



Fact Sheet

FOOD SAFETY FACTS ON *CLOSTRIDIUM PERFRINGENS*

What is foodborne illness?

Foodborne illness occurs when a person consumes food contaminated with pathogenic bacteria, viruses or parasites. This condition is commonly referred to as “food poisoning”. Many cases of foodborne illness go unreported because their symptoms often resemble those of the flu. The most common symptoms of foodborne illness may include stomach cramps, nausea, vomiting, diarrhea and fever.

What is *Clostridium perfringens*?

- *Clostridium perfringens* (*C. perfringens*) is a spore-forming bacterium. Spores can survive normal cooking temperatures. They grow when cooked food is kept in the temperature “danger zone” – between 4EC (40EF) and 60EC (140EF).
- The spores can be found in soil, dust, sewage and in the intestinal tracks of animals and humans.
- They only grow when exposed to little or no oxygen.
- *C. perfringens* produces a toxin in the intestinal tract when people eat food containing a high concentration of the bacteria.

What are the symptoms?

- The symptoms consist of intense abdominal cramps and very gassy diarrhea.
- Symptoms usually appear between eight and 24 hours after eating contaminated food. They may last for one or two days, but less severe symptoms may persist for one to two weeks.

Where could I come in contact with *C. perfringens*?

- This organism can be found in many foods, particularly in high protein or high starch foods like cooked beans and gravies.
- It is especially likely to be a problem in improperly handled leftovers due to problems with cooling and reheating.

How can I protect myself and my family?

- Do not leave food out on the table or counter top, or warming in the oven, for more than two hours.
- Freeze or discard leftovers after four days.
- Serve hot foods immediately or keep them above 60EC (140EF).
- Portion leftovers into small, shallow containers so they will cool rapidly. Cooling foods slowly may allow *C. perfringens* spores to grow.
- Reheat leftovers to 74EC (165EF)

What are food producers and processors doing to protect consumers?

- Individual companies and industry associations are working to develop systems that will further enhance the safety of their product.
- From the farm to the retail store, efforts are being made to reduce the risks associated with *C. perfringens* throughout the food production process.

How does the Canadian Food Inspection Agency protect consumers?

- The CFIA administers and enforces 13 Acts governing food safety and food inspection within Canada and at our borders.
- CFIA inspectors monitor food processing in federally registered slaughtering and processing establishments.
- CFIA inspectors also check packaging dates and labels in retail stores.
- CFIA laboratories continue to develop quick, cost-effective tests to better detect new and existing pathogens in foods and their manufacturing processes.
- In cooperation with the food industry, the CFIA is moving towards a modernised, science-based inspection system.

For more information on foodborne illness and safe food handling practices, visit the Canadian Food Inspection Agency website at www.inspection.gc.ca