the day of recognition or strong suspicion of disease. A mailed report is also required within 12 hours. The director of any clinical laboratory must also report laboratory evidence of cholera to both the DPH and LHD. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings. (Attachments A & C)

Additional requirements: Isolates of *V. cholera* must be submitted to the DPH State Public Health Laboratory for confirmation. See current lists of Reportable Diseases (Attachments A & C) and the Laboratory Reportable Significant Findings form OL-15C (Attachment D).

B. Case Definition

Confirmed Case:

- Isolation of toxigenic (i.e., cholera toxin-producing) *Vibrio cholerae* 01 or 0139 from stool or vomitus, **or**
- Serologic evidence of recent infection.

C. Case Investigation

DPH Responsibility: DPH will contact the testing laboratory and the patient's physician to confirm the diagnosis of cholera, will interview case to identify individuals in high-risk occupations or settings (food handler, health care worker with direct patient contact, day care settings) and will provide information and educational materials describing the nature of the disease and preventive measures.

The DPH will then notify the LHD of the above findings and provide additional recommendations regarding follow-up, if needed.

LHD Responsibility: If the case is in a high-risk occupation or setting, the LHD will implement control measures.

D. Control Measures

Recommendations on exclusion from high-risk occupations or settings should be made in consultation with DPH.

For more information

Please visit the CDC website: https://www.cdc.gov/cholera/index.html

Five Basic Cholera Prevention Steps: https://www.cdc.gov/cholera/preventionsteps.html

CRYPTOSPORIDIOSIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Cryptosporidium parvum is the species associated with human infection. It was recognized as a cause of human illness in 1976. The parasite can be transmitted in the form of oocysts, which are hardy and can survive in the environment for weeks or months. They are resistant to chemical disinfectants used to purify drinking water.

B. Description of Illness

General facts: Cryptosporidiosis occurs worldwide and affects both humans and animals. It is among the most common cause of persistent diarrhea in patients with AIDS in the United States.

Occurrence: In developed areas such as the United States and Europe, infection has been found in less than 1% - 4.5% of individuals surveyed by stool examination. People who are most likely to become infected with Cryptosporidium include the following: children who attend day care centers; child care workers; parents of infected children; international travelers; hikers and campers who drink unfiltered, untreated water; swimmers who swallow water while swimming in swimming pools, lakes, rivers, ponds, and streams; and people who drink from shallow, unprotected wells.

Incubation period: 2 – 10 days is the likely range (average 7 days).

Common symptoms: The most common symptom of cryptosporidiosis is profuse and watery diarrhea associated with abdominal pain. Other signs and symptoms include weight loss, stomach cramps, nausea, vomiting, and low-grade fever. In people with competent immune systems, symptoms may wax and wane but generally subside after approximately 30 days. Asymptomatic infections are common and serve as a source of infection for others.

Treatment: No treatment other than rehydration, when indicated, has been proven to be effective.

C. Reservoirs

Humans, cattle, and other domestic animals are reservoirs.

D. Modes of Transmission

The most common mode of transmission is person-to-person. Infected animals and people excrete large numbers of oocysts in stool. Persons become infected by hand-to-mouth transfer of oocysts from the feces of an infected individual, especially in institutions and daycare centers. Zoonotic transmission can occur through contact with feces from infected animals (for livestock handlers, dairy farmers, veterinarians, etc.). Outbreaks have been associated with public drinking water supplies and recreational water use including waterslides, swimming pools, and lakes that are contaminated by human and animal feces. Outbreaks have also occurred from eating

food contaminated with animal feces (e.g., unpasteurized apple cider that was contaminated with cow manure). An infected food worker could also be a source for foodborne transmission.

E. Period of Communicability

The disease is communicable for as long as the infected animal or person excretes oocysts in stool. This generally begins at the onset of symptoms and continues for several weeks after symptoms have resolved. Oocysts can remain infective outside the body in a moist environment for 2 - 6 months.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Cryptosporidiosis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of cryptosporidiosis to both the DPH and the LHD. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case:

Evidence of *Cryptosporidium* organism or DNA in stool, intestinal fluid, tissue samples, biopsy specimens, or other biological sample by certain laboratory methods with a high positive predictive value (PPV), e.g.,

- Direct fluorescent antibody [DFA] test,
- Polymerase chain reaction [PCR],
- Enzyme immunoassay [EIA], OR
- Light microscopy of stained specimen.

Probable:

The detection of *Cryptosporidium* antigen by a screening test method such as immunochromatographic card/rapid card test (e.g. enzyme-linked immunosorbent assay); or a laboratory test of unknown method.

C. Case Investigation

DPH Responsibility: DPH is available to the LHD for assistance, consultation, and guidance and to ensure that appropriate investigative and control actions are being taken.

LHD Responsibility: Using the "General Enteric Diseases Interview Form" (Attachment F), interview case and identify individuals in high-risk occupations or settings (see below). Completed GEDIF forms should be entered directly into CTEDSS or faxed to the DPH at 860-509-7910.

Provide information and educational materials describing the nature of the disease and preventive measures. The importance of frequent and thorough hand washing should be stressed for all cases and contacts. Encourage a physician visit if symptoms persist.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be excluded from direct care of patients until they are asymptomatic. Proper hand washing should be stressed.

Day Care Setting: Children or staff with laboratory-confirmed infections should be excluded until no longer symptomatic. Improved sanitation and personal hygiene should be emphasized. Proper hand washing by staff and children should be stressed, especially after using the toilet or handling soiled diapers.

Household Contacts: Household contacts with diarrhea should be evaluated and tested for cryptosporidiosis and excluded from food handling and the care of children and/or patients until asymptomatic. Proper hand washing should be stressed.

For more information

Please visit the CDC website: https://www.cdc.gov/parasites/crypto/index.html

Facts About Crypto and Swimming Pools: https://www.cdc.gov/parasites/crypto/factsheets.html

CYCLOSPORIASIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Cyclospora infection is caused by *Cyclospora cayetanensis*, a one-cell parasite first associated with human disease in 1979. Humans with cyclosporiasis shed the parasite in a non-infectious form that takes from several days to a couple of weeks to mature (sporulate) into its infectious form. The time required for maturation to the infectious form depends on factors such as temperature and moisture.

B. Description of Illness

General facts: Historically, Cyclospora infection was usually found in people who lived or traveled in developing countries; however, the parasite seems to be widely distributed throughout the world. Outbreaks follow a seasonal pattern, with a predominant number of cases occurring during the warmer months.

Occurrence: Individuals at all ages are at risk of infection. The largest documented outbreaks of cyclosporiasis in the United States and Canada occurred during the summers of 1996 and 1997 and were associated with consumption of imported raspberries.

Incubation period: About 1 week after exposure.

Common symptoms: Watery diarrhea with frequent (sometimes explosive) bowel movements. Other symptoms may include loss of appetite, weight loss, bloating, gas, stomach cramps, nausea, vomiting, muscle aches, low-grade fever, and fatigue. Occasionally, infected individuals may not have any symptoms. In people with competent immune systems, diarrhea is self-limiting but has been known to persist from 9 - 43 days. Immunodeficient persons may experience diarrhea for months. Untreated persons may have protracted, remitting, and relapsing symptoms, and weight loss can be significant.

