



# Egg Safety and the Backyard Flock

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With more and more municipalities allowing individuals to have a backyard chicken coop, consumers are asking questions about the care and safety of eggs gathered from their own flock or from a local farmer.

Eggs are among the most nutritious foods on earth and can be part of a healthy diet. However, they are perishable just like raw meat, poultry, and fish. Poultry may carry bacteria such as *Campylobacter* and *Salmonella* that can cause illness to you and your family. Infected birds do not usually appear sick and even unbroken, clean, fresh shell eggs may contain harmful bacteria.

Because of nationwide recalls of shell eggs due to *Salmonella* contamination, we now understand that the ways in which shell-eggs can become contaminated vary widely. *Salmonella* can be introduced to shell eggs not only through the laying process, but also via contaminated poultry feed or bedding and from baby chicks (pullets) that may have become contaminated in a hatchery. None of these routes of contamination are unique to large animal husbandry operations.

Fortunately, there are several steps that you can take to help ensure safe, home-produced chicken eggs.

## Caring for the Flock

- Maintaining the flock in an enclosed shed is often a local requirement and will help protect the flock from predators and make egg collecting easier.
- Eggs will stay cleaner if the shed area is kept clean and dry. Maintain floor litter in good condition. Thoroughly clean and disinfect the shed **at least once a year**. Obtain an approved disinfectant from your feed store and apply according to directions.
- Allow one nest for every three to four chickens and make sure nests are large enough for your hens. To protect eggs, pad nests with straw or wood chips. Clean out nest boxes **once a week** to remove dirty litter and manure and replace with clean nesting material.
- Allow adequate nest space and plenty of clean nesting material to help to ensure clean eggs and limit egg breakage.
- Provide a perch above the floor over a dropping box away from the nests. Chickens will roost on the perch to sleep and defecate into the wire-mesh covered dropping box. Do not let hens roost in the nest boxes.

## Caring for the Eggs

- **Collect the eggs often.** Eggs that spend more time in the nest have an increased chance of becoming dirty, broken, or lower in quality. Collecting eggs **at least twice daily** is recommended, preferably before noon. Consider a third collection in late afternoon or early evening, especially in

hot or cold weather. Coated wire baskets or plastic egg flats are good containers for collecting eggs. Discard eggs with broken or cracked shells.

- **Cleaning.** Dirty eggs can be a health hazard. Eggs with dirt and debris can be **cleaned** with fine sandpaper, a brush, or emery cloth. If eggs need to be washed, the temperature of the water should be at least 20°F warmer than the egg. This will prevent the egg contents from contracting and producing a vacuum. It will also prevent microscopic bacteria from being pulled by vacuum through the pores of the egg. A mild, non-foaming, unscented detergent approved for washing eggs can be used. A dishwashing liquid that is free of scents and dyes is acceptable. Eggs can be sanitized by dipping in a solution of 1 tablespoon household bleach to 1 gallon of water before storage. **Dry eggs** before storing because moisture may enter the shell pores as eggs cool on refrigeration.
- **Storage.** Store eggs in the **main section of the refrigerator at 35°F to 40°F**; the shelves in the door tend to be warmer than interior shelves. If collected properly and stored in the refrigerator, eggs should have a **shelf life of 6 to 8 weeks**. Date the storage carton or container and use older eggs first. Older eggs will have flatter yolks and thinner whites, so they won't make a nice looking fried egg, and the whites won't whip up as nice. If you have more eggs than you can use, you can break them out of their shells and freeze them. Only freeze fresh eggs. Beat until just blended, pour into freezer containers, seal tightly, label with the number of eggs and the date. Add a small amount of salt, sugar, or corn syrup to prevent gelling and improve the keeping quality of the eggs. It's a good idea to note any additional ingredients on the freezer container. The whites and yolks may also be frozen separately.
- **Preparation.** Never eat eggs raw or undercooked. Undercooked egg whites and yolks have been associated with outbreaks of *Salmonella enteritidis* infections. To prevent illness from bacteria, cook eggs until yolks are firm and whites are set, and cook foods containing eggs thoroughly to 160°F. Use a food thermometer to be sure. Do not keep cooked or raw eggs at room temperature for more than two hours.



### Caring for Manure

- Compost chicken manure to proper temperatures to kill harmful bacteria before being used to fertilize garden plots that are used for growing fruits and vegetables. Un-composted manure can be a source of bacterial contamination for produce grown in the garden. Chicken manure can also be high in nitrates and may damage plants if applied directly. The best option often is to use chicken manure in flower gardens, shrub borders, and other nonfood gardens.

### Caring for Yourself

- Always wash your hands with soap and water after handling eggs, chickens, or anything in their environment.
- Do not wash feed and water dishes from the chicken shed in the kitchen sink.

## Sharing or Selling Eggs Collected on Your Farm

If you choose to share eggs from your flock with friends and neighbors it is important to follow the safety recommendations outlined in this fact sheet. Use generic egg cartons that do not display a store or brand name and provide the date eggs were collected. Plastic egg holders sold for camping or plastic egg trays available from farm supply stores are good options for distributing eggs because they can be washed and reused.

No license is needed if eggs are sold at the producer's farm. Clean, pack and keep eggs stored at 41°F or below.

A license is required to sell eggs off the farm. For information or to obtain a license, contact the Division of Food Safety of the Wisconsin Department of Agriculture, Trade and Consumer Protection at 608-224-4682.

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Adapted with permission from *Home-Produced Chicken Eggs* (Colorado State University Extension bulletin no. 9.377 (updated 5/12/2010)) by M. Bunning and J. Avens.

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