

## FOOD- AND WATER-BORNE ILLNESSES

### What are food- and water-borne illnesses?

Food- and water-borne illnesses may be caused by toxins created by growing bacteria; toxins produced by the harmful algal species; or contamination of food and/or water with certain bacteria, viruses or parasites. Many cases of food poisoning happen when someone eats food that has harmful bacteria in it. The bacteria or the toxins produced by them can then make the person sick. Bacteria also can get into the water supply and make someone sick.

The U.S. Centers for Disease Control and Prevention define the greatest threats of food- and water-borne illnesses to be from among the following bacteria:

- *Salmonella* species
- *Shigella dysenteriae*
- *Escherichia coli* O157:H7 (*E. coli*)
- *Vibrio cholerae*
- *Cryptosporidium parvum* (*C. parvum*)

### How can someone come into contact with food- or water-borne bacteria?

Food- or water-borne illnesses are not spread from casual contact with another person. A person can come into contact with food- or water-borne bacteria by eating or drinking something that has bacteria in it.

**Food- or water-borne bacteria as weapons:** The use of these bacteria is less likely than using bacteria that can be spread through the air because it is hard to expose a lot of people at the same time. However, all of the above bacteria may be used to contaminate public water supplies or food at large events. Standard treatment of public water supplies would most likely kill the bacteria before people were able to drink it.

Please note: Just because you come into contact with a food- or water-borne bacteria does not mean you will get sick from it.

### What happens if someone gets sick from food- or water-borne bacteria?

Most infections with food- and water-borne bacteria cause diarrhea, nausea, vomiting, fever and stomach cramps. Each bacterium produces other symptoms, such as:

- ***Salmonella*:** bloody diarrhea, fever, headache, lack of energy
- ***Shigella*:** blood or mucus in the stool
- ***E. coli*:** bloody diarrhea. Some people (2 to 7 percent) may develop a syndrome (hemolytic uremic syndromes – HUS) that results in the destruction of red blood cells and kidney problems. HUS is more common in children than adults. About 3 to 5 percent of those who develop HUS may die.
- ***C. parvum*:** watery diarrhea, crampy stomach pain
- ***Cholera*:** About 5 percent of people who come into contact with Cholera may develop severe diarrhea, vomiting and leg cramps.

### How likely are food- and water-borne illnesses to kill someone?

The majority of food poisoning cases rarely result in death. Those most at risk are the very young and the very old.

(Food- and water-borne illnesses continued)

## **What is the treatment for food- and water-borne illnesses?**

- **Prevention of illness after contact:** None
- **Treatment of illness:** Care at home includes plenty of fluids and medicine such as acetaminophen (e.g., Tylenol®) or ibuprofen (e.g., Motrin®, Advil®) to control fever and pain. Seriously ill people may need to go to a hospital for intravenous fluids and further evaluation and treatment.

## **Are there vaccines for food- and water-borne illnesses?**

No, there are no vaccines for these infections.

## **What should be done if someone comes into contact with food- or water-borne bacteria?**

If you think that you or someone you know may have come into contact with food- or water-borne bacteria, contact the local county health department right away. (Visit [www.idph.state.il.us//local/alpha.htm](http://www.idph.state.il.us//local/alpha.htm) for a listing of all county health departments in Illinois or check your local phone book.)

If you or someone you know is showing symptoms of a food- or water-borne illness, call your health care provider or the Illinois Poison Center right away. The toll-free number for the poison center is 1-800-222-1222.

## **Where can one get more information about food- and water-borne illnesses?**

- Illinois Department of Public Health                      [www.idph.state.il.us](http://www.idph.state.il.us)
- Illinois Poison Center    [www.IllinoisPoisonCenter.org](http://www.IllinoisPoisonCenter.org)