

DECEMBER 3, 2024

# Investigation Update: *E. coli* Outbreak, Onions Served at McDonald's - November 13, 2024

#### KEY DOINTS

This outbreak is over. Learn what you can do to protect yourself from getting sick from *E. coli.* 



Notice

Locations

Timeline

## December 3, 2024

CDC, public health and regulatory officials in several states, the U.S. Food and Drug Administration (FDA), and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) collected different types of data to investigate a multistate outbreak of *E. coli* O157:H7infections.

Epidemiologic and traceback data showed that fresh, slivered onions served at McDonald's were the likely source of this outbreak.

### Epidemiologic data

A total of 104 people infected with the outbreak strain of *E. coli* O157:H7 were reported from 14 states. Illnesses started on dates ranging from September 12, 2024, to October 21, 2024. Of 98 people with information available, 34 were hospitalized, and 4 people developed hemolytic uremic syndrome (HUS), a serious condition that can cause kidney failure. One death was reported from an older adult in Colorado. This person was not one of those who developed HUS.

The true number of sick people in this outbreak was likely much higher than the number reported, and the outbreak may not have been limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *E. coli*.

Public health officials collected many different types of information from sick people, including their age, race, ethnicity, other demographics, and the foods they ate in the week before they got sick. This information provided clues to help investigators identify the source of the outbreak.

The table below has information about sick people in this outbreak ("n" is the number of people with information available for each demographic).

Demographics	Information
Age	Range from 1 to 88 years
(n=104)	Median age of 28
Sex	40% female
(n=104)	60% male
Race (n=96)	95% White 2% African American/Black 1% Native American or Alaska Native 0% Asian 0% Native Hawaiian or other Pacific Islander 2% reported more than one race
Ethnicity	89% non-Hispanic
(n=93)	11% Hispanic

State and local public health officials interviewed people about the foods they ate in the week before they got sick. Of the 81 people interviewed, 80 (99%) reported eating at McDonald's. Seventy-five people were able to remember specific menu items they ate at McDonald's, of which 63 (84%) reported a menu item containing fresh, slivered onions.

Some people in this outbreak reported traveling to other states before their illness started. At least seven people ate at McDonald's during their travel.

#### Laboratory information

Public health investigators used the <u>PulseNet</u> system to identify illnesses that may be part of this outbreak. CDC PulseNet manages a national database of DNA fingerprints of bacteria that cause foodborne illnesses. DNA fingerprinting is performed on bacteria using a method called <u>whole genome sequencing (WGS)</u>.

WGS showed that bacteria from sick people's samples were closely related genetically. This suggests that people in this outbreak got sick from the same food.

WGS analysis of bacteria from 94 people's samples predicted resistance to chloramphenicol, streptomycin, sulfisoxazole, tetracycline, and trimethoprim-sulfamethoxazole. More information is available at the National Antimicrobial Resistance Monitoring System (NARMS) site. These findings do not affect treatment guidance since antibiotics are not recommended for patients with Shiga toxin-producing *E. coli* infections.

FDA tested recalled onions and one environmental sample from a grower. Both of these samples tested positive for non-O157:H7 Shiga toxin-producing *E. Coli*. The *E. coli* found was not the outbreak strain and no human illnesses were found related to the strain. Additional samples from this investigation were negative for *E. coli*.

#### Public health actions

Follow steps to protect yourself from getting sick from E. coli.

## Previous updates

EXPAND ALL +

November 13, 2024

CDC, public health and regulatory officials in several states, the U.S. Food and Drug Administration (FDA) are collecting <u>different types of data</u> to investigate a multistate outbreak of *E. coli* O157:H7infections.

Epidemiologic and traceback data show that fresh, slivered onions served at McDonald's were the likely source of this outbreak.

