



## Keep Small Flocks Salmonella-free

**Precautionary steps on your hobby farm can keep your chickens and eggs safe from salmonella.**

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Take precautions to keep your small flock and their eggs free from salmonella.

The caged chicken versus free-range chicken debate seems to rage on even in light of the more than 500 million eggs recalled in recent weeks.

Most in the egg industry still insist that raising hens in battery cages is actually better for the hen and the safety of the egg. Just this year, the United Egg Producers, a leading U.S. egg industry trade group, announced that caging hens is better for food safety.

The U.K. egg industry takes the completely opposite stance. In the past five years, nine studies have been completed throughout the U.K., all of which indicate that egg operations with caged hens have higher incidences of salmonella. These studies were so convincing that the U.K. has enacted legislation making it illegal to cage hens anywhere in the U.K. beginning in 2012.

Even though U.S. studies seem to contradict those in the U.K., the U.S. stance that caged eggs are safe is starting to crack. California Governor Arnold Schwarzenegger signed state legislation to ban caged hens by 2015, and many food sellers, such as Wal-Mart, Safeway, Burger King, Wendy's and Subway, have committed to decrease the number of caged-hen eggs purchased.

I don't cage my hens. Do I have to worry about salmonella?

Does this let the small-flock farmer who free-ranges hens off the hook? Not hardly. All the studies in the U.S. and the U.K. found many other influences that increased the incidence of salmonella besides keeping the birds in cages. Darrell Trampel, DVM, a veterinarian and poultry expert at Iowa State University, says there are recorded cases of salmonella in all sizes and types of flocks, including those that are raised organically and free-range. It's important, even in the small flock, to take steps to reduce your chances of salmonella infection.

### Small Farm Biosecurity

Salmonella is transmitted among chickens through contact with fecal matter from infected birds or other animals. It's often carried from flock to flock on the clothes and shoes of farm visitors or the people who care for the chickens. It's important to restrict visitors to your flocks to limit the chickens' potential for exposure.

Salmonella is fairly resilient and long-lived. Trucks and other vehicles that might carry the bacteria from another facility should be routed through the farm so their path doesn't cross with that of the caretakers who might pick it up on their shoes.

Read about other tips for chicken disease prevention.

### Rodent Control

Salmonella is usually spread by mice and other rodents. It's important to keep the chicken feed in a sealed container. If hens feed outside, bring food in at night and store it in rodent-proof areas. Keep the coops in good condition and well-ventilated with tight construction to prevent mice from entering. Also eliminate weeds and piled debris that attract rodents in the chicken yard.

### Clean Coops

Remove manure and damp litter as it accumulates in the chicken coop. Clean waterers weekly and feeders regularly. Hang the feeders and waterers high enough to prevent the chickens from defecating or digging dirt into the containers. Clean and disinfect any used equipment immediately upon purchase, even if you aren't going to use it for a while.

### Vaccinate Your Flock

In the U.S., vaccines are sold in doses of thousands to accommodate the factory farm, which can make it tough for the small-flock farmer. Bud Wood, from Murray McMurray Hatchery, talks about the dilemma facing the small-scale poultry farmer.



“To be fully covered for salmonella, the birds need to be vaccinated multiple times. We could vaccinate them once here at the hatchery, but the customer would need to vaccinate them again twice more,” he says. “The biggest problem is we can only get the vaccine in 5,000 or 10,000 dose units, and it needs to be used within hours of opening.”

Small-scale farmers could go together to vaccinate their flocks, but careful coordination would be required to ensure viability of the vaccine. Watch for updates in vaccination distribution, and encourage veterinarians and legislators to make small quantities of the salmonella vaccine available to small-flock farmers.

#### Good Egg Hygiene

According to Gail Damerow, author of *Storey's Guide to Raising Chickens*, the first line of defense in keeping eggs safe to eat is to keep nests clean and lined with fresh litter. Eggs should be collected often and stored immediately after collection at 45 degrees F. Eggs that are seriously soiled, cracked or leaking should be discarded.

To be completely safe, eggs should be completely cooked with a solid yolk and firm white. For more information about egg handling, visit the [Egg Safety Center](#) and [FoodSafety.gov](#) websites.