

This document is an excerpt from Chapter 8 of the Massachusetts Foodborne Illness Investigation and Control Manual, revised February 2019. The full document can be found at <https://www.mass.gov/lists/foodborne-illness-investigation-and-control-manual>

Additional information regarding Employee Health can be found in the Massachusetts Food Code Chapter 2-2, from the MA Food Code, 105 CMR 590.000. A copy of the merged MA Food Code can be found here: <https://www.mass.gov/files/documents/2019/01/04/Merged-Food-Code-11-16-18.pdf>

Please contact the Belmont Health Department at 617-993-2720 with any questions.

Guidance Document for Local Boards of Health, Health Department Staff and Food Service "Persons in Charge"

Employee Health, Chapter 2-2 (590.002)

This document exists to clarify the requirements under "Employee Health," Chapter 2-2, from the current MA Food Code, 105 CMR 590.000, and the 2013 Federal Food Code with the 2015 Amendments. (In some instances, 105 CMR 300.00, Reportable Diseases, Surveillance, and Isolation and Quarantine Requirements will take precedence.)

Red ink shall indicate Massachusetts' specific requirements. Please highlight these if printing this document in black and white.

IMPORTANT RESOURCES

Food Protection Program	617-983-6712
Epidemiology Program	617-983-6800 (Regular & Emergency)

2-2 EMPLOYEE HEALTH

For purposes of this guidance document, in addition to the definitions given in the above-mentioned codes (which are repeated here and underlined), the following are definitions pertaining to "Employee Health."

"asymptomatic" means (1) without obvious symptoms; not showing or producing indications of a disease or other medical condition, such as an individual infected with a pathogen but not exhibiting or producing any signs or symptoms of vomiting, diarrhea, or jaundice; and (2) includes not showing symptoms because symptoms have resolved or subsided, or because symptoms never manifested.

"confirmed disease outbreak" means a foodborne disease outbreak in which laboratory analysis of appropriate specimens identifies a causative agent and epidemiological analysis implicates the food as the source of the illness.

"diarrhea" means loose, watery stools that occur more frequently than usual; at least three episodes within a 24-hour period.

"exclude" means to prevent a person from working as an employee in a food establishment or entering a food establishment as an employee.

"fever" means a measured temperature of at least 100 degrees F (37.8 degrees C.) A measured temperature is preferred, but a history of feeling feverish, having chills and warmer than usual to the touch is considered a fever.

"health practitioner" means a physician licensed to practice medicine, or if allowed by LAW, a nurse practitioner, physician assistant, or similar medical professional.

"highly susceptible population" (HSP) means persons who are more likely than other people in the general population to experience foodborne disease because they are: 1) immunocompromised; preschool age children, or older adults; and 2) obtaining food at a facility that provides services such as custodial care, health care, or assisted living, such as a child or adult day care center, kidney dialysis center, hospital or nursing home, or nutritional or socialization services such as a senior center.

"impermeable" means capable of holding liquid inside or keeping liquids from penetrating to the inside from the outside.

"jaundice" means a yellowing of the usual white part of the eyeball or of the skin; clay colored stools or dark urine.

"lesion" means an opening in the skin such as a boil or infected wound from which pus or drainage occurs.

"restrict" means to limit the activities of a food employee so that there is no risk of transmitting a disease that is transmissible through food and the food employee does not work with exposed food, clean equipment, utensils, linens, or unwrapped single-service or single-use articles.

"Shiga toxin-producing *Escherichia coli*" (STEC) means any *E. coli* capable of producing Shiga toxins (also called verocytotoxins). STEC infections can be asymptomatic or may result in a spectrum of illness ranging from mild, non-bloody diarrhea, to hemorrhagic colitis (i.e., bloody diarrhea), to hemolytic uremic syndrome (HUS - a type of kidney failure). Examples of serotypes of STEC include: *E. coli* O157:H7; *E. coli* O157:NM; *E. coli* O26:H11; *E. coli* O145:NM; *E. coli* O103:H2; and *E. coli* O111:NM. STEC are sometimes referred to as VTEC (verocytotoxigenic *E. coli*) or as EHEC (Enterohemorrhagic *E. coli*). EHEC are a subset of STEC which can cause hemorrhagic colitis or HUS.

