DPH Tuesday Infectious Disease Webinar Series

Tools for Local Boards of Health

March 11, 2025

Infectious Disease Control and Prevention Overview

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Agenda for Today

- **Key Resources for Infectious Disease Case Investigation and Control**
  - **DPH Guide to Surveillance, Reporting and Control** – *The best resource you haven't accessed yet.*
  - **105 CMR 300: Reportable Diseases, Surveillance, and Isolation Quarantine Requirements** – *The regulations behind a lot of what we do.*
- **Control Measures** – *Public health strategies and approaches to controlling the spread of infectious diseases.*

Questions on Case Investigation?

- **Call the DPH Epi Program** with specific case investigation questions. **617-983-6800**.
  - Staff are on call during the day, and we do have an Epi On-Call after hours for emergencies.
  - In MAVEN, there may be a specific DPH Epi assigned in the Tasks Tab, or you can speak to the Epi on call. Not every case is assigned a DPH Epi (typically assigned for "Immediates" and most VPDs).
- There are many online resources that can also aid your investigation if you know where to look…

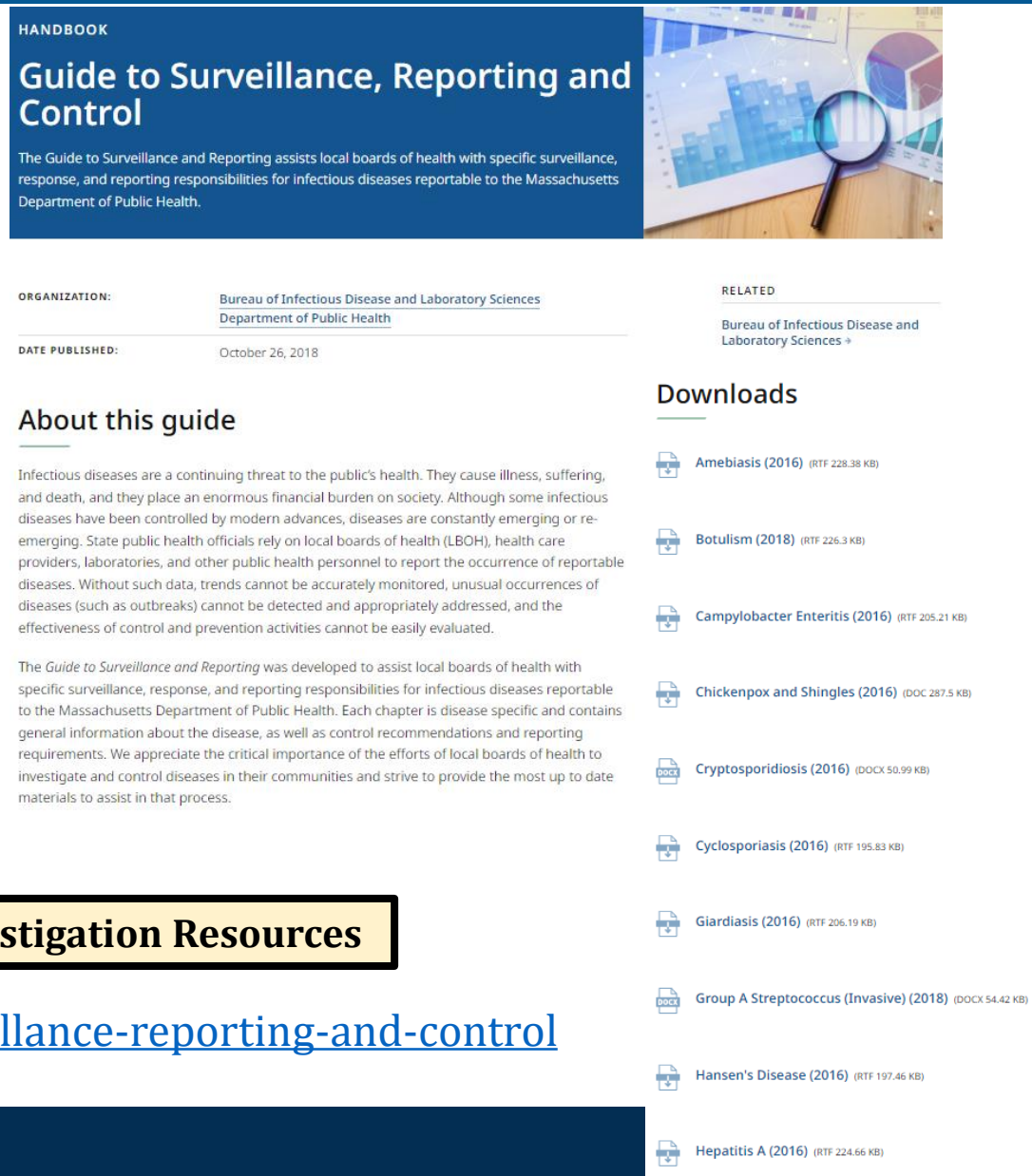
DPH Guide to Surveillance, Reporting and Control

MDPH Guide to Surveillance, Reporting and Control

The *Guide to Surveillance, Reporting and Control* was developed to assist local boards of health with specific surveillance, response, and reporting responsibilities for infectious diseases reportable to the Massachusetts Department of Public Health.

Each chapter is disease-specific and contains:

- General information about the disease
- How to conduct case investigation
- Control recommendations
- Reporting requirements



HANDBOOK

Guide to Surveillance, Reporting and Control

The Guide to Surveillance and Reporting assists local boards of health with specific surveillance, response, and reporting responsibilities for infectious diseases reportable to the Massachusetts Department of Public Health.

ORGANIZATION: Bureau of Infectious Disease and Laboratory Sciences, Department of Public Health

DATE PUBLISHED: October 26, 2018

About this guide

Infectious diseases are a continuing threat to the public's health. They cause illness, suffering, and death, and they place an enormous financial burden on society. Although some infectious diseases have been controlled by modern advances, diseases are constantly emerging or re-emerging. State public health officials rely on local boards of health (LBOH), health care providers, laboratories, and other public health personnel to report the occurrence of reportable diseases. Without such data, trends cannot be accurately monitored, unusual occurrences of diseases (such as outbreaks) cannot be detected and appropriately addressed, and the effectiveness of control and prevention activities cannot be easily evaluated.

The *Guide to Surveillance and Reporting* was developed to assist local boards of health with specific surveillance, response, and reporting responsibilities for infectious diseases reportable to the Massachusetts Department of Public Health. Each chapter is disease specific and contains general information about the disease, as well as control recommendations and reporting requirements. We appreciate the critical importance of the efforts of local boards of health to investigate and control diseases in their communities and strive to provide the most up to date materials to assist in that process.

RELATED

Bureau of Infectious Disease and Laboratory Sciences

Downloads

Amebiasis (2016) (RTF 228.38 KB)

Botulism (2018) (RTF 226.3 KB)

Campylobacter Enteritis (2016) (RTF 205.21 KB)

Chickenpox and Shingles (2016) (DOC 287.5 KB)

Cryptosporidiosis (2016) (DOCX 50.99 KB)

Cyclosporiasis (2016) (RTF 195.83 KB)

Giardiasis (2016) (RTF 206.19 KB)

Group A Streptococcus (Invasive) (2018) (DOCX 54.42 KB)

Hansen's Disease (2016) (RTF 197.46 KB)

Hepatitis A (2016) (RTF 224.66 KB)

Investigation Resources

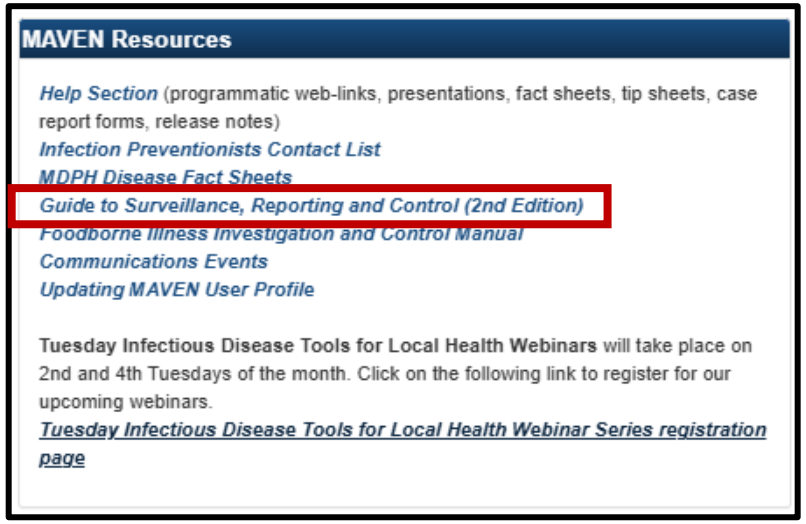
https://www.mass.gov/handbook/guide-to-surveillance-reporting-and-control

How to Access the Guide

- Available Online:

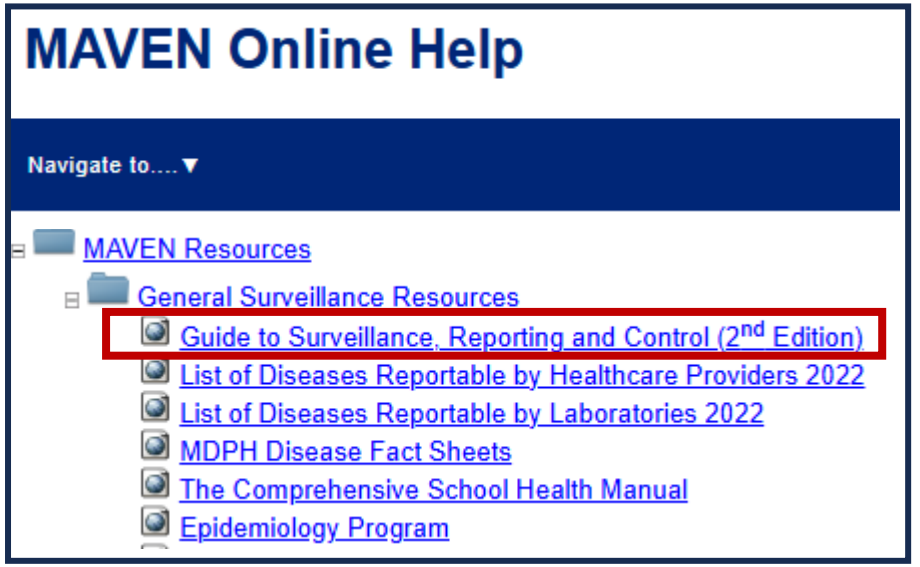
https://www.mass.gov/handbook/guide-to-surveillance-reporting-and-control

- Also linked under MAVEN Resources



(Your MAVEN Dashboard when you log in.)