Treatment: Cyclosporiasis can be treated with a 7-day course of oral trimethoprim-sulfamethoxazole (for adults, 160 mg trimethoprim plus 800 mg sulfamethoxazole twice daily; for children, 5 mg/kg trimethoprim plus 25 mg/kg sulfamethoxazole twice daily). Treatment regimens for patients who cannot tolerate sulfa drugs have not been identified.

C. Reservoirs

Humans are the only known reservoir for *Cyclospora cayetanensis*.

D. Modes of Transmission

Current knowledge of cyclosporiasis suggests that it is not transmitted directly from person- to-person. The infective stage of the parasite is not present in freshly passed stool. After being shed in human stool, the parasite must undergo developmental changes (lasting days or weeks)

before becoming infectious. Humans become infected by consuming food and water contaminated with human feces containing *Cyclospora*. Foodborne transmission has been indicated in outbreaks from consumption of contaminated produce (e.g., raspberries, basil, lettuce).

E. Period of Communicability

People who are actively ill may shed *Cyclospora* parasites for a few days to over one month. It is not known how long organisms are shed in stool once symptoms have stopped. A study of Peruvian children with cyclosporiasis indicated a mean duration of organism shedding was 23 days.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Cyclosporiasis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of cyclosporiasis to both the DPH and the LHD. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Demonstration of *Cyclospora* oocysts (by morphologic criteria or by demonstration of sporulation) or *Cyclospora* DNA (by polymerase chain reaction) in stool, duodenal/jejunal aspirates or small-bowel biopsy specimens.

C. Case Investigation

DPH Responsibility: The DPH, through FoodNet/FoodCORE, will interview all cases. Interviews include food and travel histories in an attempt to identify a source of infection and to identify individuals in high-risk occupations or settings (food handler, health care worker with direct patient contact, day care settings).

DPH is available to the LHD for assistance, consultation, and guidance and to ensure that appropriate investigative and control actions are being taken.

LHD Responsibility: If the case is in a high-risk occupation or setting, the LHD will implement control measures.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be excluded from direct care of patients until they are asymptomatic. Proper hand washing should be stressed.

Day Care Setting: Children or staff with laboratory-confirmed infections should be excluded until no longer symptomatic. Improved sanitation and personal hygiene should be emphasized. Proper hand washing by staff and children should be stressed, especially after using the toilet or handling soiled diapers.

Household Contacts: Household contacts with diarrhea should be evaluated and tested for cyclosporiasis and excluded from food handling and the care of children and/or patients until asymptomatic. Proper hand washing should be stressed.

For more information

Please visit the CDC website: https://www.cdc.gov/parasites/cyclosporiasis/index.html

GIARDIASIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY LABORATORY TO DPH & LHD

A. Etiologic Agent

Giardia is the protozoan that causes giardiasis, an infection principally of the upper small intestine. *Giardia lamblia* is the most common cause of the disease in humans; *G. intestinalis* and *G. duodenalis* are rare.

B. Description of Illness

General facts: Giardiasis is associated with drinking water from unfiltered surface water sources or shallow wells, swimming in bodies of fresh water, and having a young family member in day care. Concentrations of chlorine used in routine water treatment do not kill Giardia cysts, especially when water is cold. Infected persons may be treated with antimicrobial medications.

Occurrence: During the past 2 decades, Giardia infection has become recognized as one of the most common causes of waterborne disease (found in both drinking and recreational water) in humans in the United States. It most commonly occurs July through October among children less than 5 years of age and adults 25 - 39 years old.

Incubation period: From 1 – 2 weeks after exposure (average 7 days).

Common symptoms: Diarrhea, abdominal cramps, bloating, excessive amounts of gas in the stomach, fatigue, and weight loss can occur. Asymptomatic infections also occur. Persons with AIDS may have more serious and prolonged infection.

Treatment: 5-nitroimidazoles: one daily dose of 2 grams metronidazole (children 15 mg/kg) for 3 days, or tinidazole 2 grams in a single dose (children 50 - 75 mg/kg) are the drugs of choice. Furazolidone is available in pediatric suspension for young children and infants (2 mg/kg thrice daily for 7 – 10 days). Paramomycin can be used during pregnancy, but when disease is mild, delay of treatment till after delivery is recommended. Drug resistance and relapses may occur with any drug.

C. Reservoirs

Humans are the main reservoir, but beaver and other wild and domestic animals are possible reservoirs as well. Unfiltered stream and lake waters open to contamination by human and animal feces are a source of infection.

D. Modes of Transmission

Primarily fecal-oral transmission; person-to-person transmission (especially in institutions and day care settings) is the most likely cause of spread. Anal intercourse facilitates transmission. Ingestion of *Giardia* cysts via fecally contaminated drinking and recreational water, and less commonly food, may cause outbreaks.

E. Period of Communicability

Giardiasis is communicable throughout the course of infection, which is often months.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Giardiasis is laboratory reportable by mail to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case

Detection of *Giardia* organisms, antigen, or DNA in stool, intestinal fluid, tissue samples, biopsy specimens or other biological sample.

C. Case Investigation

DPH Responsibility: DPH is available to the LHD for assistance, consultation, and guidance and to ensure that appropriate investigative and control actions are being taken.

LHD Responsibility: Using the "General Enteric Diseases Interview Form" (Attachment F), interview case and identify individuals in high-risk occupations or settings (see below).

Provide information and educational materials describing the nature of the disease and preventive measures. The importance of frequent and thorough hand washing should be stressed for all cases and contacts. Encourage a physician visit if symptoms persist.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be excluded from direct care of patients until they are asymptomatic. Proper hand washing should be stressed.

Day Care Setting: Children and staff with diarrhea should be excluded from day care until they are asymptomatic. Identify and culture other day care attendees and staff with diarrhea. Exclusion of asymptomatic carriers is not recommended; treatment of such carriers has not been demonstrated to be effective in outbreak control. **Improved sanitation and personal hygiene should be emphasized in day care settings.** Proper hand washing by staff and children should be stressed, especially before handling food or eating, and after using the toilet or handling soiled diapers.

Household Contacts: Household contacts with diarrhea should be excluded from food handling and the care of children and/or patients until they are asymptomatic. Exclusion of asymptomatic

individuals is indicated only for those with questionable hygienic habits. Proper hand washing should be stressed.

For more information

Please visit the CDC website: https://www.cdc.gov/parasites/giardia/index.html

HEMOLYTIC UREMIC SYNDROME

THE DISEASE AND ITS EPIDEMIOLOGY

(see also Shiga toxin-producing *Escherichia coli*)

CATEGORY 2 DISEASE – REPORTED BY MAIL BY PHYSICIAN WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Hemolytic uremic syndrome (HUS) is a serious illness involving the kidneys and blood clotting mechanisms. The most common cause of post-diarrheal HUS is infection with *E. coli* O157:H7 bacteria. Less commonly, infection with other Shiga toxin-producing *E. coli* and *Shigella dysenteriae* may cause HUS.

B. Description of Illness

General facts: HUS is a rare but serious disease that often requires prolonged hospitalization. Diagnosis is based on several laboratory tests and medical evaluation. Supportive treatment (e.g., dialysis, transfusions) is often necessary for severe cases.

Occurrence: HUS is most common in children less than 10 years old, where it occurs in about 5 - 10% of E. coli O157:H7 infections. Children less than 5 years of age are at greatest risk of developing HUS.

