

# **SMALL FLOCK EGG PRODUCERS WORKSHOP**



Presented by:

California Department of Food and Agriculture,  
Egg Safety Quality Management

# Small Flock Egg Producers Workshop

California Department of Food and Agriculture  
Egg Safety and Quality Management  
Small Producer Workshop Team

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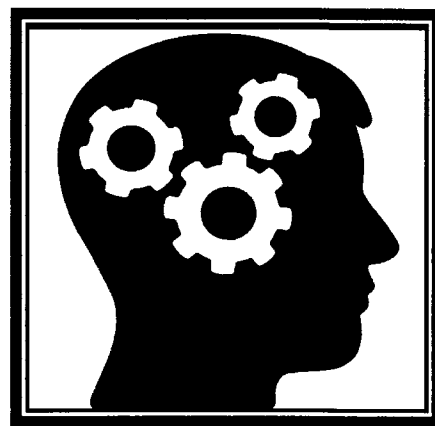
Egg Safety & Quality Management

<https://www.cdffa.ca.gov/ahfss/mpes/esqm.html>

Small Producer Outreach Program

<https://www.cdffa.ca.gov/ahfss/mpes/spop.html>

# *Top Take Aways Learning Objectives*



*Welcome! In this interactive workshop, you will learn all about chickens and eggs as well as selling regulations that are necessary elements for creating a safe and wholesome food product.*

**After your active participation in this workshop, you will be able to:**

## **Module One – Biosecurity**

- Understand importance of biosecurity
- Understand what good biosecurity is
- Implement biosecurity procedures at your facility
- Contact the Sick Bird Hotline

## **Module Two – Grading and Labeling**

- Know what the CDFA labeling regulations are
- Determine grade using the air cell
- Identify internal and external egg defects
- Candle eggs for internal defects

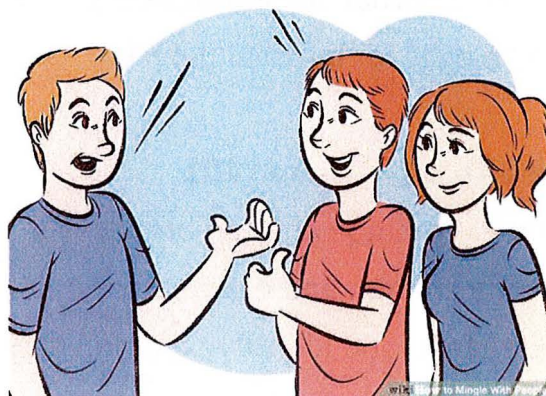
## **Module Three – Chicken 101**

- Identify common chicken breeds
- Identify chicken and egg anatomy
- Understand and identify common diseases
- Contact the Sick Bird Hotline

# Ice Breaker

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- Goal: to get to know your fellow classmates. This training will be more fun and you'll walk away with more information the more the class interacts with each other.
- Form groups of 3+ people.
- Talk amongst your group and come up with 3 things everyone in the group has in common.
  - For Example 1. everyone owns chickens, 2. everyone likes tacos and 3. no one has broken a bone.



# *Kahoot*

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- Goal: to get you interacting with the class and excited about class today. You'll have the opportunity to show what you know or learn something new. Gives the trainers an idea of the knowledge in the room.
- One person from each team volunteer to be the designated buzzer hitter
- Listen for the question
- Discuss amongst your table group
- Hit the buzzer when you know the answer
- First team to hit their buzzer and give the correct answer scores 1 point

**WINNER WINNER!**

Top 3 scoring teams get control of today's breaks!

# What I learned...

Question	Answer
How is grade determined?	
What disease can cause cyanosis of the comb and wattle?	
Why do we candle eggs?	
What is your birds best defense?	
What types of learners are chickens?	
Who needs to register with CDFA?	
What is the most important thing to do on a regular basis as a bird owner?	
How many hours of light per day does a hen need to lay an egg?	
What is IRQ?	
What is Biosecurity?	
Where is the pigment that gives the shell it's color deposited?	
What should you do to used equipment you purchase before putting it in with your birds?	

# Biosecurity

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## **Learning Objectives:**

- Understand importance of biosecurity
- Understand what good biosecurity is
- Implement biosecurity procedures at your facility
- Contact the Sick Bird Hotline

# Biosecurity Notes...

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About biosecurity:

About disease outbreaks and food recalls:

About selecting and quarantining new birds:

About recognizing signs of disease/illness and who to contact for help:

About a biosecurity plan:



# Concept Corner #1

## *All about diseases*

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**Activity:** Disease matching game

**Purpose:** To identify common disease symptoms

**Instructions:** Read all instructions. Choose a new group facilitator. Set a timer!

- A. Facilitator:** Open the game envelope and put the Disease, Description/Symptoms and Picture cards on the table. Pass out the cards. Keep the answer key closed to show the group when the game is done.
- B. Group:** Distribute the cards amongst yourselves. Take turns reading them, discuss and agree on matching the disease with the correct description/symptom and picture cards. Place them in the appropriate category. Guessing is ok!
- C. Facilitator:** Check the answers when done. Give yourselves a round of applause if you got them all correct. Discuss any discrepancies between the answer key and the group's answer.
- D. Group:** Mix up the cards and put all back in the envelope for the next group.
- E. Facilitator:** After you have finished, If time allows, discuss the following questions with the group:
  1. What caught your attention?

# Concept Corner #2

## *Biosecurity Scenarios*

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**Activity:** Biosecurity Scenarios

**Purpose:** To problem solve different biosecurity issues that are common amongst backyard bird owners

**Instructions:** Read all instructions. Choose a new group facilitator. Set a timer!

- A. **Facilitator:** Open the game envelope and pull out the color scenario card that matches you group color. Read the scenario to the group.
- B. **Group:** Listen carefully to your scenario. Identify the biosecurity areas.
- C. **Facilitator:** Write the biosecurity areas on the provided blank sheets of paper. Please do not write on scenario cards.
- D. **Group:** Brainstorm and share methods that will help lower the biosecurity risk for each of the problem areas. Use real life experience or even new ideas to help problem solve.
- E. **Facilitator:** Return the scenario card to the game envelope and take your groups ideas paper with you. You will need it later.
- F. **Here is some space for some notes to take home:**

# Concept Corner #3

## *Biosecurity & Chicken Jenga*

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**Activity:** Question Jenga

**Purpose:** To test your knowledge of biosecurity and chickens

**Instructions:** Read all instructions. Choose a new group facilitator. Set a timer!

- A. Group:** Take turns pulling a loose block out. Read the question number out loud for the facilitator. Then read the question out loud and answer the question. If you don't know the answer take a guess or ask the group for help. Then put the block on top of the stack. Repeat until someone knocks the tower over. Then re-stack and start again (time permitting).
- B. Facilitator:** Pull out the answer key and follow along providing the correct answer for any of the questions not known.
- C. Group:** Set the game up for the next group and return the answer key to the envelope.

**Here's a spot for any interesting questions you want to remember:**

# Concept Corner #4

## *Breeds Game*

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**Activity:** Breeds Matching Game

**Purpose:** To identify common chicken breeds

**Instructions:** Read all instructions. Choose a new group facilitator. Set a timer!

- A. Facilitator:** Open the game envelope and put all the cards on the table. Keep the answer key closed to show the group when the game is done.
- B. Group:** Distribute the statement cards amongst yourselves. Take turns reading them and then discuss and agree on which description and picture match. Place them in the appropriate category. Guessing is ok!
- C. Facilitator:** Check the answers when done. Give yourselves a round of applause if you got them all correct. Discuss any discrepancies between the answer key and the group's answer.
- D. Group:** Mix up the cards and put all back in the envelope for the next group.

# Biosecurity Notes...

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# Biosecurity Methods:

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Procure birds from NPIP approved "SE  
Clean" source

- Feed store
- Hatchery
- Online order

Ask Questions

- Have you been around other poultry in the past 24, 48 or 72 hours?
- Do you own birds of any kinds?
- Have your birds shown any signs of illness or disease?
- Will you please spray your shoes with disinfectant and wash your hands?

Limit Visitors

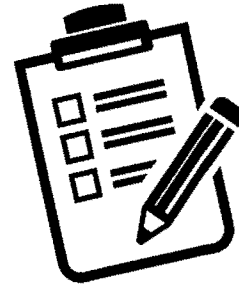
- Authorized personnel ONLY
- Property signs declaring bio secure area
- Not allowing visitors access to birds
- Traffic flow youngest to oldest

Cross Contamination

- Shower and change clothes before attending to birds
  - Wash hands frequently – including before and after
  - Disinfect shoes
  - Designated farm boots
  - Clean and disinfect equipment
  - Avoid porous equipment and tools
-

# Biosecurity Methods:

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## Prevention of stray animals and wild birds

- Secure Enclosure using netting and fencing
- Use of guardian animal to keep unwanted animals out
- Store feed in metal barrels and clean up feed spills immediately

## Rodent and Pest Control

- Use fly control methods such as fly traps and sticky tape
- Use rodent control methods such as mouse traps and t-pipe bait stations

## Harborage

- Mow grass and weed on a bi-weekly basis to keep vegetation low
- Don't store any equipment within 10' of chicken house

## Cleaning and Disinfection

- Clean manure and soiled bedding bi-weekly
- Provide good ventilation
- Repair any water leak sources within 24 hours
- Clean and sanitize quarantine pen after each flock
- Clean and sanitize housing as well as feeders, waterers, etc. after each flock

## Egg Processing and Refrigeration

- Collect and wash all eggs within 36 hours of lay
- Follow egg washing procedures
- Refrigerate eggs immediately following wash

# Biosecurity Plan Example

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Biosecurity Category	What I Can Do
Procure birds from NPIP approved source	-Talk to my feed store -Check online ordering sources to see if they are NPIP approved "SE Clean"
Limit Visitors	-Authorized personnel (myself and veterinarian) ONLY are allowed access to birds
Cross Contamination	-Wash hands before and after attending to birds -Have a dedicated pair of farm boots that get washed and disinfected with Lysol spray once a week -Shower and change clothes before attending to birds after being around other birds
Prevention of stray animals and wild birds	-Have a guard dog to keep wild birds and stray animals away from my birds. Dog is to never leave chicken area. -Use netting and chicken wire where possible to prevent stray animals and wild birds from mingling with my chickens
Rodent and Pest Control	-Use fly traps and sticky tape to reduce flies. Change these bi-weekly or more if necessary -Use rodent t-pipes with bait. Change bi-weekly or more if necessary
Harborage	-Keep weeds and grass cut down -Keep feed in metal barrels and sweep up any spilled feed
Cleaning and Disinfection	-Remove manure and soiled bedding a minimum of twice a month -Clean and disinfect feeders, waterers, enclosure, nest boxes, etc. in quarantine after isolation timeframe and in established flock after any signs of illness
Egg Processing and Refrigeration	-Collect eggs within 36 hours of lay, wash immediately using established washing procedure and refrigerate



# Create a Biosecurity Plan

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## *Ways I can add biosecurity to my flock*

Biosecurity Category	What I can do
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Procure birds from NPIP approved source

Ask Questions

Limit Visitors

Cross Contamination

Prevention of stray animals and wild birds

Rodent and Pest Control

Harborage

Cleaning and Disinfection

Egg Processing and Refrigeration

# Grading and Labeling

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## **Learning Objectives:**

- Know what the CDFA labeling regulations are
- Determine grade using air cell
- Identify internal and external egg defects
- Candle eggs for internal defects

# Grading and Labeling Notes...

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About Registration, Labeling and Signage:

About Egg Washing:

About Defects:

About Grades:

Other Notes:

# Concept Corner #1

## *Candling*

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**Activity:** Learning to candle eggs for defects

**Purpose:** To identify internal and external defects by candling

**Instructions:** Choose a new facilitator and read all instructions to the group. One of the instructors will be available for assistance or any questions. Set a timer!