- Link is available in MAVEN Help, but the Guide actually lives on mass.gov website.



Diseases Covered

Foodborne/Waterborne Diseases:

- Amebiasis
- Botulism
- Campylobacter Enteritis
- Cryptosporidiosis
- Cyclosporiasis
- Giardiasis
- Legionellosis
- Listeriosis
- Salmonellosis (Non-Typhoid)
- Shig Toxin-Producing Escherichia coli
- Shigellosis
- Vibriosis
- Yersiniosis

Vaccine Preventable Diseases:

- Chickenpox
- Hepatitis A
- Invasive Meningococcal Disease
- Measles
- Mumps
- Pertussis
- Rubella and CRS
- Streptococcus pneumoniae – Invasive Disease
- Tetanus

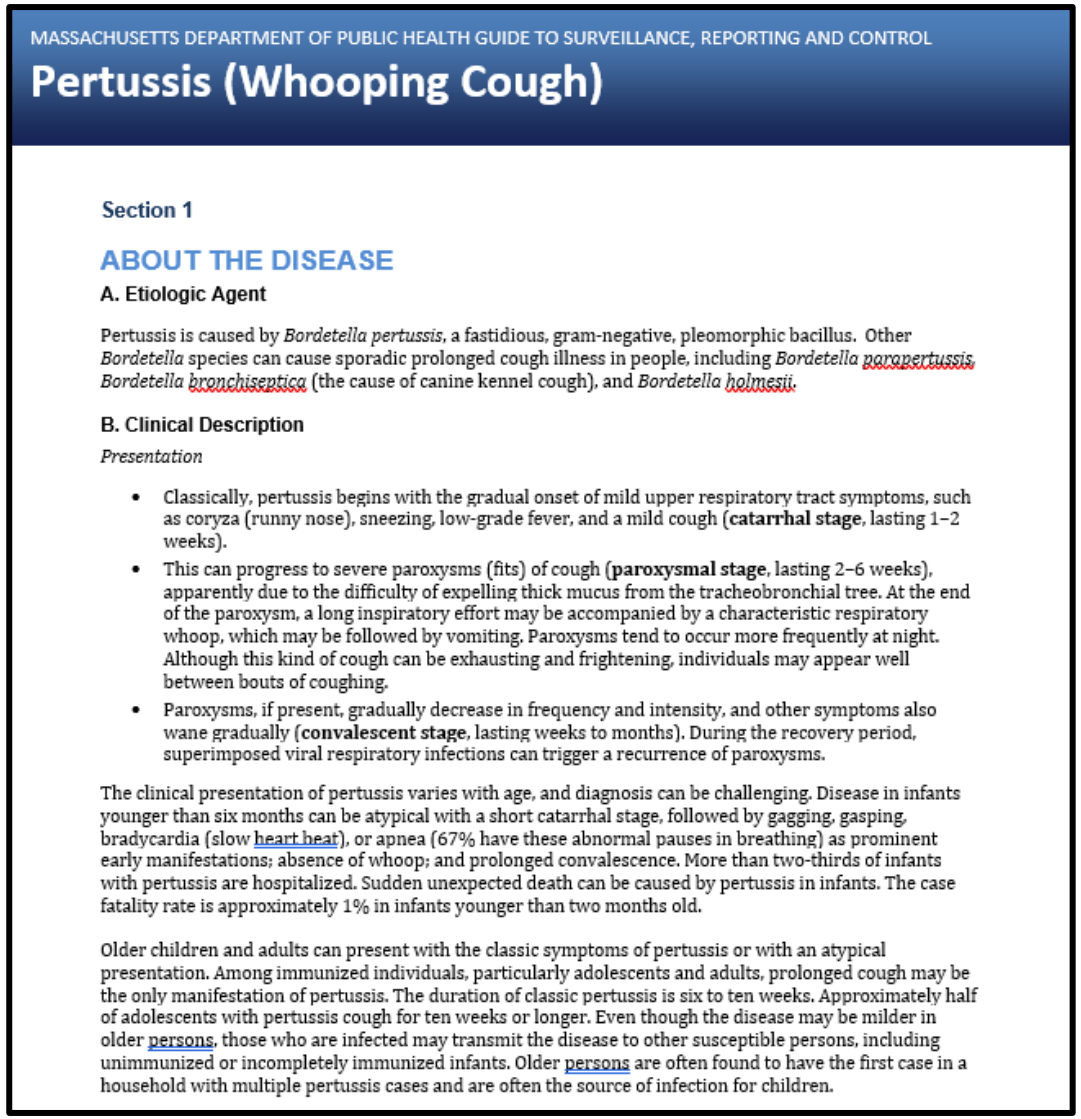
Others:

- Group A Streptococcus (Invasive)
- Hansen's Disease
- Sexually Transmitted Infections
- Toxic Shock Syndrome

Not every reportable disease has a Surveillance Chapter but that does not mean no follow up is needed.

Chapter Section 1: About the Disease

A. Etiologic Agent
B. Clinical Description
C. Vectors and Reservoirs
D. Modes of Transmission
E. Incubation Period
F. Period of Communicability or Infectious Period
G. Epidemiology
H. Vaccine
I. Bioterrorist Potential



MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH GUIDE TO SURVEILLANCE, REPORTING AND CONTROL

Pertussis (Whooping Cough)

Section 1

ABOUT THE DISEASE

A. Etiologic Agent

Pertussis is caused by *Bordetella pertussis*, a fastidious, gram-negative, pleomorphic bacillus. Other *Bordetella* species can cause sporadic prolonged cough illness in people, including *Bordetella parapertussis*, *Bordetella bronchiseptica* (the cause of canine kennel cough), and *Bordetella holmesii*.

B. Clinical Description

Presentation

- Classically, pertussis begins with the gradual onset of mild upper respiratory tract symptoms, such as coryza (runny nose), sneezing, low-grade fever, and a mild cough (**catarrhal stage**, lasting 1–2 weeks).
- This can progress to severe paroxysms (fits) of cough (**paroxysmal stage**, lasting 2–6 weeks), apparently due to the difficulty of expelling thick mucus from the tracheobronchial tree. At the end of the paroxysm, a long inspiratory effort may be accompanied by a characteristic respiratory whoop, which may be followed by vomiting. Paroxysms tend to occur more frequently at night. Although this kind of cough can be exhausting and frightening, individuals may appear well between bouts of coughing.
- Paroxysms, if present, gradually decrease in frequency and intensity, and other symptoms also wane gradually (**convalescent stage**, lasting weeks to months). During the recovery period, superimposed viral respiratory infections can trigger a recurrence of paroxysms.

The clinical presentation of pertussis varies with age, and diagnosis can be challenging. Disease in infants younger than six months can be atypical with a short catarrhal stage, followed by gagging, gasping, bradycardia (slow heart beat), or apnea (67% have these abnormal pauses in breathing) as prominent early manifestations; absence of whoop; and prolonged convalescence. More than two-thirds of infants with pertussis are hospitalized. Sudden unexpected death can be caused by pertussis in infants. The case fatality rate is approximately 1% in infants younger than two months old.

Older children and adults can present with the classic symptoms of pertussis or with an atypical presentation. Among immunized individuals, particularly adolescents and adults, prolonged cough may be the only manifestation of pertussis. The duration of classic pertussis is six to ten weeks. Approximately half of adolescents with pertussis cough for ten weeks or longer. Even though the disease may be milder in older persons, those who are infected may transmit the disease to other susceptible persons, including unimmunized or incompletely immunized infants. Older persons are often found to have the first case in a household with multiple pertussis cases and are often the source of infection for children.

Chapter Section 2: Reporting Criteria and Laboratory Testing

A. What to Report to the Massachusetts Department of Public Health

B. Laboratory Testing Available

Section 2

REPORTING CRITERIA AND LABORATORY TESTING

A. What to Report to the Massachusetts Department of Public Health (MDPH)

- Laboratory evidence of *B. pertussis* infection by one of the following:
  - Isolation (culture) of *B. pertussis* from a clinical specimen;
  - A positive polymerase chain reaction (PCR) for *B. pertussis* nucleic acid; or
  - A positive pertussis serology performed at the Massachusetts State Public Health Laboratory (MA SPHL).
- Cough illness of any duration in a contact of a laboratory-confirmed case of pertussis

Currently, unless the test is performed at the MA SPHL, pertussis serology results are not valid for case confirmation. The MDPH does not consider a patient with a positive serologic result from another laboratory to be laboratory-confirmed. Please see Section 2B for more information.

