



# Food-borne Illness, Food Poisoning, Diarrhoea and/or Vomiting Illness

## What is food-borne illness?

Food-borne illness (sometimes called "food-borne disease," "food-borne infection," or "food poisoning") is illness resulting from the consumption of contaminated foods or beverages. Many different disease-causing microbes, or pathogens, can contaminate foods, so there are many different food-borne infections. In addition, poisonous chemicals, or other harmful substances can cause food-borne diseases if they are present in food.

## What are the most common causes of food-borne illness?

The most common food-borne illnesses are caused by norovirus and by the bacteria *Salmonella*, *Shigella*, *Clostridium perfringens*, and *Campylobacter*.

## What is the incubation period?

After the microbes are swallowed, there is a delay, called the incubation period, before the symptoms of illness begin. This delay may range from hours to days, depending on the organism, and on how many of them were swallowed.

During the incubation period, the microbes pass through the stomach into the intestine, attach to the cells lining the intestinal walls, and begin to multiply there.

Some types of microbes stay in the intestine, some produce a toxin that is absorbed into the bloodstream, and some can directly invade the deeper body tissues. The symptoms experienced depend on the type of microbe.

## What are the signs and symptoms?

Numerous organisms cause similar symptoms. There is so much overlap that it is rarely possible to say which microbe is likely to be causing a given illness unless laboratory tests are done to identify the microbe, or unless the illness is part of a recognized outbreak. The most common symptoms:

- diarrhea
- vomiting
- nausea
- stomach pain/ abdominal cramps

Other symptoms include:

- fever
- headache
- body aches
- dehydration

## Should a person with food poisoning be isolated?

Symptomatic persons may be excluded from work/school for 24 to 48 hours from the last episode of diarrhea or vomiting. Further exclusion may be required for young children under the age of five and those who have difficulty adhering to good hygiene practices.

## What type of treatment and care should be given?

There are many different kinds of food-borne diseases and they may require different treatments, depending on the symptoms they cause. Illnesses that are primarily diarrhea or vomiting can lead to dehydration if the person loses more body fluids and salts (electrolytes) than they take in.

- Replacing the lost fluids and electrolytes and keeping up with fluid intake are important.
- If diarrhea is severe, oral rehydration solution such as Ceralyte\*, Pedialyte\* or Oralyte\*, should be drunk to replace the fluid losses and prevent dehydration. Sports drinks such as Gatorade\* do not replace the losses correctly and should not be used for the treatment of diarrheal illness.
- Preparations of bismuth subsalicylate (e.g., Pepto-Bismol\*) can reduce the duration and severity of simple diarrhea.
- If diarrhea and cramps occur, without bloody stools or fever, taking an anti-diarrheal medication may provide symptomatic relief, but these medications should be avoided if there is high fever or blood in the stools because they may make the illness worse.

*\*The Ministry of Health and Environment does not endorse commercial products or services.*

## How can food become contaminated?

Food-borne microbes can be introduced from infected humans who handle the food, or by cross contamination from some other raw agricultural product.

## How may food-borne illness be prevented?

While preparing food at home, keep these steps in mind:

- **Clean:**
  - Wash hands for 20 seconds with soap and water before handling food.
  - Wash surfaces and utensils after each use.
  - Wash fruits and vegetables, but not meat, poultry or eggs.

- **Separate:**

- Use separate cutting boards and plates for produce and for meat, poultry, seafood, and eggs.
- Keep meat, poultry, seafood, and eggs separate from all other foods at the grocery.
- Keep meat, poultry, seafood, and eggs separate from all other foods in the fridge.

- **Cook:**

- Use a food thermometer, especially when cooking meats.
- Keep hot foods hot after cooking (at 140 °F or above).
- Microwave/ reheat food thoroughly (to 165 °F) before consuming.

- **Chill:**

- Refrigerate perishable foods within two hours.
- Never thaw or marinate foods on the counter - thaw either in the refrigerator, in cold water, in the microwave, or cook without thawing.
- Know when to throw food out (\*See food storage guide below)

## What is a food-borne illness outbreak?

An outbreak of food-borne illness occurs when a group of people consume the same contaminated food and two or more of them come down with the same illness.

Restaurants are inspected by Environmental Health to make sure they are clean and have adequate kitchen facilities. **If you suspect that a restaurant or caterer is responsible for an outbreak, contact Environmental Health Services at 278-5333.** They work jointly with the Epidemiology and Surveillance unit to monitor disease outbreaks, including food-borne illness.

Adapted from:

“Food Safety.” Centers for Disease Control and Prevention, 2012 (<http://www.cdc.gov/foodsafety/>, accessed 8 May 2014)

\*Food Storage Guide

Category	Food	Refrigerator (40 °F or below)	Freezer (0 °F or below)
<b>Salads</b>	<b>Egg, chicken, ham, tuna &amp; macaroni salads</b>	3 to 5 days	Does not freeze well
<b>Hot dogs</b>	<b>opened package</b>	1 week	1 to 2 months
	<b>unopened package</b>	2 weeks	1 to 2 months
<b>Luncheon meat</b>	<b>opened package or deli sliced</b>	3 to 5 days	1 to 2 months
	<b>unopened package</b>	2 weeks	1 to 2 months
<b>Bacon &amp; Sausage</b>	<b>Bacon</b>	7 days	1 month
	<b>Sausage, raw — from chicken, turkey, pork, beef</b>	1 to 2 days	1 to 2 months
<b>Hamburger &amp; Other Ground Meats</b>	<b>Hamburger, ground beef, turkey, veal, pork, lamb, &amp; mixtures of them</b>	1 to 2 days	3 to 4 months

Category	Food	Refrigerator (40 °F or below)	Freezer (0 °F or below)
<b>Fresh Beef, Veal, Lamb &amp; Pork</b>	<b>Steaks</b>	3 to 5 days	6 to 12 months
	<b>Chops</b>	3 to 5 days	4 to 6 months
	<b>Roasts</b>	3 to 5 days	4 to 12 months
<b>Fresh Poultry</b>	<b>Chicken or turkey, whole</b>	1 to 2 days	1 year
	<b>Chicken or turkey, pieces</b>	1 to 2 days	9 months
<b>Soups &amp; Stews</b>	<b>Vegetable or meat added</b>	3 to 4 days	2 to 3 months
<b>Leftovers</b>	<b>Cooked meat or poultry</b>	3 to 4 days	2 to 6 months
	<b>Chicken nuggets/patties</b>	3 to 4 days	1 to 3 months
	<b>Pizza</b>	3 to 4 days	1 to 2 months

Adapted from:  
 “Check Your Steps.” Centers for Disease Control and Prevention, 2014 (<http://www.foodsafety.gov/>, accessed 8 May 2014)