#### Epidemiologic data

As of November 13, a total of 104 people infected with the outbreak strain of *E. coli* O157:H7 have been reported from 14 states. Illnesses started on dates ranging from September 12, 2024, to October 21, 2024. Of 98 people with information available, 34 have been hospitalized, and 4 people developed hemolytic uremic syndrome, a serious condition that can cause kidney failure. One death has been reported from an older adult in Colorado. This person is not one of those who developed HUS.

The true number of sick people in this outbreak is likely much higher than the number reported, and the outbreak may not be limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *E. coli*. In addition, recent illnesses may not yet be reported as it usually takes <u>3 to 4 weeks</u> to determine if a sick person is part of an outbreak.

Public health officials collect many different types of information from sick people, including their age, race, ethnicity, other demographics, and the foods they ate in the week before they got sick. This information provides clues to help investigators identify the source of the outbreak.

The table below has information about sick people in this outbreak ("n" is the number of people with information available for each demographic).

Demographics	Information
Age (n=104)	Range from 1 to 88 yearsMedian age of 28
Sex(n=104)	40% female60% male
Race(n=96)	95% White2% African American/Black1% Native American or Alaska Native0% Asian0% Native Hawaiian or other Pacific Islander2% reported more than one race
Ethnicity(n=93)	89% non-Hispanic11% Hispanic

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Of the 81 people interviewed, 80 (99%) report eating at McDonald's. Seventy-five people were able to remember specific menu items they ate at McDonald's. Of 75 people with information, 63 (84%) reported a menu item containing fresh slivered onions.

Some people in this outbreak reported traveling to other states before their illness started. At least seven people ate at McDonald's during their travel

#### Laboratory information

FDA tested recalled onions and one sample tested positive for non-O157:H7 Shiga toxin-producing *E. coli*. The *E.coli* found in onions was not the outbreak strain and no human illnesses have been linked to this strain. Additional testing results will be released when available by FDA.

#### Public health actions

Because these onions are recalled and past shelf life, it is not necessary to avoid eating onions or other foods made with onions. Call your healthcare provider if you have severe *E. coli* symptoms.

October 30, 2024

CDC, public health and regulatory officials in several states, the U.S. Food and Drug Administration (FDA), and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) are collecting different types of data to investigate a multistate outbreak of *E. coli* O157:H7infections.

Epidemiologic and traceback data show that fresh, slivered onions served at McDonald's were the likely source of this outbreak.

#### Epidemiologic data

As of October 30, 90 people infected with the outbreak strain of *E. coli* O157:H7 have been reported from 13 states. Illnesses started on dates ranging from September 27, 2024, to October 16, 2024. Of 83 people with information available, 27 have been hospitalized, and 2 people developed hemolytic uremic syndrome, a serious condition that can cause kidney failure. One death has been reported from an older adult in Colorado. This person is not one of those who developed HUS.

The true number of sick people in this outbreak is likely much higher than the number reported, and the outbreak may not be limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *E. coli*. In addition, recent illnesses may not yet be reported as it usually takes 3 to 4 weeks to determine if a sick person is part of an outbreak.

Public health officials collect many different types of information from sick people, including their age, race, ethnicity, other demographics, and the foods they ate in the week before they got sick. This information provides clues to help investigators identify the source of the outbreak

The table below has information about sick people in this outbreak ("n" is the number of people with information available for each demographic).

Demographics	Information
<b>Age</b> (n=90)	Range from 13 to 88 years Median age of 30
Sex (n=90)	41% female 59% male
Race (n=82)	96% White 3% African American/Black 0% Native American or Alaska Native 0% Asian 0% Native Hawaiian or other Pacific Islander 1% reported more than one race
Ethnicity (n=79)	92% non-Hispanic 8% Hispanic

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Of the 62 people interviewed, all 62 (100%) report eating at McDonald's. Fifty-eight people were able to remember specific menu items they ate at McDonald's. Forty-eight of 58 people (83%) reported a menu item containing fresh, slivered onions. Forty-six of 58 people (79%) reported a menu item made with fresh quarter pound beef patties. Overall, three people reported menu items that contained fresh, slivered onions, but not fresh quarter pound beef patties. One person reported a menu item with a fresh quarter pound beef patty but without fresh, slivered onions

Some people in this outbreak reported traveling to other states before their illness started. At least three people ate at McDonald's during their travel.