B. Laboratory Testing Services Available

There are three types of diagnostic tests for pertussis acceptable for public health purposes:

- Culture: Available at the MA SPHL and at some commercial and hospital laboratories.
- PCR: Available at commercial and hospital laboratories.
- Serology: Only serologic assays performed at the MA SPHL are acceptable for laboratory confirmation. *Note: Serologic results from commercial and hospital laboratories are not considered interpretable by the MDPH or the Centers for Disease Control and Prevention (CDC).*

Chapter Section 3: Reporting Responsibilities and Case Investigation

A. Purpose of Surveillance and Reporting

B. Laboratory and Healthcare Provider Report Requirements

C. Local of Board of Health Reporting and Follow-Up Responsibilities

I. Reporting requirements

II. Case investigation steps

III. Using MAVEN

C. Local Board of Health (LBOH) Reporting and Follow-Up Responsibilities

Reporting Requirements

MDPH regulations *(105 CMR 300.000)* stipulate that pertussis is reportable to the LBOH and that each LBOH must report any case of pertussis or suspect case of pertussis, as defined by the reporting criteria in Section 2A. Cases should be reported to the MDPH Bureau of Infectious Disease and Laboratory Sciences, Division of Surveillance, Analytics and Informatics (DSAI) via MAVEN. Refer to the List of Diseases Reportable to Local Boards of Health for information on prioritization and timeliness requirements of reporting and case investigation https://www.mass.gov/lists/infectious-disease-reporting-and-regulations-for-health-care-providers-and-laboratories

Case Investigation

It is the responsibility of the LBOH to complete all questions in each of the question packages by interviewing the case and others who may be able to provide information. Much of the information required can be obtained from the health care provider or from the medical record.

Using MAVEN (for questions related to MAVEN, please contact MAVENHelp@mass.gov)

Administrative Question Package

- Monitor your "Online LBOH Notification for Routine Diseases" workflow in MAVEN for any new cases of pertussis.
- Once a new event appears in this workflow, complete the following:
  - In the Administrative Question Package (QP) and under the "Local Health and Investigation" "Step 1 - LBOH acknowledged" by selecting "Yes".
  - The "LBOH acknowledged date" will then auto populate to the current day.
  - Completing this first step will move the event out of this workflow and into your
  - "Online LBOH notified but Case Report Forms (CRF) are pending" workflow.
  - Note the date you started your investigation by answering "Step 2 – Investigation started" as "Yes" and then note the date where shown.
  - Record your name, agency, and phone numbers where shown in "Step 3 - LBOH/Agency Investigator."

Demographic Question Package

- **Record all demographic and employment information.** It is particularly important to complete the **Race/Ethnicity, Place of birth (country), and Occupation questions.**

Clinical Question Package

- Complete the "Diagnosis/Clinical Information" section, providing the following:
  - Diagnosis date
  - Date of symptom onset

Chapter Section 4: Controlling Further Spread

A. Isolation and Quarantine Requirements (105 CMR 300)
B. Antibiotics for Treatment and Prophylaxis
C. Control Measures for the Case
D. General Control Measures for Close Contacts
E. Management of Special Situations: Schools, Childcare, Healthcare Settings
F. Outbreak Management

Section 4

CONTROLLING FURTHER SPREAD

A. Isolation and Quarantine Requirements *(105 CMR 300.200)*

Minimum Period of Isolation of Patient

For 21 days from onset of cough, or 5 days after initiation of appropriate antibiotic therapy. The first full day of antibiotics is considered to be Day 1. Neither treatment nor exclusion is required for cases beyond their infectious period, which lasts 21 days after cough onset. These isolation requirements typically apply to laboratory-confirmed cases of pertussis; however, a suspect case who is being treated for pertussis should refrain from public activities until five days of treatment have been completed.

Minimum Period of Quarantine of Contacts

- If the contact is **symptomatic**, use same restrictions as for cases.
- If the contact is asymptomatic, not a healthcare worker, and exposed within the last 21 days, s/he should receive antibiotic prophylaxis, but no exclusion is generally required.
- Asymptomatic healthcare worker contacts who are receiving post-exposure prophylaxis do not need to be excluded.
- Asymptomatic healthcare workers not receiving antibiotic prophylaxis should be excluded from the workplace for 21 days after last exposure, or if last exposure is unknown, for 21 days after the onset of the last case in the setting.

C. Control Measures for the Case

1) Determine if the case is confirmed.
    a. When a provider suspects pertussis and treats a patient with antibiotics, the patient should refrain from public activities until five days of treatment have elapsed, even if the case has not been confirmed.
2) Determine cough onset date.
3) Case should be excluded from all public activities for 21 days after cough onset, or until he/she completes five days of appropriate antibiotic therapy.
4) Neither treatment nor exclusion is required for cases beyond their infectious period, which lasts 21 days after cough onset.
5) Evaluate immunization status of case; refer for vaccination if necessary.

Note: In certain situations, deemed to be high-risk, MDPH may make additional recommendations regarding control measures (e.g., treatment, prophylaxis, and exclusion.)

Control Example from Salmonellosis Chapter

Helpful tips for how to manage **special situations**

School

Since salmonellosis may be transmitted from person-to-person through fecal-oral transmission, it is important to follow up on cases in school settings. The MDPH *Comprehensive School Health Manual* provides detailed information on case follow-up and control in a school setting. General recommendations include:

- Students or staff with *Salmonella* infection who have diarrhea should be excluded until their diarrhea is resolved.
- Students or staff with *Salmonella* who do not handle food, have no diarrhea or have mild diarrhea, and are not otherwise sick may remain in school if special precautions are taken.
- Students or staff who handle food and have *Salmonella* infection (symptomatic or not) must not prepare food until their diarrhea is gone and they have 1 negative stool specimen (collected at least 48 hours after completion of antibiotic therapy, if antibiotics are given) (per *105 CMR 300.200*).
- The school nurse and school physician should consult with the LBOH and the MDPH epidemiologists to determine whether some or all parents/guardians and staff should be notified. Parent/guardian notification should be discussed with the school administrator prior to initiation. Sample letters are available from the Division of Epidemiology and Immunization at (617) 983-6800.

Refer to Chapter 8 of the MDPH *Comprehensive School Health Manual* for complete guidelines on handling diseases spread through the intestinal tract.

Control Example from Salmonellosis Chapter

Helpful disease-specific **prevention talking points**

Personal Preventive Measures/Education

To avoid exposure to *Salmonella,* recommend that individuals:

- Always wash their hands thoroughly with soap and water before eating or preparing food, after using the toilet, after changing diapers, and after touching pets or other animals (especially reptiles).
- Wash the child's hands as well as their own hands after changing diapers, and dispose of feces in a sanitary manner.
- Wash hands thoroughly and frequently when ill with diarrhea or when caring for someone with diarrhea. Hands should be scrubbed for at least 15–20 seconds after cleaning the bathroom; after using the toilet or helping someone use the toilet; after changing diapers; before handling food; and before eating.
- Keep food that will be eaten raw, such as vegetables, from becoming contaminated by animal-derived food products.
- Avoid letting infants or young children touch reptiles, such as turtles or iguanas, or their cages.
- If elderly or immunocompromised, avoid reptiles when choosing pets.
- In a daycare or school, do not use reptiles as classroom pets.
- Make sure to thoroughly cook all food products from animals, especially poultry and eggs, and avoid consuming raw or cracked eggs, unpasteurized milk, or other unpasteurized dairy products.

Discuss transmission risks that may result from oral-anal sexual contact. Latex barrier protection (e.g., dental dam) may prevent the spread of *Salmonella* to a case's sexual partners and may prevent exposure to and transmission of other fecal-oral pathogens.

Control Example: Food Handler Exclusions

Section 4

CONTROLLING FURTHER SPREAD

A. Isolation and Quarantine Requirements *(105 CMR 300.200)*

Food handlers with campylobacteriosis must be excluded from work.

Note: A case of campylobacteriosis *is defined by the reporting criteria in Section 2A of this chapter.*

Minimum Period of Isolation of Patient

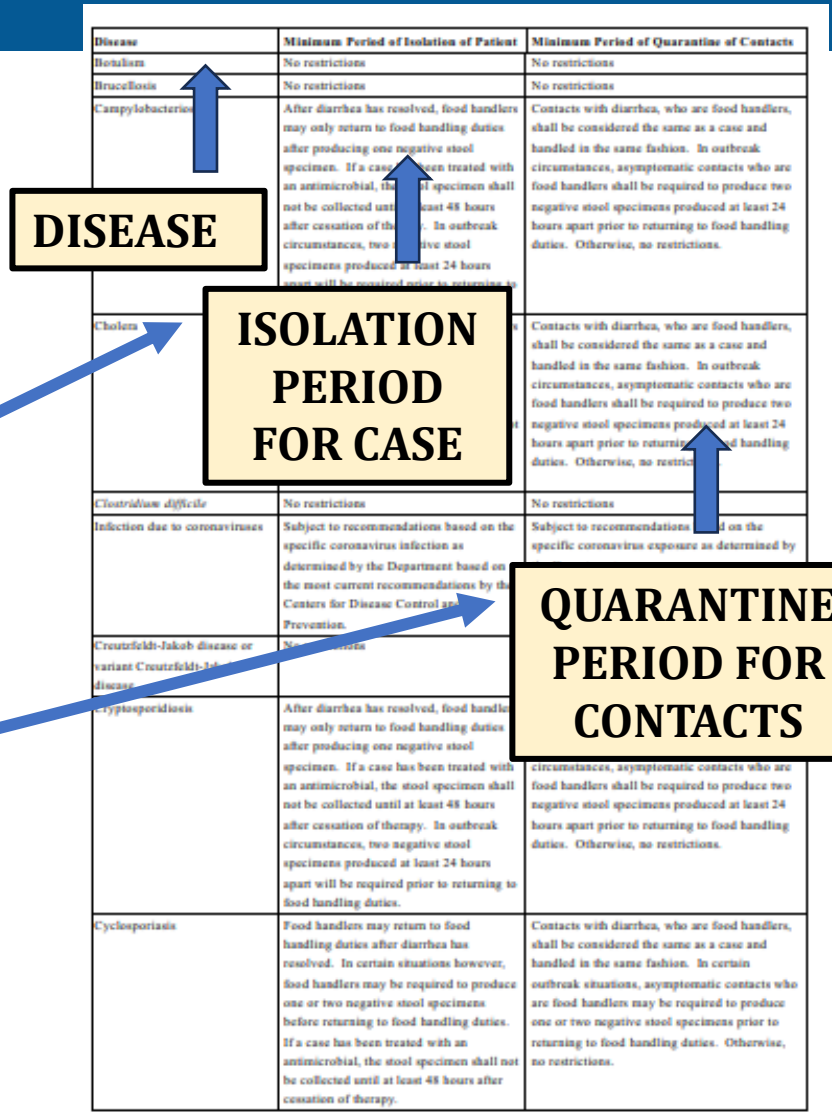
After diarrhea has resolved, food handlers may only return to work after producing one negative stool specimen. If the case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy. In outbreak circumstances, a second consecutive negative stool specimen will be required prior to returning to work.