Incubation period: Usually about 3 to 10 days after the onset of diarrhea. Diarrhea may have resolved, and the case may appear to be improving when the onset of HUS occurs.

Common symptoms: Most cases of HUS follow an acute diarrheal illness and are characterized by acute renal failure, low platelet count, and hemolytic anemia. Most people recover completely with kidney function returning to normal.

Treatment: There is no known medical treatment that will prevent the development of HUS. Supportive treatment is provided for kidney function (dialysis) and blood clotting (transfusions).

C. Reservoirs

See Shiga toxin-producing *Escherichia coli*.

D. Modes of Transmission

See Shiga toxin-producing *Escherichia coli*.

E. Period of Communicability

See Shiga toxin-producing *Escherichia coli.*

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

HUS is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: An acute illness diagnosed as HUS or thrombotic thrombocytopenic purpura that meets the following laboratory criteria and began within 3 weeks after onset of an episode of acute or bloody diarrhea:

acute onset of anemia with microangiopathic changes (i.e., schistocytes, burr cells, or helmut cells) on peripheral blood smear and acute onset of renal injury evidence by either hematuria, proteinuria, or elevated creatinine level (i.e., > 1.0 mg/dL in a child < 13 years or > 1.5 mg/dL in a person aged > 13 years, or > 50% increase over baseline).

C. Case Investigation

DPH Responsibility: The DPH, through FoodNet/FoodCORE, will obtain epidemiological, clinical, and laboratory information from the hospital and/or through patient interview. The DPH will notify the LHD if the person is in a high-risk setting.

LHD Responsibility: If the person is in a high-risk setting, the LHD will work with DPH to implement control measures (see below).

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals should be restricted from direct patient care until diarrhea ceases and two consecutive negative stool cultures spaced at least 24 hours apart are obtained. If person was treated with antibiotics, cultures should be collected at least 48 hours after last dose.

Day Care Setting: Children and/or staff should be excluded from day care until diarrhea ceases and two consecutive negative stool cultures spaced at least 24 hours apart are obtained. If the person was treated with antibiotics, cultures should be collected at least 48 hours after last dose. Any other daycare attendees and/or staff with diarrhea should be identified and cultured.

Improved sanitation and personal hygiene should be emphasized in day care settings**.** Proper hand washing by staff and children should be stressed, especially after using the toilet or handling soiled diapers.

Household Contacts: Household contacts with diarrhea should be excluded from food handling and care of children and/or patients until diarrhea ceases and two (2) consecutive

negative stool cultures taken at least 24 hours apart are obtained. Asymptomatic household contacts involved in food handling or care of children and/or patients should have at least one stool specimen cultured. Stress good hand washing technique. Asymptomatic household contacts should not be restricted from work pending culture results.

For more information

Please visit the CDC website for general e-coli information:
https://www.cdc.gov/ecoli/general/index.html

HEPATITIS A INFECTION

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Hepatitis A virus (HAV) is an RNA virus that causes illness of variable severity. It can cause liver disease and has a relatively low case-fatality rate. The diagnosis is confirmed by the demonstration of IgM antibodies against HAV in the serum of acutely or recently ill persons.

B. Description of Illness

General facts: In the United States, 33% of the general population will test positive for prior HAV infection. In outbreak situations, day care attendees and employees, men who have sex with men, and injecting drug users may be at higher risk than the general population. Severity of illness increases with age, but complete recovery with no recurrence or long-lasting effects is most common. Convalescence is often prolonged, but no chronic infection is known to occur.

Occurrence: Worldwide (epidemic and sporadic), with tendency for cyclic recurrences.

Incubation period: From 15 - 50 days (average 28 - 30 days).

Common symptoms: Abrupt onset of fever, fatigue, anorexia, diarrhea, dark urine, abdominal discomfort; often followed within a few days by jaundice. HAV co-infection increases severity of liver complications (e.g., fulminant hepatitis) in case-patients with chronic liver disease caused by hepatitis B or hepatitis C (HBV or HCV) virus infection. HAV has a low case fatality rate (0.1 - 0.3%), but elevated (1.8%) for adults 50 years and older, and persons with chronic liver disease have increased risk of death.

Treatment: There is no specific treatment for HAV infection. Post exposure prophylaxis (HAV vaccine or immune globulin, depending on a person's age and other medical factors) may prevent infection in persons exposed to HAV, and should be given as soon as possible. The efficacy of immune globulin or vaccine when administered more than 2 weeks after exposure has not been established.

C. Reservoirs

Humans are the main reservoir for HAV. Chimpanzees and other non-human primates rarely serve as reservoirs. No source of infection is identified in almost half of all cases.

D. Modes of Transmission

Person-to-person via the fecal-oral route is the most common mode of transmission. Transmission is common among close contacts of acute cases, and occurs sporadically in and among day care settings with diapered children, injecting and non-injecting drug users, and men who have sex with men. Common-source outbreaks have been linked to:

- Contaminated water

- Raw/undercooked mollusks from contaminated waters
- Food contaminated by infected food handlers
- Contaminated produce (e.g., lettuce, strawberries)
- Injecting and non-injecting drug use
- Rarely by transfusion of blood or clotting factor concentrates

E. Period of Communicability

Case-patients are most infectious 1 - 2 weeks before onset of symptoms to several days after onset of jaundice. Prolonged viral excretion in feces (up to 6 months) has been documented in some infants and children. Chronic shedding of HAV is not known to occur.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Hepatitis A infection is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of hepatitis A infection to both the DPH and LHD. Effective January 2006, laboratories are also required to send at least 0.5 mL of residual serum from positive hepatitis A IgM anti-HAV tests to the DPH Laboratory for subtyping. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: An acute illness with a) discrete onset of symptoms and b) jaundice or elevated serum aminotransferase levels and immunoglobulin M (IgM) antibody to hepatitis A virus (anti-HAV) positive.

C. Case Investigation

DPH Responsibility: In order to screen out asymptomatic individuals with positive laboratory reports, DPH will contact the ordering physician to confirm that the patient has signs and symptoms of acute hepatitis. DPH will then interview the case to collect clinical and risk factor information and to identify individuals in high-risk occupations or settings (see below). DPH will provide educational materials describing the nature of the disease and preventive measures and will recommend that close contacts see a physician for prophylaxis as indicated below.

LHD Responsibility: If the case is in a high-risk occupation or setting, the LHD will implement control measures upon notification from DPH.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Care Duties: Exclude individuals with laboratory-

confirmed infection from direct patient care until 7 days after onset of jaundice or 10 days after onset of symptoms (if jaundice is absent) and providing all symptoms have subsided. Consider the possibility of PEP for patients who may have received dental/oral/mouth care from the infected individual, and PEP can be given within 2 weeks of last exposure.

Day Care Setting

In a day care setting where all children are not toilet trained: PEP is recommended for employees and children in the facility when HAV infection is identified in any employee or child or in the household members of two or more of the enrolled children. During the 6 weeks after the last case is identified, new employees and children should also receive PEP.

In a day care setting where all children are toilet trained: If HAV is identified in an employee or child, PEP is recommended for employees in contact with the case-patient and children in the same room as the case-patient.

If recognition of an outbreak in a day care setting is delayed by 3 or more weeks from the onset of the index case, or if illness has occurred in 3 or more families: HAV is likely to have already spread widely. In this situation, PEP should be considered for the household contacts of day care attendees.