#### Traceback information and laboratory data

FDA has initiated inspections at a Taylor Farms processing center in Colorado and an onion grower of interest in Washington state. FDA is unable to implicate a grower at this time.

On October 22, Taylor Farms, the supplier of slivered onions for affected McDonald's locations, initiated a recall of yellow onions. Customers were contacted directly by Taylor Farms and asked to remove products. FDA is working closely with the implicated firms and will continue to provide updates including any additional recalls that might be needed for businesses who received recalled onions.

On October 22, the Colorado Department of Agriculture (CDA) laboratories analyzed subsamples from all the lots of McDonald's brand fresh and frozen beef patties collected from various McDonald's locations in Colorado and found them to be negative for *E. coli*. All beef testing \( \text{Lesting } \) has been completed.

FSIS has conducted a thorough investigation, including traceback of beef patties served on Quarter Pounders at McDonald's, and evidence does not point to ground beef as the likely source of contamination. FSIS used specific meal information reported by ill people to trace beef patties through the supply chain to the establishments where they were produced and did not identify a beef source. FSIS will continue to work closely with federal and state partners.

#### Public health actions

Because onions have been recalled, it is not necessary to avoid eating onions or other foods made with onions. Call your healthcare provider if you have severe *E. coli* symptoms.

October 25, 2024 +

CDC, public health and regulatory officials in several states, the U.S. Food and Drug Administration (FDA), and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) are collecting <u>different types of data</u> to investigate a multistate outbreak of *E. coli* O157:H7 infections.

Epidemiologic data show that Quarter Pounder hamburgers served at McDonald's are contaminated with *E. coli* and are making people sick. Early information from FDA indicates onions may be a source of this outbreak. Investigators from all agencies are working quickly to determine the contaminated ingredient.

#### Epidemiologic data

As of October 24, 75 people infected with the outbreak strain of *E. coli* O157:H7 have been reported from 13 states. Illnesses started on dates ranging from September 27, 2024, to October 10, 2024. Of 61 people with information available, 22 have been hospitalized, and 2 people developed hemolytic uremic syndrome, a serious condition that can cause kidney failure. One death has been reported from an older adult in Colorado. This person is not one of those who developed HUS.

The true number of sick people in this outbreak is likely much higher than the number reported, and the outbreak may not be limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *E. coli*. In addition, recent illnesses may not yet be reported as it usually takes <u>3 to 4 weeks</u> to determine if a sick person is part of an outbreak.

Public health officials collect many different types of information from sick people, including their age, race, ethnicity, other demographics, and the foods they ate in the week before they got sick. This information provides clues to help investigators identify the source of the outbreak

The table below has information about sick people in this outbreak ("n" is the number of people with information available for each demographic).

Demographics	Information
Age	Range from 13 to 88 years
(n=74)	Median age of 29
Sex	40% female
(n=75)	60% male
Race (n=59)	95% White 3% African American/Black 0% Native American or Alaska Native 0% Asian 0% Native Hawaiian or other Pacific Islander 2% reported more than one race
Ethnicity	91% non-Hispanic
(n=55)	9% Hispanic

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Of the 42 people interviewed, all 42 (100%) report eating at McDonald's, and 39 people report eating a beef hamburger. Of 36 people who remember the specific beef hamburger they ate at McDonald's, 31 (86%) report eating a Quarter Pounder hamburger. Some people in this outbreak reported traveling to other states before their illness started. At least three people ate at McDonald's during their travel.

#### Traceback Information

Investigators are working to determine if the slivered onions or beef patties in Quarter Pounder burgers are the specific source of this outbreak.

Preliminary traceback and distribution information reviewed by FDA shows that slivered onions served on Quarter Pounders are a likely source of contamination. FDA is working quickly to confirm that these onions are a source of this outbreak and to determine if these onions were served or sold at other businesses.

