

Meet the Outbreaks

Hammy Burgens

Food Type:

Hamburger

Pathogen:

Shigatoxigenic *E. coli* O157:H7

Location:

A restaurant chain across four states

Impact:

732 people affected

178 permanently damaged

4 deaths

The real case

In 1993, a popular fast-food restaurant ran a promotion and discounted their hamburger sales across four states. Unfortunately, the restaurant received meat contaminated with a novel strain of bacteria known as shigatoxigenic *E. coli*. from their suppliers. The restaurant cooked the beef according to federal standards of the time, bringing the internal temperature to 140 °F (60 °C). However, this temperature was not high enough to kill the bacteria. The guideline has since been raised to 160 °F (71.1 °C).

How to prevent or mitigate

Recalling contaminated products;ensuring that the food is cooked to above 165 °F before freezing; following reheating guidelines.



Cheesy McPizza

Food Type:

Frozen pizza

Pathogen:

E. coli O157:H7

Location:

Southern United States

Impact:

21 people affected

The real case

In the summer of 2007, 21 individuals from 10 states across the Southeast were infected by a strain of pathogenic *E. coli*. The outbreak was linked to the pepperoni in two frozen pizza brands.

How to prevent or mitigate

Recall of products, ensuring that the product is cooked to above 165 degrees before freezing, consumers following reheating guidelines.



Callie N. Tae

Food Type:

Salsa and *chili con queso*

Pathogen:

Hepatitis A virus (HAV)

Location:

Pennsylvania restaurant

Impact:

555 people infected

3 deaths

The real case

In 2003, the largest foodborne outbreak caused by Hepatitis A virus resulted in 3 deaths of



the 555 people infected. The outbreak was traced back to green onions that were imported from Mexico, and used in salsa and queso.

How to prevent or mitigate

Proper washing of produce, the public being vaccinated, and proper handwashing.



Mr. Frosty Freeze

Food Type:

Ice cream

Pathogen:

Listeria monocytogenes

Location:

Southern United States

Impact:

10 people infected

3 deaths

The real case

In 2015, an outbreak of listeriosis caused by *Listeria monocytogenes* was found in an ice cream in South Carolina. Other states were prompted to test, and also found *Listeria monocytogenes* in ice cream products in their states. The outbreak grew to affect 10 people in four states. Three people died as a result.

How to prevent or mitigate

Since *Listeria* grows best at cooler temperatures, it's important with cold products such as ice cream to make sure that proper tests are in place to ensure the product is free of bacteria.



'Dirty Sal' Addison

Food Type:

Leafy greens

Pathogen:

E. coli O157:H7

Location:

24 states

Impact:

18 people affected

9 hospitalized

2 developed kidney failure

1 death

The real case

Between late 2017 and early 2018, the CDC and FDA were investigating several cases of gastroenteritis caused by pathogenic *E. coli*. In total, 18 people were infected, 9 people were hospitalized, 2 people developed kidney failure, and 1 person died. No one company or product was ever identified as the cause of the outbreak. Between late 2017 and early 2018, the CDC and FDA were investigating several cases of gastroenteritis caused by pathogenic *E. coli*. In total, 18 people were infected, 9 people were hospitalized, 2 people developed kidney failure, and 1 person died. No one company or product was ever identified as the cause of the outbreak.

How to prevent or mitigate

Product recalls, washing vegetables prior to packaging, washing vegetables after purchase, educating consumers about proper vegetable handling.



King Krusty

Food Type:

Frozen pot pie

Pathogen:

Salmonella

Location:

34 states

Impact:

270 people affected

67 hospitalized

The real case

The 2001, over 270 individuals were affected by an outbreak of *Salmonella* in individual frozen pot pies. The pot pies were sold under several different brand names and were distributed nationwide. The affected individuals lived in 34 different states, and 67 people were hospitalized as a result of the outbreak.



were hospitalized as a result of the outbreak.

How to prevent or mitigate

Proper sanitization of processing lines, training of manufacturing employees, stricter regulations about non-compliance with food safety protocol. Ensuring products are cooked to and stored at the proper temperatures.



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