Minimum Period of Quarantine of Contacts

Contacts with diarrhea who are food handlers shall be considered the same as a case and shall be handled in the same fashion. In outbreak circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens 24 hours apart. Otherwise, there are no restrictions.

Note: A food handler is any person directly preparing or handling food. This can include a patient care or childcare provider.

Available in the Surveillance Chapter but primarily from 105 CMR 300.00



Disease	Minimum Period of Isolation of Patient	Minimum Period of Quarantine of Contacts
Botulism	No restrictions	No restrictions
Brucellosis	No restrictions	No restrictions
Campylobacteriosis	After diarrhea has resolved, food handlers may only return to food handling duties after producing one negative stool specimen. If a case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy. In outbreak circumstances, two negative stool specimens produced at least 24 hours apart will be required prior to returning to	Contacts with diarrhea, who are food handlers, shall be considered the same as a case and handled in the same fashion. In outbreak circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens produced at least 24 hours apart prior to returning to food handling duties. Otherwise, no restrictions.
Cholera		Contacts with diarrhea, who are food handlers, shall be considered the same as a case and handled in the same fashion. In outbreak circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens produced at least 24 hours apart prior to returning to food handling duties. Otherwise, no restrictions.
Clostridium difficile	No restrictions	No restrictions
Infection due to coronaviruses	Subject to recommendations based on the specific coronavirus infection as determined by the Department based on the most current recommendations by the Centers for Disease Control and Prevention.	Subject to recommendations based on the specific coronavirus exposure as determined by
Creutzfeldt-Jakob disease or variant Creutzfeldt-Jakob disease	No restrictions	
Cryptosporidiosis	After diarrhea has resolved, food handlers may only return to food handling duties after producing one negative stool specimen. If a case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy. In outbreak circumstances, two negative stool specimens produced at least 24 hours apart will be required prior to returning to food handling duties.	circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens produced at least 24 hours apart prior to returning to food handling duties. Otherwise, no restrictions.
Cyclosporiasis	Food handlers may return to food handling duties after diarrhea has resolved. In certain situations however, food handlers may be required to produce one or two negative stool specimens before returning to food handling duties. If a case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy.	Contacts with diarrhea, who are food handlers, shall be considered the same as a case and handled in the same fashion. In certain outbreak situations, asymptomatic contacts who are food handlers may be required to produce one or two negative stool specimens prior to returning to food handling duties. Otherwise, no restrictions.

DISEASE

ISOLATION PERIOD FOR CASE

QUARANTINE PERIOD FOR CONTACTS

Mass.gov | 105 CMR 300.000: REPORTABLE DISEASES, SURVEILLANCE, AND ISOLATION AND QUARANTINE REQUIREMENTS

Building Your Local Resources

- Consider building off the Guide to Surveillance Chapters to develop your local resources.
  - Do you have a “go to” local provider for referrals?
  - What are key contact numbers for your school nurses?
  - Contact information and tips for working with your local restaurant inspector?
- If a disease is not included in the Guide, consider building your own local resource on how to investigate and respond using the same outline.
- Bookmark MAVEN Help for other tipsheets, webinars and resources.

105 CMR 300: Reportable Diseases, Surveillance, Isolation, and Quarantine Requirements

Regulations in Massachusetts

- Reporting, Surveillance, Isolation and Quarantine Requirements in Massachusetts:
  - 105 CMR 300: Reportable Diseases, Surveillance, and Isolation Quarantine Requirements

This presentation is being provided for reference and is not legal advice. If you need legal advice you may wish to consult with your agency's legal counsel.

105 CMR: DEPARTMENT OF PUBLIC HEALTH

105 CMR 300.000: REPORTABLE DISEASES, SURVEILLANCE, AND ISOLATION AND QUARANTINE REQUIREMENTS

Section

Established Reporting, Surveillance, Isolation, and Quarantine Requirements in MA

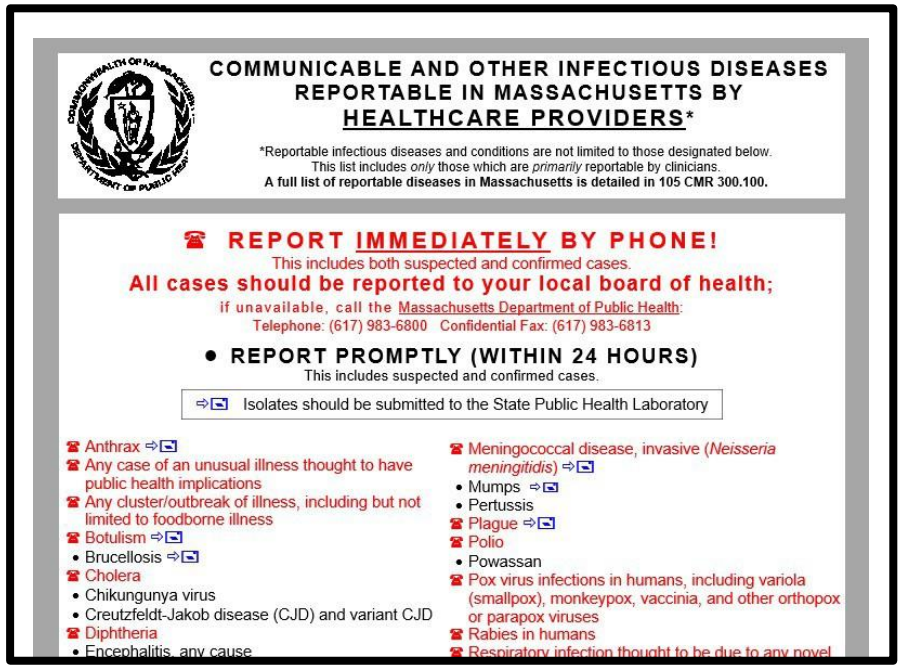
- The following few slides reference select components of a Massachusetts regulation promulgated by the Department of Public Health (DPH) to implement certain state statutes, 105 CMR 300: Reportable Diseases, Surveillance, and Isolation Quarantine Requirements, and outline some of the key work of DPH and Local Boards of Health (LBOH) in preventing diseases designated as dangerous to public health.

- **Highlights Include:**

  - **Who initiates reporting?**
  - **What is the purpose of 105 CMR 300 Reportable Diseases, Surveillance, and Isolation Quarantine Requirements?**
  - **What is in a disease report?**
  - **LBOHs: Timely and complete disease reports are submitted through MAVEN.**
  - **Investigation, Monitoring, Control and Prevention: Common activities that may be part of investigations.**
  - **Accessing Medical Records.**
  - **Isolation and Quarantine Requirements for specific diseases.**

What is Reportable by Whom in MA?

- Disease surveillance, reporting, and control are required by law under M.G.L. c.111 and c.111D.
- 105 CMR 300.000: Reportable Diseases, Surveillance, and Isolation Quarantine Requirements



COMMUNICABLE AND OTHER INFECTIOUS DISEASES REPORTABLE IN MASSACHUSETTS BY HEALTHCARE PROVIDERS*

*Reportable infectious diseases and conditions are not limited to those designated below. This list includes *only* those which are *primarily* reportable by clinicians. **A full list of reportable diseases in Massachusetts is detailed in 105 CMR 300.100.**

☎ REPORT IMMEDIATELY BY PHONE!

This includes both suspected and confirmed cases.

All cases should be reported to your local board of health;

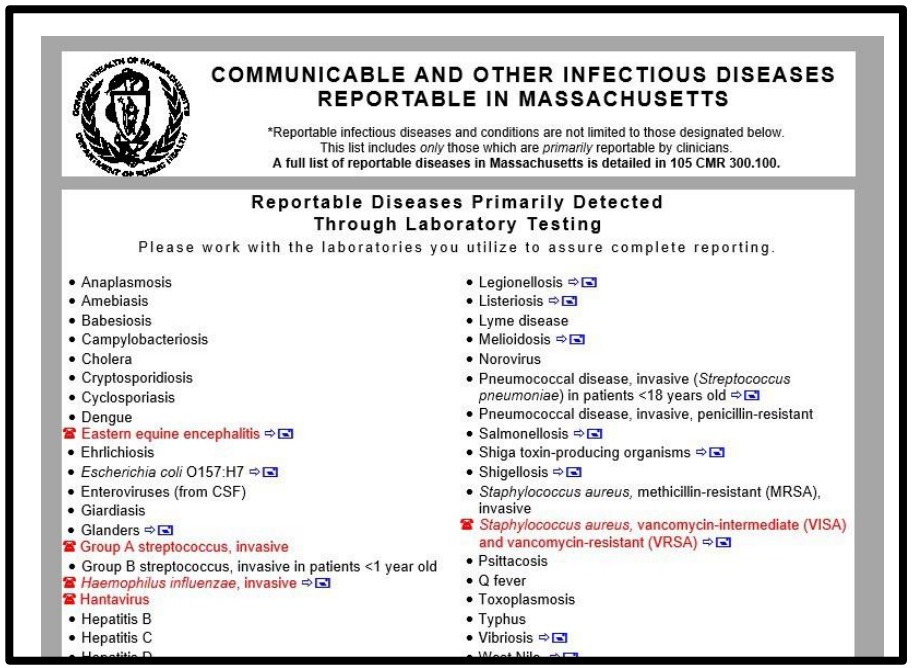
if unavailable, call the Massachusetts Department of Public Health:
Telephone: (617) 983-6800 Confidential Fax: (617) 983-6813

● REPORT PROMPTLY (WITHIN 24 HOURS)

This includes suspected and confirmed cases.