Taylor Farms, the supplier of slivered onions for affected McDonald's locations initiated a recall of yellow onions. Customers were contacted directly and asked to remove products. FDA is working closely with the implicated firms and will continue to provide updates including any additional recalls that might be needed for businesses who received recalled onions.

FSIS is conducting traceback on hamburger patties served at McDonald's to determine if ground beef is a source of illness.

#### Public health actions

McDonalds has stopped using fresh slivered onions and quarter pound beef patties in several states to protect their customers while a source of illness is confirmed. Quarter Pounders will not be available for sale temporarily in some states. Call your healthcare provider if you ate a McDonald's Quarter Pounder hamburger and have severe *E. coli* symptoms.

October 22, 2024 +

CDC, public health and regulatory officials in several states, the U.S. Food and Drug Administration (FDA), and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) are collecting <u>different types of data</u> to investigate a multistate outbreak of *E. coli* O157:H7 infections.

Epidemiologic data show that Quarter Pounder hamburgers served at McDonald's are contaminated with *E. coli* and are making people sick. Early information from FDA indicates onions may be a source of this outbreak. Investigators from all agencies are working quickly to determine the contaminated ingredient.

#### Epidemiologic data

As of October 22, 49 people infected with the outbreak strain of *E. coli* O157:H7 have been reported from 10 states. Illnesses started on dates ranging from September 27, 2024, to October 11, 2024. Of 28 people with information available, 10 have been hospitalized, and 1 person developed hemolytic uremic syndrome, a serious condition that can cause kidney failure. One death has been reported from an older adult in Colorado. This is not the same person with HUS.

The true number of sick people in this outbreak is likely much higher than the number reported, and the outbreak may not be limited to the states with known illnesses. This is because many people recover without medical care and are not tested for *E. coli*. In addition, recent illnesses may not yet be reported as it usually takes <u>3 to 4 weeks</u> to determine if a sick person is part of an outbreak.

Public health officials collect many different types of information from sick people, including their age, race, ethnicity, other demographics, and the foods they ate in the week before they got sick. This information provides clues to help investigators identify the source of the outbreak

The table below has information about sick people in this outbreak ("n" is the number of people with information available for each demographic).

Demographics	Information
Age	Range from 13 to 88 years
(n=49)	Median age of 26
Sex	37% female
(n=49)	63% male
Race (n=29)	93% White 7% African American/Black 0% Native American or Alaska Native 0% Asian 0% Native Hawaiian or other Pacific Islander 0% reported more than one race
Ethnicity	100% non-Hispanic
(n=25)	0% Hispanic

State and local public health officials are interviewing people about the foods they ate in the week before they got sick. Of the 18 people interviewed, all 18 (100%) report eating at McDonald's, and 16 people report eating a beef hamburger. Of 14 people who remember the specific beef hamburger they ate at McDonald's, 12 (86%) report eating a Quarter Pounder hamburger. Some people in this outbreak reported traveling to other states before their illness started. At least one person ate at McDonald's during their travel.

#### Traceback Information

Investigators are working to determine if the slivered onions or beef patties in Quarter Pounder burgers are the specific source of this outbreak.

Preliminary traceback and distribution information reviewed by FDA shows that slivered onions served on Quarter Pounders are a likely source of contamination. FDA is working quickly to confirm that these onions are a source of this outbreak and to determine if these onions were served or sold at other businesses.

FSIS is conducting traceback on hamburger patties served at McDonald's to determine if ground beef is a source of illness.

#### Public health actions

McDonalds has stopped using fresh slivered onions and quarter pound beef patties in several states to protect their customers while a source of illness is confirmed. Quarter Pounders will not be available for sale temporarily in some states. Call your healthcare provider if

you ate a McDonald's Quarter Pounder hamburger and have severe <i>E. coli</i> symptoms.				

SOURCES

#### CONTENT SOURCE:

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)