

***Salmonella* Outbreak Linked to Pet Bearded Dragons - June 2024**

Investigation notice

Investigation start date: June 14, 2024

Investigation status: Closed

Recall issued: No

This outbreak is over. Bearded dragons may carry *Salmonella* germs that can spread to you and make you sick. Always take steps to stay healthy around your bearded dragon.

Fast Facts

- **Cases:** 26
- **Hospitalizations:** 10
- **Deaths:** 0

December 10, 2024

CDC and public health officials in several states collected different types of data to investigate a multistate outbreak of *Salmonella* Cotham infections.

Epidemiologic and laboratory data showed that contact with pet bearded dragons made people sick in this outbreak.

Epidemiologic Data

As of December 10, a total of 26 people infected with the outbreak strain of *Salmonella* Cotham were reported from 13 states. Illnesses started on dates ranging from January 8, 2024, to Oct 31, 2024.

The true number of sick people in the 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 *Salmonella*.

Public health officials collect many different types of information from sick people, including their age, race, ethnicity, other demographics, and the animals they came into contact within 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=24)

Range from <1 to 67 years

Median age of 1 year

67% under 5 years

Sex

(n=26)

65% female

35% male

Race

(n=21)

81% White

14% African American/Black

1% reported more than one race

Ethnicity

(n=24)

71% non-Hispanic

29% Hispanic

State and local public health officials interviewed people about the animals they came into contact with during the week before they got sick. Of the 25 people interviewed, 17 (68%) reported contact with a bearded dragon and 1 (4%) reported contact with a lizard before getting sick. Most people had contact at home while caring for a bearded dragon, such as touching the animal or their enclosures, feeding them, and putting them on their laps, heads, or shoulders. At least one child did not touch the bearded dragon and might have been exposed when touching surfaces in the home where the bearded dragon had been allowed to freely roam.

Laboratory and Traceback Data

Public health investigators used the [PulseNet](#) system to identify illnesses that may have been part of this outbreak. CDC PulseNet manages a national database of DNA fingerprints of bacteria that cause gastrointestinal illnesses. DNA fingerprinting is performed on bacteria using a method called [whole genome sequencing \(WGS\)](#).

Investigators in Alabama and Minnesota collected samples from bearded dragons in the shared environments of sick people. WGS showed that the *Salmonella* Cotham found in these samples are the same strain as the one found in sick people.

WGS showed that bacteria from sick people's samples were closely related genetically. This means that people in this outbreak likely got sick from the same type of animal. WGS also showed that

this *Salmonella* Cotham strain was genetically closely related to a *Salmonella* Cotham strain that caused an [outbreak from 2012–2014](#) and was linked to bearded dragons.

People in this outbreak reported purchasing bearded dragons at multiple retail locations.

[WGS analysis](#) of bacteria from 24 people's samples and three animal samples did not predict resistance to any antibiotics. Two people's samples predicted resistance to ciprofloxacin, gentamicin, and streptomycin. More information is available at the [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) site. Most people with *Salmonella* illness recover without antibiotics. However, if antibiotics are needed, some illnesses may be difficult to treat with some commonly recommended antibiotics and may require a different antibiotic choice.

Public Health Actions

CDC advises that you always take steps to [stay healthy around bearded dragons](#):

- Wash your hands after handling bearded dragons, their food, or items in their environment.
- Don't kiss or snuggle bearded dragons.
- Keep bearded dragons out of the kitchen or anywhere that food is prepared, stored, served, or eaten and away from areas where young children play.
- Keep its supplies and habitat clean.
- Limit young children's contact with bearded dragons.