⇨ Isolates should be submitted to the State Public Health Laboratory

☎ Anthrax ⇨
☎ Any case of an unusual illness thought to have public health implications
☎ Any cluster/outbreak of illness, including but not limited to foodborne illness
☎ Botulism ⇨
• Brucellosis ⇨
☎ Cholera
• Chikungunya virus
• Creutzfeldt-Jakob disease (CJD) and variant CJD
☎ Diphtheria
• Encephalitis, any cause
☎ Meningococcal disease, invasive (*Neisseria meningitidis*) ⇨
• Mumps ⇨
• Pertussis
☎ Plague ⇨
☎ Polio
• Powassan
☎ Pox virus infections in humans, including variola (smallpox), monkeypox, vaccinia, and other orthopox or parapox viruses
☎ Rabies in humans
☎ Respiratory infection thought to be due to any novel



COMMUNICABLE AND OTHER INFECTIOUS DISEASES REPORTABLE IN MASSACHUSETTS

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Reportable Diseases Primarily Detected Through Laboratory Testing

Please work with the laboratories you utilize to assure complete reporting.

• Anaplasmosis
• Amebiasis
• Babesiosis
• Campylobacteriosis
• Cholera
• Cryptosporidiosis
• Cyclosporiasis
• Dengue
☎ Eastern equine encephalitis ⇨
• Ehrlichiosis
• *Escherichia coli* O157:H7 ⇨
• Enteroviruses (from CSF)
• Giardiasis
• Glanders ⇨
☎ Group A streptococcus, invasive
• Group B streptococcus, invasive in patients <1 year old
☎ *Haemophilus influenzae*, invasive ⇨
☎ Hantavirus
• Hepatitis B
• Hepatitis C
• Legionellosis ⇨
• Listeriosis ⇨
• Lyme disease
• Melioidosis ⇨
• Norovirus
• Pneumococcal disease, invasive (*Streptococcus pneumoniae*) in patients <18 years old ⇨
• Pneumococcal disease, invasive, penicillin-resistant
• Salmonellosis ⇨
• Shiga toxin-producing organisms ⇨
• Shigellosis ⇨
• *Staphylococcus aureus*, methicillin-resistant (MRSA), invasive
☎ *Staphylococcus aureus*, vancomycin-intermediate (VISA) and vancomycin-resistant (VRSA) ⇨
• Psittacosis
• Q fever
• Toxoplasmosis
• Typhus
• Vibriosis ⇨

https://www.mass.gov/lists/infectious-disease-reporting-and-regulations-for-health-care-providers-and-laboratories

105 CMR 300.000: Reportable Diseases, Surveillance, and Isolation Quarantine Requirements

105 CMR 300.001

Purpose

The purpose of 105 CMR 300.000 is to list diseases dangerous to the public health as designated by the Department of Public Health and to ***establish reporting, surveillance, isolation and quarantine requirements****. 105 CMR 300.000 is* ***intended for application by local boards of health****, hospitals, laboratories, physicians and other health care workers, veterinarians, education officials, recreational program health service providers, food industry officials, and the public.*

What is a Disease Report?

105 CMR 300.020

Definitions

Report of a Disease. *A notice submitted pursuant to reporting requirements in 105 CMR 300.000 that shall include contact information for the clinician responsible for reporting the disease and* ***full personal demographic, clinical, epidemiologic and laboratory information on the case****, to the appropriate authority of the occurrence of a specified disease in people or animals, directly by telephone, in writing, by facsimile, or by electronic means.*

Content of reports to the Department shall be defined on a disease by disease basis. *Also see 105 CMR 300.170 for laboratory reports.*

- Depending on the disease, some disease reports are required at the point a provider SUSPECTS the disease, and others are required once diagnosed.

MAVEN Coverage: Required for LBOH

105 CMR 300.110

Case Reports by Local Boards of Health

Each local board of health shall report to the Department the occurrence or suspected occurrence of any disease reported to the board of health, pursuant to 105 CMR 300.100. The case's ***full clinical data, demographic data and epidemiologic data,*** *as defined by the Department,* ***must be included*** *for each report.*

Each local board of health shall utilize the secure electronic disease surveillance and case management system (MAVEN) *designated and maintained by the Department.*

Each case shall be reported immediately, but no later than 24 hours after receipt by the local board of health.

- Each local jurisdiction should complete the Case Report promptly on your cases and complete that report in MAVEN.

Surveillance and Control of Diseases Dangerous to Public Health

105 CMR 300.190

Surveillance and Control of Diseases Dangerous to the Public Health

The Department and local boards of health are authorized to conduct surveillance activities necessary for the investigation, monitoring, control and prevention of diseases dangerous to the public health. Such activities shall include, but need not be limited to:

(A) *Systematic collection and evaluation of morbidity and mortality reports. This includes the collection and analysis of data derived from electronic health record systems.*

(B) *Investigation into the existence of diseases dangerous to the public health to determine the causes and extent of such diseases and to formulate prevention and control measures.*

(C) *Identification of cases and contacts.*

(D) *Counseling and interviewing individuals as appropriate to assist in positive identification of exposed individuals and to develop information relating to the source and spread of illness.*

Surveillance and Control of Diseases Dangerous to Public Health

105 CMR 300.190

Surveillance and Control of Diseases Dangerous to the Public Health

The Department and local boards of health are authorized to conduct surveillance activities necessary for the investigation, monitoring, control and prevention of diseases dangerous to the public health. Such activities shall include, but need not be limited to:

(E) *Monitoring the medical condition of individuals diagnosed with or exposed to diseases dangerous to the public health.*

(F) *Collection and/or preparation of data concerning the availability and use of vaccines, immune globulins, insecticides and other substances used in disease prevention and control.*

(G) *Collection and/or preparation of data regarding immunity levels in segments of the population and other relevant epidemiological data.*

(H) *Ensuring that diseases dangerous to the public health are subject to the requirements of 105 CMR 300.200 and other proper control measures.*

Accessing Medical Records and Other Information to Complete Investigations

105 CMR 300.191

Access to Medical Records and Other Information

(A) ***The Department or local boards of health are authorized to obtain, upon request, from health care providers and other persons subject to the provisions of 105 CMR 300.000, access to medical records****, including electronic health records, and other information that the Department or the local board of health deems necessary* ***to carry out its responsibilities to investigate, monitor, prevent and control diseases dangerous to the public health****.*

- Often initial reports are incomplete, and LBOH may need to contact a medical provider for further information relevant to a particular reportable infection.

Accessing Medical Records and Other Information to Complete Investigations

105 CMR 300.200

Isolation and Quarantine Requirements

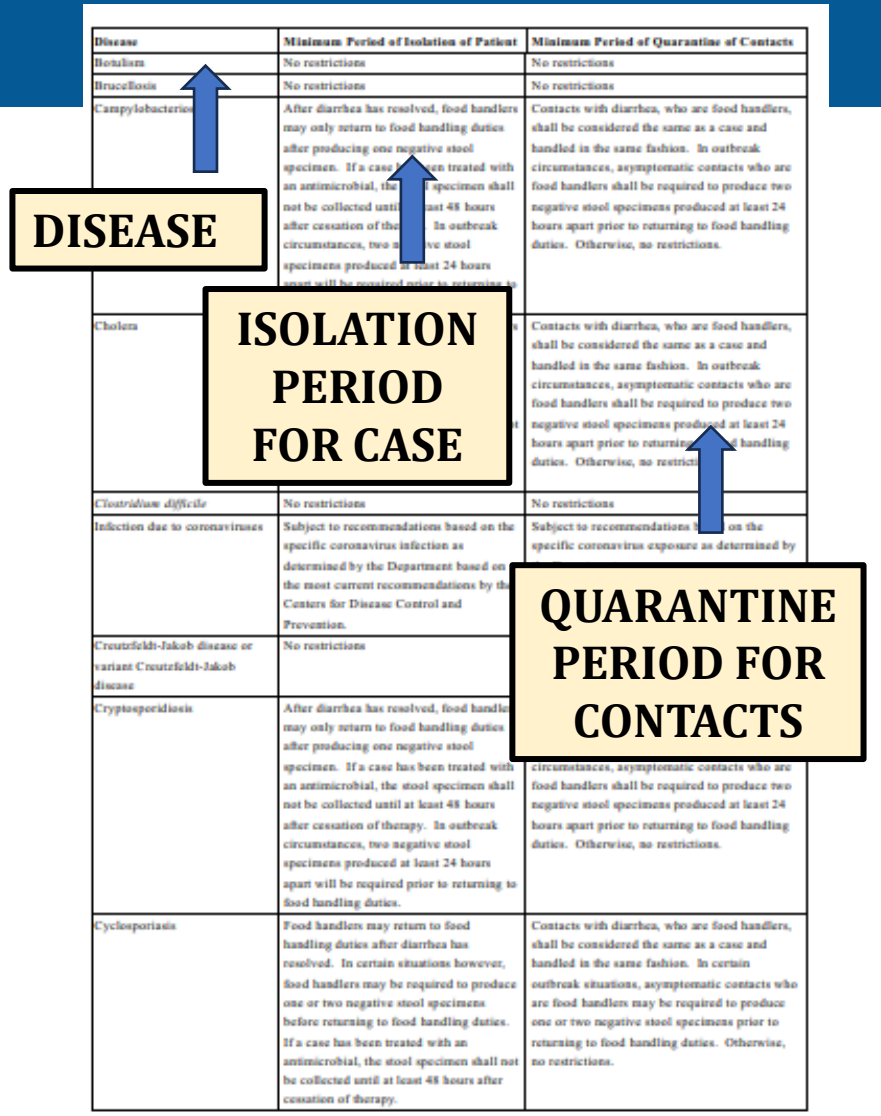
Upon the report of a case or suspected case of disease declared dangerous to the public health, the local board of health and the Department are authorized to implement and enforce the requirements outlined in 105 CMR 300.200.

