

Outbreak of Multidrug-Resistant *Salmonella* Infections Linked to Contact with Pig Ear Dog Treats



Investigation Notice

Published on July 31, 2019 at 1:00 PM ET

CDC, public health and regulatory officials in several states, and the U.S. Food and Drug Administration are investigating a multistate outbreak of multidrug-resistant *Salmonella* infections linked to contact with pig ear dog treats.

Latest Outbreak Information

At A Glance

- [Reported Cases](#): 127
- [States](#): 33
- Hospitalizations: 26
- Deaths: 0

- CDC and FDA are now advising people not to buy or feed **any** pig ear dog treats to pets, including any that may already be in homes.
- People can get sick after handling the treats or caring for dogs who ate the treats. Dogs might get sick after eating them.
- Since the last update on July 17, 2019, a total of 34 ill people have been added to this investigation.
- A total of 127 people infected with the outbreak strains of *Salmonella* have been reported from 33 states.
 - 26 ill people (30%) have been hospitalized. No deaths have been reported.
 - 24 illnesses (21%) are among children younger than 5 years.
- [Epidemiologic, laboratory and traceback](#) evidence indicates that contact with pig ear dog treats from many different suppliers is the likely source of this outbreak.
- State health and regulatory officials in several states and the FDA have tested pig ear dog treats at various suppliers and identified many different strains of *Salmonella*. No single supplier, distributor or common brand of pig ear treats has been identified that could account for all the illnesses. This is why CDC and FDA are now advising people to not buy or feed any pig ear dog treats to pets.

- This investigation is ongoing and CDC will provide updates when more information is available.

Advice to Dog Owners

- **Do not feed any pig ear treats to your dog. Throw them away in a secure container so that your pets and other animals can't eat them.**
 - Even if some of the pig ears were fed to your dog and no one got sick, do not continue to feed them to your dog.
 - Wash containers, shelves, and areas that held any pig ear dog treats with hot, soapy water. Be sure to wash your hands after handling any of these items.
- **I fed pig ears to my dog. How do I know if I have a *Salmonella* infection?**
 - People with a *Salmonella* infection may have diarrhea, fever, and stomach cramps. Most people recover without treatment. If you have symptoms of a *Salmonella* infection talk to your healthcare provider.
- **How do I know if my dog has *Salmonella* infection?**
 - Some dogs with *Salmonella* infection may not look sick. Dogs with a *Salmonella* infection usually have diarrhea (which may be bloody) Sick animals may seem more tired than usual and may vomit or have a fever.
 - If your dog or cat has these signs of illness, or you are concerned that your pet may have *Salmonella* infection, please contact your pet's veterinarian.
- **How can I report my dog's illness if I think it's related to pig ears?**
 - FDA encourages consumers to report complaints about pet food products electronically through the Safety Reporting Portal.
- **Shop safely**
 - Always wash your hands thoroughly with soap and water after touching unpackaged dog food or treats, including products in bulk bins or on store shelves.
- **Tips to stay healthy while feeding your dog**
 - Always wash your hands thoroughly with soap and water right after handling dog food or treats.
 - When possible, store dog food and treats away from where human food is stored or prepared and away from the reach of young children.
 - Don't use your dog's food bowl to scoop food. Use a clean, dedicated scoop, spoon, or cup.
 - Always follow any storage instructions on dog food bags or containers.
- **Play safely after your dog eats**
 - Don't let your dog lick your mouth or face after it eats.
 - Don't let your dog lick any open wounds or areas with broken skin.
 - If you do play with your dog after it has just eaten, wash your hands and any part of your body it licked with soap and water.
- **Take extra care around young children**
 - Children younger than 5 should not touch or eat dog food or treats.

- Young children are at risk for illness because their immune systems are still developing and because they are more likely than others to put their fingers or other items into their mouths.
- Adults should supervise handwashing for young children.
- See our [Pet Food Safety Infographic](#) for more tips on staying healthy while caring for pets.

Advice to Pet Stores and Retailers Selling Pig Ears

- **Importers, suppliers, distributors, wholesalers, and other retailers should not sell any pig ear pet treats.**
 - Remove pig ears from retail. This includes bulk bin and individually wrapped pig ears.
 - Throw them away in secure containers so that animals cannot get to them.
 - Retailers who choose not to immediately throw them away should securely and safely store packaged product until additional information is available.
 - Wash and sanitize any surfaces that have come in contact with pig ears. This includes bulk bins or shelves, other storage containers, and surfaces such as counters or displays. Advise employees and customers to wash hands after handling pet treats and food.
 - Additional information on specific companies supplying contaminated pig ears is not available at this time. However, information will be updated as it becomes available.

Recalls

Several companies recalled pig ear products because they might be contaminated with *Salmonella*. Ongoing testing of pig ears indicates that many brands of pig ears might be contaminated with *Salmonella*.