Close Contacts: Close personal contacts (e.g., household members, sexual partners) of HAV case-patients should receive PEP within 2 weeks of last exposure. Testing of contacts for immunity to hepatitis A is not recommended because it adds unnecessary cost and may delay PEP.

Post exposure prophylaxis (PEP): summary of updated recommendations

PEP should be given as soon as possible, within 2 weeks of exposure. The efficacy of PEP given more than 2 weeks after exposure has not been established.

Group	Recommended PEP
Healthy persons aged 12 months – 40 years	Single-antigen hepatitis A vaccine
Persons aged > 40 years	Immune globulin (IG); vaccine can be used if IG cannot be obtained
Children aged < 12 months, immunocompromised persons, persons who have chronic liver disease diagnosed, and persons for whom vaccine in contraindicated	Immune globulin (IG)

(Reference: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5641a3.htm)

For more information

Please visit the CDC website: https://www.cdc.gov/hepatitis/hav/index.htm

Hepatitis A Questions and Answers for the Public: https://www.cdc.gov/hepatitis/hav/afaq.htm#overview

LISTERIOSIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Listeria monocytogenes is a gram-positive, rod-shaped bacterium that causes listeriosis; human infections are usually caused by serovars 1/2a, 1/2b and 4b.

B. Description of Illness

General facts: Listeriosis is an important public health problem in the United States. Diagnosis of listeriosis is best made by routine bacterial culture of specimens from usually sterile sites such as blood or cerebrospinal fluid. Stool culture is not reliable because many persons have enteric colonization with L. monocytogenes without invasive disease.

Occurrence: In the United States, an estimated 2,500 persons become seriously ill with listeriosis each year. Of these, 500 die. At increased risk are the following: pregnant women; newborns; persons with weakened immune systems; persons with cancer, diabetes or kidney disease; persons with AIDS; persons who take glucocorticosteriod medications; and the elderly. Healthy adults and children occasionally get infected with Listeria, but they rarely become seriously ill.

Incubation period: Variable; outbreak cases have occurred 3 - 70 days following a single exposure to an implicated product (median incubation is estimated at 3 weeks).

Common symptoms: A person with listeriosis has fever, muscle aches, and sometimes gastrointestinal symptoms such as nausea or diarrhea. If infection spreads to the nervous system, symptoms such as headache, stiff neck, confusion, loss of balance, or convulsions can occur. Infected pregnant women may experience only a mild, flu-like illness; however, infections during pregnancy can lead to miscarriage or stillbirth, premature delivery, or infection of the newborn.

Treatment: Penicillin or ampicillin alone or together with aminoglycosides. For penicillin-allergic patients, trimethoprim-sulfamethoxazole or erythromycin is preferred. Cephalosporins, including third-generation cephalosporins, are not effective in the treatment of clinical listeriosis.

C. Reservoirs

Soil is the main reservoir, as well as forage, water, mud, and silage. Other reservoirs include infected domestic and wild animals, fowl, and humans. Up to 10% of humans may have asymptomatic fecal carriage, and rates may be higher in slaughterhouse workers and in laboratory workers handling *L. monocytogenes.*

D. Modes of Transmission

Outbreaks have been associated with ingestion of raw or contaminated milk, soft cheeses, vegetables, hot dogs, and ready-to-eat meats; sporadic cases can result from foodborne transmission as well. Transmission can also occur from mother to fetus in utero or during birth.

E. Period of Communicability

Infected persons can shed organisms in stool for several months, although person-to-person transmission is rare. Mothers of infected newborns may also shed in vaginal discharges and urine for 7-10 days after delivery, but rarely longer.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Listeriosis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of listeriosis to both the DPH and the LHD. **Additional requirements:** Isolates of *L. monocytogenes* must be submitted to the DPH State Public Health Laboratory for confirmation. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Isolation of *L. monocytogenes* from a normally sterile site (e.g., blood or cerebral spinal fluid, or, less commonly, joint, pleural, or pericardial fluid).

C. Case Investigation

DPH Responsibility: The DPH, through FoodNet/FoodCORE, will interview all cases of listeriosis.

LHD Responsibility: If a cluster/outbreak situation is identified, the LHD will work with DPH to investigate and identify a common source of infection (e.g., raw or contaminated milk, soft cheeses, contaminated vegetables, ready-to-eat meats) and to implement control measures to prevent further exposure to that source.

For more information

Please visit the CDC website: https://www.cdc.gov/listeria/index.html

SALMONELLOSIS

THE DISEASE AND ITS EPIDEMIOLGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Salmonella is a gram-negative bacterium that causes illness in animals and in humans. The *Salmonella enterica* species affects humans. While there are approximately 200 different serotypes of *S. enterica* identified in the United States each year, *S.* Enteritidis and *S.* Typhimurium are the most common. (For information on *S. typhi* and *S. paratyphi*, see "Typhoid Fever".)

B. Description of Illness

General facts: While many sources of infection are possible, temperature abuse of food during preparation and cross contamination during food handling are the most important risk factors for salmonellosis. A temporary carrier state may last for months, especially in infants. Antibiotics may not eliminate the carrier state and may lead to resistant strains or even more severe illness.

Occurrence: About 5 million cases of salmonellosis occur in the United States annually. The incidence rate is highest in infants and young children. The majority of cases occur sporadically, but large outbreaks in health care facilities, day care centers, and restaurants have occurred, usually from contaminated food.

Incubation period: Usually about 12 – 36 hours (ranges from 6 - 72 hours).

Common symptoms: Diarrhea, nausea, headache, abdominal pain, fever, sometimes loss of appetite and vomiting. Death is rare except for the very young, very old, debilitated, or immunosuppressed.

Treatment: For uncomplicated enterocolitis, none generally indicated except rehydration and electrolyte replacement with oral rehydration solution.

C. Reservoirs

Domestic and wild animals are reservoirs, including livestock (e.g., cattle, poultry, swine) and pets such as baby chicks and ducklings, dogs, cats, birds (including pet birds), and reptiles (e.g., lizards, snakes, and turtles). Humans may serve as a reservoir, especially in mild and unrecognized cases as well as patients and convalescent carriers. Chronic carriers are rare in humans but prevalent in animals and birds.

D. Modes of Transmission

Salmonella are usually transmitted to humans by eating foods contaminated with animal feces (e.g., beef, poultry, milk, or eggs), but all foods, including vegetables may become contaminated. Recent outbreaks have been traced to raw fruits and vegetables contaminated during slicing. Fecal-oral transmission is also important especially when diarrhea is present. Food may

also become contaminated by the unwashed hands of an infected food handler, who forgot to wash his/her hands with soap after using the bathroom. Pets are also potential sources.

E. Period of Communicability

Persons may shed *Salmonella* throughout the course of infection (several days to weeks). Depending on serotypes, about 1% of infected adults and 5% of infected children under 5 years old may excrete the organism for over a year.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Salmonellosis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of salmonellosis to both the DPH and the LHD. **Additional requirements:** Isolates must be submitted to the DPH State Public Health Laboratory for confirmation and serotyping. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Isolation of *Salmonella* from any clinical specimen.

Probable: Detection of *Salmonella* spp. in a clinical specimen using a culture-independent diagnostic test (CIDT).

