Foodborne disease: Clostridium perfringens

2007 Case Definition (North Carolina)

Clinical description

An illness characterized by acute onset of some or all of the following symptoms: colic, nausea, and diarrhea; vomiting and fever are usually absent. Symptom onset occurs within 24 hours following ingestion of food contaminated with toxins produced by *Clostridium perfringens*.

Laboratory criteria for diagnosis

- Isolation of Clostridium perfringens from clinical stool specimen or
- Demonstration of enterotoxins produced by Clostridium perfringens in a stool sample
- Isolation of *Clostridium perfringens* from a leftover food sample
- Positive Clostridium perfringens toxin assay in a leftover food sample

Case classification

Confirmed:

- a clinically compatible case with a positive culture for *Clostridium perfringens* in a stool specimen,
 - or
- a clinically compatible case with demonstration of enterotoxins produced by *Clostridium perfringens* in a stool specimen

Probable:

- a clinically compatible case epidemiologically linked to a confirmed case, or
- a clinically compatible case who provides a leftover food sample that
 - cultures positive for *Clostridium perfringens*, or
 - tests positive for Clostridium perfringens toxin