

Public Health Notice: Outbreak of *Salmonella* infections linked to pet hedgehogs

December 21, 2020 - Final Update

This notice has been updated to reflect that the outbreak appears to be over and the investigation is winding down. Although the number of reported illnesses has decreased, it is possible that people could still get sick because hedgehogs can carry *Salmonella* bacteria. Canadians are advised to always practise good hand hygiene, frequent handwashing and safe handling of hedgehogs and their environments.



Why you should take note

The Public Health Agency of Canada collaborated with provincial public health and food safety partners to investigate an outbreak of *Salmonella* infections that occurred in six provinces. The outbreak appears to be over and the investigation is winding down.

Investigation findings identified exposure to pet hedgehogs as a likely source of the outbreak. The majority of individuals who became sick

reported having direct or indirect contact with hedgehogs before their illnesses occurred. Ill individuals reported buying hedgehogs from various sources, including pet stores, breeders, or sellers advertising online.

Although this outbreak appears to be over, it is possible that people could still get sick because hedgehogs can carry *Salmonella* bacteria even though they appear healthy and clean and show no signs of illness. Even having indirect contact by touching their environments can put you at risk for developing a *Salmonella* infection.

Canadians are advised to always practice good hand hygiene, frequent handwashing and safe handling of hedgehogs and their environments.

Investigation summary

In total, 31 confirmed cases of *Salmonella* Typhimurium illness were reported in the following provinces: British Columbia (3), Alberta (6), Saskatchewan (1), Ontario (4), Quebec (16), and New Brunswick (1). Individuals became sick between June 2017 and October 2020. Four individuals were hospitalized. No deaths were reported. Individuals who became ill were between four months and 79 years of age. Ten of the reported illnesses (32%) occurred in children 10 years of age and younger. The majority of cases (52%) were female.

The collaborative outbreak investigation was initiated because reports of *Salmonella* Typhimurium illnesses with similar genetic fingerprints were identified. Through the use of a laboratory method called whole genome sequencing, some *Salmonella* Typhimurium illnesses dating back to 2017 were identified to have the same genetic strain as the illnesses that occurred in 2020.

The [United States Centers for Disease Control and Prevention](#) also investigated an outbreak of *Salmonella* Typhimurium illnesses that had a similar genetic fingerprint to illnesses reported in this outbreak.

Who is most at risk

Anyone can become sick with a *Salmonella* infection, but children aged 5 years and under, older adults, pregnant people or people with weakened immune systems are at higher risk for contracting serious illness.

Most people who become ill from a *Salmonella* infection will recover fully after a few days. It is possible for some people to be infected with the bacteria and to not get sick or show any symptoms, but to still be able to spread the infection to others.

What you can do to protect your health

Hedgehogs can carry *Salmonella*. Kissing and cuddling a hedgehog can spread *Salmonella* to your face or mouth and make you sick. To prevent direct or indirect spread of *Salmonella* to others, follow these simple steps to help reduce your risk of becoming ill from contact with hedgehogs and their environments.

- Do not eat, drink or put things in your mouth while handling a hedgehog.
- Always wash your hands with soap and warm water immediately after touching a hedgehog, their food, supplies, or after being in the area where they live or roam, and especially before holding or caring for children under 5 years of age.
- Do not keep hedgehogs in homes, daycare centres, schools or other facilities with children aged 5 years and under.
- Always supervise children when they touch or play with hedgehogs. Do not let them put hedgehogs or their supplies near their face or share their food or drinks with pets. Make sure they thoroughly wash their hands after touching hedgehogs.
- Regularly clean any surfaces or objects your hedgehog touches with soapy water followed by a disinfectant. Personal clothing or linens that have come into contact with hedgehogs should be

laundered and dried thoroughly using the warmest appropriate temperature setting.

- Do not bathe hedgehogs in the kitchen sink or in bathtubs or bathroom sinks. Cleaning of cages and supplies should take place outdoors where possible to avoid contamination within the house. Hedgehog droppings can be flushed down the toilet. Bedding and other solid waste should be bagged and properly disposed.
- Keep hedgehogs and all their food, containers and toys away from the kitchen and other places where food is made or eaten.
- Be aware of the specific needs of your hedgehog. Always keep hedgehogs in habitats specifically designed for them. Stress for a hedgehog can increase shedding of *Salmonella*. If your hedgehog gets sick, follow up with your veterinarian.
- Hedgehogs may not be the best choice for every family. If you choose to have a hedgehog in your home, talk to your health care provider or veterinarian about the risks, especially if your family includes young children, pregnant people, immunocompromised individuals, or adults 65 years of age and over.

Symptoms

Symptoms of a [Salmonella infection](#), called salmonellosis, typically start 6 to 72 hours after exposure to *Salmonella* bacteria from an infected animal, person, or contaminated product.

Symptoms include:

- fever
- chills
- diarrhea
- abdominal cramps
- headache
- nausea
- vomiting

These symptoms usually last for 4 to 7 days. In healthy people, salmonellosis often clears up without treatment. In some cases, severe illness and hospitalization may occur. In some cases, antibiotics may be required. People who are infected with *Salmonella* bacteria can be infectious from several days to several weeks. People who experience symptoms, or who have underlying medical conditions, should contact their health care provider if they suspect they have a *Salmonella* infection.

What is the Government of Canada doing

The Government of Canada is committed to protecting the health of Canadians from enteric disease outbreaks. The Public Health Agency of Canada leads the human health investigation into an outbreak and is in regular contact with its federal, provincial and territorial partners to monitor the situation and to collaborate on steps to address an outbreak.

The Government of Canada will continue to update Canadians if new information related to these investigations becomes available.

Epidemiological information

Figure 1 is an epidemiological curve for this outbreak, which shows the numbers of new cases by month. Outbreak investigators use this information to show when illnesses begin, when they peak and when they trail off. It can take several weeks from the time a person becomes ill to when the illness is reported and testing confirms a link to the outbreak. Data are available for 31 cases.

Figure 1: Number of people infected with *Salmonella* Typhimurium