C. Case Investigation

DPH Responsibility: The DPH, through FoodCORE, will interview cases for LHDs that have opted to defer Salmonella interviews to FoodCORE. If a case in a high-risk occupation or setting is identified, DPH will notify the appropriate LHD so that the appropriate control measures may be implemented. DPH is available to the LHD for assistance, consultation, and guidance and to ensure that appropriate investigative and control actions are being taken.

LHD Responsibility: For those LHDs that interview their Salmonella cases, use the "General Enteric Diseases Interview Form" specific to *Salmonella* and *Campylobacter* (Attachment G), to interview the case and identify individuals in high-risk occupations or settings (see below). Completed GEDIF forms should be entered directly into CTEDSS or faxed to the DPH at 860-509- 7910 upon completion.

Provide information and educational materials describing the nature of the disease and preventive measures. The importance of frequent and thorough hand washing should be stressed for all cases and contacts. Encourage a physician visit if symptoms persist.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Symptomatic individuals with laboratory-confirmed infection should be excluded from direct patient care until asymptomatic.

Day Care Setting: Exclude symptomatic children and employees with laboratory- confirmed infection until symptoms subside. Other children and employees with gastrointestinal symptoms should be identified and cultured. **Improved sanitation and personal hygiene should be emphasized in day care settings.** Proper hand washing by staff and children should be stressed, especially after using the toilet or handling soiled diapers.

Household Contacts: Close contacts with gastrointestinal symptoms should be excluded from food handling until diarrhea ceases and two consecutive negative stool cultures taken at least 24 hours apart are obtained. Asymptomatic household contacts involved in food handling should have at least one negative stool culture. Stress good hand washing technique. Asymptomatic household contacts should not be excluded from work pending culture results.

Close contacts with gastrointestinal symptoms should be excluded from day care and care of patients until diarrhea ceases. Exclusion of asymptomatic contacts is indicated for those with questionable hygienic habits.

For more information

Please visit the CDC website: https://www.cdc.gov/salmonella/index.html

SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI*

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Escherichia coli is a gram-negative bacterium. Although most strains are harmless and live in the intestines of healthy humans and animals, some produce a powerful toxin that can cause severe illness; these strains are called Shiga toxin-producing *E. coli* (STEC).

B. Description of Illness

General facts: While the most common STEC in North America are strains of the serotype O157:H7, other serotypes such as O26:H11, O111:H8, and O103:H2 have also been implicated in human illness. The infectious dose is very low.

Occurrence: Infection is now recognized as an important problem in North America, South America, and Europe. An estimated 73,000 cases of infection and 61 deaths occur in the United States each year.

Incubation period: Usually about 3 - 4 days after exposure (range 2 – 8 days).

Common symptoms: Abdominal cramps, diarrhea (often bloody), sometimes vomiting, and a low-grade fever may occur. Asymptomatic infections can also occur. In young children and the elderly, the infection can cause a serious complication called hemolytic uremic syndrome (HUS), leading to kidney failure, or a condition called thrombotic thrombocytopenic purpura (TTP). Symptoms of uncomplicated infection usually resolve within 5 - 10 days. There is no evidence to suggest that treatment with antibiotics is helpful.

Treatment: Reasonable concern exists that some antimicrobial agents increase the risk of HUS, although proof is lacking. Fluid replacement is the cornerstone of treatment for enterohemorrhagic *E. coli* diarrhea.

C. Reservoirs

Cattle are the most important reservoir; however, other animals, such a deer, may carry STEC. Humans may serve as a reservoir for person-to-person transmission.

D. Modes of Transmission

Transmission occurs most often through ingestion of food contaminated with fecal matter, such as raw and/or undercooked beef (especially ground beef), raw (unpasteurized) milk and juice, and produce (sprouts, etc.). Waterborne transmission has occurred (swimming in or drinking contaminated water). Transmission from person-to-person is important in families, day care settings and institutional settings, especially when diarrhea is present.

E. Period of Communicability

Infectious organisms are excreted throughout the course of infection, which is generally one week

or less in adults, but a third of children can excrete organisms for 3 weeks. Prolonged asymptomatic carrier state is uncommon.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

O157:H7 infection and Shiga toxin-related disease are reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of O157:H7 infection and Shiga toxin-related disease to both the DPH and the LHD.

Additional requirements: O157 isolates and broth that yielded the positive Shiga toxin test must be submitted to the DPH State Public Health Laboratory for confirmation. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case:

- Isolation of E. coli O157:H7 from a clinical specimen,
- Isolation of Shiga toxin-producing E. coli O157:NM from a clinical specimen,
- Isolation of Shiga-toxin producing E. coli of any serotype from the broth of a stool specimen directly testing positive for Shiga-toxin.

C. Investigation

DPH Responsibility: The DPH, through FoodNet/FoodCORE, will interview all cases of STEC infection and will notify the LHD if a person is in a high-risk setting.

LHD Responsibility: If a person in a high-risk setting, the LHD will work with DPH to implement control measures and/or investigate and identify a common source of infection.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be restricted from direct patient care until diarrhea ceases and two consecutive negative stool cultures spaced at least 24 hours apart are obtained. If person was treated with antibiotics, cultures should be collected at least 48 hours after last dose.

Day Care Setting: Children and/or staff with laboratory-confirmed infection should be excluded from day care until diarrhea ceases and two consecutive negative stool cultures spaced at least 24 hours apart are obtained. If the person was treated with antibiotics, cultures should be collected at least 48 hours after last dose. Any other daycare attendees and/or staff with diarrhea should be identified and cultured. Improved sanitation and personal hygiene should be emphasized in day care settings**.** Proper hand washing by staff and children should be stressed, especially after

using the toilet or handling soiled diapers.

Household Contacts: Household contacts with diarrhea should be excluded from food handling, day care, and care of patients until diarrhea ceases and two (2) consecutive negative stool cultures taken at least 24 hours apart are obtained. Asymptomatic household contacts involved in food handling, day care, or care of patients should have at least one stool specimen cultured. Stress good hand washing technique. Asymptomatic household contacts should not be restricted from work or day care pending culture results.

For more information

Please visit the CDC website: https://www.cdc.gov/ecoli/general/index.html.

SHIGELLOSIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Shigella species are gram-negative bacilli. Infection may occur after the ingestion of very few (10-100) organisms. Four species have been identified. Among *Shigella* isolates reported in the United States from 1989 to 2000, 78% were *S. sonnei*, 19% were *S. flexneri*, 2% were *S. boydii*, and 1% were *S. dysenteriae.*

B. Description of Illness

General facts: Every year, about 18,000 cases of shigellosis are reported in the United States. Shigellosis is particularly common and causes recurrent problems in settings where hygiene is poor and can sometimes sweep through entire communities.

Occurrence: Occurs worldwide; incidence is highest in young children. Secondary attack rates in households can be as high as 40%. Outbreaks usually occur in men who have sex with men, in over-crowded conditions, and in places where personal hygiene is poor (e.g., day care centers, jails). Shigellosis is more common in summer than winter.

Incubation Period: Symptoms may appear 12 – 96 hours after exposure; usually within 1 – 3 days; up to 1 week for *S. dysenteriae*.

Common Symptoms: Common symptoms include diarrhea (may contain blood and/or mucous, or may be watery), fever, and nausea.

