

# Outbreak of *E. coli* Infections



## Investigation Notice

Posted April 5, 2019 at 11:30 AM ET

**CDC, several states, the U.S. Department of Agriculture's Food Safety and Inspection Service, and the U.S. Food and Drug Administration are investigating a multistate outbreak of Shiga toxin-producing *Escherichia coli* (*E. coli*) O103 infections. This investigation is still ongoing and a specific food item, grocery store, or restaurant chain has not been identified as the source of infections.**

### Latest Outbreak Information

#### At A Glance

- [Reported Cases](#): 72
  - [States](#): 5
  - Hospitalizations: 8
  - Deaths: 0
- As of April 4, 2019, 72 people infected with the outbreak strain of *E. coli* O103 have been reported from five states.
    - Eight people have been hospitalized. No cases of hemolytic uremic syndrome (HUS) or deaths have been reported.
  - This investigation is still ongoing and a specific food item, grocery store, or restaurant chain has not been identified as the source of infections.
  - CDC is not recommending that consumers avoid any particular food at this time. Restaurants and retailers are not advised to avoid serving or selling any particular food.
  - This is a rapidly evolving investigation. We will update our advice if a source is identified.

### Advice to Consumers, Restaurants, and Retailers

[Take action](#) if you have symptoms of an *E. coli* infection:

- Talk to your healthcare provider.
- Write down what you ate in the week before you started to get sick.
- Report your illness to the health department.
- Assist public health investigators by answering questions about your illness.

Follow these [general ways to prevent](#) *E. coli* infection:

- **Wash your hands.** Wash hands after using the restroom or changing diapers, before and after preparing or eating food, and after contact with animals.
- **Cook meats thoroughly to kill harmful germs.** Cook steaks and roasts to at least 145°F and let rest for 3 minutes after you remove meat from the grill or stove. Cook ground beef and pork to at least 160°F. Use a food thermometer to check the temperature of the meat.
- **Don't cross-contaminate food preparation areas.** Thoroughly wash hands, counters, cutting boards, and utensils after they touch raw meat.
- **Wash fruits and vegetables** before eating, unless the package says the contents have been washed.
- **Avoid raw milk, other unpasteurized dairy products, and unpasteurized juices.**
- **Don't prepare food or drink for others when you are sick.**

## Symptoms of *E. coli* Infection

- People usually get sick from Shiga toxin-producing *E. coli* (STEC) 2–8 days (average of 3–4 days) after swallowing the germ.
- Some people with a STEC infection may get a type of kidney failure called hemolytic uremic syndrome (HUS).
- *E. coli* infection is usually diagnosed by testing a stool sample.
- Antibiotics are not recommended for patients with suspected *E. coli* infections until diagnostic testing can be performed and *E. coli* infection is ruled out. Some studies have shown that administering antibiotics to patients with *E. coli* infections might increase their risk of developing HUS, and a benefit of treatment has not been clearly demonstrated.
- For more information, see [Symptoms of \*E. coli\* Infection](#).

## Investigation Details

## April 5, 2019

CDC, several states, the U.S. Department of Agriculture's Food Safety and Inspection Service, and the U.S. Food and Drug Administration are investigating a multistate outbreak of Shiga toxin-producing *E. coli* O103 infections. This investigation includes *E. coli* O103 infections recently reported by the [Kentucky Department of Public Health](#)External.

Public health investigators are using the [PulseNet](#) system to identify illnesses that may be part of this outbreak. PulseNet is the national subtyping network of public health and food regulatory agency laboratories coordinated by CDC. DNA fingerprinting is performed on *E. coli* bacteria isolated from ill people by using techniques called [pulsed-field gel electrophoresis](#) (PFGE) and [whole genome sequencing](#) (WGS). CDC PulseNet manages a national database of these DNA fingerprints to identify possible outbreaks. WGS gives a more detailed DNA fingerprint than PFGE. WGS performed on *E. coli* from ill people in this outbreak showed that they are closely related genetically. This means that the ill people are more likely to share a common source of infection.

As of April 4, 2019, 72 people infected with the outbreak strain of *E. coli* O103 have been reported from five states. CDC is reporting the 72 illnesses that PulseNet has confirmed are part of this outbreak. States are investigating additional illnesses that might be a part of this outbreak. A list of the states and the number of confirmed cases in each can be found on the [Map of Reported Cases](#) page.

Illnesses started on dates from [March 2, 2019, to March 29, 2019](#). Ill people range in age from 1 to 74 years, with a median age of 17. Fifty-five percent are female. Of 47 people with information available, 8 (17%) have been hospitalized. No deaths and no cases of hemolytic uremic syndrome (HUS) have been reported.

This investigation is still ongoing and a specific food item, grocery store, or restaurant chain has not been identified as the source of infections. State and local public health officials are interviewing ill people to determine what they ate and other exposures in the week before their illness started.

CDC will provide more information as it becomes available.