Minimum requirements for the isolation and quarantine of diseases dangerous to the public health are set forth in 105 CMR 300.200(A). Depending on the specific circumstances related to the exposure, case and/or contact with respect to any disease or condition listed in 105 CMR 300.200(A) or (B), additional control measures may be required.

- 105 CMR 300.200 provides a large table of reportable infectious diseases and outlines when, and if, there are isolation requirements for cases, and when, and if, there are quarantine requirements for exposed contacts.

Where to Go for More Information?

- The Code of Massachusetts Regulations (CMR) outlines reportable diseases, surveillance, and isolation and quarantine requirements.
  - 105 CMR 300.000
- This is the regulatory foundation of our public health work in infectious diseases. (contains purpose, definitions, reporting, requirements, etc.)
  - Section **105 CMR 300.200** provides a quick Isolation & Quarantine Requirements Table

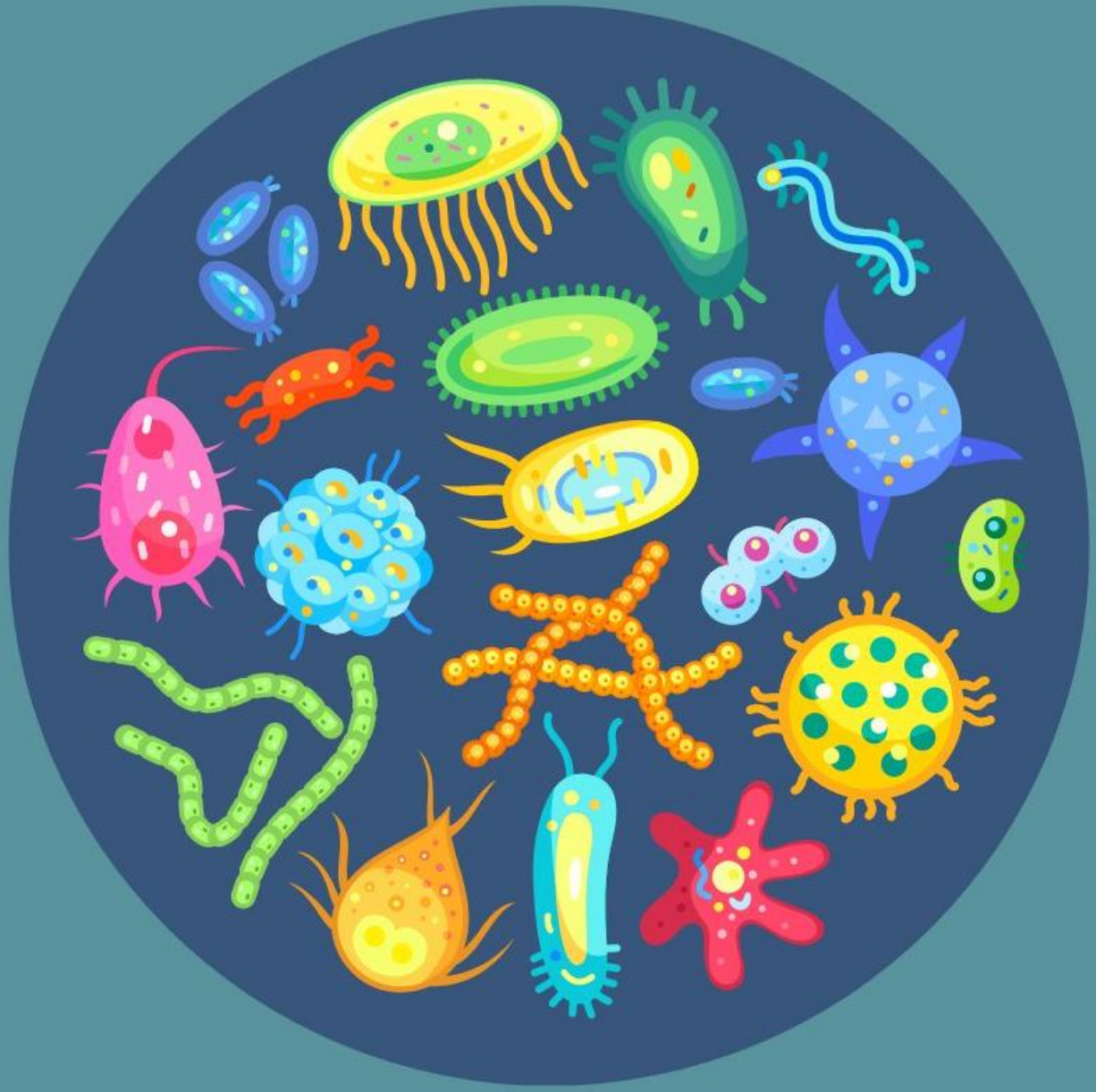


Disease	Minimum Period of Isolation of Patient	Minimum Period of Quarantine of Contacts
Botulism	No restrictions	No restrictions
Brucellosis	No restrictions	No restrictions
Campylobacteriosis	After diarrhea has resolved, food handlers may only return to food handling duties after producing one negative stool specimen. If a case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy. In outbreak circumstances, two negative stool specimens produced at least 24 hours apart will be required prior to returning to	Contacts with diarrhea, who are food handlers, shall be considered the same as a case and handled in the same fashion. In outbreak circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens produced at least 24 hours apart prior to returning to food handling duties. Otherwise, no restrictions.
Cholera		Contacts with diarrhea, who are food handlers, shall be considered the same as a case and handled in the same fashion. In outbreak circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens produced at least 24 hours apart prior to returning to food handling duties. Otherwise, no restrictions.
Clostridium difficile	No restrictions	No restrictions
Infection due to coronaviruses	Subject to recommendations based on the specific coronavirus infection as determined by the Department based on the most current recommendations by the Centers for Disease Control and Prevention.	Subject to recommendations based on the specific coronavirus exposure as determined by
Creutzfeldt-Jakob disease or variant Creutzfeldt-Jakob disease	No restrictions	
Cryptosporidiosis	After diarrhea has resolved, food handlers may only return to food handling duties after producing one negative stool specimen. If a case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy. In outbreak circumstances, two negative stool specimens produced at least 24 hours apart will be required prior to returning to food handling duties.	circumstances, asymptomatic contacts who are food handlers shall be required to produce two negative stool specimens produced at least 24 hours apart prior to returning to food handling duties. Otherwise, no restrictions.
Cyclosporiasis	Food handlers may return to food handling duties after diarrhea has resolved. In certain situations however, food handlers may be required to produce one or two negative stool specimens before returning to food handling duties. If a case has been treated with an antimicrobial, the stool specimen shall not be collected until at least 48 hours after cessation of therapy.	Contacts with diarrhea, who are food handlers, shall be considered the same as a case and handled in the same fashion. In certain outbreak situations, asymptomatic contacts who are food handlers may be required to produce one or two negative stool specimens prior to returning to food handling duties. Otherwise, no restrictions.

Mass.gov | 105 CMR 300.000: REPORTABLE DISEASES, SURVEILLANCE, AND ISOLATION AND QUARANTINE REQUIREMENTS

Investigation Resources

Infectious Disease Control Measures

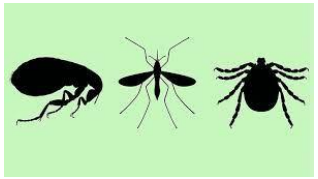


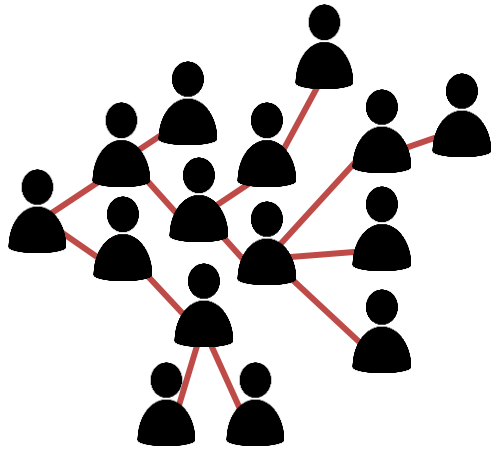
Control Measures Rely on Good Case Investigation

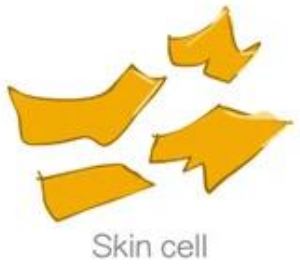
- **Control measures** are a large part of why we investigate cases of infectious disease and what distinguishes public health from medicine.
- **Control measures** (identifying infectious periods for determining exposures and close contacts or identifying high risk occupations and if a case is a food handler and needs to be excluded from work, etc.) are actions that may be needed for both Immediate and Routine diseases.
  - **Case investigation – is this a real case?** Data collection to determine what, when, where, why, who, and how?
  - **Control measures – who else is at risk?** What needs to be done to stop the chains of transmission and control spread in the population?
- We investigate in order to implement public health action to stop the spread of disease in the population.

Infectious Disease Transmission

- **Infectious diseases are transmitted in a variety of ways.**
  - Person-to-person by droplets coughed or sneezed
  - Ingestion of food or water
  - Insects or animals
  - Sexually
  - Direct contact
  - Contact with an object/surfaces
  - Needle sharing
  - Blood, organ transplants
  - Health care







Disease Control

- Each disease is different, and our approaches for control are different based upon specific disease factors.
  - Are we still learning about the disease?
  - Is there prevention?
  - Is there treatment?
  - Is there a cure?

