Egg Safety: What You Need to Know

Fresh eggs, even those with clean, uncracked shells, may contain bacteria called Salmonella that can cause foodborne illness, often called “food poisoning.” FDA has put regulations in place to help prevent contamination of eggs on the farm and during shipping and storage, but consumers also play a key role in preventing illness linked to eggs. Protect yourself and your family by following these safe handling tips when buying, storing, preparing, and serving eggs or foods that contain them.

What is Salmonella?

Salmonella, the name of a group of bacteria, is a common cause of food poisoning in the United States. Most people infected with Salmonella develop diarrhea, fever, abdominal cramps, and vomiting 12 to 72 hours after infection. Symptoms usually last 4 to 7 days and most people get better without treatment. However, in some people, the diarrhea may be so severe that they need to be hospitalized. In these patients, the Salmonella infection may spread from the intestines to the blood stream, and then to other body sites and can cause death unless the person is treated quickly with antibiotics. Certain people are at greater risk for severe illness and include children, older adults, pregnant women, and people with weakened immune systems (such as transplant patients and individuals with HIV/AIDS, cancer, and diabetes).

FDA requires all cartons of shell eggs that have not been treated to destroy Salmonella to carry the following safe handling statement:

SAFE HANDLING INSTRUCTIONS
To prevent illness from bacteria:
keep eggs refrigerated, cook eggs until yolks are firm, and cook foods containing eggs thoroughly.

Eggs that have been treated to destroy Salmonella—by in-shell pasteurization, for example—are not required to carry safe handling instructions, but the labeling will usually say that they have been treated.
Buying

You can help keep eggs safe by making wise buying decisions at the grocery store.

• Buy eggs only if sold from a refrigerator or refrigerated case.
• Open the carton and make sure that the eggs are clean and the shells are not cracked.

Storing

Proper storage of eggs can affect both quality and safety.

• Store promptly in a clean refrigerator at a temperature of 40°F or below. Use a refrigerator thermometer to check.
• Store eggs in their original carton and use them within 3 weeks for best quality.
• Use or eat hard-cooked eggs (in the shell or peeled) within 1 week after cooking.
• Use frozen eggs within 1 year. Eggs should not be frozen in their shells. To freeze whole eggs, beat yolks and whites together. Egg whites can also be frozen by themselves.
• Refrigerate leftover cooked egg dishes and use within 3 to 4 days. When refrigerating a large amount of a hot egg-containing leftover, divide it into several shallow containers so it will cool quickly.

Preparing

Wash hands, utensils, equipment, and work surfaces with hot, soapy water before and after they come in contact with raw eggs and raw egg-containing foods.

• Cook eggs until both the yolk and the white are firm. Scrambled eggs should not be runny.
• Casseroles and other dishes containing eggs should be cooked to 160°F. Use a food thermometer to be sure.
• For recipes that call for eggs that are raw or undercooked when the dish is served, like Caesar salad dressing and homemade ice cream:
  – Use either shell eggs that have been treated to destroy Salmonella, by pasteurization or another approved method, or pasteurized egg products.

Serving

Follow these serving guidelines for eggs and egg dishes.

• Serve cooked eggs (such as hard-boiled eggs and fried eggs) and egg-containing foods (such as such as quiches and soufflés) immediately after cooking. Cooked eggs and egg dishes may be refrigerated for serving later but should be thoroughly reheated to 165°F before serving.
A NOTE ABOUT EASTER EGGS
Easter eggs should be hard-boiled before coloring. Do not eat them after hiding or playing with them. Bacteria and viruses picked up on the shells can be transferred to the edible part of the egg.

Never leave cooked eggs or egg dishes out of the refrigerator for more than 2 hours or for more than 1 hour when temperatures are above 90° F. Bacteria that can cause illness grow quickly at warm temperatures (between 40° F and 140° F).

For party planning, keep hot egg dishes hot and cold egg dishes cold:
- Keep egg dishes refrigerated until time to serve.
- Serve small platters of reheated egg dishes at a time to ensure the food stays at the proper temperature. Replenish as needed, or at least every 2 hours.
- Keep cold egg dishes on ice if they are going to stay out longer than 2 hours.

