



# ***A GUIDE FOR FARM TO CONSUMER EGG SALES IN TENNESSEE***

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## INTRODUCTION

An increasing number of consumers are interested in purchasing local, farm-fresh eggs, and direct farm marketers are asking questions about the requirements for selling eggs in Tennessee. Understanding and complying with applicable regulations is an important step to producing high-quality eggs for market while reducing food safety risks.

Egg sales in Tennessee may be regulated by up to three agencies: the Tennessee Department of Agriculture, the US Department of Agriculture and the US Food and Drug Administration. These agencies are referred to as TDA, USDA, and FDA, respectively, throughout this publication. Egg sales regulations depend on the producer's flock size (i.e., the number of laying hens), whether eggs are purchased from other sources for resale, and whether the eggs are sold through retail or wholesale market channels.

Producers selling eggs from their own flocks of less than 3,000 laying hens must adhere to Tennessee's Egg Law (Tenn. Code Ann. § 53-2) and Egg Rules and Regulations (TDA's Division of Markets, Chapter 0080-5-4, [publications.tnsosfiles.com/rules/0080/0080-05/0080-05-04.pdf](https://publications.tnsosfiles.com/rules/0080/0080-05/0080-05-04.pdf)), which are administered by TDA Consumer and Industry Services. Much of Tennessee's egg marketing regulations apply generally to all eggs sold in the state, but additional marketing requirements apply to eggs sold by egg wholesalers and distributors.

Producers with larger flocks (3,000 or more laying hens) typically must comply with state and federal regulations. Federal regulations include the FDA's Egg Safety Rule (21 CFR Part 118) and the USDA's Egg Products Inspection Act, or EPIA (21 CFR Chapter 15). Because most producers in Tennessee have flocks with less than 3,000 laying hens, this publication does not include information about federal regulations. More information on federal regulations can be found at [tiny.utk.edu/FDAEggRegs](http://tiny.utk.edu/FDAEggRegs) and [www.ams.usda.gov/rules-regulations/eggs](http://www.ams.usda.gov/rules-regulations/eggs).

This publication focuses on the regulatory requirements for producers selling eggs in Tennessee from their own flocks of less than 3,000 laying hens.<sup>1</sup> It is important that farm egg producers understand and abide by the state's egg marketing regulations, which have been put in place to provide consumers a level of safety for the eggs they purchase. Topics discussed include regulations applicable for all eggs sold in Tennessee, and requirements specific to wholesale egg sales and egg distributors. Finally, an example procedure for cleaning and sanitizing shell eggs to meet regulatory requirements and maintain food safety is provided.

## RETAIL EGG SALES DEFINED

In this publication, **retail egg sales**—also referred to as direct-to-consumer egg sales—are defined as producers selling eggs from their own flocks directly to household consumers. Retail egg sales often occur at farmers markets or on-farm stands.

<sup>1</sup>Egg marketing requirements may vary from state to state. The regulations discussed in this publication apply to sales in Tennessee only. Producers interested in selling eggs across state lines should contact the regulatory authorities in those states to determine their specific requirements.

## WHOLESALE EGG SALES AND EGG DISTRIBUTOR DEFINED

**Wholesale egg sales** refer to eggs sold to an intermediary buyer who either resells the eggs or uses the eggs as an ingredient to produce and market a value-added food product. Wholesale egg sales often are made to grocery stores, convenience stores, restaurants and bakeries.

A producer is legally considered to be an **egg distributor** if he or she purchases eggs from other producers to resell. An egg distributor follows the same regulatory requirements as wholesale egg producers.

## REQUIREMENTS APPLICABLE TO ALL EGG SALES IN TENNESSEE (RETAILERS, WHOLESALERS AND DISTRIBUTORS)

The state's egg marketing regulations are found in the Tennessee Egg Law (Tenn. Code Ann. § 53-2) and the TDA's Egg Rules and Regulations (Division of Markets, Chapter 0080-5-4, [publications.tnsosfiles.com/rules/0080/0080-05/0080-05-04.pdf](https://publications.tnsosfiles.com/rules/0080/0080-05/0080-05-04.pdf)). Most of the state's egg marketing requirements apply to all eggs sold in Tennessee, regardless of flock size or market channel (retail or wholesale). These requirements primarily pertain to cleaning, packaging, labeling, storing, transporting and safely handling shell eggs. According to the Tennessee Egg Law and Egg Rules and Regulations, all egg marketers must:

1. **Effectively clean and sanitize shell eggs.**
  - An example cleaning and sanitization procedure is provided in the final section.
2. **Package eggs in new and unused, clean cartons.**
3. **Label egg cartons or other containers with type no less than ¼ inch in height that is plain, conspicuous, easy-to-read, and placed on top of all cartons. Egg carton labels should contain the following information:**
  - Producer name and contact information (address, city, and ZIP code).
  - The date in which the shell eggs were packed into the egg carton.
  - The quantity of eggs in the carton (i.e., one dozen, 12 each, etc.).
  - The words "Keep Refrigerated" on the carton.
  - For ungraded or unclassified eggs, mark as "Ungraded" or "Unclassified."
  - Include the Safe Handling Instructions statement shown below on the outside or inside of the egg carton lid.

An example of a label containing the required label components is provided in Figure 1. Producers should note that the Safe Handling Instructions statement alternatively could be placed on a separate label on the inside of the carton lid.

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

4. Hold eggs intended for sale in a designated refrigerator — not with products for the producer's personal use.
5. Store and transport eggs at a temperature suitable to maintain food safety. (The regulations indicate this temperature should be 45 degrees F or lower. However, the TDA now recommends a temperature of 41 degrees F or lower for maximum food safety.)
6. Place a thermometer in the refrigerator and/or cooler containing the eggs to help producers verify that the appropriate temperature is reached and maintained during storage, transport and when offered for sale.

Additionally, it is recommended, although not required, that producers add a lot number or code date on the carton in order to identify potentially adulterated product in the event of a recall.

TDA inspectors may visit the source farm to investigate if eggs found at retail are not effectively cleaned, sanitized or labeled, or are otherwise adulterated. Inspectors may also visit the source farm if a complaint is received.



Figure 1. Example egg carton label containing required components. Image not to scale.

## ADDITIONAL REQUIREMENTS FOR EGG WHOLESALERS AND DISTRIBUTORS

Some requirements for producers marketing eggs from their own flocks of less than 3,000 layers depend on the market channels through which eggs are sold (retail vs. wholesale). Producers selling eggs from their own flocks of less than 3,000 laying hens only to retail customers must adhere to the requirements described in the previous section. Producers wholesaling any of their eggs must follow additional wholesale marketing requirements. Wholesale egg marketing requirements also apply to egg distributors, which include producers reselling eggs purchased from other sources.

In addition to the general marketing requirements outlined in the previous section, producers involved with wholesaling or distributing eggs must:

1. Obtain an egg sales permit from TDA.
2. Grade and size eggs.
3. Adhere to additional labeling requirements.

The following sections provide more information about each of these additional requirements.

## Obtaining a TDA Egg Sales Permit

Wholesale egg producers and distributors should contact TDA Consumer and Industry Services staff at 615-837-5193 to start the egg permit application process. The producer will then be referred to a TDA inspector. An inspector will visit the producer to verify that the regulatory requirements for cleaning, sanitation, packaging, labeling, refrigeration, transportation, etc. are being followed. The inspector will also determine if the water source used for cleaning and sanitation should be tested for coliform bacteria. Inspections are typically conducted annually. The license year begins July 1 and ends June 30. The egg permit application fee is \$50 per year.

## Grading Eggs

Grading eggs is the process in which the exterior (shell soundness and cleanliness) and interior (yolk, white and air cell) are assessed, making it possible for a person to classify each egg into a grade classification (e.g., Grade AA, Grade A) according to quality factors. The interior of the egg is evaluated with a technique called candling. Eggs must be graded by a licensed grader, also commonly known as a certified egg candler. Producers can attend an egg candling course to become a certified egg candler. For more information concerning these classes, contact TDA's Consumer and Industry Services staff at 615-837-5193. More information on egg grading standards can be found in the USDA Egg Grading Manual: [www.ams.usda.gov/publications/content/egg-grading-manual](http://www.ams.usda.gov/publications/content/egg-grading-manual).

