**Section 690.730 Typhoid Fever (Reportable by telephone or facsimile as soon as possible, within 24 hours)**

a) Control of Case.

1) Standard Precautions shall be followed. Contact Precautions shall be followed for diapered or incontinent persons or for persons with poor hygiene during the acute illness.

2) Feces, urine and articles soiled with excreta shall be disinfected before being discharged to a private sewage disposal system.

3) Persons in Non-sensitive Occupations.

A) Cases with typhoid fever in non-sensitive occupations shall not return to their occupation until:

i) Termination of the acute illness (absence of fever); and

ii) Receipt of education on transmission of the bacterium that causes typhoid fever from the local health authority.

B) Cases who are in non-sensitive occupations who are no longer acutely ill may resume their occupation but shall submit 3 consecutive specimens of feces negative for Salmonella typhi, taken not less than 24 hours apart, following clinical recovery of the patient, and the initial specimen preferably 30 days after onset. The first release specimen shall not be obtained less than 48 hours after completion of antimicrobial therapy. Once specimen submission begins, specimens shall be submitted at least once per week until the case is released or reclassified. Each release specimen shall be examined in a laboratory of the Department or in an acceptable laboratory. Specimens of feces shall show evidence of growth of normal flora.

C) Reclassification of Cases.

i) Convalescent Carrier. If any of the 3 release specimens from the case are positive for Salmonella typhi and the patient is asymptomatic, the case shall be classified as a convalescent carrier, providing that the specimen was collected within 12 months following onset of symptoms. If the patient becomes classified as a convalescent typhoid carrier, the patient is subject to subsection (b)(2) of this Section.

ii) Chronic Carrier. If cases do not submit 3 consecutive negative specimens within 12 months following onset of illness, the case shall be classified as a chronic carrier and subject to subsection (b)(1) of this Section.

4) Food Handlers or Persons in Sensitive Occupations, not including Health Care Workers.

A) Cases with typhoid fever shall not work as food handlers or in sensitive occupations until:

i) Termination of the acute illness (absence of fever); and

ii) Receipt from the local health authority of education on transmission of the bacterium that causes typhoid fever; and

iii) Submission of 3 consecutive specimens of feces negative for Salmonella typhi, taken not less than 24 hours apart, following clinical recovery of the patient, and the initial specimen preferably 30 days after onset. The first release specimen shall not be obtained less than 48 hours after completion of antimicrobial therapy. Once specimen submission begins, specimens shall be submitted at least once per week until the case is released or reclassified. Each release specimen shall be examined in a Department laboratory or an acceptable laboratory.

B) Reclassification of Cases.

i) Convalescent Carrier. If any of the 3 release specimens from the case is positive for Salmonella typhi and the patient is asymptomatic, the case shall be classified as a convalescent carrier, provided that the specimen was collected within 12 months following onset of symptoms. If the patient becomes classified as a convalescent typhoid carrier, the patient is subject to subsection (b)(2) of this Section.

ii) Chronic Carrier. If cases do not submit 3 consecutive negative specimens within 12 months following onset of illness, the case shall be classified as a chronic carrier and shall be subject to subsection (b)(1) of this Section.

5) Health Care Workers.

A) Cases with typhoid fever employed as health care workers shall not return to their occupation until:

i) Termination of the acute illness (absence of fever); and

ii) Receipt from the local health authority of education on transmission of the bacterium that causes typhoid fever.

B) Health care workers who use Standard Precautions or any equivalent isolation procedure and who are not acutely ill may continue working while submitting release specimens as described. Health care workers shall submit 3 consecutive specimens of feces negative for Salmonella typhi, taken not less than 24 hours apart, following clinical recovery of the patient, and the initial specimen preferably 30 days after onset of illness. The first release specimen shall not be obtained less than 48 hours after completion of antimicrobial therapy.

C) Once specimen submission begins, health care workers shall submit at least one specimen per week until the case is released or reclassified, or they shall be restricted from working until they comply with required specimen submission. Each release specimen shall be examined in a Department laboratory or an acceptable laboratory. Specimens of feces shall show evidence of growth of normal flora.

D) Reclassification of Cases.

i) Convalescent Carrier. If any of the 3 release specimens from the case are positive for Salmonella typhi and the patient is asymptomatic, the case shall be classified as a convalescent carrier provided the specimen was collected within 12 months following onset of symptoms. If the patient becomes classified as a convalescent typhoid carrier, he or she is subject to subsection (b)(2) of this Section.

ii) Chronic Carrier. If cases do not submit 3 consecutive negative specimens within 12 months following onset of illness, the case shall be classified as a chronic carrier and subject to subsection (b)(1) of this Section.

b) Control of Carriers.

1) Chronic Carriers.

A) A chronic carrier is defined as:

i) A person who excretes typhoid bacilli in feces or urine and had no symptoms of typhoid disease during the past 12 months; or

ii) A person who was an acute typhoid fever case who excretes typhoid bacilli for 12 months or longer after onset of typhoid fever; or

iii) A person who harbors typhoid bacilli at a site where excretion is likely (including a patient with culture-positive bile or another clinical specimen following cholecystectomy), but had no symptoms of typhoid disease during the past 12 months; or

iv) A person with culture-proven acute typhoid fever more than 12 months earlier who has not submitted 3 negative specimens of feces as described in subsection (a)(4) of this Section.

B) A person found to be a chronic typhoid carrier is subject to the same regulations as cases, but may be granted a modified form of isolation after receiving health education from the local health authority about modes of transmission for the bacteria that causes typhoid fever. Chronic typhoid carriers may not be employed as food handlers or in sensitive occupations or attend a day care (adult or child) facility until released from the restrictions placed on chronic typhoid carriers (see subsection (b)(1)(D) of this Section). The local health authority shall contact the carrier annually or as often as necessary to reiterate education about modes of transmission of the bacteria that causes typhoid fever. Carriers over age 70 and other carriers with infirm health shall be contacted every 6 months.

