
Egg Sales in Tennessee:

Requirements and Suggested Practices for Producers with Small Flocks

September 2021



Table of Contents

Introduction	1
Background on Egg Regulations	1
Small Producer Exemptions	2
Suggested Egg Handling Practices for Producers with Small Flocks	3
Example Procedures for Cleaning and Sanitizing Shell Eggs	4
Summary	5

Disclaimer

This publication is for educational purposes only and does not constitute legal advice nor is it intended to be a substitute for the services of a competent legal professional.

Authors

Megan Bruch Leffew
Extension Specialist
Center for Profitable Agriculture

Mark Morgan
Professor and Extension Specialist
Department of Food Science





Introduction

An increasing number of consumers are interested in purchasing local, farm-fresh eggs, creating opportunities for producers with small flocks to help meet this demand. Important aspects of business planning and risk management for small flock producers include understanding and complying with applicable regulations as well as providing safe products to consumers. This publication describes regulatory requirements for Tennessee producers raising, packing and selling eggs from their own flocks of fewer than 3,000 laying hens. The publication also provides suggested practices for cleaning, sanitizing, packaging and storing shell eggs to reduce food safety risks.

Background on Egg Regulations

The Tennessee Egg Law had established a permitting system within the state related to buying, selling or processing eggs. In July 2020, the Tennessee Egg Law was repealed. While there are no longer specific egg regulations within the state, producers must abide by federal egg regulations when marketing eggs within Tennessee or in other states. Although not required by federal regulations, producers interested in selling eggs across state lines should also contact the regulatory authorities in those states to determine if they have additional requirements beyond what is required at the federal level.

Many of the federal regulations are focused on safe handling of eggs to prevent food-borne illness from bacteria such as salmonella. Producers with small flocks of less than 3,000 laying hens that own and raise the hens and pack their own eggs are exempt from most federal regulations as described in the next section, Small Flock Exemptions. **Small flock producers are not, however, exempt from providing a safe, wholesome product to consumers or from food safety liability.** Since bacterial contamination can occur in eggs from any size flock, small flock producers should review these regulations to gain an understanding of the standard requirements and practices for handling fresh eggs.

What is considered an egg under these regulations?

For producers wanting to market eggs, an egg is generally defined as the shell egg of avian species such as chicken, duck, goose, turkey, guinea or quail (Egg Products Inspection Act, 2013 Food Code).

The small producer exemptions apply to eggs from these species. So, an egg producer would be exempt from the regulations if they own and raise fewer than 3,000 laying females and pack the eggs themselves. However, small producers are required to list the safe handling instructions on the cartons or package as described in the Small Producer Exemptions section of this publication.



Shell eggs are regulated by three federal agencies directed by multiple pieces of legislation:



1. The United States Department of Agriculture (USDA) Agricultural Marketing Service (AMS) administers the Shell Egg Surveillance program as part of the Egg Products Inspection Act (EPIA), 7 CFR 57 - <https://www.ams.usda.gov/rules-regulations/eggs/complying>. Under this mandatory program, handlers are inspected quarterly to verify that eggs meet a minimum of U.S. Grade B Quality, inedible and restricted class eggs are being disposed of properly, and that records are being maintained. USDA AMS also administers a voluntary egg quality grading program, which allows firms to use the U.S. Grade shield for marketing purposes. Under this legislation, shell egg handlers include firms with 3,000 or more layers, and firms that grade and pack eggs from other producers.
2. The USDA Food Safety and Inspection Service (FSIS) verifies shell eggs packed for consumers are labeled “KEEP REFRIGERATED” and stored and transported under refrigeration no greater than 45 degrees F as part of the EPIA as found in 9 CFR 590.50 - https://www.ecfr.gov/cgi-bin/text-idx?node=pt9.2.590&rgn=div5#se9.2.590_150.
3. The United States Food and Drug Administration (FDA) administers the Egg Safety Final Rule for producers with 3,000 or more laying hens. This rule requires safety standards for controlling pests, rodents and salmonella in flocks and requires testing, cleaning and refrigeration provisions to prevent salmonella - <https://www.fda.gov/food/eggs-guidance-documents-regulatory-information/egg-safety-final-rule>.

Small Producer Exemptions

As mentioned in the previous section, producers with fewer than 3,000 laying hens who own and raise the hens and pack the eggs themselves are exempt from many of the federal rules and regulations.

The safe handling instructions on egg cartons is required to comply with specific formatting according to the regulations ([21 CFR 101.17\(h\)](https://www.ecfr.gov/cfr/title21/chapterII/subchapterB/part101/section101.17)¹) and administered by the Food and Drug Administration:

- The text “**SAFE HANDLING INSTRUCTIONS**” should be in all caps and bold font.
- The required text should be placed in a hairline box on the top, side or in-lid of the egg carton. If the statement is located on the in-lid (inside the carton), the statement “Keep Refrigerated” must be placed on the top or side of the carton.