- A. **Facilitator:** Make sure every group member has a form and pen/pencil
- B. **Group:** There are 5 candling stations, split up into groups of 1-2 people per station (facilitator included). Look at each of the 10 eggs at your station and try to identify any internal or external defects you see (guessing is ok!). Write the defect down on your answer form (next page) under the number marked on the egg.
- C. **Group:** Once all group members at each station have identified all 10 eggs' defects pull out the answer key and see how you did. Give yourselves a round of applause if you got them all correct.
- D. **Facilitator:** If time allows, lead a group discussion on what defects were identified and what was learned.

# *Candling Answer Form*

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1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

# Concept Corner #2

## *Group Discussion*

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**Activity:** Network and Discussion

**Purpose:** To reflect and share what you learned and network

**Instructions:** Choose a new facilitator and read all instructions to the group. Set a timer!

- A. Facilitator:** Lead a group discussion
- B. Group:** Reflect and share what new things you learned or things you do at your facility related to grading, labeling and marketing of your eggs.
- C. Group:** If time allows share names and numbers to build a networking group for help.

**Notes:**

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# Concept Corner #3

## *Matching Game*

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**Activity:** Defect Matching Game

**Purpose:** To identify internal and external defects

**Instructions:** Read all instructions. Choose a new group facilitator. Set a timer!

- A. Facilitator:** Open the game envelope and put the Defect, Description and Picture cards on the table. Pass out the statement cards. Keep the answer key closed to show the group when the game is done.
- B. Group:** Distribute the statement cards amongst yourselves. Take turns reading them and then discuss and agree on which description and picture match with which defect. Place them in the appropriate category. Guessing is ok!
- C. Facilitator:** Check the answers when done. Give yourselves a round of applause if you got them all correct. Discuss any discrepancies between the answer key and the group's answer.
- D. Group:** Mix up the cards and put all back in the envelope for the next group.

# Concept Corner #4

## *Labeling*

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**Activity:** Identifying labeling errors

**Purpose:** To learn how to correctly label your egg cartons or signage

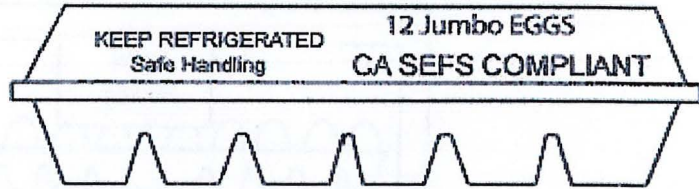
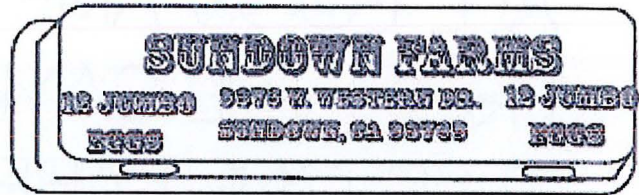
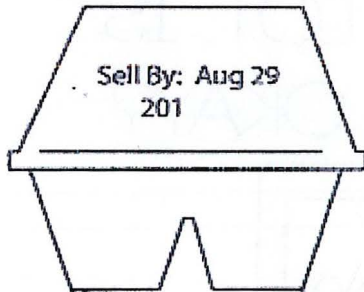
**Instructions:** Choose a new facilitator and read all instructions to the group. Set a timer!

- A. Group:** Flip to pages 24-26 and identify the errors on each carton label or egg signage
- B. Facilitator:** When everyone is done spotting the errors, check the answer key so group members know how they did. Then return the answer key for the next group.

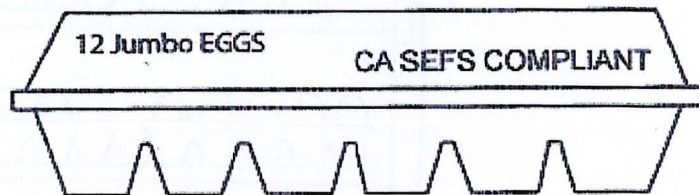
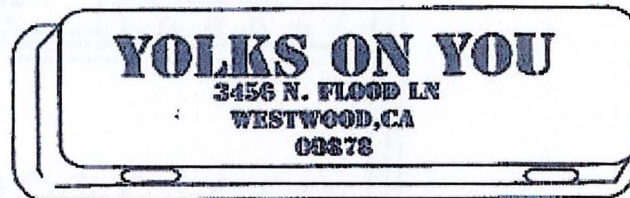


# CARTON QUIZ

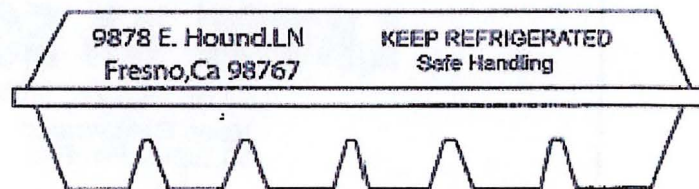
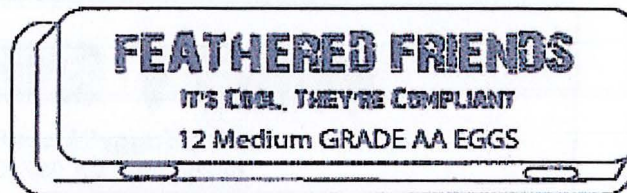
1.



2.



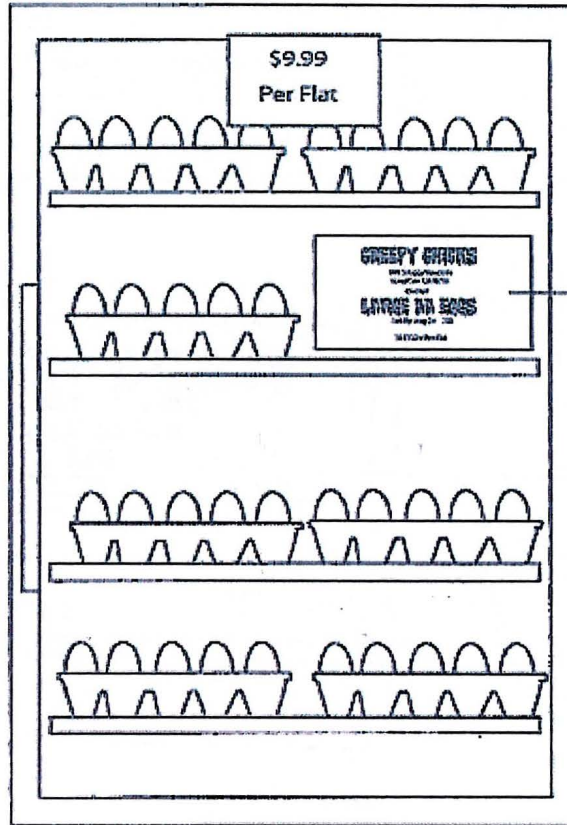
3.



4.

# SCENARIO 1

ALL EGGS ARE ON FLATS FROM THE SAME LOT. IS THIS ONE LABEL OKAY?



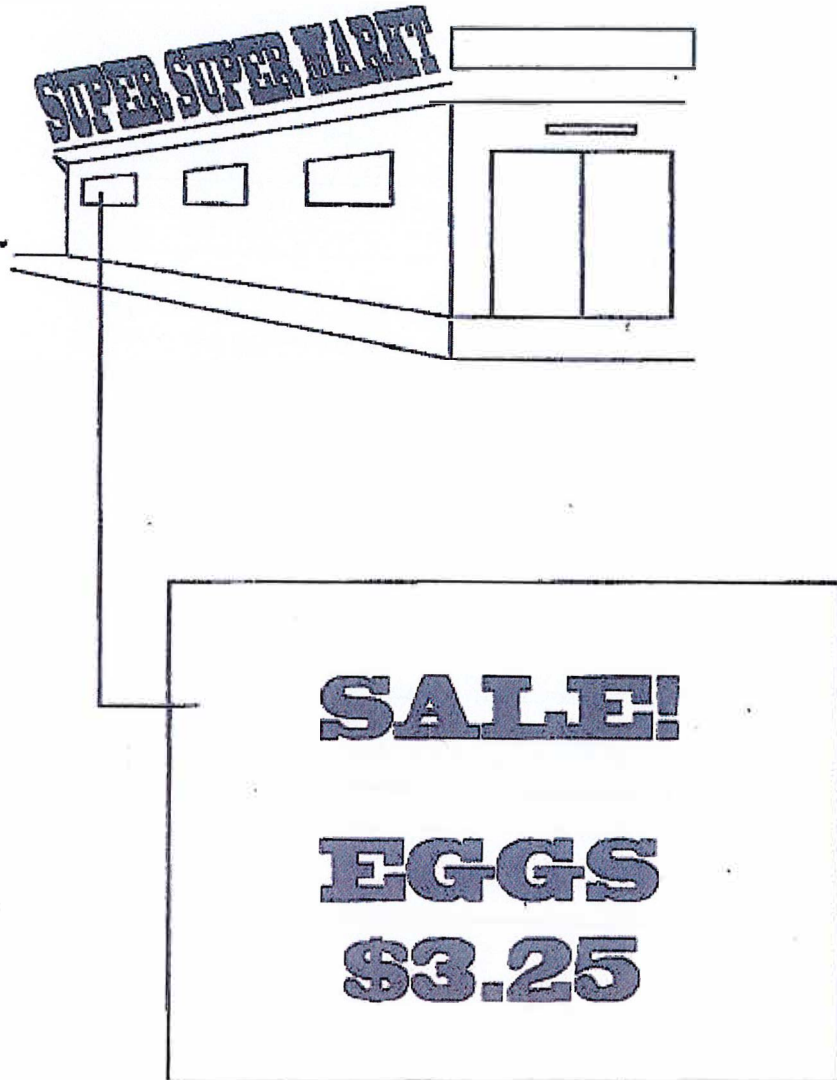
**CREEPY CHICKS**  
999. S Foggy Woods Rd.  
ScaryPlace, CA 96780  
CA 0987  
**LARGE AA EGGS**  
Sell By: Aug 24 208  
Keep Refrigerated  
30 EGGS Per Flat

**CA SEFS COMPLIANT**

5.

# SCENARIO 2

THE LOCAL SUPERMARKET OR  
ROADSIDE STAND HAVE EGGS FOR SALE.  
IS THIS SIGN OKAY?



# Grading & Labeling Notes...

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# Chicken 101

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## **Learning Objectives:**

- Identify common chicken breeds
- Identify chicken and egg anatomy
- Understand and identify common diseases
- Contact the Sick Bird Hotline

# Chicken 101 Notes:

About Chicken and Egg Anatomy and Shell Color:

About Reproduction, Fertilized Eggs and Brooding Chicks:

About Chicken Society:

About Molting, Vaccinations and Diseases:

About Sick Bird Hotline and Proper Disposal:

# Chicken 101 Notes...

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# Resources

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- Biosecurity & Disease Summary
- Grading and Labeling Summary
- Common Egg Defects
- Chicken 101 Summary & Sources
- CDFA District Map w/ Contacts
- CDFA Egg Handler Registration Form
- Air Cell Gauge
- Julian Calendar
- NPIP Sheet
- Quick Reference Guide
- Suppliers
- FDA Guidelines for Cleaners
- Small Producer Contacts and Resources
- Retail Brochure
- Egg Washing Brochure
- Origin Tolerances
- Destination Tolerances
- Labeling Guidelines
- Tips for keeping your birds healthy
- Virulent Newcastle Disease Alert
- Signs of Disease in Poultry and Pet Birds
- Information for Pet Bird Owners
- Biosecurity Practices for Poultry Exhibitors
- Virulent Newcastle Disease Information
- Avian Influenza Information Sheet – GA
- Salmonella Information Sheet – GA
- Mycoplasma Information Sheet - GA
- Workshop Evaluation Form



# Biosecurity Summary:

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- Biosecurity is an extremely important part of raising birds. Every producer big or small needs to do their part in reducing the risk of spreading disease by implementing biosecurity measures into their daily routine
- Biosecurity is: Procedures used to prevent the introduction and spread of disease causing organisms.
- Infections from backyard chickens have been on the rise since 1990. This seems to be happening because backyard producers tend to be less informed in Salmonella Enteritidis and other disease prevention than larger producers.
- NPIP is a voluntary program in which the government and industry work together to eliminate and control poultry diseases.
- Biosecurity starts with selecting healthy birds. NPIP approved sourced birds have an SE clean status and have already been vaccinated. Don't be afraid to inspect the bird for general health and parasites. Quarantine new birds! This reduces the risk of spreading diseases.
- Be Proactive! Sick Bird Hotline – 1-866-922-BIRD (2473). Report sick or dead poultry or wild birds. This could help prevent a disease outbreak.