## Sizing Eggs

Many buyers will also request that eggs be sorted based upon size (e.g., jumbo, extra large, large). Standards for each size classification are also found in the USDA Egg Grading Manual.

## Additional Labeling Requirements

Egg packages often used by egg wholesalers and distributors (cases, boxes, etc.) must include an additional poster, sign or placard specifying that the eggs have been graded. The label should be no less than 6 x 3 inches in size, have type that is no less than ½ inch in height and should be plain, conspicuous and easy to read.

Eggs sold through wholesale market channels packaged in cases, boxes or other containers also should include an egg classification certificate that is at least 2 inches by 4 inches in size. The certificate should include:

1. Egg wholesaler and/or distributor's name and address.
2. Egg candler's license number.
3. Date of candling.
4. Classification information regarding grade and size of eggs.

## EXAMPLE STANDARD OPERATING PROCEDURE FOR CLEANING SHELL EGGS

Meeting egg marketing regulatory requirements requires proper cleaning and sanitation in order to maintain food safety for the people who consume the eggs. Many producers are unsure of what documentation and procedures they should follow to adhere to the egg cleaning requirements. To assist with implementation, an example Standard Operating Procedure<sup>2</sup> is provided below to illustrate proper cleaning and sanitizing techniques. It is important to remember that this is provided as an example, and each operation may have alternate SOPs for cleaning shell eggs, which also achieve the desired objectives. This example has been based on the use of a chlorine sanitizer. As described below, other sanitizers approved for washing shell eggs may also be used. Producers may tailor the example SOP provided in this publication to fit their operation's egg cleaning protocol by downloading the "Standard Operating Procedure for Cleaning Shell Eggs" Word document, available at [tiny.utk.edu/EggSOP](http://tiny.utk.edu/EggSOP).

### PURPOSE

To remove and inactivate foodborne pathogens on the shell of the egg.

### SCOPE

This procedure applies to employees of (LIST FARM NAME HERE) who are involved in the handling and preparation of shell eggs for sale.

### KEY WORDS

Shell eggs, Foodborne pathogens, Washing

## INSTRUCTIONS

### Step 1: Prepare a chlorine sanitizing solution to be used as the final step in the egg cleaning process.

1. Fill a container with potable water (no generic E. coli per 100 milliliters). Municipal water or well water that has been tested will meet these requirements. Water should be at least 20 F warmer than the shell egg temperature, but should not exceed 40 F warmer than the warmest egg. Additionally, chlorine gas will begin to evolve if the temperature is too high. For these reasons, limit the upper temperature to no more than 130 F.
2. Add a sanitizer to the water, adhering to the label instructions of an EPA-registered sanitizer for washing shell eggs. In this example, we have selected a sodium hypochlorite (bleach) solution, which should have a concentration of 200 parts per million (ppm) free chlorine (Figure 2).
  - 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 this purpose and have detailed specifications regarding concentration utilized and contact time. There are several categories of sanitizers covered on the NSF website ([nsf.org/usda/PSNCListings.asp](http://nsf.org/usda/PSNCListings.asp)): Q3, quaternary ammonium chloride sanitizers; Q4, chlorine sanitizers; and Q6, iodine sanitizers. Contact the chemical manufacturers to see information specific to the product's label, contact time and chemical concentration required. A monitoring method for determining compound concentration, such as test strips, should also be utilized to verify concentration. Unfortunately, there are very few over the counter options available. Before using any sanitizer, assure that a copy of the approved EPA label is on file.

#### Brand X Bleach (EPA Reg. No. 5124-2) for Food Egg Sanitation

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

Figure 2. Example sanitizer label depicting a sodium hypochlorite (bleach) sanitizer labeled for washing shell eggs.

3. Ratio of 1 tablespoon per 1 gallon of water should achieve a 200 ppm free chlorine solution, based upon label instructions.
4. Check the solution to verify free chlorine concentration is 200 ppm.
  - Test strips can be purchased from many suppliers. Make sure to purchase strips that are for determining free chlorine concentration, also referred to as available chlorine. DO NOT purchase test strips for measuring total chlorine.
  - A high-range test strip will be necessary that is capable of measuring a 200 ppm concentration solution.