- On July 3, 2019, Pet Supplies Plus recalled bulk pig ears stocked in open bins because they might be contaminated with *Salmonella*.
- On July 26, 2019 Lennox Intl Inc recalled pig ears because they might be contaminated with *Salmonella*. On July 30, 2019 Lennox Intl Inc expanded their recall.
- No single supplier, distributor or common brand of pig ear treats has been identified that could account for all the illnesses. More products could be recalled as testing identifies *Salmonella*.

Symptoms of *Salmonella* Infection

- Most people infected with *Salmonella* develop diarrhea, fever, and stomach cramps 12 to 72 hours after being exposed to the bacteria.
- The illness usually lasts 4 to 7 days, and most people recover without treatment.

- In some people, the illness may be so severe that the patient needs to be hospitalized. *Salmonella* infection may spread from the intestines to the bloodstream and then to other places in the body.
- Children younger than 5 years, adults 65 years and older, and people with weakened immune systems are more likely to have a severe illness.

Investigation Details

July 31, 2019

CDC, public health and regulatory officials in several states, and the U. S. Food and Drug Administration are investigating a multistate outbreak of multidrug-resistant *Salmonella* serotypes I 4,[5],12:i:-, Infantis, Newport, and London infections linked to contact with pig ear dog treats.

As of July 31, 2019, a total of 127 people infected with the outbreak strains of *Salmonella* have been reported from 33 states. A list of the states and the number of cases in each can be found on the [Map of Reported Cases page](#).

Illnesses started on dates ranging from [June 16, 2015 to July 6, 2019](#). Ill people range in age from less than 1 year to 90 years, with a median age of 40 years. Fifty-five (45%) ill people are female. Of 88 ill people with information available, 26 (30%) have been hospitalized. No deaths have been reported.

Illnesses might not yet be reported due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2 to 4 weeks. Please see the [Timeline for Reporting Cases of Salmonella Infection](#) for more details.

[Predicted antibiotic resistance](#) based on whole genome sequencing (WGS) was determined for 71 isolates from ill people. There was no antibiotic resistance predicted for one isolate; the remaining 70 isolates had predicted antibiotic resistance or decreased susceptibility to one or more of the following antibiotics: amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftriaxone, ciprofloxacin, gentamicin, kanamycin, nalidixic acid, streptomycin, sulfisoxazole, and tetracycline. Testing of one clinical isolate using standard [antibiotic susceptibility testing](#) methods by CDC's [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) provided comparable results (kanamycin was not tested by this method). If antibiotics are needed, infections related to this outbreak may be difficult to treat with some commonly recommended antibiotics, and may require a different antibiotic choice.

Investigation of the Outbreak

[Epidemiologic, laboratory, and traceback](#) evidence indicates that contact with pig ear dog treats is the likely source of this outbreak.

In interviews, ill people answered questions about animal and pet food contact in the week before they became ill. Seventy-six (89%) of 85 ill people reported contact with a dog before

getting sick. Of 62 people with available information, 45 (73%) reported contact with pig ear dog treats or with dogs who were fed pig ear dog treats. Both of these proportions are significantly higher than the results from a survey of healthy people who reported contact with dogs (61%) or handling dog treats (16%), such as pig ears, in the week before interview.

During the investigation, health and regulatory officials from Kansas, Michigan, Pennsylvania, and FDA collected pig ears at retail locations where ill people reported buying the products or their suppliers and distributors. Testing identified many different strains of *Salmonella*. A search of the CDC PulseNet database found that people had been infected with some of these strains, including *Salmonella* Infantis, *Salmonella* London, and *Salmonella* Newport. Some of these illnesses date back to 2015. These ill people were added to the outbreak investigation.

Additional *Salmonella* strains were isolated from pig ears, and investigators are working to determine if any human illnesses are linked to those strains. Those strains include *Salmonella* Panama, *Salmonella* Brandenburg, *Salmonella* Anatum, and *Salmonella* Livingstone.

Some of the tested pig ears were imported from Argentina, and Brazil. Some product labels indicated that the pig ears were irradiated; this process should kill *Salmonella*. *Salmonella* identified in products labeled as irradiated indicate they may not have been irradiated or there was another issue that led to *Salmonella* contamination.

On July 3, 2019, Pet Supplies Plus bulk pig ears stocked in open bins because they might be contaminated with *Salmonella*. On July 26, 2019, Lennox Intl Inc pig ears because they might be contaminated with *Salmonella*. On July 30, 2019 Lennox Intl Inc expanded their recall. These recalls do not account for all of the illnesses in this outbreak.

Information collected to date about where ill people bought pig ears has not identified a single supplier, distributor, or common brand of pig ear treats. CDC and FDA recommend that people do not purchase or feed any pig ear pet treats to dogs because they could be contaminated with *Salmonella* and could make people and dogs sick. CDC and FDA recommendations may change as more information becomes available.

This investigation is ongoing. CDC will provide updates when more information is available.

Pet owners can take [steps to keep their families healthy while feeding pets](#).