# Disease Summary:

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- Chickens are susceptible to a variety of avian and zoonotic diseases/illnesses
- Some illnesses are easily treatable, others will wipe out an entire flock in less than 2 days
- Disease is preventable with proper biosecurity, vaccination, and enough space

## Marek's Disease:

- A herpes infection of chickens and sometimes turkeys
- Can manifest neurologically, viscerally, and cutaneously
- Symptoms:
  - Paralysis
  - Weight loss
  - Raised and Rough Skin
  - Vision impairment and change in iris and pupil
- Prevention: Vaccination and good hygiene

## Mycoplasma Gallisepticum:

- Highly infectious chronic respiratory disease
- Symptoms
  - Respiratory: coughing, nasal and ocular discharge
  - Slow growth and stunting
  - Poor productivity, reduced hatchability and chick viability
  - Leg problems
  - Inappetance
- Prevention: vaccination and good hygiene

## Newcastle Disease:

- Highly contagious viral disease that affects chickens, turkeys, pigeons, and ducks to name a few. Can infect mammals occasionally.
- Survives for long periods at ambient temps, especially in feces and can persist in houses for up to a year
- Symptoms include: Sudden death, depression, inappetance, coughing, diarrhea, paralysis, drop in egg production, twisted neck
- Prevention: Vaccination, all in/all out production, good biosecurity

## Highly Pathogenic Avian Influenza:

# Disease Summary:

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- Only one of two "Class A" diseases targeted for emergency disease control measures by OIE (World Organization for Animal Health)
- A potential zoonosis that can result in infection, conjunctivitis, or severe pneumonia
- Symptoms include: sudden death, loss of appetite, drop in egg production, coughing, diarrhea, paralysis, nasal or ocular discharge, cyanosis of comb/wattle
- Prevention: hygiene, quarantine, all in/all out production, good biosecurity
  - Vaccination not normally recommended because vaccinated birds can still remain carriers

## **Salmonella Enteritidis:**

- Zoonotic, most common in poultry and humans
- Can be vertically transmitted from shell or yolk of egg
- Symptoms:
  - Dejection, closed eyes, ruffled feathers
  - Diarrhea/pasting
  - Loss of appetite and thirst
- Prevention: vaccines, all in/all out production, good biosecurity, clean nests

## **Infectious Bronchitis:**

- Coronavirus of chickens
- Poor ventilation and high density contribute to the spread
- Symptoms:
  - Drop in egg production and soft-shelled eggs
  - Rough shells
  - Loss of internal egg quality
  - Coughing, sneezing
- Prevention: Live vaccines, good biosecurity

# Grading and Labeling Summary:

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- You MUST be registered to sell eggs in CA
- There are 9 labeling requirements to be compliant to sell eggs in CA:
  - Identity – Eggs
  - Responsibility – Name, Address and Zip Code
  - Quantity – 1 dozen, 18 Count, 15 Dozen, etc.
  - Keep Refrigerated – Safe Handling Instructions
  - Sell by Date – no more than 30 days from Julian Date
  - Julian Date – Date of Pack
  - CA Registration Number CA xxxx
  - Size and Grade – Minimum ¼” height
  - CA SEFS Compliant – Minimum ¼” height
- Egg washing: Wash, Sanitize, Rinse, Dry
- Refrigeration: eggs must be kept at 45° Fahrenheit or lower within 36 hours of lay
- Defect Tolerances for Origin:
  - Checks 5%, 7% for Jumbo
  - Leakers, Dirt's and Loss Combined 0.5%
  - Underweights 4% for next lowest size, 0% two or more sizes smaller than marked

# Common External Egg Defects

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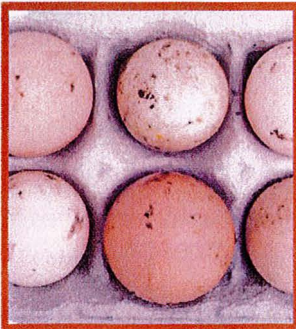
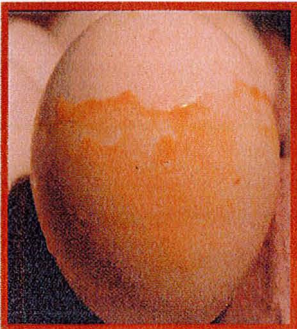
- Checks



- Leaker



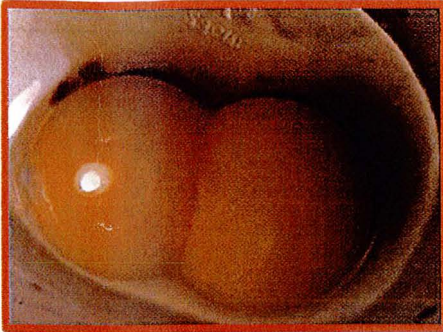
- Dirty



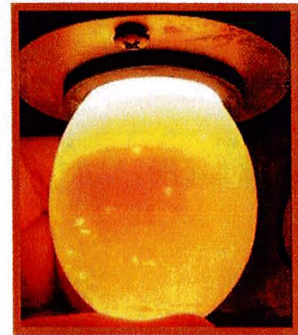
# Common Internal Egg Defects

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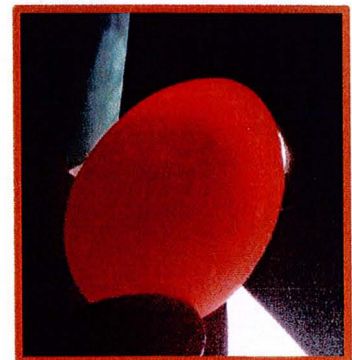
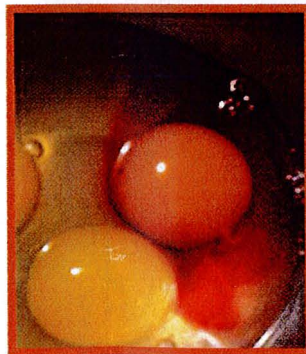
- Meat Spot



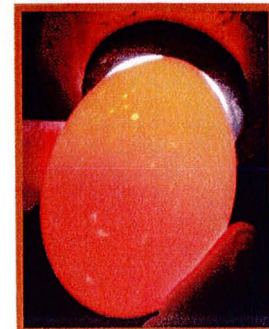
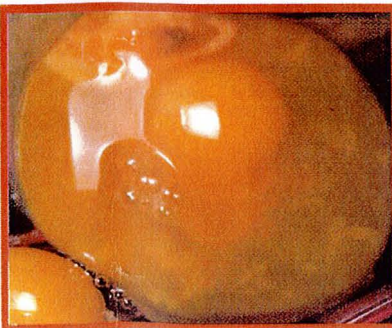
- Blood Spot



- Bloody White



- Mixed Rot



# Chicken 101 Summary:

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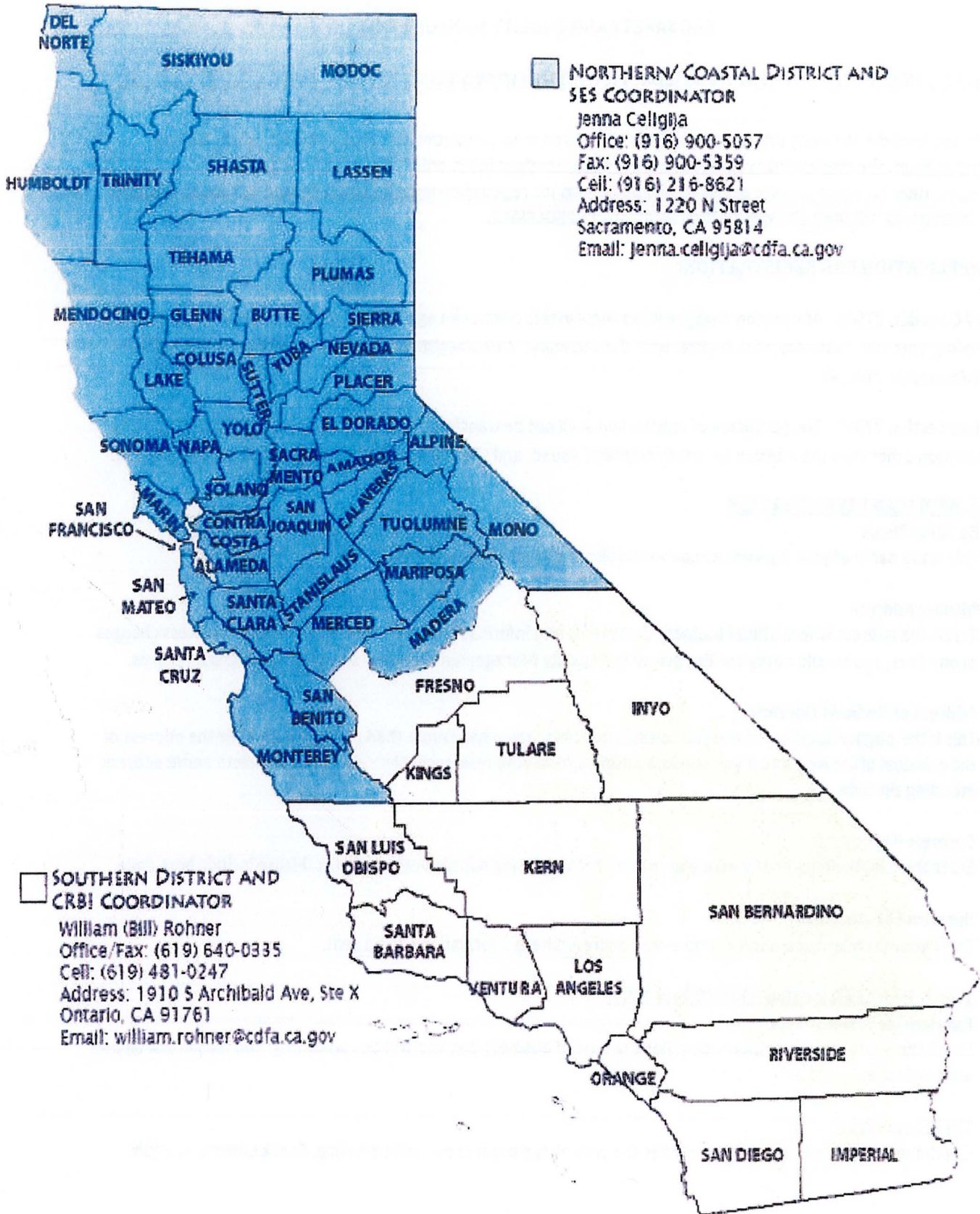
- Chicken Anatomy:
  - The ovary is a mass of follicles, each follicle containing a yolk and an ovum.
  - It takes around 10 days for the yolk develop to full size.
  - When the yolk is released, the follicle ruptures at the stigma, an area free of blood vessels on the surface of the follicle.
- The oviduct has 5 parts:
  - Infundibulum, Magnum, Isthmus, Uterus and Vagina
- A hen can lay an egg every 25 hours
- Hens need at least 14 hours of light per day to lay
- Brooding Chicks:
  - A chicks body temperature at hatch is 103.5° Fahrenheit and layer feed has calcium so it should not be fed to chicks less than 18 weeks old as it will cause Kidney damage
- Egg eating: Often starts as an accident but other causes can include: improper nutrition, stress, excessive light or thirst.
- Be Proactive! Sick Bird Hotline – 1-866-922-BIRD (2473). Report sick or dead poultry or wild birds. This could help prevent a disease outbreak.
- Dispose of carcasses appropriately to help prevent the spread of disease.