<sup>2</sup>Standard Operating Procedures (SOPs) are written food safety practices and procedures.

- Check the pH of the wash water to assure that it is not higher than 7.5 using test strips according to the manufacturer's instructions.
  - Test strips can be purchased from numerous suppliers.
  - If the pH is above 7.5, add vinegar to reduce the pH below 7.5.
  - Controlling pH is a requirement specific to chlorine sanitizers and most likely will not be needed if another sanitizer is selected.
- Fill the chlorine solution into a spray bottle or another container from which eggs can be submerged or sprayed as the final step of rinsing.

## Step 2: Prepare a detergent rinse using potable water.

- Eggs should be washed first in a food-grade detergent to remove visible soil and feces. Water temperature should be at least 20 F and no more than 40 F warmer than the warmest eggs.
- It is preferred that eggs are sprayed with a detergent instead of immersing them. This will limit the possibility of contaminating clean eggs with microorganisms. If immersion is used, the time period should not exceed 20 seconds, and water should be closely monitored for cleanliness.
- When selecting a food-grade detergent, make sure it is approved for egg washing. To assist, the NSF has compiled a list of USDA-approved egg washing compounds. This list can be found at [www.nsf.org/usda/PSNCListings.asp](http://www.nsf.org/usda/PSNCListings.asp). From this site, select "Nonfood Category Q1," shell egg cleaning compounds, and click "Search," as shown below.

**White Book™ - Nonfood Compounds Listing Directory**

Note: If you want to search by Company Name and/or Product Name, Just type the first few letters of the company's name and/or product's name. To select multiple categories, hold the "Ctrl" key while making your category selections.

Company Name: \_\_\_\_\_ Product Name: \_\_\_\_\_ Registration Number: \_\_\_\_\_

Country: ALL State: Colorado, Connecticut, Delaware, Washington

Nonfood Categories:
 

- PX. Ingredients for use in miscellaneous Products
- Q1. Shell egg cleaning compounds**
- Q2. Shell egg destaining compounds
- Q3. Shell egg sanitizing compounds
- Q4. Shell egg sanitizing compounds
- Q5. Foam control compounds

This will generate a list of compounds, organized by manufacturer, which are registered as shell egg cleaners, as shown below. From this list, producers should evaluate which manufacturer/product will work best for their specific operation. As an example, visit the Spartan Chemical Company's website linked in the NSF list and review the information for the Egg So Clean Egg Washing Compound.<sup>3</sup>

<b>Spartan Chemical Company, Inc.</b>		<a href="#">Visit this company's website</a>
Eggs So Clean™ Egg Washing Compound	132122	<b>Q1</b>
Eggs So Clean™ pH Booster	132121	<b>Q1</b>
<b>Stearns Packaging Corporation</b>		<a href="#">Visit this company's website</a>
HYPO-CHLOR Formula 12.5	135240	<b>B1, D2, G4, Q1, Q2, Q4</b>
<b>Thatcher Company</b>		<a href="#">Visit this company's website</a>
ALKACHLOR	130244	<b>A2, Q1</b>
CC-95	130223	<b>A2, Q1</b>
EGG WASH POWDER	130266	<b>Q1</b>
LIQUID CHLORINATED CLEANER	077128	<b>A2, Q1</b>

<sup>3</sup>This product is used as an example for educational purposes only. The use of the product as an example does not constitute an endorsement of a particular brand or manufacturer.


## STEP 2 INSTRUCTIONS CONT.

Once at the company's website, a search for a specific product will typically lead to more detailed information. Continuing with the Egg So Clean Egg Washing Compound example, the information from Spartan Chemical's website is shown and can be used to evaluate factors important to a purchase decision.

Producers should investigate what quantities products are sold in, as some companies have a minimum order requirement. Typically, direct farm marketers of eggs will want to purchase volumes of 5 gallons or less at a time, based upon their scale of production. Producers will also want to evaluate directions of use, which are commonly accessible through the website, to make sure they align with their capabilities. Lastly, determine where the product can be purchased. Typically this will be through a local distributor or, in some cases, over the internet.