Targeting Control Measures

FOR THE CASE:

- Isolation
- Medical treatment

FOR CONTACTS:

- Quarantine
- Monitoring
- Post-exposure prophylaxis (medication or vaccine)

FOR THE ENVIRONMENT:

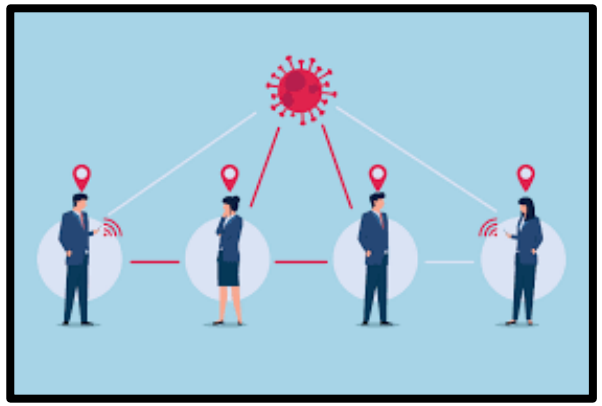
- Remove food item from an establishment
- Sterilize or disinfect objects/environment (e.g., surfaces or toys)

FOR THE PUBLIC:

- Awareness and Health Education
- Community Guidance

Contact Tracing

- **Contact tracing is the process of identifying and screening a case's close contacts for further public health control measures. Examples can include:**
  - Quarantine
  - Post-exposure prophylaxis (PEP) – vaccine or medication
  - Monitoring for symptoms (active or self-monitoring)



- Contact tracing may not be appropriate for every disease. Factors that are important to consider:
  - Transmission route of disease
  - Type of contact – household, intimate, casual, shared air space etc.
  - Duration of contact
  - Timing of exposure

Isolation vs. Quarantine

Isolation:

- For symptomatic people.
  and/or
- For Confirmed Cases.
- Prevents cases from infecting others.
- **LASTS UNTIL THE PERSON IS NO LONGER CONTAGIOUS.**

CASES

Quarantine:

- For asymptomatic people who have had an exposure (close contacts of confirmed cases).
- Prevents people from infecting others in the event they develop symptoms.
- **Timing is disease-dependent; defined in 105 CMR 300, and lasts until the exposed contact is no longer able to develop illness from specific date of exposure.**

CONTACTS

Most Important Questions:

For Positive Cases

- **Did you have symptoms?**
  - When was the symptom onset?*
- **What date was the specimen collected for the positive test?**

For Close Contacts

- **What was the final date of exposure to an infectious confirmed case?**

*Some diseases have a specific symptom that's onset date determines infectious period.

Find the DAY ZERO.

Social Distancing vs. Quarantine

Social Distancing:

- Maintaining at least 6 ft between you and any other person.
- Selecting activities that allow for individuals to work with their own materials.
- Utilizing outdoor venues or settings with good airflow.
- Reducing group size & avoiding crowded settings.
- Maintaining risk reduction practices like masking & good hygiene.

EVERYBODY

Quarantine:

- Staying at home – NO GOING OUT.
- Using standard hygiene and washing hands frequently.
- Not sharing things like towels and utensils.
- Not having visitors.
- Staying away from other people in your household.
- Prevents possibly exposing others if illness does develop.

CONTACTS

Monitoring vs. Quarantine

Monitoring:

- No restrictions on outside activity.
- Being alert for symptoms and calling doctor or public health if symptomatic.
- Taking your temperature (disease-dependent).
- Can be active or self monitoring (daily calls from public health vs. only call public health if symptoms arise).
- Applies to known contacts and may also apply to those with suspected risk.

CONTACTS

Quarantine:

- Staying at home – NO GOING OUT.
- Using standard hygiene and washing hands frequently.
- Not sharing things like towels and utensils.
- Not having visitors.
- Staying at least 6 feet away from other people in your household.
- Prevents possibly exposing others if illness does develop.

CONTACTS

Exclusion vs. Quarantine

Exclusion:

- Often related to a specific setting or activity where risk of transmission is heightened.
- Lasts until an individual meets certain requirements (such as a negative test, vaccination, etc.).

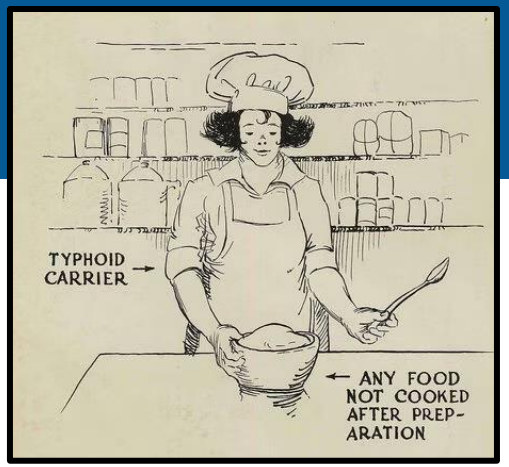
CONTACTS or CASES

Quarantine:

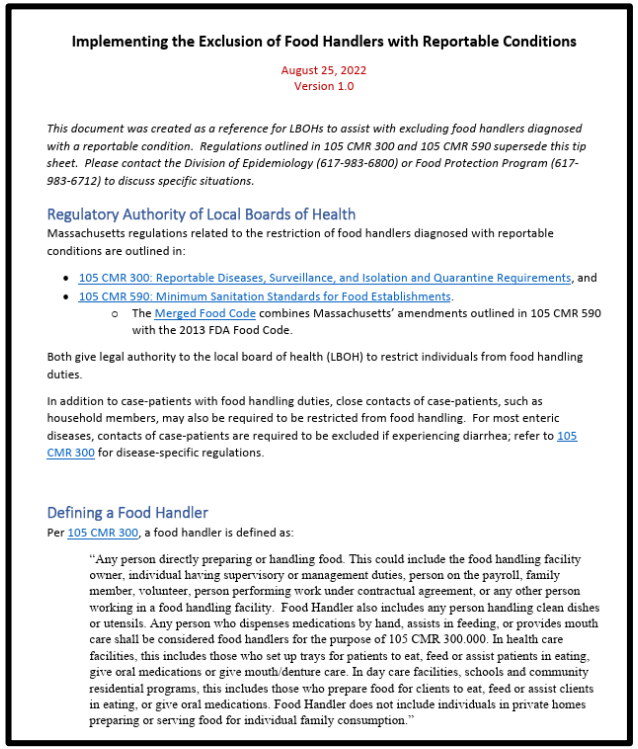
- Staying at home – NO GOING OUT.
- Using standard hygiene and washing hands frequently.
- Not sharing things like towels and utensils.
- Not having visitors.
- Staying at least 6 feet away from other people in your household.
- Prevents possibly exposing others if illness does develop.

CONTACTS

Food Handler Exclusions



- Work exclusions can help limit spread in high-risk settings
- Given that enteric diseases can be transmitted through contaminated food or improper handling of food, excluding those directly preparing/handling food while infectious is essential to limit spread.
- Very generally, a food handler is someone who handles anything (food, clean dishes and utensils, medication, medical equipment, etc.) that goes into someone else's mouth or puts their actual hands in someone's mouth.
- The definition of who is considered a "food handler," food handling restrictions and return-to-work criteria are outlined in 105 CMR 300.
- Key Food Handler Exclusion Training/Resources:
  - Introduction to Enteric Disease Case Investigations
  - Enteric Gastrointestinal Illness Investigations 2023 Season Refresher



Implementing the Exclusion of Food Handlers with Reportable Conditions

August 25, 2022
Version 1.0

This document was created as a reference for LBOHs to assist with excluding food handlers diagnosed with a reportable condition. Regulations outlined in 105 CMR 300 and 105 CMR 590 supersede this tip sheet. Please contact the Division of Epidemiology (617-983-6800) or Food Protection Program (617-983-6712) to discuss specific situations.

Regulatory Authority of Local Boards of Health

Massachusetts regulations related to the restriction of food handlers diagnosed with reportable conditions are outlined in:

- 105 CMR 300: Reportable Diseases, Surveillance, and Isolation and Quarantine Requirements, and
- 105 CMR 590: Minimum Sanitation Standards for Food Establishments.
  - The Merged Food Code combines Massachusetts' amendments outlined in 105 CMR 590 with the 2013 FDA Food Code.

Both give legal authority to the local board of health (LBOH) to restrict individuals from food handling duties.

In addition to case-patients with food handling duties, close contacts of case-patients, such as household members, may also be required to be restricted from food handling. For most enteric diseases, contacts of case-patients are required to be excluded if experiencing diarrhea; refer to 105 CMR 300 for disease-specific regulations.

Defining a Food Handler

Per 105 CMR 300, a food handler is defined as:

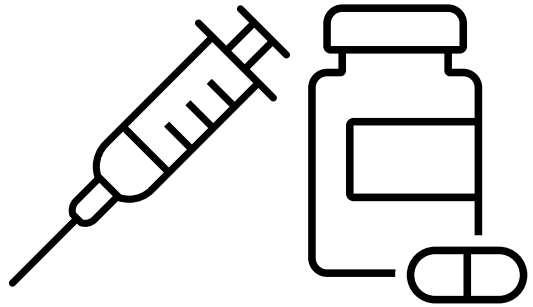
> "Any person directly preparing or handling food. This could include the food handling facility owner, individual having supervisory or management duties, person on the payroll, family member, volunteer, person performing work under contractual agreement, or any other person working in a food handling facility. Food Handler also includes any person handling clean dishes or utensils. Any person who dispenses medications by hand, assists in feeding, or provides mouth care shall be considered food handlers for the purpose of 105 CMR 300.000. In health care facilities, this includes those who set up trays for patients to eat, feed or assist patients in eating, give oral medications or give mouth/denture care. In day care facilities, schools and community residential programs, this includes those who prepare food for clients to eat, feed or assist clients in eating, or give oral medications. Food Handler does not include individuals in private homes preparing or serving food for individual family consumption."