# Chicken 101 Sources:

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- Evolution of Birds Info from:
  - [http://evolution.berkeley.edu/evolibrary/article/evograms\\_06](http://evolution.berkeley.edu/evolibrary/article/evograms_06)
  - <https://www.quantamagazine.org/20150602-dinosaurs-to-birds/>
  - <http://archaeology.about.com/od/domestications/qt/chicken.htm>
- Chicken facts:
  - <http://www.backyardchickens.com/a/interesting-facts-about-chicken-eggs>
  - <http://www.poultryhub.org/physiology/body-systems/reproductive-system/>
  - [https://en.wikipedia.org/wiki/Chick\\_culling](https://en.wikipedia.org/wiki/Chick_culling)
  - [http://www.onekind.org/education/animals\\_a\\_z/chicken/](http://www.onekind.org/education/animals_a_z/chicken/)
  - <http://www.smithsonianmag.com/science-nature/14-fun-facts-about-chickens-65848556/?no-ist>





EGG SAFETY AND QUALITY MANAGEMENT

**REGISTRATION FORM INSTRUCTION/INFORMATION SHEET FOR EGG HANDLERS**

Please read the following information and instructions prior to completing the application for an egg handler registration. We request that you either type or print clearly in ink in order to avoid any delay in the issuance of the registration for which you are applying. All applications for registration must be complete and include all required attachments. **INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED.**

**APPLICATION FOR REGISTRATION:**

FAC Section 27541. Any person engaged in business in this state as an egg handler, or any out-of-state egg handler selling eggs into California, shall register with the secretary. A new registration shall be submitted if any current information changes.

FAC Section 27542. The certificate of registration shall not be transferable to any person, or be applicable to any location other than the location for which originally issued, and shall be conspicuously displayed at such location.

**1. APPLICANT INFORMATION**

**Business Name**

This is the name of your business as you would like to appear on your license.

**Mailing Address**

This is the address where official business documents and information can be sent. If your mailing address changes at any time, you should notify the Egg Safety and Quality Management Program so we can update our records.

**Address of Business Operation**

This is the physical location where you conduct business. If you have more than one office, provide the address of the principal office location. If you conduct business from your residence, please list your complete home address, including zip code.

**Business Phone**

Enter the telephone number where you can be reached during normal business hours. Please include area code.

**Business Fax and Email**

Enter your fax telephone number and e-mail address where information can be sent.

**2. EGG HANDLER BUSINESS INFORMATION**

**Egg Handler Business Type**

Check the appropriate box which identifies the type of business that you will be conducting. You may check all that are applicable.

**Egg Product Type**

Check the appropriate box which identifies the type of egg product you will be selling. Check boxes that apply.

**3. FLOCK INFORMATION**

**Flock Size**

List the size of laying flock. If the flock(s) is not located at the registered facility, provide the address where they are located. Use additional

### Selling all Eggs to Consumers on Premises

Answer yes only if ALL of the eggs are sold on the premises, otherwise answer no.

### Selling at Certified Farmers Markets

If you are selling at a farmers market, please list the county where you will be selling your eggs. If you sell in more than one county, please list all. Each location must have a valid registration copy; contact Egg Safety and Quality Management for additional copies.

### Selling Organic Eggs

If applicable, please provide the California Organic Registration number and USDA Certification number.

### Special Requirement Eggs

Special Requirement Eggs Definition – Eggs which are labeled as containing a distinguishing quality or condition. Examples: Higher omega, higher protein values, higher lutein values, etc.

## **4. MILL FEE RESPONSIBILITY**

FAC Section 27551. The following persons shall pay to the secretary a maximum fee of fifteen cents (\$0.15) for each 30 dozen eggs sold as provided below:

- (a) California egg handlers shall pay the fee on all egg sales from their own production, on eggs purchased or acquired from California egg producers, and on eggs processed into egg products. California egg handlers shall not pay a fee on eggs purchased from out-of-state egg handlers or egg producers.
- (b) California egg producers shall pay the fee on all egg sales to anyone not registered under this chapter as an egg handler, to out-of-state purchasers, and to egg breaking plants.
- (c) Out-of-state egg handlers and producers shall report and pay the fee on egg sales into California sold to a retailer, producer, handler, or breaking plant, and on egg products brought into the state at a maximum rate of fifteen cents (\$0.15) for each equivalent of 30 dozen eggs.
- (d) Shipments of eggs that are accompanied by a United States Department of Agriculture certificate of grade and sold to the federal government or its agencies are exempt from these fees.
- (e) Eggs sold to household consumers on the premises where produced from a total flock size of 500 hens or less are exempt from these fees.
- (f) The assessment provided for in this section shall only be paid once on any particular egg.

## **5. CALIFORNIA DESIGNEE INFORMATION (OUT-OF-STATE ONLY)**

FAC Section 27685. Before receiving a registration as required by this chapter, an applicant whose home office or principal place of business is outside of California shall file with the Department the name of an agent in California who is authorized to receive service of process in actions by the state or the Department in the enforcement of this chapter.

### **SIGNATURE**

Application must be signed and dated by an authorized representative to be valid.

For any additional clarification or assistance, please contact the Egg Safety and Quality Management Program at (916) 900-5062.



State of California  
 DEPARTMENT OF FOOD AND AGRICULTURE  
 Egg Safety and Quality Management Program

DEPARTMENTAL USE ONLY	
Handler Code	Initials
<input type="text"/>	<input type="text"/>
Payment Type: Mo <input type="checkbox"/> An <input type="checkbox"/> Ex <input type="checkbox"/>	

**EGG HANDLER AND PRODUCER REGISTRATION FORM**

517-004a (Rev. 11/15)

Section 1: Applicant Information	
Business Name: <input type="text"/>	Address of Business Operation: Street <input type="text"/>
Mailing Address: Street <input type="text"/>	City <input type="text"/> State <input type="text"/> Zip <input type="text"/>
City <input type="text"/> State <input type="text"/> Zip <input type="text"/>	Business Phone: <input type="text"/> Fax: <input type="text"/>
Contact Person: <input type="text"/> Phone: <input type="text"/>	Web Page: <input type="text"/>
Email: <input type="text"/>	USDA Egg Grading Program? Yes <input type="checkbox"/> , P- _____ ; No <input type="checkbox"/>
Section 2: Business Information	
Business Type: (Check Applicable Boxes)	
<input type="checkbox"/> 1. Producer Only	<input type="checkbox"/> 5. Broker
<input type="checkbox"/> 2. Packer Only	<input type="checkbox"/> 6. Breaker
<input type="checkbox"/> 3. Producer/ Packer	<input type="checkbox"/> 7. Hatchery
<input type="checkbox"/> 4. Distributor/ Wholesale	<input type="checkbox"/> 8. Other _____
Egg Product Type(s): (Check Applicable Boxes)	
<input type="checkbox"/> Shell Eggs	<input type="checkbox"/> Liquid and/or Dry Egg Products
How many cases of shell eggs graded/ produced/ handled monthly? _____ (1 case = 30 dozen shell eggs)	
How many cases of egg products processed/handled monthly? _____ Liquid _____ Dry (1 case = 40 lbs. liquid, 9 lbs. dry)	
Section 3: Flock Information	
What is the size of laying flock? _____. Is flock(s) located at business operation above? ... Yes <input type="checkbox"/> No <input type="checkbox"/>	
Do you sell ALL your eggs to consumers on your premises? ..... Yes <input type="checkbox"/> No <input type="checkbox"/>	
Do you sell at Certified Farmers Markets? ..... Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, list County(s): _____	
Do you sell organic eggs? ..... Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, CA Organic Registration # _____, USDA Certification # _____	
Do you produce Special Requirement Eggs? ..... Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, list type(s): _____	

**Section 4: Mill Fee Responsibility \*Refer to FAC Section 27551**

- Do you purchase eggs from out-of-state egg handlers? ..... Yes  No
- Do you sell eggs to retailers or distributors/ brokers? ..... Yes  No
- Do you import eggs into the State of California? ..... Yes  No
- Are you responsible for the mill fee assessment for eggs you handle?..... Yes  No
- Do you purchase eggs from in-state producers?..... Yes  No

Is another egg handler paying the mill fee for you? Yes  No

If yes, please submit with your application, a letterhead proof from each payer.

Fill out the name, location, and approximate number of cases each company is paying for monthly:

Handler Code	Name	Approx. Cases

Am I paying for someone's mill fee? Yes  No

If yes, provide the name of business, handler code, and approximate number of cases you will be paying for monthly:

Handler Code	Name	Approx. Cases

**Section 5: California Designee Information (Out-of-State Registrants) \*Refer to FAC Section 27685**

Resident Agent Name: \_\_\_\_\_  
 Resident Agent Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

**Registration fees:**

Required Fees		
<input type="checkbox"/>	Registration Fee: \$75.00	\$
Optional Materials		
<input type="checkbox"/>	Inspection Manual: {15.00}	\$
<b>Total Fees:</b>		\$

**Complete and make remittance payable to:**

Egg Safety and Quality Management  
 CASHIER, CDFA  
 P.O. Box 942872  
 Sacramento, CA 94271

\*Check or money orders only

\*All registrations expire at the end of the calendar year regardless of when payment was received.

If you need further information, please contact the Department of Food and Agriculture, Egg Safety and Quality Management Program (ESQM) at (916) 900-5062, or write to 1220 N Street, Sacramento, CA 95814. Visit our internet website at <http://www.cdfa.ca.gov/ahfs/mpes/esqm.html>.

\* By signing this registration form, I declare that I understand all laws and regulations relating to the preparation for market and marketing of shell eggs and/or egg products in the State of California and that all information is complete, accurate, and truthful.

Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_

# Air Cell Gauge

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE**  
 1220 N STREET  
 SACRAMENTO, CA. 95814

**EGG SAFETY AND QUALITY MANAGEMENT – AIR CELL GAUGE**

<p><b>INDIVIDUAL WEIGHTS</b></p> <p style="text-align: center;"><u>SIZE</u></p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>OR WEIGHT CLASS</u></th> <th style="text-align: left;"><u>OUNCES</u></th> <th style="text-align: left;"><u>GRAMS</u></th> </tr> </thead> <tbody> <tr> <td>JUMBO</td> <td>2 5/12</td> <td>68.51</td> </tr> <tr> <td>EXTRA LARGE</td> <td>2 1/6</td> <td>61.42</td> </tr> <tr> <td>LARGE</td> <td>1 11/12</td> <td>54.34</td> </tr> <tr> <td>MEDIUM</td> <td>1 2/3</td> <td>47.25</td> </tr> <tr> <td>SMALL</td> <td>1 5/12</td> <td>40.16</td> </tr> <tr> <td>PEE WEE – less than</td> <td>(NO MINIMUM)</td> <td></td> </tr> <tr> <td>Underweight Tolerance</td> <td>4% lot tolerance</td> <td></td> </tr> </tbody> </table>	<u>OR WEIGHT CLASS</u>	<u>OUNCES</u>	<u>GRAMS</u>	JUMBO	2 5/12	68.51	EXTRA LARGE	2 1/6	61.42	LARGE	1 11/12	54.34	MEDIUM	1 2/3	47.25	SMALL	1 5/12	40.16	PEE WEE – less than	(NO MINIMUM)		Underweight Tolerance	4% lot tolerance		<p><b>SAMPLE SELECTION – 5 LAYER CARTONS</b></p> <p>Case No. 1 Layer 1-2-3          Case No. 2 Layer 3-4-5          Case No. 3 Layer 2-3-4          Case No. 4 Layer 1-2-5          Case No. 5 Layer 1-4-5          over 5, repeat above sequence</p>
<u>OR WEIGHT CLASS</u>	<u>OUNCES</u>	<u>GRAMS</u>																							
JUMBO	2 5/12	68.51																							
EXTRA LARGE	2 1/6	61.42																							
LARGE	1 11/12	54.34																							
MEDIUM	1 2/3	47.25																							
SMALL	1 5/12	40.16																							
PEE WEE – less than	(NO MINIMUM)																								
Underweight Tolerance	4% lot tolerance																								

GRADE B  
3/8

DESTINATION  
GRADE A  
1/4

ORIGIN GRADE A  
DESTINATION GRADE AA  
3/16

ORIGIN GRADE AA  
1/8 INCH

# Julian Calendar

**JULIAN DATE CALENDAR  
PERPETUAL**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1	32	60	91	121	152	182	213	244	274	305	335
2	2	33	61	92	122	153	183	214	245	275	306	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
5	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	249	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	312	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	22	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	327	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	269	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	301	332	362
29	29		88	119	149	180	210	241	272	302	333	363
30	30		89	120	150	181	211	242	273	303	334	364
31	31		90		151		212	243		304		365

**JULIAN DATE CALENDAR  
FOR LEAP YEARS ONLY**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1	32	61	92	122	153	183	214	245	275	306	336
2	2	33	62	93	123	154	184	215	246	276	307	337
3	3	34	63	94	124	155	185	216	247	277	308	338
4	4	35	64	95	125	156	186	217	248	278	309	339
5	5	36	65	96	126	157	187	218	249	279	310	340
6	6	37	66	97	127	158	188	219	250	280	311	341
7	7	38	67	98	128	159	189	220	251	281	312	342
8	8	39	68	99	129	160	190	221	252	282	313	343
9	9	40	69	100	130	161	191	222	253	283	314	344
10	10	41	70	101	131	162	192	223	254	284	315	345
11	11	42	71	102	132	163	193	224	255	285	316	346
12	12	43	72	103	133	164	194	225	256	286	317	347
13	13	44	73	104	134	165	195	226	257	287	318	348
14	14	45	74	105	135	166	196	227	258	288	319	349
15	15	46	75	106	136	167	197	228	259	289	320	350
16	16	47	76	107	137	168	198	229	260	290	321	351
17	17	48	77	108	138	169	199	230	261	291	322	352
18	18	49	78	109	139	170	200	231	262	292	323	353
19	19	50	79	110	140	171	201	232	263	293	324	354
20	20	51	80	111	141	172	202	233	264	294	325	355
21	21	52	81	112	142	173	203	234	265	295	326	356
22	22	53	82	113	143	174	204	235	266	296	327	357
23	23	54	83	114	144	175	205	236	267	297	328	358
24	24	55	84	115	145	176	206	237	268	298	329	359
25	25	56	85	116	146	177	207	238	269	299	330	360
26	26	57	86	117	147	178	208	239	270	300	331	361
27	27	58	87	118	148	179	209	240	271	301	332	362
28	28	59	88	119	149	180	210	241	272	302	333	363
29	29	60	89	120	150	181	211	242	273	303	334	364
30	30		90	121	151	182	212	243	274	304	335	365
31	31		91		152		213	244		305		366

USE IN 2016, 2020, 2024, 2028, 2032, 2036, 2040, ETC.

# NPIP Explanation Sheet

- WHAT IS NATIONAL POULTRY IMPROVEMENT PLAN (NPIP)? The National Poultry Improvement Plan was established in the early 1930's to provide a cooperative industry, state, and federal program through which new diagnostic technology can be effectively applied to the improvement of poultry and poultry products throughout the country. The development of the NPIP was initiated to eliminate Pullorum Disease caused by *Salmonella pullorum* which was rampant in poultry and could cause upwards of 80% mortality in baby poultry. The program was later extended and refined to include testing and monitoring for *Salmonella typhoid*, *Salmonella enteritidis*, *Mycoplasma gallisepticum*, *Mycoplasma synoviae*, *Mycoplasma meleagridis*, and Avian Influenza. In addition, the NPIP currently includes commercial poultry, turkeys, waterfowl, exhibition poultry, backyard poultry, and game birds. The technical and management provisions of the NPIP have been developed jointly by Industry members and State and Federal officials. These criteria have established standards for the evaluation of poultry with respect to freedom from NPIP diseases.
- APHIS' mission is to safeguard the health of our nation's agricultural resources. Our many animal health experts work closely with other federal agencies, states, foreign governments, industry and professional groups, and others to enhance international trade and cooperation while preventing the introduction of dangerous and costly pests and diseases.

Poultryimprovement.org

To find a list of NPIP approved hatcheries go to:

<http://www.poultryimprovement.org/statesContent.cfm>

Other related resources:

<http://countrysidenetwork.com/daily/poultry/feed-health/buying-healthy-chicks-why-an-npip-chicken-hatchery-is-vital/>

<https://www.mypetchicken.com/backyard-chickens/chicken-help/What-is-NPIP-and-why-should-I-purchase-only-from-H350.aspx>





# California Shell Egg Regulation

## Quick Reference Guide

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- California standards of quality for individual shell eggs are applicable only to eggs that are a product of domesticated chickens
- No eggs lower than Grade B shall be sold for human consumption
- Blood eggs are classified as inedible and cannot be sold for human consumption
- Eggs in the shell are exempt from standards established by these regulations when being transported
  - From a location which does not have proper or adequate facilities for grading to a shell egg grading plant that does
  - To the first point of grading
- Each container or sub container of processed shell eggs shall be marked with name, address, and zip code of the person or company by or for whom the eggs were graded and packed, the Julian packing date, the words "Keep Refrigerated" or the "safe handling instructions" language, and the UNABBREVIATED designation of one of the following sizes and grades:
  - \*SIZE: Jumbo, Extra Large, Large, Medium, Small, Peewee**
  - \*GRADE: AA, A, B**
  - \*Shell Egg Food Safety Compliant (or CA SEFS Compliant)**
    - \*font must be a minimum of ¼-inch in height*
- *Processed eggs must be held under refrigeration in rooms kept at 45° or below from the time of packing until sale to consumers*
- *Any advertisement, sign, or placard, which indicates the price of eggs for sale MUST also include the full descriptions of size and grade*
- *Superlative descriptions or other amplifications of grade or size are not permitted on containers (examples include "fancy" "select" "superior" "premium" "giant" etc...)*
- *Descriptive terms such as "polyunsaturated" "higher in iodine" etc...must be approved by CDFA through laboratory analysis*
- *The terms "organic" or "organically produced" are allowed only if the producer is licensed as an organic producer by CDFA*
- *Size, grade, name and address marking are not required on containers or sub containers:*
  1. *If sold at retail from a properly marked bulk display and packaged in presence of the purchaser*
  2. *If packed for shipment or in transit to points outside of California*
  3. *If sold to household consumer without advertising by the producer on the premises where produced, from a flock size of 500 hens or less*
  4. *If being delivered from outside of the state to dealers for candling and grading*
  5. *If being delivered to, or in possession of, a dealer for candling and grading*

# California Shell Egg Regulation Quick Reference Guide

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6. If packages for sale to military forces of the USA, labeled with one of the accepted USDA grades

- Eggs labeled “fertile” must be at least 85% fertile
- Polyunsaturated eggs (to be so labeled and advertised) must contain at least 2% polyunsaturated fatty acids
- Properly labeled restricted eggs (checks and dirt's) may be sold directly to consumers ONLY as follows:
  1. By a shell egg producer from his OWN flock's production, AT the site of production or segregation
  2. At secondary locations operated by the producer-packer for the primary purpose of shell-egg retail sales
  3. By a shell egg packer at the grading station where grading or segregation occurred. Proper labeling IS required
  4. Are sold to the final consumer for exclusive use by his or her household and nonpaying guests in quantities not to exceed 30-dozen per sale
- Inedible eggs (diffused blood, leakers, incubator rejects, rots, etc...) are unfit for human consumption and MUST be denatured, labeled and either disposed of or used for animal foods or industrial products only
- Any person engaged in business in California as a shell egg dealer (a person engaged in the business of producing, candling, grading, packing or otherwise preparing shell eggs, sale or distribution) SHALL register with the California Department of Food and Agriculture
- It is unlawful to make any false or misleading representation concerning quality, size, weight, conditions, source, origin, or any other matter relating to eggs
- It is unlawful for any person to sell to any retailer, consumer, or institutional consumer, any eggs which are ungraded as to quality, except under CDFA approval in cases of emergency only
- It is unlawful for any person to mark any eggs which were not produced in this state as “produced in California” or represent them in any manner to be a product of this state

Specific questions can be directed to

CDFA, Egg Safety & Quality Management

1220 N Street, Sacramento, CA 95814

(916) 900-5062

CDFA.ESQM\_Inquiries@cdfa.ca.gov

# Suppliers:

## Bio Gear, Cleaning and Disinfecting and Egg Candles and Scales

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### FARMTEK

[www.farmtek.com](http://www.farmtek.com)

Tyvek Coveralls

Disposable Boots

Disposable Gloves

Egg Scales

### NASCO

[www.enasco.com](http://www.enasco.com)

Egg Wash System

Egg Wash Solution/Powder

Egg Candles

Egg Scales

Equipment Disinfectants

Tyvek Coveralls

Disposable Boots

Disposable Gloves

### TRACTOR SUPPLY

[www.tractorsupply.com](http://www.tractorsupply.com)

Egg Candler

Egg Wash Solution

Equipment Disinfectants

### VALLEY VET

[www.valleyvet.com](http://www.valleyvet.com)

Tyvek Coveralls

Disposable Boots

Disposable Gloves

Disinfectants

Egg Wash Solutions

# *FDA Guidance for Shell Egg Cleaners*

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Disinfectants recommended by the USDA-APHIS that are effective against both HPAI and SE, and are more appropriate to the poultry house environment and high organic matter load in their “Biosecurity Guide for Poultry and Bird Owners” include:

- Roccal: mixed at one-half fluid ounce per gallon of water
- Nolvasan (chlorhexidine diacetate 2%): mixed at three fluid ounces per gallon of water
- Tek-trol: mixed per manufacturer’s instructions.
- One Stroke Environ: mixed per manufacturer’s instructions
- Household bleach (sodium hypochlorite 6%): mix three-fourth of a cup of bleach per gallon of water
- Lysol spray for footwear
- Purell hand pump for hand disinfection

In order for most disinfectants to work properly the object to be disinfected must be thoroughly cleaned and washed prior to being disinfected. Disinfectants should be applied using brushes, sponges, or spray units and appropriate contact times should be allowed (follow manufacturer’s instructions).

