

Food Safety Fact Sheet

Foodborne Illness: Clostridium perfringens

What is Clostridium perfringens food poisoning?

Clostridium perfringens or C. perfringens is a spore-forming foodborne pathogen that produces a mild gastroenteritis caused by an enterotoxin. Although C. perfringens may live normally in the human intestine, illness is caused by eating food contaminated with large numbers of C. perfringens bacteria that produce enough toxin in the intestines to cause illness. It results mainly in sporadic disease but can occasionally produce outbreaks. According to the Centers for Disease Control and Prevention (CDC). *Clostridium perfringens* is one of the most common foodborne illness in the United States. It is estimated this pathogen causes nearly one million cases of foodborne illness each year.

What are the Symptoms?

According to the CDC, people infected with *C. perfringens* develop **watery diarrhea** and **intense abdominal cramps** within 6 to 24 hours (typically 8 to 12 hours). The illness usually begins suddenly and lasts for less than 24 hours. People infected with *C. perfringens* usually do not have fever or vomiting.



How can I prevent the development of Clostridium Perfringens?

Since *C. perfringens* can survive high temperatures, prevention is key. During cooling and holding of food, the bacteria can grow if held for long periods of time at temperatures from 54°F-135°F and grow very rapidly between 109°F-117°F.

To prevent bacteria growth:

- Hold hot foods at 135°F or higher.
- Cool previously cooked foods rapidly from 135°F to 41°F within 6 hours, reaching 70°F in the first 2 hours.
- Reheat previously cooked/cooled foods and commercially produced foods prepared for future reheating, to 165°F or commercially produced fully cooked foods to 135°F both within 2 hours. *Always read the labels on manufactured foods that have been cooked/prepared for future reheating.*

Most Common Foods.

Beef, poultry, gravies, and dried or precooked foods are common sources of *C. perfringens* infection. *C. perfringens* infection often occurs when foods are prepared in large quantities and kept warm for a long time before serving.

When in doubt, throw it out.

Foods that have dangerous bacteria in them may not taste, smell, or look different. Any food that has been left out too long may be dangerous to eat, even if it looks okay.

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