Food Handler Tipsheet

Post Exposure Prophylaxis (PEP)

- **Post-Exposure Prophylaxis (PEP)** refers to a vaccine or medication that can be given after an exposure with the goal of preventing infection and slowing the spread of the disease in a community.
  - Emergency measure – not a routine prevention measure.
  - Time sensitive – often PEP must be started within a certain time window to be effective.
  - Varies by disease - could involve antibiotics, antiviral medications, vaccines, or immune globulin. Not all infections have PEP countermeasures available.

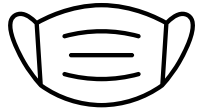
- **Some PEP Examples:**
  - Hepatitis A (vaccine)
  - Invasive Meningococcal Disease (antibiotics)
  - Pertussis (antibiotics)
  - Measles (vaccine or immune globulin)
  - Rabies (vaccine and immune globulin)
  - Tuberculosis (antibiotics)
  - Influenza (antiviral)



Personal Protective Equipment (PPE)

- **Personal protective equipment (PPE)** refers to protective clothing, helmets, gloves, face shields, goggles, facemasks and/or respirators or other equipment designed to protect the wearer from injury or the spread of infection or illness.

- PPE is most effective in occupational settings (such as healthcare) where the employees are trained in donning and doffing and appropriate PPE is officially prescribed for different situations.
  - Health care setting: Appendix A https://www.cdc.gov/infection-control/hcp/isolation-precautions/appendix-a-type-duration.html



- Occasionally, the general public may be advised to take personal precautions such as masking during respiratory illness season or wearing gloves when disposing of a dead bird on their property.

- PPE can serve as both as exposure prevention and source control.

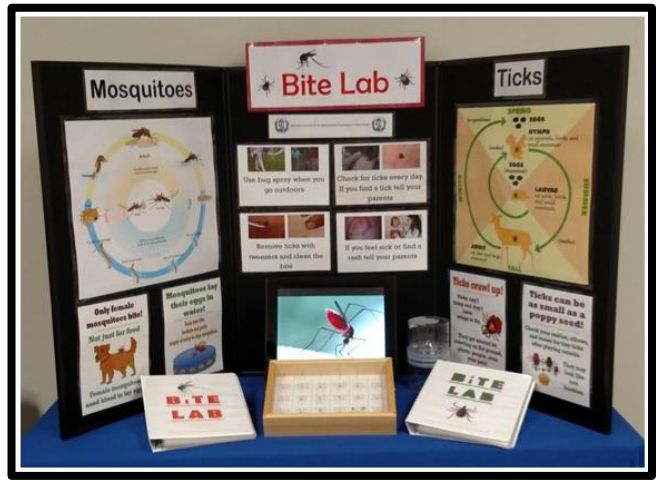
Environmental Controls

- **Environmental Controls** can take many forms and are strategies that focus on reducing or removing risk of exposure in the environment around us.

- **Some Environmental Control Activity Examples:**
  - Removing contaminated food item(s).
  - Sanitizing and disinfecting objects/environment (surfaces, air, objects, water).
  - Vector control (remove the organism that transmits disease pathogens, such as mosquito control programs).
  - Closing beaches to swimming.

Control through Health Education and Awareness

- Educating the public about good hygiene practices, safe behaviors, and vaccination can significantly reduce the transmission of diseases.
  - Mosquito and Tick Bite Prevention Measures and Education
  - Hand Hygiene
  - Food Safety
- Educational talking points can be disseminated via:
  - Fact sheets
  - Letters to parents
  - Press release

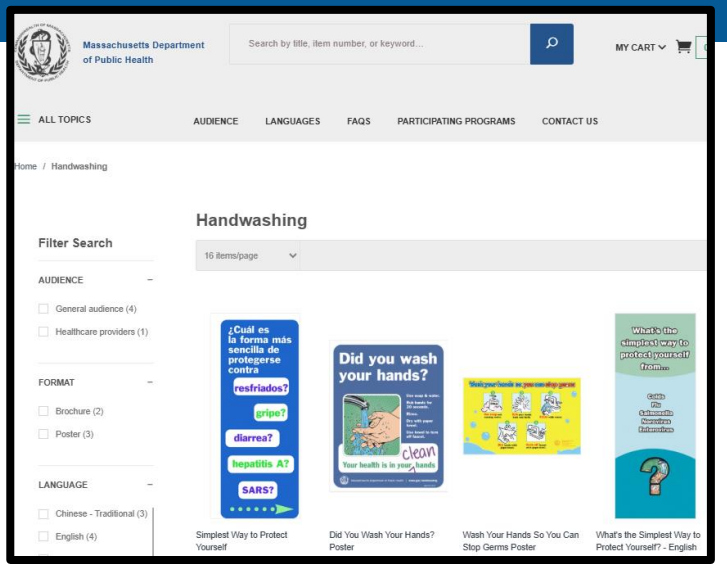


BITE LAB

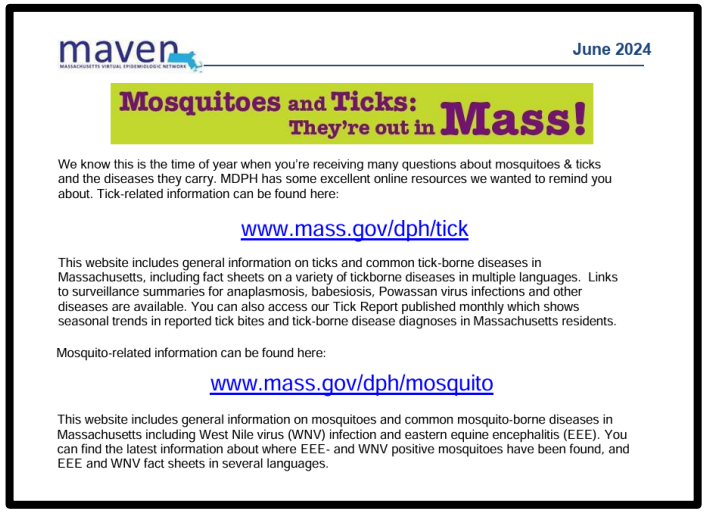
Brought to You By:
Massachusetts Department of Public Health: Division of Epidemiology

Health Education and Awareness Resources

- **Examples:**
  - Order Free Health Promotion Materials from Massachusetts Health Promotion Clearinghouse
  - Fact Sheets on mass.gov
  - Arbovirus Toolkit for LBOHs (sample press releases, educational materials)
  - See MAVEN Help for more!
    - *New!* GI Illness Symptom Checklist for Child Care and Schools
    - *New!* Control Recommendations for Child Care and Schools



MA Health Promotion Clearinghouse

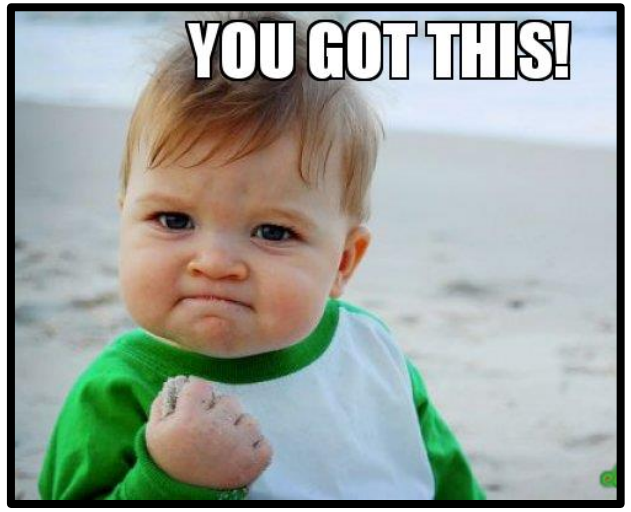


Mosquito and Tick Resources

The “If All Else Fails” Control Measure….

- Stay Home When Sick.
- We may not always have a clear diagnosis and guidance. However, there are some commonsense approaches to illness and symptoms that we should all be practicing.
  - Massachusetts Respiratory Illness Season Guidance for the General Public: Staying Home to Prevent the Spread of Respiratory Viruses
- Be aware that some people around you may have risk factors for more severe disease. Masking, physical distancing, hand hygiene, and covering your coughs and sneezes helps protect them.

MDPH Resources for You



MDPH Division of Epidemiology: 617-983-6800

MDPH Tuberculosis Program:

- **TB Program Email:** BIDLS-TBGeneral@mass.gov
- **TB Program Phone: 617-983-6970**

MDPH Division of Surveillance, Analytics, and Informatics (DSAI):

- **MAVEN Help Desk:** MavenHelp@mass.gov
- **MAVEN Onboarding:** MavenTraining@mass.gov
- **MDPH MAVEN Help Desk: 617-983-6801**
- **MDPH MAVEN Fax:** 617-887-8789

Tools for LBOH Tuesday Webinar Registration: http://tinyurl.com/MAVEN-Webinars

MAVEN Help has Guidance Documents, the Case Classification Manual, and Previous Webinars:

- http://www.maven-help.maventrainingsite.com/toc.html

MDPH Guide to Surveillance, Reporting, and Control: Disease-Specific Chapters:

- https://www.mass.gov/handbook/guide-to-surveillance-reporting-and-control

105 CMR 300: Reportable Diseases, Surveillance, and Isolation Quarantine Requirements.

- https://www.mass.gov/regulations/105-CMR-30000-reportable-diseases-surveillance-and-isolation-and-quarantine-requirements

The Massachusetts Immunization Information System (MIIS) Onboarding and Resources:

- https://www.miisresourcecenter.com/