# Resources and Contacts

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## USEFUL WEBSITES

- UC Davis Vet Med: <http://www.vetmed.ucdavis.edu/index.cfm>
- UC Davis Coop Poultry: <http://ucanr.edu/sites/poultry/>
- California Animal Health and Food Safety (CAHFS) Lab: <http://cahfs.ucdavis.edu/>
- CDFA Meat, Poultry, and Egg Safety: <https://www.cdfa.ca.gov/ahfss/MPES/>
- Food and Drug Administration (FDA): <https://www.fda.gov/>
- National Poultry Improvement Plan (NPIP): <http://www.poultryimprovement.org/default.cfm>
- United Egg Producers (UEP): <http://www.unitedegg.org/>
- Humane Farm Animal Care (HFAC): <http://certifiedhumane.org/>
- American Humane Association (AHA): <http://www.americanhumane.org/>
- California Poultry Federation: <http://www.cpif.org/>
- NorCal Poultry Association: <http://www.norcalpoultryncpa.com/>
- US Poultry and Egg Association: <https://www.uspoultry.org/>
- American Poultry Association: <http://amerpoultryassn.com/>
- Pacific Egg and Poultry Association: <http://pacificegg.org/>

## USEFUL PHONE NUMBERS AND EMAILS

- Sick Bird Hotline: 866-922-BIRD
- Dr. Maurice Pitesky (Veterinarian at UC Davis): [mepitesky@ucdavis.edu](mailto:mepitesky@ucdavis.edu)
- Dr. Christine Alvarado (Texas A&M Poultry): [calvarado@poultry.tamu.edu](mailto:calvarado@poultry.tamu.edu)
- Felicia Pohl (Avian Outreach Coordinator with Animal Health Branch): [Felicia.pohl@cdfa.ca.gov](mailto:Felicia.pohl@cdfa.ca.gov)  
916-900-5044
- Kaliko Orian: [kaliko.orian@gmail.com](mailto:kaliko.orian@gmail.com)

## CDFA USEFUL INFORMATION

- Website: <https://www.cdfa.ca.gov/ahfss/mpes/esqm.html>
- Complaints and Inquiries: [CDFA.ESQM\\_Inquiries@cdfa.ca.gov](mailto:CDFA.ESQM_Inquiries@cdfa.ca.gov)
- Jenna Celigija (Northern District Supervisor): [jenna.celigija@cdfa.ca.gov](mailto:jenna.celigija@cdfa.ca.gov)
- Michelle Dingley (Registration): [michelle.dingley@cdfa.ca.gov](mailto:michelle.dingley@cdfa.ca.gov) 916-900-5062
- Rebecca McCallister (Workshops): [Rebecca.mccallister@cdfa.ca.gov](mailto:Rebecca.mccallister@cdfa.ca.gov)

# BACKYARD POULTRY SUBMISSION GUIDELINES

**CAHFS - Davis Laboratory**  
University of California  
620 W. Health Sciences Drive  
Davis, CA 95616  
Phone: 530-752-8700  
Fax: 530-752-6253  
[daviscahfs@ucdavis.edu](mailto:daviscahfs@ucdavis.edu)

**CAHFS - San Bernardino Laboratory**  
105 W. Central Avenue  
San Bernardino, CA 92408  
Phone: (909) 383-4287  
Fax: (909) 884-5980  
[sanbernardinocahfs@ucdavis.edu](mailto:sanbernardinocahfs@ucdavis.edu)

**CAHFS - Tulare Laboratory**  
18830 Road 112  
Tulare, CA 93274  
Phone: (559) 688-7543  
Fax: (559) 686-4231  
[tularecahfs@ucdavis.edu](mailto:tularecahfs@ucdavis.edu)

**CAHFS - Turlock Laboratory**  
1550 Soderquist Rd.  
Turlock, CA 95381  
Phone: (209) 634-5837  
Fax: (209) 667-4261  
[turlockcahfs@ucdavis.edu](mailto:turlockcahfs@ucdavis.edu)

Web Site:  
[www.cahfs.ucdavis.edu](http://www.cahfs.ucdavis.edu)



**UC DAVIS**  
**VETERINARY MEDICINE**  
California Animal Health and  
Food Safety Laboratory System

CAHFS provides specialized necropsy examinations for birds from backyard flocks. For the purposes of this program, a "backyard flock" is defined as chickens, turkeys, squabs and water fowl of less than 1,000 birds in the flock. Up to two birds may be examined for \$20 (shipping fees apply).

It does NOT include pet birds, quail, pheasants, racing pigeons, etc. Standard fees apply for these species.

Note: Bird carcasses may be kept refrigerated for no more than three days prior to shipment. Please do not freeze the bird as freezing interferes with the necropsy examination.

To ship a dead bird from a backyard flock for necropsy, the following items will be needed:

- Submission form
- Two (2) plastic bags (trash bags are suitable)
- Ziploc type or waterproof bag for paper work
- Cold packs, frozen
- Absorbent packing material such as newspaper or paper towels
- Cardboard box (insulated preferred)
- Packaging tape

Packaging instructions:

1. Complete the submission form and place in a Ziploc type bag *separate* from the carcass.
2. Place the bird carcass in a plastic trash bag and tightly seal the bag to prevent leakage.
3. Add frozen cold packs (NO ICE CUBES!) to a second plastic trash bag. Place the bag containing the carcass into the bag with the cold packs and seal carefully to prevent leakage.
4. Add newspaper or paper towels to the box to absorb any moisture and prevent the box from getting soggy while in transit.
5. Put the Ziploc bag with the submission form in the box.
6. Seal the box with packaging tape and ship for Next Day delivery via FedEx, UPS, or similar overnight delivery service. DO NOT send by the U.S. Postal Service. Packages must be shipped to arrive at the laboratory on a weekday.

Reporting results:

We highly recommend having a veterinarian involved in your case as CAHFS does not provide treatment, management or disease prevention recommendations.



**UC DAVIS**  
**VETERINARY MEDICINE**  
 California Animal Health and  
 Food Safety Laboratory System  
<http://cahfs.ucdavis.edu>

For Lab Use Only

Accn # \_\_\_\_\_  
 Rec'd by: \_\_\_\_\_  
 Case Coordinator: \_\_\_\_\_  
 Accn Type \_\_\_\_\_  
 # of Samples \_\_\_\_\_  
 Date rec'd \_\_\_\_\_  
 Section \_\_\_\_\_  
 Bill to:  Vet  Clinic  Owner  Other  
 Carrier \_\_\_\_\_

Veterinarian's Name \_\_\_\_\_ Owner's Name \_\_\_\_\_  
 Clinic Name \_\_\_\_\_ Ranch \_\_\_\_\_  
 Address \_\_\_\_\_ Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone \_\_\_\_\_ Fax \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_  
 Email \_\_\_\_\_ Email \_\_\_\_\_

fax,  email, or  mail

Add'l Copy to \_\_\_\_\_

Reference # \_\_\_\_\_ Date sample(s) taken \_\_\_\_\_ Date shipped \_\_\_\_\_

- Cattle
- Horse
- Swine
- Sheep
- Rabbit
- Other \_\_\_\_\_
- Turkey
- Chicken
- Psittacine \_\_\_\_\_
- Goat
- Plant or Feed

**Movement Sample**  
 (Specify test methods below) Destination / Date of movement \_\_\_\_\_  
 Location of Animal(s) \_\_\_\_\_  
 (county, state)  
 Project/Trial  CAHFS contact \_\_\_\_\_  
 Production Class \_\_\_\_\_  
 (i.e. beef, dairy, calf ranch, etc.)

#in group/hse	_____
#in herd/fk	_____
#sick	_____
#died	_____

History (clinical signs, nutrition, housing, vaccination, treatment, production level, etc. Use next page if more space is needed.):

Duration of illness \_\_\_\_\_ Date of death: \_\_\_\_\_ Euth? Yes  No  Insured? Yes  Email notification sample receipt? Yes

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(continue on next page if necessary)

Disease(s) or condition(s) suspected: \_\_\_\_\_

**Animal/Specimen Information (continue on back)**

Animal ID/Name	Breed	Sex (F/M)	Age	Qty	Specimen Type	Test(s) Requested

CAHFS, Davis  
 University of California, Davis  
 620 W. Health Sciences Dr  
 Davis, CA 95616  
 General Info: (530) 752-8700  
 FAX (530) 752-8253

CAHFS, Turlock  
 University of California, Davis  
 1550 N. Soderquist  
 Turlock, CA 95381  
 General Info: (209) 634-5837  
 FAX (209) 657-4261

CAHFS, Tulare  
 University of California, Davis  
 16830 Road 112  
 Tulare, CA 93274  
 General Info: (559) 686-7543  
 FAX (559) 686-4231

CAHFS, San Bernardino  
 University of California, Davis  
 105 West Central Avenue  
 San Bernardino, CA 92408  
 General Info: (909) 383-4287  
 FAX (909) 384-5960

I understand that specimens submitted are the property of CAHFS. Client information provided to CAHFS, and the tests results from samples submitted to CAHFS, will be treated as confidential information consistent with applicable legal standards, including, but not limited to, California Business and Professions Code section 4857 and Evidence Code section 1040. Such confidential information will not be divulged to third parties without written consent of the client, except when required by law, which includes requirements that test results be provided to regulatory agencies.

University, its officers, employees, and agents shall not be accountable for any loss, expense (including attorneys' fees), damage, or liability of any kind resulting from or arising out of services provided hereunder unless caused by negligent or willful acts or omissions by University, its officers, employees, or agents.

Signature of Submitter: \_\_\_\_\_

Date: \_\_\_\_\_

Submission Form B-2015

History (continued)


**Animal/Specimen Information**  
*(please use for multiple animal submission)*

Lab Use	Specimen ID	Breed	Sex	Age	Qty	Specimen Type	Test(s) Requested



**Unlawful Acts as described in the  
California Food and Agriculture Code  
Included but not limited to:**

FAC 27633 – Unlawful to engage in the business of an egg handler without first registering with CDFA-ESQM.

FAC 27634 – Unlawful to sell or use any container of eggs which a name, a trademark, or a trade name unless the seller is entitled to use the name, trademark, or trade name.

FAC 27632 – Unlawful to mark eggs not produced in California as "Produced in California".

FAC 27635 – Unlawful to sell or represent as chicken eggs, eggs from any other species of fowl.

FAC 27636 – Unlawful to sell as "fresh eggs", "ranch eggs" or to represent as being fresh any eggs which are below the quality as Grade A or which has been in storage for more than 30 days.

FAC 27637 – Unlawful to make a statement, representation or assertion in any manner concerning the quality, size, weight, condition, source, origin, or any other matter relating to eggs which are false, deceptive, or misleading in any particular.

FAC 27638 – Unlawful to refuse to comply with a lawful order of an enforcement officer.

FAC 27639 – Unlawful to refuse to submit eggs or any container, lot, load or any display of eggs to the inspection of any enforcement officer.

You may access and review the laws and regulations for shell eggs through the web:

<http://www.cdfa.ca.gov/ahfss/mpes/esqm.html>

**Mailing Address:**

**CDFA – Egg Safety & Quality Management**  
1220 N Street  
Sacramento, CA 95814

**Physical Address:**

2800 Gateway Oaks Drive  
Sacramento, CA 95833

**Phone: (916) 900-5062**

**Fax: (916) 900-5359**

**Email: [CDFA.ESQM\\_Inquiries@cdfa.ca.gov](mailto:CDFA.ESQM_Inquiries@cdfa.ca.gov)**

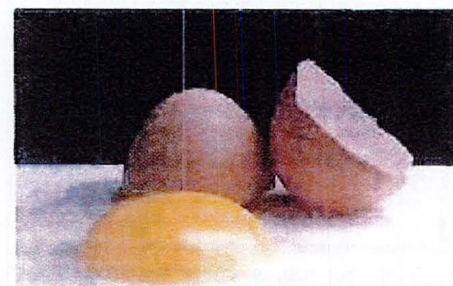


**Program Staff Information**

Tony Herrera, Program Supervisor, HQ  
Jenna Celigija, Northern District (916) 216-8621  
Bill Rohner, Southern District (919) 481-0247  
Tuan Nguyen, Support Staff, HQ  
Emily Miller, Support Staff, HQ  
Rosie Chadaris, Support Staff, HQ  
Penny Short, Support Staff, HQ



**Shell Egg Handler Information**



**ESQM Goal**

To provide consumers with shell eggs that are wholesome, properly labeled, refrigerated and of established quality, while maintaining fair and equitable marketing standards in the egg industry

## Egg Safety & Quality Management Program (ESQM)



ESQM upholds the laws and regulations for shell eggs, enforcing quality, grade, size, labeling, refrigeration, brand registration, and payment of assessments.

