

Salmonella

Salmonella bacteria are commonly found in animals, especially birds and reptiles. Eggs can have *Salmonella* both inside the egg (usually in the yolk) and on the outside of the shell.

In humans, *Salmonella* can cause illness (salmonellosis) within 12-72 hours after eating the contaminated food (or food contaminated with the feces of infected animals).

Symptoms of salmonellosis include:

- ◆ headache, chills, fever (up to 105°F)
- ◆ stomach cramps
- ◆ diarrhea (sometimes bloody), vomiting

Severity of illness depends on the person's health, and the type and number of *Salmonella* ingested. Salmonellosis usually goes away within 7 days, but a small number of severe cases may cause lasting injury (including joint pain and arthritis) or death. **If you have symptoms, see a doctor.**

No one should eat undercooked eggs, but there are people more likely to get sick or seriously ill. These people include children, pregnant women, senior citizens, and people on certain antibiotics or with chronic illnesses.

To prevent egg-associated salmonellosis:

1. Cook all egg products thoroughly (to 145°F).
2. Wash hands and utensils after handling raw eggs (and other raw animal products).
3. Keep eggs refrigerated.
4. Eat foods, including milk, that are prepared from thoroughly-cooked eggs or are pasteurized.

Animal-Associated Salmonellosis

Pets may also shed *Salmonella* in their feces. Pets that carry the bacteria include reptiles such as turtles, lizards and snakes; and other pets including birds, chicks, ducks, frogs, bunnies, puppies, and kittens.

People may get *Salmonella* infection from their pets by not washing their hands after touching a pet; cleaning their pet's tank, aquarium or cage; or feeding their pet (pet food can also be contaminated with *Salmonella*).

Remember to always wash your hands with plenty of soap and warm water after handling your pet, its food, and before eating or preparing food for your family.



Thumper's Tip: Because reptiles commonly shed *Salmonella* bacteria when they go to the bathroom, they are not recommended pets for homes or childcare centers with children younger than 5 years old or with other immune-compromised people.

For more information contact:

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Also check our other brochures:

"Do I Have a Foodborne Illness?" "Salmonella"
"Reptile-Associated Salmonellosis" "Egg Safety"

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Easter Eggs

Seasonal Food Safety Series



www.bfhd.wa.gov



Eggs are often used seasonally for decorations and games. This brochure is designed to egg-ucate you on safe handling procedures to reduce the chance of illness associated with eggs.

Because raw eggs may have *Salmonella* or other bacteria, you will need to work with eggs carefully. **Wash your hands with warm water and soap before handling eggs and at every step of egg preparation** (including cooking, dyeing, and hiding).

Hard-Cooking Eggs

This method (from the American Egg Board) should produce eggs that have fully-cooked yolks. Eggs prepared this way also often have less of a green tinge (associated with overcooking), fewer cracks and are easier to peel.

- 1 Place cold eggs in a **single layer** in a saucepan.
- 2 Add enough **cold tap water** to come at least one inch over the eggs.
- 3 Cover and quickly **bring to a hard boil**.
- 4 **Turn off heat** and keep eggs covered.
- 5 Let eggs stand, **covered**, in the hot water 15 minutes for large eggs (12 minutes for medium, 18 minutes for extra large).
- 6 Immediately **run cold water over eggs** or plunge them in ice water until cooled.
- 7 **Refrigerate** in a clean, dry container.



Thumper's Tip: While fresh eggs can be kept refrigerated for 4-5 weeks, hard-cooked eggs should be used within 1 week. Hard-cooked eggs don't last as long as raw eggs because boiling removes the protective coating (applied by either the hen or the egg processor) that protects the egg's pores from contamination.

Easter Egg Tips

At all times: Shells are the egg's first line of defense—work with eggs carefully to prevent cracking them. If the shells crack, bacteria can get inside the eggs—eggs with broken shells should not be decorated, hidden or eaten. Wash hands often.

Dyeing eggs: If the eggs will be eaten, be sure to use a food-safe dye. Make sure to use cold eggs for decorating.



Thumper's Tip: Hard cooking the eggs should kill *Salmonella* bacteria, but will not keep the eggs from spoiling or getting re-contaminated. Refrigerate hard-cooked eggs before dyeing them, and keep them refrigerated when you're not using them.

To prevent re-contamination and to slow spoilage, keep the eggs refrigerated, dry and in a clean container (don't put them back in the egg carton) when you're done decorating them. **Be sure to wash your hands before and after you decorate the eggs.**

Hiding eggs: Eggs must be protected from sources of contamination like dirt, pets, lawn fertilizer and water and from heat like sunny spots. A safer option would be to keep edible eggs refrigerated and hide inedible, plastic eggs for the hunt. If you plan to eat the eggs you've hidden, be sure the eggs have not been out of the refrigerator for more than 2 hours (don't forget to include the time it took you to hide the eggs).

General Egg Tips

- Purchase clean, uncracked eggs (open the carton and check) from a refrigerated case.
- If you buy farm-fresh eggs, refrigerate them as soon as possible. Egg quality and safety drop at warm temperatures. Refrigerated, uncooked eggs should be good for 4-5 weeks after purchase.
- Refrigerate eggs in the coldest part of the refrigerator (not in the door).
- Wash hands and utensils with hot soapy water before and after contact with raw eggs.
- Don't leave eggs out of the refrigerator for more than 2 hours.
- Cook eggs thoroughly (to at least 145°F) and eat immediately. Eggs served sunny-side up, soft-boiled, or poached are generally not cooked hot enough to destroy *Salmonella* bacteria.
- Egg cartons used to store raw eggs should not be reused. Never store cooked eggs or other foods in an egg carton that was used for raw eggs.
- Chill hard-cooked eggs before dyeing.



Thumper's Tip: Cracked eggs, or eggs that have been out of refrigeration for more than 2 hours, may not be safe to eat and should be discarded.