"sore throat" means pain when swallowing, reddened edges of the throat or white patches on the back of the throat.

"vomiting" means ejecting the contents of the stomach out through the mouth, sometimes forcefully.

2-201.11 and 590.002(E) Responsibility of Permit Holder, Person in Charge, Food Employees and Conditional Employees

2-201.11(A) The **permit holder** shall require food employees and conditional employees to report to the person in charge information about their health and activities as they relate to diseases that are transmissible through food.

A food employee or conditional employee shall report the information in a manner that allows the person in charge to reduce the risk of foodborne disease transmission, including providing necessary additional information, such as:

- 1) the date of onset of illness symptoms listed in Table 1; (P)
- 2) date of diagnosis, with or without symptoms, by a health practitioner of any diseases below in Table 2; (P)
- 3) meets any of the criteria for high-risk conditions listed in Table 3. (P)

Table 1: Symptoms of Disease

- a) Vomiting
- b) Diarrhea
- c) Jaundice
- d) Sore throat with fever
- e) Lesion with pus such as a boil or Infected wound that is open and/or draining

Table 2: Diagnosis of Disease

- a) Norovirus
- b) Hepatitis A virus
- c) *Shigella* spp. (current or within the last month)
- d) Shiga Toxin-producing *Escherichia coli* (current or within the last month)
- e) Typhoid fever (caused by *Salmonella* Typhi) (current or within the last 3 months)
- f) non-typhoidal *Salmonella*
- g) Any other diseases transmissible through food so designated in 105 CMR 300.000:
"Summary of Reportable Diseases, Surveillance and Isolation and Quarantine Requirements."

Table 3: Food Employee or Conditional Employee Meets One or More of These High-Risk Conditions:

- a) Is suspected of being the source of a confirmed disease outbreak because he/she prepared or consumed food implicated in the outbreak;
- b) Is suspected of being exposed to a confirmed disease outbreak because he/she attended or worked in a setting where there is a confirmed disease outbreak;
- c) Has consumed food at an event prepared by a person who is ill;
- d) Lives in the same household as a person diagnosed with 1-5 below: or
- e) Lives in the same household as, and has knowledge about, a person who attends or works in a setting where there is a confirmed disease outbreak of a disease listed below:
 - 1) Norovirus within the past 48 hours of the last exposure
 - 2) Shiga toxin-producing *E. coli* within the past 3 days of the last exposure
 - 3) *Shigella* spp. within the past 3 days of the last exposure
 - 4) Typhoid fever within the past 14 days of the last exposure
 - 5) Hepatitis A virus within the past 30 days of the last exposure

2-201.11(B, C & D) Responsibility of the Person in Charge (P)

- 1) The **Person in Charge** shall notify the Regulatory Authority when a food employee or conditional employee exhibits symptoms of jaundice or reports a diagnosis of diseases listed in Table 2. (Pf) [Also 590.002(E)]
- 2) The **Person in Charge** shall ensure that a food employee who exhibits or reports symptoms listed in Table 1 above or a diagnosis of diseases listed in Table 2 above or meets high-risk criteria listed in Table 3 above is excluded or restricted as described in 2-201.12 below. [590.002(F)] (P)
- 3) The **Person in Charge** shall ensure that all conditional employees are not made food employees and do not work at the food establishment until all exclusions and restrictions can be lifted as described below in 2-201.13. [590.002(F)] (P)
- 4) The **Person in Charge** shall ensure that all food employees meet all criteria for the removal, adjustment or retention of exclusions and restrictions as described in 2-201.13 [590.002(F)] below prior to the food employee resuming work at the food establishment. (P)

2-201.11(E & F) and 590.002(E) Responsibility of Food Employees and Conditional Employees to Report

- 1) A **Food Employee** or **Conditional Employee** shall report to the Person in Charge the information as specified under 2-201.11(A) symptoms as in Table 1, diagnoses as in Table 2, or high risk situations as in Table 3; (Pf) and
- 2) Comply with all exclusions and restrictions as specified in 2-201.12 and the removal, adjustment or retention of those exclusions and restrictions as in 2-201.13. (P) [590.002(F)]

Important questions for the Person in Charge to ask the Food Employee or Conditional Employee, in order to determine if they should be excluded or restricted are:

- 1) Does the employee currently have symptoms?
- 2) What symptoms?
- 3) When did the symptoms start?
- 4) Has he/she seen a health practitioner?