# EGGS-SO-CLEAN® EGG WASHING COMPOUND

(312905) [Share](#) [Mail](#) [Print](#)




## PRODUCT DETAILS

A uniquely formulated washing compound specifically designed for use in shell egg washing applications. Non-chlorinated, Eggs-So-Clean Egg Washing Compound, is a combination of several surfactants that aid in cleaning and preventing soil from redepositing on the eggshell. Provides efficient egg washing by quickly removing chicken feces, blood, dirt, mud, feathers, insects and other soil from the eggshell.

COLOR	Clear
DILUTION	0.5 oz./gal.
PH	13.5
SCENT	Mild Fragrance

**Certifications**

 KOSHER PRODUCT

[Where to Buy >](#)

## PACKAGING VARIATIONS

PRODUCT CODE	BAR CODE	SIZE
<a href="#">312905</a>	00753727034932	5 GAL PAIL
<a href="#">312955</a>	00753727038374	55 GAL DRUM
<a href="#">312960</a>	00753727039869	275 GAL TOTE

[Where to Buy](#)

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### Step 3: Prepare a potable water rinse with water that is at least 20 F warmer than the shell egg temperature.

1. Eggs should be thoroughly rinsed with potable water to remove any detergent prior to applying sanitizer.
2. Similar to the washing step above, spraying is greatly preferred to immersion.

### Step 4: Eggs should be thoroughly coated in the chlorine sanitizer previously prepared in Step 1.

1. The eggs can be sprayed with the sanitizer solution or submerged, as the label indicates.

### Step 5: Allow eggs to air dry and store in refrigeration (41 F or below) until sold.

### Step 6: Wash, rinse, sanitize and air-dry all food-contact surfaces, equipment and utensils after use each day.

## SUMMARY

Understanding and following egg sales regulations helps ensure a safe and wholesome food supply for consumers and reduces risk for producers. The regulatory requirements of egg sales for Tennessee producers depend on the producer's flock size, whether eggs are purchased from other sources for resale and market channels used to sell eggs (retail or wholesale). Figure 3 summarizes the requirements for retailing, wholesaling and distributing eggs in Tennessee for producers with less than 3,000 laying hens.

To recap, egg producers with less than 3,000 laying hens who only sell eggs from their own flock directly to end-consumers are required to comply with Tennessee's general egg marketing requirements specified in the Tennessee Egg Law and Egg Rules and Regulations. Producers retailing eggs solely from their own flocks of less than 3,000 laying hens are not required to obtain a TDA-issued egg sales permit or grade eggs. Producers with less than 3,000 laying hens who sell eggs through wholesale market channels or who buy eggs to resell (i.e., distribute) are required to meet the same requirements for cleaning, sanitation, packaging, storage, transport, etc. Further, these wholesalers and distributors must obtain an egg sales permit from TDA, grade eggs for market and follow additional labeling requirements.

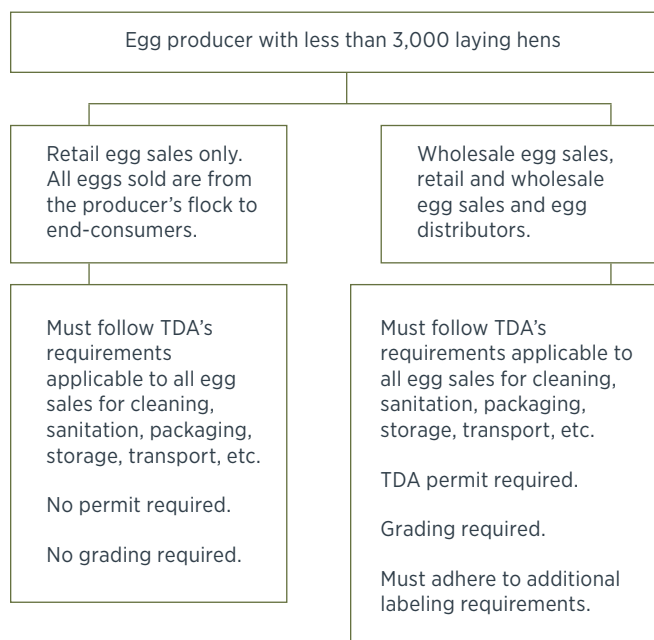


Figure 3. Summary of requirements for egg sales in Tennessee for producers with less than 3,000 laying hens.

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