

## Outbreak Investigation: Pathogen and Contaminated Food

**Instructions:** Answer the questions below about the pathogen and food that probably caused the outbreak. Consider the results of your investigation so far: the symptoms of people who became ill, the attack rate and the incubation period. Compare these against the descriptions of each pathogen below.

Which pathogen do you suspect caused the illnesses? .....

Which food do you suspect was contaminated by the pathogen? .....

Some of the people who said they ate this food did not get sick. What are some possible explanations?  
.....  
.....  
.....

One person (#16) did not eat any of the foods on the menu. What are some possible explanations for his or her illness?  
.....  
.....  
.....

### Norovirus

**Incubation period:** 1-2 days

**Signs and symptoms:** nausea, vomiting, diarrhea

**Commonly associated foods:** poorly cooked shellfish, ready-to-eat foods like salads and sandwiches handled by infected persons, contaminated water

### Campylobacter

**Incubation period:** 2-5 days

**Signs and symptoms:** fever, vomiting, diarrhea, abdominal cramps

**Commonly associated foods:** raw and undercooked poultry, unpasteurized milk, contaminated water

### Salmonella

**Incubation period:** 1-3 days

**Signs and symptoms:** fever, vomiting, diarrhea

**Commonly associated foods:** eggs, poultry, meat, and cheese; unpasteurized milk and juice; certain raw fruits and vegetables like sprouts and melons

### E. coli

**Incubation period:** 1-8 days

**Signs and symptoms:** vomiting, diarrhea, abdominal cramps

**Commonly associated foods:** undercooked ground beef, unpasteurized milk and juice, contaminated water

Adapted from [foodsafety.gov](http://foodsafety.gov)