C) When a chronic typhoid carrier requires hospital care or care in a long-term care facility or day care (adult or child) program for any reason, the facility shall be notified about his/her carrier status before he/she is admitted as a patient to assure that proper precautions are taken. A health care worker, upon taking care of the case at home, shall also be informed for his/her protection. Typhoid carriers can be admitted to long-term care facilities or day care programs after consultation with the local health authority and the Department, at which time a care plan specific to each carrier shall be developed.

D) A chronic carrier may be released from modified isolation after submitting 3 consecutive negative specimens of feces collected not less than 30 days apart. Each specimen shall be authenticated and at least one specimen shall be collected after administering a saline cathartic. The post-cathartic specimen shall be collected from the second or third bowel movement after administering the cathartic. Specimens shall not be taken within 48 hours after antimicrobial therapy, regardless of the reason for which the medication was prescribed. Testing and transport of specimens shall comply with subsection (a)(4) of this Section.

2) Convalescent Carriers.

A) A convalescent carrier is defined as:

i) A case of acute typhoid fever who has one or more positive cultures subsequent to clinical recovery; or

ii) A person who is culture-positive for typhoid bacilli, as described in subsection (b)(1)(A), and who has a history of acute typhoid within the previous 12 months.

B) A person found to be a convalescent typhoid carrier may not resume his/her usual activities outside the home until granted a modified form of isolation after receiving health education from the local health authority about modes of transmission for the bacteria that causes typhoid fever. Convalescent typhoid carriers may not work as food handlers or in sensitive occupations or attend group day care (adult or child) until released from the restrictions on convalescent typhoid carriers (see subsection (b)(2) of this Section).

C) When a convalescent typhoid carrier requires hospital care or care in a long-term care facility or day care (adult or child) program for any reason, the facility shall be notified about his/her carrier status before he/she is admitted as a patient to assure that proper precautions are taken. A health care worker, upon taking care of the case at home, shall also be informed for his/her protection. Typhoid carriers can be admitted to long-term care facilities or day care programs after consultation with the local health authority and the Department, at which time a care plan specific to each carrier shall be developed.

D) A convalescent carrier may be released from modified isolation after submitting 3 consecutive negative specimens of feces at intervals of not less than 30 days and within 12 months after onset. Collection, testing and transport of these specimens shall conform to subsection (a)(4) of this Section.

c) Control of Contacts to a Case.

1) Contacts to a case whose most likely source of infection is travel to a foreign country (usually a developing country) within 30 days prior to onset of symptoms shall abide by the following.

A) Members of households where these cases reside are not required to be tested for typhoid bacilli, except for household members who were also foreign travel companions of the case, unless the local health authority identifies specific risks for transmission within the household.

B) Travel companions of such cases shall be tested, but need not restrict their occupations unless they had symptoms of typhoid fever during or subsequent to foreign travel.

C) Travel companions who have had symptoms of typhoid fever shall not work as food handlers or in sensitive occupations or attend group day care (adult or child) until testing is completed.

D) When testing is required in this subsection (c)(1), 2 specimens of feces shall be collected not less than 24 hours apart. Other aspects of specimen collection, transport and testing shall conform with subsection (a)(4) through (a)(6) of this Section.

E) If persons required to be tested according to this subsection (c) (1) refuse to comply within 2 weeks after notification of this testing requirement, they shall be restricted from their occupation, school attendance or day care (adult or child) attendance until compliance is achieved.

2) In tour groups to foreign countries (usually developing countries) in which typhoid fever has occurred, all members of the tour group shall be tested (see requirements for travel companions in subsections (c)(1)(B) through (E) of this Section).

3) Persons living in the household of cases whose source was in the United States are considered contacts to typhoid fever. Other persons outside the household who have had close contact with the case at a time when they could have been the source of infection for the case, or at a time when they may have been exposed to infection by the case, are also classified as contacts to typhoid fever.

A) Contacts shall submit 2 consecutive negative specimens of feces, but need not curtail their usual activities, except they shall not be employed in food handling or in sensitive occupations (see Section 690.900) or attend group day care (child or adult) until testing is completed.

B) Collecting, testing and transport of specimens shall comply with subsections (a)(4) through (a)(6) of this Section.

C) If persons required to be tested according to this subsection refuse to comply within one week after notification, they shall be restricted from their occupations or school attendance until compliance is achieved.

d) Control of Contacts to a Carrier. All persons living in the household of a newly identified chronic carrier and other contacts living outside the home must submit 2 consecutive negative specimens of feces collected, tested and transported according to subsections (a)(4) through (a)(6) of this Section. Persons employed in food handling or sensitive occupations shall not return to these occupations until this testing requirement has been fulfilled. Other persons need not have their usual activities curtailed. If persons required to be tested according to this subsection refuse to comply with this testing requirement within one weekafter notification, they shall be restricted from their occupations, school attendance or day care (adult or child) attendance until compliance is achieved.

e) Sale of Food, Milk, etc. (See Section 690.1000(b).)

f) Laboratory Reporting.

1) Laboratories shall report to the local health authority patients from whom Salmonella typhi has been isolated or patients who have a positive result on any other laboratory test indicative of and specific for detecting Salmonella typhi infection.

2) Laboratories shall forward clinical materials positive for Salmonella typhi to the Department's laboratory.

3) Laboratories shall report and submit to the Department's laboratory any Salmonella typhi isolates from food resulting from an outbreak investigation.

(Source: Amended at 32 Ill. Reg. 3777, effective March 3, 2008)