2-201.12 Exclusions and Restrictions (P)

Table 4 Exclude Food Employees and Conditional Employees
exhibiting any symptoms listed in Table 1 above, or having a diagnosis
of any diseases listed in Table 2 above, **EXCEPT:**

- a) if the employee provides a written document from a health practitioner stating that the symptom is not related to an infectious process related to a foodborne illness but symptoms are from a medication or chronic illness; or
- b) if the employee provides a written document from a health practitioner stating that a diagnosis of *Shigella* or Shiga Toxin-producing *E. Coli* within the last month or Typhoid Fever within the previous 3 months was treated appropriately **and has laboratory results as required under 590.002(F) which are listed in Table 9, Removal of Exclusions and Restrictions;** or
- c) an employee with a lesion/wound may cover it with a tightly fitting bandage on the arms or other parts of the body; or an impermeable cover such as a finger cot or stall is required on the wrists or fingers as well as a single-use glove over the bandage.

Table 5 Restrict Food Employees and Conditional Employees who:

- a) cannot bandage a lesion, such as a boil, or wound adequately as described above in Table 4c.
- b) meets any of the criteria listed in Table 3 above and works with a HSP.

See **Table 6** for Exclusions and Restrictions of Employees or Conditional Employees due to Symptoms of Illness (Table 1).

See **Table 7** for Exclusions and Restrictions of Employees or Conditional Employees due to Diagnosis of Illness (Table 2).

*******VERY IMPORTANT*******

**ALL REQUIRED STOOL SPECIMENS MUST BE TAKEN NO EARLIER THAN
48 HOURS AFTER ANTIBIOTIC THERAPY HAS BEEN COMPLETED
and DONE AT LEAST 24 HOURS APART**

[Except Typhoid Fever (*S. Typhi*) which is 3 stools 48 hours apart]

[In an outbreak situation, employees can be excluded until stool specimens are submitted.]

2-201.13 and 590.002(F) Removal, Adjustment, or Retention of Exclusions and Restrictions (P)

(A) See **Table 8** for Reinstatement of Employees or Conditional Employees who have been Excluded or Restricted due to Symptoms of Illness (Table 1).

(B) See **Table 9** for Reinstatement of Employees or Conditional Employees who have been Excluded or Restricted due to a Diagnosis of Illness (Table 2).

(C) Employees or Conditional Employees who were restricted due to conditions stated in **Table 3** may be reinstated if:

- 1) **Norovirus** and ONE of the following conditions is met:
 - a) More than 48 hours have passed since the last day the food employee was potentially exposed; or
 - b) More than 48 hours have passed since the food employee's household contact became asymptomatic.
- 2) **Shigella spp.** or **Shiga Toxin-producing *Escherichia coli*** and ONE of the following conditions is met:
 - a) More than 3 calendar days have passed since the last day the food employee was potentially exposed; or
 - b) More than 3 calendar days have passed since the food employee's household contact became asymptomatic.
- 3) **Typhoid fever** and ONE of the following conditions is met:
 - a) More than 14 calendar days have passed since the last day the food employee was potentially exposed; or
 - b) More than 14 calendar days have passed since the food employee's household contact became asymptomatic.

(According to 105 CMR 300.000, if a food employee is a household contact of a confirmed case of Typhoid Fever, that food employee is treated the same as the case and must submit 3 negative stools before being reinstated.)

- 4) **Hepatitis A** and ONE of the following conditions is met:
 - a) Food employee is immune to hepatitis A virus infection because:
 - 1) has had a prior illness from hepatitis A
 - 2) has been vaccinated against hepatitis A
 - 3) has received Immune globulin in the last three months; or
 - b) More than 30 calendar days have passed since the last day the food employee was potentially exposed; or
 - c) More than 30 calendar days have passed since the food employee's household contact became jaundiced;
 - d) 2-201.13(J)(4)(f) of the Federal Food Code is not allowed by 105 CMR 590.000.
(Refers to bare-hand contact of ready-to-eat foods.)