Treatment: Fluid and electrolyte replacement is important when diarrhea is watery or there are signs of dehydration. Antibiotics shorten the duration and severity of illness and the duration of pathogen excretion. They should be used in individual cases if warranted by the severity of illness or to protect contacts (e.g., in day care centers or institutions) when epidemiologically indicated. Multidrug resistance to most of the low- cost antibiotics is common, and the choice of specific agents will depend on the antibiogram of the isolated strain.

C. Reservoirs

Humans are the significant reservoir; outbreaks have occurred in primate colonies as well.

D. Modes of Transmission

Transmission is person-to-person through direct or indirect fecal-oral contact from a symptomatic patient or a short-term asymptomatic carrier. Secondary transmission in households is of concern and can reach 40%. Individuals primarily responsible for transmission are those who fail to use proper hand washing techniques (especially after using the bathroom) and transmit organisms to others directly by physical contact or indirectly by contaminating food.

E. Period of Communicability

Shigellosis is communicable during the acute infection and until the infectious agent is no longer present in feces, usually within 4 weeks after illness. Asymptomatic carriers may transmit infection; rarely the carrier state may persist for months. Antibiotic treatment usually reduces duration of carriage to a few days. Secondary attack rates in households are common if precautions are not followed.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Shigellosis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of shigellosis to both the DPH and the LHD.

Additional requirements: Isolates of *Shigella* must be submitted to the DPH State Public Health Laboratory for confirmation. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Isolation of *Shigella* from any clinical specimen.

Probable: Detection of *Shigella* spp. or *Shigella*/ enteroinvasive *E. coli* (EIEC) in a clinical specimen using a culture-independent diagnostic testing (CIDT).

C. Case Investigation

DPH Responsibility: DPH will interview the case to collect clinical and risk factor information and to identify individuals in high-risk occupations or settings (see below). DPH will provide educational materials describing the nature of the disease and preventive measures.

LHD Responsibility: If the case is in a high-risk occupation or setting, the LHD will implement control measures. DPH is available for consultation as needed.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be restricted from direct patient care until diarrhea ceases and two consecutive negative stool cultures spaced at least 24 hours apart are obtained. If the person was treated with antibiotics, cultures should be collected at least 48 hours after last dose.

Day Care Setting: Attendees and/or staff with laboratory-confirmed infection should be excluded from day care until diarrhea ceases and two consecutive negative stool cultures spaced at least 24 hours apart are obtained. If treated with antibiotics, cultures should be

collected at least 48 hours after last dose. Any other day care attendees and/or staff with diarrhea should be identified and cultured. **Improved sanitation and personal hygiene should be emphasized in day care settings.** Proper hand washing by staff and children (especially after using the toilet or handling soiled diapers) should be stressed, as hand hygiene is the most important measure to decrease transmission.

Household Contacts: Household contacts with diarrhea should be excluded from food handling, day care, and care of patients until diarrhea ceases and two consecutive negative stool cultures taken at least 24 hours apart are obtained. Asymptomatic household contacts involved in food handling, day care, or care of patients should have at least one stool specimen cultured; stress good hand washing technique and recommend glove use. Asymptomatic household contacts should not be restricted from work pending culture results.

For more information

Please visit the CDC website: https://www.cdc.gov/shigella/index.html.

TRICHINELLOSIS

THE DISEASE AND ITS EPDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Trichinellosis is a parasitic disease caused by intestinal round worms whose larvae migrate to and become encapsulated in the muscles. Of the several *Trichinella* species identified, *T. spiralis* is the most common cause of human infection.

B. Description of Illness

General facts: Severity of illness is highly variable and depends on the amount of larvae ingested. Clinical spectrum of disease ranges from unapparent infection (most common) to fulminating, fatal disease. Specific drug treatments are effective in the intestinal and muscular stage.

Occurrence: Worldwide; incidence varies. Cases are usually sporadic and outbreaks localized.

Incubation period: Usually 1 – 2 weeks. Gastrointestinal symptoms may appear within a few days. Systemic symptoms appear about 8-15 days after ingestion of infected meat, but can vary between 5 and 45 days depending on number of parasites.

Common symptoms: Nausea, diarrhea, vomiting, fatigue, and abdominal discomfort may precede headache, fever, joint pain and muscle soreness, hives, light sensitivity, swelling of the eyelids, and constipation. Rarely, due to heavy infection, cardiac and/or neurologic complications could appear weeks into the infection; in severe cases, death by myocardial failure may occur.

Treatment: Albendazole or mebendazole are effective in the intestinal stage and in the muscular stage. Corticosteroids are indicated only in severe cases to alleviate symptoms of inflammatory reaction when the central nervous system or heart is involved; however, they delay elimination of adult worms from the intestine.

C. Reservoirs

A number of animals serve as reservoirs for *Trichinella*, including swine, dogs, cats, horses, rats, and many wild animal species (such as wolf, bear, fox, wild boar, and marine mammals).

D. Modes of Transmission

Transmission is foodborne and occurs through ingestion of raw or insufficiently cooked flesh of animals containing encysted *Trichinella* larvae; chiefly pork, pork products and beef products (such as hamburgers mixed with raw pork). As many as 30% of domestic cases may be attributed to ingestion of wild game meat.

E. Period of Communicability

Not transmitted directly person-to-person. Animal hosts remain infective for months, and meat from such animals stays infective for long periods of time unless cooked, frozen, or irradiated to kill the larvae.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Trichinellosis is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). The director of any clinical laboratory must also report laboratory evidence of trichinellosis to both the DPH and the LHD. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case:

- Demonstration of *Trichinella* larvae in tissue obtained by muscle biopsy **or**
- Positive serologic test for *Trichinella*.

C. Case Investigation

DPH Responsibility: The DPH will conduct the following activities: contact the testing laboratory and the patient's physician to confirm the diagnosis of trichinellosis; interview the patient to collect food history during incubation period (5 – 45 days before symptom onset); specifically inquire about consumption of pork and pork products, other high-risk foods such as wild game meat and dried jerky, and methods of preparation; assess other household members and persons who have eaten suspected meat (if any) for evidence of infection; and confiscate any remaining suspected food and consult CDC about testing.

LHD Responsibility: If a cluster/outbreak is identified, the LHD will work with the DPH to implement control measures. Provide information and educational materials describing the nature of the disease and preventive measures.

For more information

Please visit the CDC website: https://www.cdc.gov/parasites/trichinellosis/index.html.

TYPHOID/PARATYPHOID FEVER

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Salmonella enterica serotype Typhi (abbreviated *S. typhi*) is a gram-negative bacillus that causes typhoid fever, a systemic bacterial disease. *Salmonella enterica* serotypes Paratyphi A, Paratyphi B, and Paratyphi C cause a similar illness called paratyphoid fever, but this illness tends to be milder and has a lower case-fatality rate than typhoid fever.

B. Description of Illness

General facts: In the United States, about 400 cases occur each year, and 70% of these are acquired while traveling internationally. Typhoid fever is still common in the developing world, where it affects about 12.5 million persons each year. Travelers to countries where typhoid is common should consider being vaccinated against typhoid.

Occurrence: Worldwide. Susceptibility to invasive infections is increased in infants, the elderly, and individuals who are immunocompromised. In the United States, infection with *S. typhi* implies direct contact with an infected person or with an item contaminated by a carrier.