ESQM monitors shell egg quality at production, wholesale, and retail levels.

ESQM partners with various County Agricultural Commissioners, USDA-AMS and FDA to assure California Shell Egg Standards are maintained.

ESQM provides Annual Shell Egg Workshops to county personnel throughout the state to ensure the uniform application of Shell Egg Standards.

### Registration Requirements

Who should register with CDFA, ESQM?

**Food and Agricultural Code (FAC) 27541 & 27633** Any person engaged in California as an egg producer or egg handler, any out of state egg handler or egg producer selling eggs into California shall register with the California Department of Food and Agriculture (CDFA), Egg Safety & Quality Management (ESQM).

The certificate of registration is non-transferable. Once the application is processed you will be issued an Egg Handler Registration Number. A copy of the registration form may be downloaded

<https://www.cdfa.ca.gov/ahfs/MPES/pdfs/EggHandlersRegistrationApplication.pdf>

## Refrigeration Requirements

**FAC 27643** Eggs will be stored, held or transported at an ambient temperature of 45 degrees Fahrenheit or below. Transport vehicle refrigeration units must deliver air at 45 degrees Fahrenheit or below.

Refrigeration at retail locations and farmers markets are regulated by the appropriate County Environmental Health Department.

### Grading of Shell Eggs

**FAC 27651** It is unlawful to sell to any retailer, consumer, or institutional consumer, any eggs which are ungraded as to quality and size.

### Shell Egg Grades

#### Grade AA Grade A Grade B

For grade tolerances at origin and destination refer to the California Code of Regulations (CCR)

Title 3, Division 3 Chapter 1, Subchapter 3

**Clean Eggs** All Grade AA and Grade A eggs must be clean. A clean egg has a shell that is free from adhering foreign material, visible stains or discoloration. (CCR) Section 1351.2



## Size Requirements

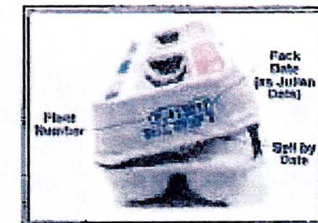
SIZE OR WEIGHT CLASS	OUNCES	GRAMS
JUMBO	2-5/12	68.51
EXTRA LARGE	2-1/6	61.42
LARGE	1-11/12	54.34
MEDIUM	1-2/3	47.25
SMALL	1-5/12	40.16
PEE WEE	NO MINIMUM	

Egg size is determined by the weight of the individual egg.

### Marking Requirements

Each container or sub container of shell eggs shall be marked with:

Name | Address | Zip Code | Quantity | \*Keep Refrigerated\* | Julian Pack Date | Sell by Date | USDA or CDFA Registration Number | \*Size and Grade | \*Shell Egg Food Safety Compliant (or CA SEFS Compliant) | \*Must be printed in font 1/4 inch or larger



Marking Requirements, Refer to CCR 1354 — 1356.

### Shell Egg Defects

Common defects of eggs include but are not limited to: checked (cracked shells), and "loss" types such as leaking eggs, dirty eggs and eggs containing blood or meat spots. More serious defects described as inedible are the various rot types such as: black rot, mixed rot and bloody whites.



## Chemicals:

- Any chemicals used in the washing and sanitizing process must be Generally Recognized as Safe (GRAS) by FDA
- Approved for food surfaces
- Unscented, dye-free dishwashing detergent is a valid consideration for backyard flocks



## Backyard Producers selling eggs:

Collect eggs daily and refrigerate

Prior to offering for sale:

- Take eggs out of refrigeration and temper to room temperature for up to 36 hours

Washing:

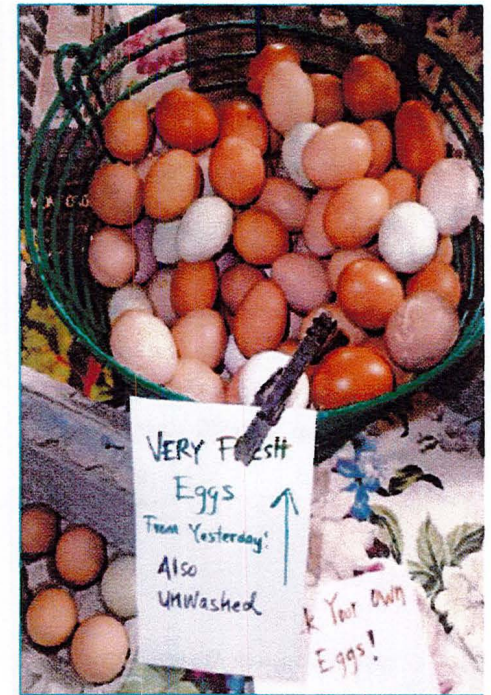
- ½ cap of Clorox in 1.5L of water at minimum of 90° F. Dip in washcloth and wipe off egg

Rinsing:

- Wipe with washcloth in water

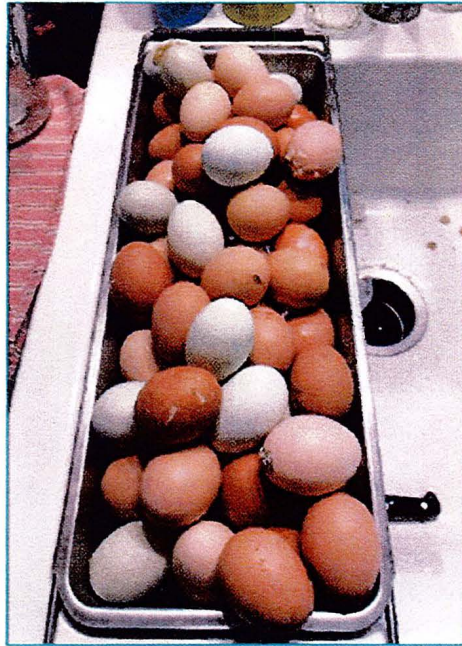
Drying:

- Wipe dry and place back in refrigeration



## CDFA EGG WASHING GUIDE

*How to properly wash and sanitize shell eggs for market*



## Why should I clean my eggs?

The goal is to remove all possible sources of contamination in order to provide a safe food product.

## Steps for cleaning eggs:

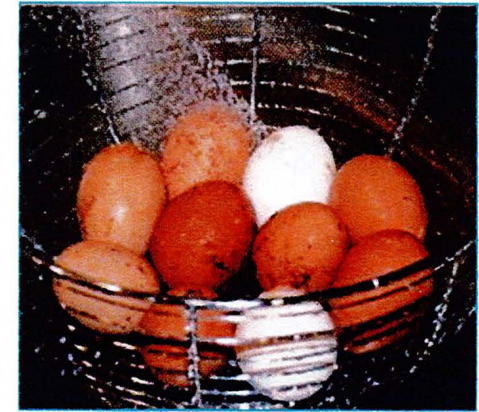
1. Washing
2. Sanitizing
3. Rinsing
4. Drying

## Washing:

- Wash water must be at least 90° F and 20° F warmer than the eggs (eggs are approx. 100° at time of lay)
- Too big of a temperature difference can cause cracks
- Salmonella can grow at temperatures ranging from 100° - 108° F
- Water should be potable and constantly running during the washing process. Eggs should not be soaked
- Water must not have more than 2 ppm of iron. Low iron in eggs is a defense against bacterial growth

## Sanitizing:

- Dilute chlorine bleach is the most common agent for backyard producer egg sanitizing
- Use between 50 and 200 ppm
- ½ tablespoon bleach per gallon of water = 100 ppm
- Organic materials inactivate chlorine therefore change solution every few hours



## Rinsing:

Same principles apply:

- Safe water
- 20° warmer
- Constantly running water

## Drying:

- Ensure eggs are dry then return to refrigeration
- Typical egg cartons or refrigerator storage areas trap any surface moisture



# Origin Tolerances

GRADE	QUALITY REQUIRED	TOLERANCE PERMITTED	
		PERCENT	QUALITY
AA	85% AA	15%	A, B
		WITHIN THIS 15%	CHECKS (7% Jumbo)
		5%	
		1%	C
A	85% A or better	0.5%	LEAKERS, DIRTIES, OR LOSS (due to blood or meat spots)
		15%	B
		WITHIN THIS 15%	
		5%	CHECKS (7% Jumbo)
B	85% OR better	1%	C
		0.5%	LEAKERS, DIRTIES, OR LOSS (due to blood or meat spots)
		15%	C
		WITHIN THIS 15%	CHECKS
		10%	
		0.5%	LEAKERS, DIRTIES, OR LOSS (due to blood or meat spots)

# Destination Tolerances

---

GRADE	QUALITY REQUIRED	TOLERANCE PERMITTED	
		PERCENT	QUALITY
AA	80% AA	20%	A, B
		WITHIN THIS 20%	CHECKS(9%Jumbo)
		7%	
		1%	C
A	80% A or better	1%	LEAKERS, DIRTIES, OR LOSS (of this 1%, not over 0.5% loss due to blood or meat spots)
		20%	B
		WITHIN THIS 20%	
		7%	CHECKS (9% Jumbo)
B	80% OR better	1%	C
		WITHIN THIS 20%	CHECKS
		10%	
		1%	LEAKERS, DIRTIES, OR LOSS (of this 1%, not over 0.5% loss due to blood or meat spots)

# Labeling Guidelines

---

- **Identity** – Eggs
- **Responsibility** – Name, Address, Zip Code
- **Quantity** – 1 Dozen, 18 Count, 15 Dozen, Etc...
- **Keep Refrigerated** – Safe Handling Instructions
- **Sell By Date**
- **Julian Date** – Date of Pack
- **CA Registration Number** – CA 1234
- **Size and Grade** – Minimum ¼-inch
- **CA SEFS COMPLIANT** – Minimum ¼-inch
  
- **Julian Date:** Date of Pack
  - Must be 3 digits
  - Example – January 1 – 001, December 31 – 365
- **Sell By:** 30 days from date of pack
  - Has to say sell by
- **Sizes:** Can put multiple sizes in one carton but carton has to be labeled with only one size. CANNOT label as mixed sizes, various sizes, or anything similar. If carton is mixed sizes, label should reflect the smallest size in the carton
  - Example: carton has Small, Large and Extra Large – carton should be labeled as Small
- 4% tolerance for underweight eggs
- 0% tolerance for eggs 2+ sizes smaller than labeled size

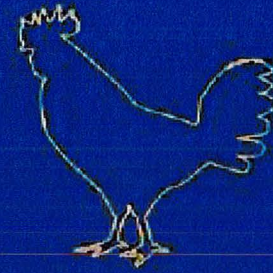
# Label Approval

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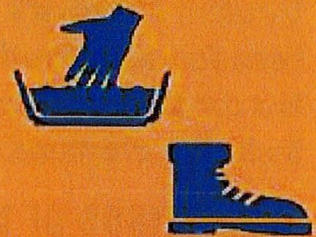
- Any producer can email their label to Jenna Celigija with CDFA for approval of your label at no charge prior to use.
- Email: [jenna.celigija@cdfa.ca.gov](mailto:jenna.celigija@cdfa.ca.gov)



# TIPS FOR KEEPING YOUR BIRDS HEALTHY



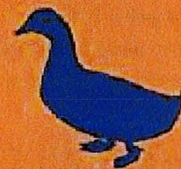
1. **Wash hands before and after handling or coming in contact with your birds; have dedicated clothing and boots while tending to your birds; scrub and disinfect boots.**



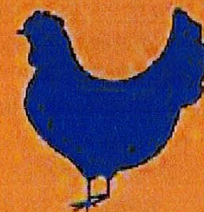
2. **Avoid sharing equipment with neighbors or other bird owners unless thoroughly cleaned and disinfected before and after each use.**



3. **Do your best to prevent waterfowl and wild birds from coming in contact with your birds.**



4. **Always buy your birds from a National Poultry Improvement Plan (NPIP) Hatchery.**



5. **Report an unusual number of sick or dead birds to: Sick Bird Hotline 1-866-922-BIRD (2473)**



# ALERT



## VIRULENT NEWCASTLE DISEASE

### INFORMATION FOR BIRD OWNERS

*Virulent Newcastle Disease (VND) has been found in Southern California. It is a contagious disease of birds, including chickens.*



#### WHAT KINDS OF BIRDS GET VND?

All birds can be infected with VND. In most cases the disease will kill chickens. Other birds may not get sick but can still spread the disease to chickens and other pet birds.

