



## Avoiding *Salmonella* from Backyard Poultry

*By the Water Quality & Health Council*

Backyard poultry farming is an increasingly popular trend in urban and suburban areas that permit it, giving families a fun way to raise food while learning to care for animals. Assuming roosters are banned in the neighborhood for their earsplitting “cock-a-doodle-doo,” what could be the downside of raising poultry in the backyard? The answer is illness. Unfortunately, outbreaks of *Salmonella* infection linked to backyard poultry are on the rise. We have described this type of disease in a [previous article as a “zoonotic disease,”](#) which is one that can spread between animals and humans under natural conditions, e.g., *in your own backyard.*



[According to the Centers for Disease Control and Prevention \(CDC\),](#)

*Salmonella* bacteria reside in poultry droppings and on the feathers, feet and beaks of poultry, even though the chicks and ducklings may appear clean and healthy. Any human contact, whether through handling poultry directly or contacting cages, coops, feed and water dishes, hay, plants and soil in the area in which the poultry live, can expose backyard poultry farmers to *Salmonella* bacteria.

### *Multistate Outbreaks*

According to the [CDC](#), there were a record number of illnesses associated with backyard poultry in 2016. Currently, CDC advises there are eight *Salmonella* outbreaks linked to backyard poultry nationwide. As of May 25, 2017, there were 372 cases of illness reported from *Salmonella* bacteria in 47 states; 71 people have been hospitalized. The outbreaks have been associated with chicks and ducklings from several hatcheries. Are these outbreaks grounds for abandoning your dream of a backyard flock? Hardly! As always, knowledge is power, and understanding how poultry can transmit bacteria to humans is half the battle when it comes to avoiding infection. The other half is implementing safe practices around live poultry.

### *Tips for Backyard Poultry Farmers*<sup>1</sup>

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<sup>1</sup> Tips are based on CDC’s “Advice to Backyard Flock Owners.” Online, available: <https://www.cdc.gov/zoonotic/gi/outbreaks/livepoultry.html>

- ✓ **Wash Your Hands** with soap and water after touching live poultry or objects in their environment. Wash your hands after touching shoes or clothing that have come in contact with live poultry or their environment. This is especially important for children, who frequently put their hands in their mouths.
- ✓ **Keep Poultry Out of Your Living Space.** Do not let live poultry inside your house or even on your patio, deck or porch.
- ✓ **Do Not Eat Where Poultry Live and Roam.** Your risk of infection rises if you eat where poultry live and roam.
- ✓ **Protect the Most Vulnerable.** Children under the age of five, adults older than 65 and people with weakened immune systems are the most vulnerable to infection and should not handle live poultry or related equipment.
- ✓ **Clean and Disinfect all Poultry Equipment Outdoors,** including cages, feed and water containers. According to the [University of Minnesota Extension](#), uncleaned coops frequently carry *Salmonella*. Always clean before disinfecting for best results. Those who clean chicken manure should wear a proper face mask and ensure good ventilation while working.
  - The US Department of Agriculture provides a handy [cleaning and disinfecting checklist for backyard poultry owners](#) and recommends applying a US Environmental Protection Agency (EPA)-registered disinfectant, such as chlorine bleach<sup>2</sup>, that is effective against avian influenza virus or other diseases of concern, such as salmonellosis. Information on the effectiveness of the disinfectant and disinfecting directions will be on the product label.
- ✓ **Chlorinate Poultry Drinking Water.** The [University of Minnesota Extension website](#) notes that routine chlorination of poultry drinking water to a minimum of 1-1.5 ppm free chlorine has been reported in research to reduce the spread of *Salmonella*.
- ✓ **Do Not Snuggle or Kiss Poultry or Let Children Do So,** as cute as chicks and ducklings may be.
- ✓ **When Collecting Eggs**
  - **Wash hands** after collecting eggs.
  - **Collect eggs often** to avoid eggs becoming dirty or breaking; throw away cracked eggs.
  - **Dirt and debris clinging to egg shells** can be removed with fine sandpaper, a brush, or cloth.
  - **Do not wash eggs** as cold water can pull bacteria into the egg.
  - **Refrigerate eggs** after collecting them.
  - **Cook eggs thoroughly** to destroy *Salmonella*, which could be present in eggs.

A breakfast of fresh eggs from the hens in the backyard coop is a delicious reward for the work that goes into raising poultry. Stay well and productive by being an informed backyard poultry farmer!

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<sup>2</sup> According to Clorox, *Salmonella* on surfaces can be destroyed with a solution of ½ cup of 8.25% chlorine bleach added to one gallon of water; apply to surface free of dirt and droppings (clean surfaces first) and leave wet for 5-7 minutes. Finally, rinse with plain water.