Incubation period: Depends on size of the infecting dose, symptoms generally appear from 8 – 14 days after exposure (range 3 days to 1 month); for paratyphoid fever (range 1 - 10 days).

Common symptoms: Persons with typhoid fever usually have a sustained fever as high as 103° to 104°F. They may also feel weak, or have stomach pains, headache, or loss of appetite. In some cases, patients have a rash of flat, rose-colored spots. Relapses are common. Fatalities are less than one percent with antibiotic treatment.

Treatment: Three commonly prescribed antibiotics are ampicillin, trimethoprim-sulfamethoxazole, and ciprofloxacin. Persons given antibiotics usually begin to feel better within 2 to 3 days, and deaths rarely occur.

C. Reservoirs

Humans are the only known reservoir for *S. typhi*; for paratyphoid, reservoirs include humans and rarely domestic animals. The human carrier state may follow acute illness as well as mild or subclinical infections. The chronic carrier state is most common among persons infected during middle age, especially women.

D. Modes of Transmission

Infection occurs by eating food and/or water contaminated by feces and/or urine of cases and carriers. Important vehicles in some countries include shellfish taken from sewage-contaminated beds (particularly oysters), raw fruits and vegetables, and contaminated milk and milk products. Flies may infect food in which the organism then multiplies to achieve an infective dose.

E. Period of Communicability

The disease is communicable for as long as the bacilli appear in stool, usually from the first week of infection throughout convalescence; variable thereafter (usually 1-2 weeks for paratyphoid). About 10% of untreated typhoid fever cases discharge bacilli for 3 months after onset of symptoms, and 2% - 5% become permanent carriers, with fewer paratyphoid than typhoid case-patients becoming permanent gallbladder carriers.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Typhoid fever is physician reportable by mail within 12 hours of recognition or strong suspicion to both the Connecticut Department of Public Health (DPH) and the local health department (LHD).

Additional requirements: Isolates of *Salmonella* must be submitted to the DPH State Public Health Laboratory for confirmation. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Isolation of *S. typhi* or *S. paratyphi* from blood, stool, or other clinical specimen.

C. Case Investigation

DPH Responsibility: DPH is available to the LHD for assistance, consultation, and guidance and to ensure that appropriate investigative and control actions are being taken.

LHD Responsibility: Complete the CDC "*Typhoid and Paratyphoid Fever Surveillance Report*" (Attachment M). Completed forms should be scanned and uploaded to CTEDSS or faxed to the DPH at 860-509-7910. In addition, interview the case and identify individuals in high-risk occupations or settings (see below). Provide information and educational materials that describe the nature of the disease and preventive measures. Proper hand washing should be stressed for all cases and contacts. Encourage a physician visit if symptoms persist.

D. Control Measures

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health care provider, day care attendee or staff member:

Exclude from patient care, or day care center until the following are met:

Three consecutive negative stool cultures that are:

- taken not earlier than 1 month after onset, and
- taken at least 24 hours apart, and
- taken at least 48 hours after any antibiotic treatment.

When *S. typhi* infection is identified in a symptomatic child care attendee or staff member, stool cultures should be collected from other attendees and staff members, and all infected people should be excluded.

Comment: Even with antibiotic treatment, infected persons may continue to shed the infectious organism. Shedding is highest during the month following onset of illness; thus, it is recommended to begin culturing one month following onset of illness.

Household contact that is a health care provider, or day care attendee or staff member:

Exclude from patient care, and day care center until the following are met**:**

Two consecutive negative stool cultures that are**:**
- taken at least 24 hours apart, **and**
- taken at least 48 hours after any antibiotic treatment.

Typhoid carrier who is a health care provider

Exclude typhoid carriers from providing patient care until the following are met:

Three consecutive negative stool cultures that are:
- taken at least **1 month apart**, **and**
- taken at least 48 hours after any antibiotic treatment.

Culturing of household contacts

Ideally, all household contacts should be cultured to identify additional cases or carriers. If this is not possible, then culture household contacts meeting the following criteria:
- persons who traveled with the confirmed case, **or**
- persons who are in high-risk occupations (food handlers, health care providers, day care attendee or staff member).

For more information

Please visit the CDC website: https://www.cdc.gov/typhoid-fever/index.html.

VIBRIO INFECTION, non-cholera

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY MAIL WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Like *Vibrio cholerae*, non-cholera *Vibrio* are gram-negative bacilli. These *Vibrio* species (including *V. parahaemolyticus*, *V. vulnificus* and others) are associated with diarrhea, septicemia, and/or wound infections.

B. Description of Illness

General facts: Non-cholera Vibrio are bacteria in the same family as those that cause cholera. They live in seawater and are part of a group of Vibrio organisms that are called "halophilic" because they require salt.

Occurrence: Most infections occur in warmer months. Sporadic cases and common source outbreaks of *V. parahaemolyticus* (with undercooked seafood as the food vehicle) occur worldwide. Although the annual incidence of *V. vulnificus* is < 0.5 per 100,000 population, it is the most common agent of serious Vibrio infections in the United States.

Incubation period: When ingested, non-cholera Vibrio species cause symptoms within 5 – 92 hours (median 23 hours).

Common symptoms: When ingested, non-cholera *Vibrio* species can cause diarrhea often with abdominal cramping, nausea, vomiting, fever, and chills. Severe disease is uncommon and occurs more frequently in persons with weakened immune systems. These *Vibrios* can also cause bloodstream infections of the skin when an open wound is exposed to seawater.

C. Reservoirs

Non-cholera *Vibrio* species can be found free in estuarine or costal marine waters, and in fish and shellfish (especially oysters) in these environments.

D. Modes of Transmission

Infection occurs through consumption of raw or undercooked seafood (or food contaminated by raw seafood), by rinsing food with contaminated water. Wound infections commonly result from exposure from abrasions exposed to contaminated seawater or from punctures resulting from handling contaminated shellfish.

E. Period of Communicability

Non-cholera *Vibrio* infections are not considered to be communicable from person to person, but can be transmitted through ingestion of food or water contaminated directly or indirectly with feces or vomitus of infected persons.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Non-cholera *Vibrio* infections are laboratory reportable, and *V. parahaemolyticus* and *V. vulnificus* are also physician reportable by mail to both the Connecticut Department of Public Health (DPH) and the local health department (LHD).

Additional requirements: All *Vibrio* isolates must be submitted to the DPH State Public Health Laboratory for confirmation. See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Isolation of *Vibrio spp.* other than *Vibrio cholerae* O1 or O139 from a clinical specimen.

C. Case Investigation

DPH Responsibility: DPH will contact the case's physician and/or the case to complete the CDC "*Cholera and Other Vibrio Illness Surveillance Report"* form (Attachment I), identify individuals in high-risk occupations or settings (food handler, health care worker with direct patient contact, day care settings) and provide information and educational materials describing the nature of the disease and preventive measures.

LHD Responsibility: If the case is in a high-risk occupation or setting, the LHD will implement control measures. LHDs will work with the Food Protection Program to conduct shellfish investigation as needed.

D. Control Measures

Recommendations on exclusion from high-risk occupations or settings should be made in conjunction with DPH.

For more information

Please visit the CDC website: https://www.cdc.gov/vibrio/index.html.