TRANSPORTING

For picnics, pack cooked eggs and egg dishes in an insulated cooler with enough ice or frozen gel packs to keep them cold. Transport the cooler in the passenger compartment of the car, not in the much warmer trunk. At the picnic area, put the cooler in the shade if possible and keep the lid closed as much as you can.

For school or work, pack cooked eggs with a small frozen gel pack or a frozen juice box.

ABOUT FOODBORNE ILLNESS

Know the Symptoms
Consuming dangerous foodborne bacteria will usually cause illness within 1 to 3 days of eating the contaminated food. However, sickness can also occur within 20 minutes or up to 6 weeks later. Although most people will recover from a foodborne illness within a short period of time, some can develop chronic, severe, or even life-threatening health problems. Foodborne illness can sometimes be confused with other illnesses that have similar symptoms. The symptoms of foodborne illness can include:

- Vomiting, diarrhea, and abdominal pain
- Flu-like symptoms, such as fever, headache, and body ache

Take Action
If you think that you or a family member has a foodborne illness, contact your healthcare provider immediately. Also, report the suspected foodborne illness to FDA in either of these ways:

- Contact the Consumer Complaint Coordinator in your area. Locate a coordinator here: http://www.fda.gov/Safety/ReportaProblem/ConsumerComplaintCoordinators
- Contact MedWatch, FDA’s Safety Information and Adverse Event Reporting Program: By Phone: 1-800-FDA-1088
  Online: File a voluntary report at http://www.fda.gov/medwatch
Safe Food Handling: Four Simple Steps

**CLEAN**
Wash hands and surfaces often

- Wash your hands with warm water and soap for at least 20 seconds before and after handling food and after using the bathroom, changing diapers, and handling pets.
- Wash your cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item.
- Consider using paper towels to clean up kitchen surfaces. If you use cloth towels, launder them often in the hot cycle.
- Rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten. Scrub firm produce with a clean produce brush.
- With canned goods, remember to clean lids before opening.

**SEPARATE**
Separate raw meats from other foods

- Separate raw meat, poultry, seafood, and eggs from other foods in your grocery shopping cart, grocery bags, and refrigerator.
- Use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
- Never place cooked food on a plate that previously held raw meat, poultry, seafood, or eggs unless the plate has been washed in hot, soapy water.
- Don’t reuse marinades used on raw foods unless you bring them to a boil first.

**COOK**
Cook to the right temperature

- Color and texture are unreliable indicators of safety. Using a food thermometer is the only way to ensure the safety of meat, poultry, seafood, and egg products for all cooking methods. These foods must be cooked to a safe minimum internal temperature to destroy any harmful bacteria.
- Cook eggs until the yolk and white are firm. Only use recipes in which eggs are cooked or heated thoroughly.
- When cooking in a microwave oven, cover food, stir, and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking. Always allow standing time, which completes the cooking, before checking the internal temperature with a food thermometer.
- Bring sauces, soups and gravy to a boil when reheating.

**CHILL**
Refrigerate foods promptly

- Use an appliance thermometer to be sure the temperature is consistently 40° F or below and the freezer temperature is 0° F or below.
- Refrigerate or freeze meat, poultry, eggs, seafood, and other perishables within 2 hours of cooking or purchasing. Refrigerate within 1 hour if the temperature outside is above 90° F.
- Never thaw food at room temperature, such as on the counter top. There are three safe ways to defrost food: in the refrigerator, in cold water, and in the microwave. Food thawed in cold water or in the microwave should be cooked immediately.
- Always marinate food in the refrigerator.
- Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.

For more information, contact the U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition’s Food and Cosmetic Information Center at 1-888-SAFEFOOD (toll free), Monday through Friday 10 AM to 4 PM ET (except Thursdays from 12:30 PM to 1:30 PM ET and Federal holidays). Or, visit the FDA website at [http://www.fda.gov/educationresourcelibrary](http://www.fda.gov/educationresourcelibrary)