

OUTBREAK SUMMARY

When an outbreak is detected, CK Public Health conducts an assessment in order to:

1

IDENTIFY the source of the illness.

CK Public Health became aware of the outbreak on Sun Oct 22, 2023, following a cluster of gastrointestinal illness among people who attended an event the evening of Fri Oct 20, 2023. The event organizer notified CK Public Health after receiving numerous reports of illness from attendees. CK Public Health immediately initiated an outbreak investigation.

2

CONTROL the source to prevent additional illnesses.

When reports of illness were received, the food premises that catered the event was immediately contacted by CK Public Health. The food premises voluntarily ceased operation during the initial assessment to ensure there was no ongoing risk of illness. The food premises reopened when inspections confirmed that there were no ongoing public health concerns.

3

RECOMMEND solutions to prevent a similar outbreak.

Multiple site inspections were completed and food handling practices were thoroughly assessed by CK Public Health Inspectors. Several safe food handling practice improvements were implemented to mitigate risk and prevent future foodborne illness.



QUESTIONNAIRES

On Mon Oct 23, 2023, a questionnaire was sent to all attendees. Questions were used to determine who became ill after eating at the event, including onset time of illness, symptoms experienced, and food/beverage items consumed at the event.



DATA ANALYSIS

Of the 277 attendees who completed the survey, 136 people (46%) became ill with gastrointestinal symptoms after attending the event. The most commonly experienced symptoms were watery diarrhea and abdominal cramps.

Symptom onset times indicated a single source outbreak, given the rapid increase in cases all falling in a short period of time.

A Relative Risk analysis was conducted to indicate which menu items were most associated with illness. The Smoked Prime Rib with Au Jus item had a RR of 5.0, meaning that if an attendee ate the prime rib, they were 5 times more likely to become ill compared to those who did not eat it.

TESTING

Leftover meals from the event were not available for laboratory testing. General samples were collected from similar foods prepared at the restaurant with no conclusive results.

Stool samples collected from ill residents underwent laboratory testing, and **clostridium perfringens enterotoxin** was the detected illness-causing bacteria.

DID YOU KNOW?

What is Clostridium Perfringens Enterotoxin?

A bacteria that can sometimes be found in hazardous raw food products (ie. large cuts of meat) and is a common cause of foodborne illness.

How does it make you sick?

- The bacteria makes spores (inactive forms of the bacteria) that allow it to survive cooking temperatures.
- When food is held at unsafe temperatures for long periods of time, spores can reactivate and grow in the food.
- High numbers of the bacteria in food will result in illness when the food is eaten.
- Outbreaks tend to happen in settings where large groups of people are served, and keeping foods at proper temperatures may be difficult (ie. large events with catered food).
- Food handling errors often include improper cooling and reheating.
- Symptoms of illness often include sudden onset of watery diarrhea, 6-24 hours after eating contaminated food.

CONCLUSION



Through this investigation, CK Public Health has concluded that, most likely, improper cooling and reheating of the prime rib menu item resulted in proliferation of the clostridium perfringens bacteria, causing widespread gastrointestinal illness following the event. Based on food handling practices, a charge was laid on the premises that prepared the catered meal.

QUESTIONS?

If you have questions about any of the content in this report please contact us at 519-355-1071 ext 2902