Consultation with the Regulatory Authority is REQUIRED in certain circumstances, but is strongly encouraged in all situations involving sick food employees or conditional employees. The Regulatory Authority also may call the Food Protection Program and/or the Epidemiology Program for consultation at any time.

Table 6: Exclusions and Restrictions Due to Symptoms

Symptoms	Works with HSP (Yes/No?)	Exclude	Restrict
Vomiting and/or diarrhea	Either	Yes	
Jaundice (if onset in the last 7 days)	Either	Yes	
Sore throat with fever	Yes	Yes	
	No		Yes
Uncovered infected wound or pustular boil	Either		Yes

****Jaundice must be reported to the regulatory authority****

Table 7: Exclusions and Restrictions by Disease Diagnosis

Disease	Symptomatic	Works with HSP	Exclude	Restrict
Norovirus (Nausea & Vomiting)	Yes	Either	Yes	
	No	Yes	Yes	
	No	No		Yes
Shiga Toxin-Producing <i>E.coli</i> (current or within the last month)	Yes	Either	Yes	
	No	Yes	Yes	
	No	No		Yes
Typhoid fever (S. Typhi) current or in the last three months without receiving antibiotic therapy	Yes	Either	Yes	
	No	Yes	Yes	
	No	No		Yes
Shigella spp. (current or within the last month)	Yes	Either	Yes	
	No	Yes	Yes	
	No	No		Yes
Non-typhoidal Salmonella	Yes	Either	Yes	
	No	Either		Yes
Hepatitis A (Jaundice or within 7 days of onset of jaundice)	Yes	Either	Yes	
	No	Either	Yes	
Any other diseases per 105 CMR 300.000, contact MDPH Food Protection Program or the Epidemiology Program.				

****All exclusions due to disease diagnosis must be reported to the regulatory authority****

**Table 8: Removal of Exclusions and Restrictions
When Person No Longer has Symptoms**

Type of Symptoms	Works with HSP	Reinstate
Vomiting and/or diarrhea	Either	Yes, no symptoms for 48 hours, preferably 72 hours
Jaundice	Either	Yes, if has been jaundiced for more than 7 days.
Sore throat with fever	Either	Yes, with medical documentation of more than 24 hours of antibiotic therapy for strep pyogenes OR at least one negative throat culture for same or health practitioner determination that person is free of same
Uncovered infected wound or pustular boil	Either	Yes, when scabbed over or covered properly

**If employee had jaundice, reinstatement must have the approval of the regulatory authority **

Table 9: Removal of Exclusions and Restrictions Due to Diagnosis When Person No Longer Has Symptoms

Disease	Works with HSP	Reinstate
Norovirus	Either	Reinstate after symptoms resolved for 72 hours; or 72 hours after positive test, whichever occurs last.
Shiga Toxin-Producing <i>E.coli</i> (current or within the last month)	Either	Reinstate if symptoms resolved AND medical documentation of 2 consecutive negative stool specimens, 48 hours after antibiotic therapy completed, and taken 24 hours apart.
<i>S. Typhi</i> (Typhoid Fever)(current or in the last three months without receiving antibiotic therapy)	Either	Reinstate with medical documentation that person is free from Typhoid fever, including documentation of 3 consecutive negative stool cultures, starting one month after symptoms started, 48 hours after antibiotic therapy completed, and taken 48 hours apart.
<i>Shigella</i> spp. (current or within the last month)	Either	Reinstate if symptoms resolved AND medical documentation of 2 consecutive negative stool specimens, 48 hours after antibiotic therapy completed, and 24 hours apart.
Non-typhoidal <i>Salmonella</i>	Either	Medical documentation of 2 negative stool specimens, 48 hours after antibiotic therapy completed. In outbreak circumstances, 2 consecutive negative stool specimens are required, 24 hours apart.
Hepatitis A	Either	Reinstate after one week from onset of symptoms, or for cases with unknown onset, one week past the date of positive blood test.
Any other diseases per 105 CMR 300.000, contact MDPH Food Protection Program or the Epidemiology Program.		

All reinstatements from exclusions and restrictions due to disease diagnosis must be made with the approval of the regulatory authority