For eggs that are labeled or sold for use in food service, the statement may be on cartons or in labeling (invoices, etc.). Below is an example of the safe handling instructions.

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

There are no additional regulatory requirements for cleaning, sanitizing, labeling or refrigerating eggs produced under this exemption. Small producers are allowed to sell eggs to any market including direct to consumers, restaurants, grocery stores, institutions, convenience stores, etc. Note that this applies **only** to producers who own and are raising and packing their own eggs from fewer than 3,000 laying hens. To be eligible for this exemption, a producer cannot pack or sell eggs from another producer.

¹Find the regulation online at: https://www.ecfr.gov/cgi-bin/text-idx?node=pt21.2.101&rgn=div5#se21.2.101_117.




Suggested Egg Handling Practices for Producers with Small Flocks

While the lack of regulatory requirements makes it easier for small producers to supply eggs for sale, there is no scientific evidence that eggs from small producers have any less risk of foodborne illness. Producers of small flocks must be diligent in handling their flocks and eggs to reduce the risk of salmonella. In addition to raising healthy flocks in sanitary conditions, all producers should adopt standard practices for sorting, cleaning and sanitizing, refrigerating, packaging, labeling, storing and transporting eggs to enhance marketing efforts and reduce food safety risks. Suggested practices include:

1. Collecting eggs at least daily to decrease the number of dirty and cracked eggs. Use easily cleanable containers like coated wire baskets or plastic flats for collection. Do not stack eggs higher than five layers deep to prevent damage. Hold eggs below 60 degrees F and 70 percent humidity prior to cleaning. Do not rapidly cool eggs before cleaning. Clean eggs as soon as possible after collection and refrigerate, or refrigerate unwashed eggs within 36 hours of laying.
2. Effectively cleaning and sanitizing dirty shell eggs. (Example cleaning and sanitizing procedures are provided in the next section.)
3. Not selling eggs with cracks (also known as checks) or leaks.
4. Packaging eggs only in new and unused, clean cartons.
5. Developing a visually appealing label which clearly communicates:
 - Farm or producer name
 - Address
 - Safe Handling Instructions (as required by federal regulations)
 - Lot number or code date to identify potentially adulterated product in the event of a recall.
 - For ungraded or unclassified eggs, producers may omit a statement or mark the eggs as “Ungraded” or “Unclassified.”
6. Storing, transporting and selling eggs at a temperature below 45 degrees F, and preferably below 41 degrees F, to maintain quality and safety. To reduce the risk of salmonella, eggs gathered from laying hens should be refrigerated as soon as possible.
7. Storing eggs intended for sale in a designated refrigerator – not with products for the producer’s personal use.
8. Placing a thermometer in the refrigerator and/or cooler containing the eggs to help verify the appropriate ambient temperature is reached and maintained during storage, transport and when offered for sale.





Sunrise Farm Fresh Eggs
One Dozen - Ungraded
Keep Refrigerated

Packed ___(date)___

31490 County Road H
Somewhere, TN 99999

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

Figure 1: Example label for farm-fresh eggs.



Example Procedures for Cleaning and Sanitizing Shell Eggs

Example procedures are included for both dry and wet cleaning and sanitizing shell eggs. Note that not cleaning and sanitizing eggs correctly can cause foodborne illnesses.

Slightly dirty eggs can be dry cleaned with an egg brush or gently rubbed with a dry paper towel. Eggs with visible feces or other soil that cannot be removed by dry cleaning should be set aside for washing or disposal. If a damp cloth or paper towel (preferred) is used for cleaning, the water used to dampen the cloth should be sanitized and frequently changed, the damp cloth should be wrung out and not dripping before use, and dirty cloths should be washed, sanitized and dried before reuse.

Any brushes used for dry cleaning should be sanitized before and after use. Follow instructions for sanitizing food contact utensils on the sanitizer label.

Wet Cleaning

Small quantities of eggs can be easily washed by hand. Egg washing equipment for larger quantities can be found for sale on the internet. Wash eggs as soon as they are collected. This will help limit the opportunity for contamination and quality loss.

For either wet or dry cleaning procedures, the basic criteria for washing and sanitizing is the same. This includes using: hot water (with or without an unscented detergent), a sanitizing solution, rubber gloves to protect hands (optional), and a cleanable, nylon brush to remove soil (optional). Detergents and sanitizers selected should meet FDA regulations for processing foods.