YERSINIOSIS

THE DISEASE AND ITS EPIDEMIOLOGY

CATEGORY 2 DISEASE – REPORTED BY LABORATORY WITHIN 12 HOURS TO DPH & LHD

A. Etiologic Agent

Yersiniosis is an enteric bacterial illness caused by *Yersinia enterocolitica* or *Yersinia pseudotuberculosis*, which are gram-negative bacilli. These bacteria cause a number of age-specific syndromes and a variety of uncommon presentations.

B. Description of Illness

General facts: Most reported cases of yersiniosis are caused by *Y. enterocolitica*, which responds to treatment with antibiotics. Unlike many foodborne pathogens, *Yersinia* multiplies in cooler temperatures with little air (e.g., refrigeration).

Occurrence: Worldwide, with the highest rates reported during the cold season in temperate climates such as North America and northern Europe. About 2/3 of *Y. enterocolitica* cases occur in infants and children, and 3/4 of *Y. pseudotuberculosis* cases occur in persons 5 - 20 years old.

Incubation period: Usually 4-7 days after exposure.

Common symptoms: Intestinal inflammation with fever and diarrhea, often with blood or mucus in stool, is most common for *Y. enterocolitica* infection in young children. Less commonly, post-infectious arthritis and systemic infection may occur. Infections in older children and adults can mimic acute appendicitis with fever, abdominal pain, and tenderness of the abdomen; outbreaks may be recognized by local increases in appendectomies. Fever, rash, and abdominal pain are common symptoms of *Y. pseudotuberculosis* infection; diarrhea and less commonly septicemia may occur. Prolonged asymptomatic carriage is possible.

Treatment: Organisms are sensitive to many antibiotics, but are generally resistant to penicillin and its semi-synthetic derivatives. Treatment may be helpful for gastrointestinal symptoms; definitely indicated for septicemia and other invasive disease. Agents of choice against *Y. enterocolitica* are the aminoglycosides (septicemia only) and trimethoprim-sufamethoxazole. Newer quinolones such as ciprofloxacin are highly effective. Both *Y. enterocolitica* and *Y. pseudotuberculosis* are usually sensitive to tetracyclines.

C. Reservoirs

Animals, with swine as the principal reservoir for *Y. enterocolitica*; asymptomatic carriage of the bacteria is common in pigs, especially in winter. *Y. pseudotuberculosis* is primarily a zoonotic disease of wild and domesticated birds and mammals (particularly rodents and other small mammals), with humans as an incidental host.

D. Modes of Transmission

Transmission is through the fecal-oral route, with infections occurring with the consumption of food and/or water contaminated by contact with infected people or animals. *Y. enterocolitica* is most commonly associated with raw or undercooked pork and pork products (especially pork intestines, or chitterlings, in the United States). Human cases have been reported in association with disease in household pets, particularly sick puppies and kittens.

E. Period of Communicability

Secondary transmission is thought to be rare; however, an infected person excretes the organism in stool for at least as long as symptoms exist (approximately 2-3 weeks). Untreated cases may shed for as long as 2-3 months. Both children and adults have been reported with prolonged asymptomatic carriage.

ACTIONS REQUIRED AND CONTROL MEASURES

A. Reporting Requirements

Yersiniosis is laboratory reportable by mail to both the Connecticut Department of Public Health (DPH) and the local health department (LHD). See current lists of physician reportable diseases, emergency illnesses and health conditions, and laboratory reportable findings at https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Reporting-of-Diseases-Emergency-Illnesses-Health-Conditions-and-Laboratory-Findings.

B. Case Definition

Confirmed Case: Isolation of *Yersinia* from any clinical specimen.

C. Case Investigation

DPH Responsibility: DPH is available to the LHD for assistance, consultation, and guidance and to ensure that appropriate investigative and control actions are being taken.

LHD Responsibility: Using the "General Enteric Diseases Interview Form" (Attachment F), interview case and identify individuals in high-risk occupations or settings (see below). Completed GEDIF forms should be entered directly into CTEDSS or faxed to the DPH at 860-509-7910.

Provide information and educational materials describing the nature of the disease and preventive measures. The importance of frequent and thorough hand washing should be stressed for all cases and contacts. Encourage a physician visit if symptoms persist.

D. Control Measures for Individuals in High-Risk Occupations or Settings

Food Handler: Refer to DPH Food Protection Program at 860-509-7297.

Health Care Worker with Direct Patient Contact: Individuals with laboratory-confirmed infection should be excluded from direct care of patients until they are asymptomatic. Proper hand washing should be stressed.

Day Care Setting: Symptomatic children in diapers should be excluded from day care. Improved sanitation and personal hygiene should be emphasized in day care settings. Proper hand washing by staff and children should be stressed, especially after using the toilet and/or handling soiled diapers, and prior to preparing or eating food.

Household Contacts: Household contacts with diarrhea should be excluded from food handling and the care of children and/or patients until they are asymptomatic. Proper hand washing should be stressed.

For more information

Please visit the CDC website: https://www.cdc.gov/yersinia/

Sexually Transmitted Disease Response

SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases are the responsibility of the STD Program.

For follow-up information, please contact the STD Control Program directly at 860-509-7920.

For more disease information

Please visit the DPH STD Program website: https://portal.ct.gov/DPH/Infectious-Diseases/STD/Sexually-Transmitted-Diseases-Control-Program

CDC website: https://www.cdc.gov/std/default.htm.

Vaccine Preventable Disease Response

VACCINE PREVENTABLE DISEASES

Vaccine preventable diseases are the responsibility of the Immunizations Program.

For follow-up information, please contact the Immunizations Program directly at 860-509-7929.

For more disease information

Please visit the DPH Immunization Program website:
https://portal.ct.gov/DPH/Immunizations/CONNECTICUT-IMMUNIZATION--PROGRAM

CDC website: https://www.cdc.gov/vaccines/vpd/index.html

Diphtheria ACIP vaccination recommendations: https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/dtap.html.

Vector-borne Disease Response

VECTOR-BORNE DISEASES

Vector-borne disease follow-up is conducted by DPH staff.

If you have questions, please call 860-509-7994.

For more disease information

The DPH mosquito-borne diseases website: https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Mosquito-borne-Diseases

The DPH tick-borne diseases website: https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Tick-borne-Diseases

Please visit the CDC website: https://www.cdc.gov/ncezid/dvbd/index.html

ATTACHMENT A

Physician Reportable Diseases List

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ATTACHMENT B

Reportable Disease Confidential Case Report Form – PD23

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ATTACHMENT C

Laboratory Reportable Significant Findings List

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ATTACHMENT D

Reportable Laboratory Findings Form – OL-15C

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ATTACHMENT E

Example of a Confidentiality Pledge

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ATTACHMENT F

Food Protection Program - FDA Food Code Information

FDA Food Q&A PDF.

The FDA Food Core 2017 document can be found, and downloaded from, https://www.fda.gov/media/110822/download.

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ATTACHMENT G

GEDIF for Salmonella and Campylobacter

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ATTACHMENT H

GEDIF for Shigella

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ATTACHMENT I

GEDIF for Yersinia

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ATTACHMENT J

GEDIF for Cryptosporidium

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ATTACHMENT K

Cholera and Other Vibrio Illness Surveillance Report Form

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ATTACHMENT L

Hepatitis A Case Report Form and Contact Management Form

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ATTACHMENT M

Typhoid and Paratyphoid Fever Surveillance Report Form

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ATTACHMENT N

Annual FoodNet/FoodCORE Letter

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