

# Foodborne Illness Supplemental Information

Testing for foodborne illness is available at the South Dakota Public Health Laboratory.

A foodborne disease outbreak is defined as three or more persons with vomiting or diarrhea who attended the same event or consumed the same meal. Single isolate cases or complaints are not considered outbreaks. EXCEPTION: One case of Botulism is subject to notification and investigation.

[Refer to BOTULISM.](#)

When you suspect a possible foodborne disease, notify the Health Department immediately so investigation procedures and sample collection can be started if necessary. Contact the Health Department whenever any enteric disease outbreak is suspected in a daycare center, a restaurant, or other facility. Additional assistance in the investigation is available by contacting the Office of Disease Prevention at 605-773-3737 or 1-800-592-1804.

Outbreak investigation involves the cooperation of several disciplines within the health department, including the epidemiologist, the health department, and the laboratory. The investigation requires interviewing patients, collecting clinical specimens, and laboratory testing. Communication between the various members is essential for the prompt and precise handling of an outbreak.

A wide variety of organisms can cause gastrointestinal illness. Listed below are some of the organisms that are implicated in foodborne outbreaks:

- *Bacillus cereus*
- *Campylobacter jejuni*
- *Clostridium botulinum*
- *Clostridium perfringens*
- *Escherichia coli* 0157
- *Listeria monocytogenes*
- *Salmonella* species
- *Staphylococcus aureus*
- *Vibrio* species
- *Yersinia enterocolitica*

Organisms that can cause an enteric illness outbreak not associated with food include:

- *Cryptosporidium*
- *Giardia*
- *Shigella* species

## Collection and Shipment of Specimens

The health department should be notified when an outbreak is suspected. If there is a danger to the community, the Office of Disease Prevention will take action to prevent further spread of the disease.

Clinical specimens should be collected from a representative number of ill persons and an equal number of exposed but well persons.

### **Reporting Procedures and Interpretation of Results**

Communications among the SD public health officials, the SDPHL, and the health care providers are continuous from the time an outbreak is reported until the results are reported. Work-up of specimens requires a constant exchange of information between the laboratory and the epidemiology team. Additional testing is performed as needed.

The results of all specimens are reported to the health care provider who submitted the specimen. The Office of Disease Prevention is also sent a report if a foodborne illness is detected.

### **Criteria for Unacceptable Specimens**

Unsatisfactory specimens will be assessed on an individual basis.

The specimen should be properly identified, and the specimen identifier should match the information on the form. The specimen needs to arrive in appropriate temperature range.