Step 1: Washing

You can wash all eggs or just dirty eggs. If washing, eggs should be cleaned using hot water (100-120 degrees F). Ideally, the water should be 20-30 degrees F warmer than the egg to prevent cooling it during washing. This helps prevent bacteria from being pulled into the egg through its pores. An egg washing detergent can be added to the hot water if needed. Do not soak the eggs in the wash water. Dip and scrub or wash under running water. If dipping in a basin, change any dirty wash or rinse water regularly (e.g. every 3-4 dozen eggs). Rubber gloves can be used to protect hands from the hot water, detergent and sanitizer.

If using a detergent, detergents specifically for egg washing are recommended and can be found on the internet.

Step 2: Sanitizing

Any sanitizer can be used if approved for sanitizing shell eggs. To be approved, sanitizers must be registered with the Environmental Protection Agency (as evident by an EPA registration number) for sanitizing shell eggs and have detailed specifications regarding concentration and contact time. Check the label for any sanitizers you select. Here is an example label from a commonly available bleach product (Note that not all bleach products are approved for egg sanitation – so check the label carefully):

Brand X Bleach (EPA Reg. No. 5813-1) for Food Egg Sanitation

To sanitize food eggs: Thoroughly clean all eggs. Completely mix 5.5 ounces of this product with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature must not exceed 130 degrees F. Spray the warm sanitizer so that the eggs are completely wet. Allow the eggs to fully dry before packing. Do not rinse. The solution must not be reused to sanitize eggs.



To sanitize eggs with an EPA approved bleach product, after washing eggs (and rinsing with warm water if using detergent), producers may make a simple sanitizing solution using 1 tablespoon of chlorine bleach (5.25 percent sodium hypochlorite) in 1 gallon of warm water (100-120 degrees F but less than 130 degrees F). Wet eggs thoroughly (dipping works well) and allow to dry. No additional rinse is needed. Only clean and sanitize intact eggs, and check for cracks prior to sanitizing.

Checking the concentration of sanitizer in the solution periodically is important. A concentration of 200 parts per million (ppm) free chlorine is recommended when using bleach as a sanitizer. Free chlorine test strips are widely available. Check with restaurant supply stores. The concentration of free chlorine will drop over time and as more eggs are dipped in the same solution. The rate of drop depends on the cleanliness of the eggs. If concentration is below 200 ppm, prepare a new sanitizing solution.

Step 3: Air Dry Eggs

Allow eggs to air dry completely before packaging. Moisture on the surface can allow bacteria to more easily enter the pores in the egg over time. After drying, store cartons of eggs in refrigeration (41 degrees F or below) until sold.

Step 4: Wash, Rinse, Sanitize and Air-Dry All Food Contact Surfaces, Equipment and Utensils

Wash, rinse, sanitize and air-dry all food-contact surfaces, equipment and utensils after use each day.

Summary

Understanding and following egg sales regulations and suggested practices helps ensure a safe and wholesome food supply for consumers and reduces risk for producers. While Tennessee no longer has regulatory requirements specific for the state, producers must follow federal regulations. Only producers with fewer than 3,000 laying hens who own the hens, raise the hens and pack the eggs themselves are exempt from many of the federal rules and regulations. These small flock producers are only required to include safe handling instructions as specified in the regulations. However, all producers should also consider implementing suggested practices to enhance marketing efforts and reduce the risk of food safety liability.

Acknowledgments

This publication provides an update to egg sales regulations in Tennessee and is adapted from UT Extension publication W 646 A Guide for Farm to Consumer Egg Sales in Tennessee, authored by

Chuck Grigsby
former Extension specialist
Center for Profitable Agriculture

Megan Bruch Leffew
Extension specialist
Center for Profitable Agriculture

Faith Critzer
former associate professor and
Extension food safety specialist
Department of Food Science

The authors would like to thank the following people and organizations for their contributions to the publication:

Reviewers

Mike Brown
Tennessee Department of
Agriculture

Kevin Keener
University of Guelph

Nathan Miller
University of Tennessee
Department of Food Science

David Waddell
Tennessee Department of
Agriculture

Danny Withers
Tennessee Department of
Agriculture

**United States Department of
Agriculture**
Agricultural Marketing Service
(USDA-AMS)

Editor

Beth Hall Davis
Office of Marketing and
Communications

Designer

Mary Felstead



UTIA
INSTITUTE OF
AGRICULTURE
THE UNIVERSITY OF TENNESSEE

UTIA.TENNESSEE.EDU

Real. Life. Solutions.™

CENTER FOR
PROFITABLE AGRICULTURE
UTEXTENSION
INSTITUTE OF AGRICULTURE
A UNIVERSITY OF TENNESSEE - FARM BUREAU PARTNERSHIP



This material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28585.



SOUTHERN
EXTENSION
RISK
MANAGEMENT
EDUCATION



Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.