#### HOW IS VND SPREAD?

The disease is spread by direct contact between birds, by coughing and sneezing, and through droppings. People can spread VND by moving infected birds, moving equipment and feed, and by wearing clothing and shoes that have been in infected areas.

#### DOES VND INFECT PEOPLE?

Properly cooked meat and eggs from infected birds are safe to eat. In rare cases, people in extremely close contact with infected birds may get a mild fever, and redness and swelling in the area around the eyes. These symptoms usually go away without medical treatment.

#### WHAT DOES VND LOOK LIKE IN BIRDS?

There may be swelling around the eyes, a purplish swelling of the wattle and comb, a large amount of fluid coming from the beak and nasal areas, a twisting of the neck and head, a loss of appetite, diarrhea, and sometimes sudden death.

#### WHAT YOU CAN DO TO HELP

- If you think your birds are sick please immediately call the **Sick Bird Hotline** at: **866-922-2473**.
- Keep your birds away from other birds.
- If you visit family or friends with birds, shower, wash your clothes, and change your shoes before handling your birds.
- Don't visit them without taking these same steps if you have handled your birds.
- Try to keep people who also own birds from visiting your property
- Share information about VND with family and friends

#### How to Protect Your Birds

- Wash hands and scrub boots before and after entering an area with birds
- Avoid sharing equipment; clean and disinfect equipment and tires before moving them between properties
- Isolate any bird returning from shows for 30 days before placing them with the rest of the flock
- Do not bring any new birds on to your property as long as the disease is in California.



## Signs of Disease Poultry and Pet Birds

Sick birds are inactive, dull, and tend to separate themselves from other healthy birds in the flock. Some signs of disease are:

- Coughing
- Sneezing
- Nasal discharge
- Green watery diarrhea
- Reduction in egg production
- Twisting of the head and neck
- Paralysis
- Circling
- Muscle Tremors
- Depression
- Swelling around eyes and neck
- Sudden Death

**The California Department of Food and Agriculture encourages responsible bird ownership. Please consult with a veterinarian on a regular basis regarding the health of your birds or flock. Good health for California poultry and pets is beneficial to everyone!**



Cornell University

To report an unusual number of sick or dead birds, call:

**Sick Bird Hotline (866) 922-2473**

For more information, please click the following:

[Animal Health Branch](#)  
[Avian Health Program](#)



# Information for Pet Bird Owners

Anything that touches your birds can carry harmful disease organisms. You are the only protection your birds have, so use these important tips to provide the best care and disease prevention.

## Bird Care Suggestions

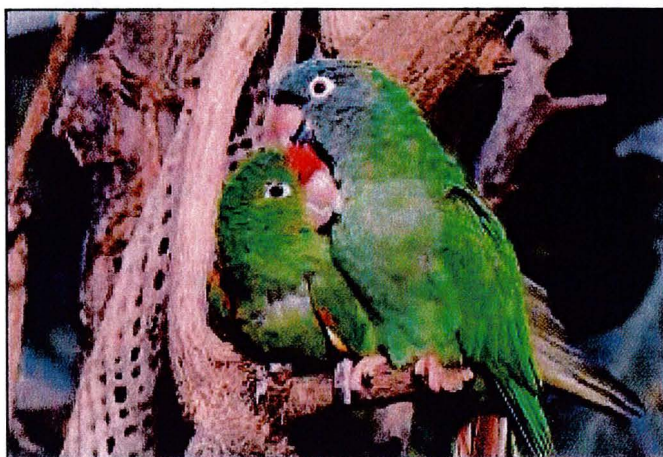
- Different bird species will have different diets. Depending on the type, age, and size of birds, the ratio of seeds, pellets, and fresh fruits and vegetables will vary.
- Provide fresh water for your birds daily.
- Use paper towels or other paper products as bedding. Clean or replace bedding as needed.
- Keep your birds in a clean, dry, and isolated area. Good sanitary practices can help your birds fend off diseases and illness.
- Provide appropriate living space and perches for your birds.
- Birds are extremely sensitive to toxins. Don't use chemicals such as cleaners, hairspray, candles, and/or perfumes around your birds.
- Protect your birds from extreme hot and temperatures. Providing an 85°F environment is ideal!

To report an unusual number of sick or dead birds, call:  
**Sick Bird Hotline**  
 (866) 922-2473



## Disease Prevention Guidelines

- Thoroughly wash your hands with soap and water before and after handling birds. Considering also using hand sanitizer and disposable gloves, especially if birds are sick.
- Isolate any new birds or returning birds at least 30 days to monitor for disease.
- Clean and disinfect your cages and equipment after taking them to any bird event or having them around other birds. Limit contact with other bird or poultry owners.
- Keep your birds away from wild birds, rodents, insects, and other pets, as these can all carry disease.



CDFA Animal Health Branch  
 Headquarters - (916) 900-5002  
 Redding District - (530) 225-2140  
 Modesto District - (209) 491-9350  
 Tulare District - (559) 685-3500  
 Ontario District - (909) 947-4462  
 USDA-APHIS-WS (916) 854-3950 or (877) 741-3690

For more information, please visit:  
[www.cdfa.ca.gov/ahfss/animal\\_health](http://www.cdfa.ca.gov/ahfss/animal_health)  
[Avian Health Program](#)



## Biosecurity Practices to Minimize Risk of Spreading Avian Diseases

### Poultry Exhibitors

Biosecurity means doing everything you can to protect your birds against disease. Standard biosecurity practices are important for California's poultry community at all times. Here are some recommendations for poultry exhibitors:

#### Before the Exhibition

- House poultry indoors or at minimum, within a screened area.
- Remove food and water sources that attract pests such as wild waterfowl/birds, rodents, and insects.
- House different species (e.g. chickens, turkeys, ducks, and geese) separate from each other.
- Avoid visits to other backyard flocks or poultry operations and restrict visitor access to your birds.
- Avoid direct contact with wildlife, especially wild birds and waterfowl.
- Keep tools and equipment clean and disinfected.
- Clean cages, food, and water containers daily.
- Wash hands and disinfect shoes after working with birds.
- Consider having dedicated boots and clothing for working with your birds.
- Monitor and document the health of your birds daily.

**If your birds show any sign of illness, please do not bring your birds to the exhibition nor attend yourself.**

- Become familiar with the signs of disease in birds:
  - Sudden death,
  - Wheezing, coughing, nasal discharge,
  - Green watery diarrhea,
  - Depression,
  - Decreased feed intake,
  - Drop in egg production or egg quality,
  - Swelling and/or discoloration of eyes, head, neck, combs, or wattles, and/or
  - Tremors, circling, drooping wings, twisting of head and neck.

To report an unusual number of sick or dead birds, call:  
**Sick Bird Hotline**  
 (866) 922-2473

- Immediately isolate sick birds to a pen or area that is away from all other birds.
- Handle sick birds after tending to healthy birds.
- Ask the exhibition organizer about appropriate disease prevention measures and any specific actions that may be required if a bird becomes sick at the show.



#### During the Exhibition

- Clean cages, food, water containers daily.
- Do not share equipment with other exhibitors; if equipment must be shared, make sure it is cleaned and disinfected between uses.
- Restrict direct contact between your birds and other birds.
- Avoid contact with other birds during the event.
- Restrict bird contact to essential personnel, and
- Observe birds daily for signs of illness.
  - Report any clinical signs to the designated exhibition veterinarian, poultry health inspector, or appropriate exhibition staff.
  - Immediately remove sick birds from the exhibition area.
  - If your bird(s) show clinical signs of a reportable disease such as avian influenza or virulent Newcastle disease, testing (e.g. blood samples or swab samples) may be required and those results will be shared with the State Veterinarian's Office.



## Virulent Newcastle Disease: Information for Bird Owners

Virulent Newcastle disease (VND), previously known as exotic Newcastle disease and sometimes referred to as Asiatic or Doyle's form of Newcastle disease, is a contagious and fatal disease affecting all species of birds.

**Definition:** VND is a virulent strain of the Newcastle disease virus and is one of the most serious disease of chickens throughout the world. It is characterized by the lesions produced in the gastrointestinal tract or the brain. In susceptible chickens, morbidity rates approach 100% and mortality rates may exceed 95%.

**Host:** All birds, both domestic and wild, are susceptible to VND. The mortality and morbidity rates vary drastically between species and with the strain of virus. In poultry, chickens are very susceptible to the disease, while ducks and geese tend to be resistant. Mortality rates in psittacine birds have ranged from zero up to 75% prior to depopulation. Certain psittacine birds, especially Amazon parrots, have been demonstrated to shed VND virus intermittently in excess of one year.

**Transmission:** Within an infected flock, VND is transmitted by direct contact, contaminated feeding and watering equipment, and by aerosols produced by coughing, gasping, and other disturbances of respiration. Dissemination between flocks over long distances have been due to movement of contaminated equipment and service personnel such as vaccination crews. Movement of carrier birds and those in an incubating stage account for most of the outbreaks in the pet bird industry.

**Clinical Signs:** There may be considerable variation in the severity of clinical signs, depending on species, age, vaccination, and natural resistance of the birds, as well as the virulence of the VND strain. Certain species demonstrate a period of depression, diarrhea, and loss of appetite. Clinical signs are more pronounced in susceptible chickens. Edema of the tissues around the eye, especially of the lower eyelid, are common. Straw colored exudate may flow from the mouth or nasal openings. Respiratory distress may vary from mild to severe. Clinical signs in turkeys and pet birds are usually mild. Neurologic symptoms, such as twisting of the head and neck (torticollis) and paralysis of the wings and/or legs are commonly seen 10-20 days following onset of clinical signs.



Twisting of the head and neck (torticollis)

**Human Health:** VND is not a food safety concern; properly cooked poultry products are safe to eat. In rare cases, humans that have exposure to infected birds may get eye inflammation or mild fever-like symptoms. These signs generally resolve without treatment, however, medical care should be sought if symptoms persist. Infection is easily prevented by using standard personal protective equipment.

**Reporting:** This is a reportable disease under emergency conditions; suspect cases must be reported to CDFA within 24 hours.

To report an unusual number of sick or dead birds, call:  
**Sick Bird Hotline**  
**(866) 922-2473**



Conjunctivitis and edema of the eyelids



Excessive fluids are commonly seen in the respiratory tract



Normal appearing chicken with a pale comb

**CDFA Animal Health Branch**  
 Headquarters - (916) 900-5002  
 Redding District - (530) 225-2140  
 Modesto District - (209) 491-9350  
 Tulare District - (559) 685-3500  
 Ontario District - (909) 947-4462  
 USDA-APHIS-VS (916) 854-3950 or (877) 741-3690

For more information and updates on VND, please visit:  
[https://www.cdfa.ca.gov/ahfss/Animal\\_Health/Newcastle\\_Disease\\_Info.html](https://www.cdfa.ca.gov/ahfss/Animal_Health/Newcastle_Disease_Info.html)

CDFA Animal Health Branch: [www.cdfa.ca.gov/ah](http://www.cdfa.ca.gov/ah)



# Avian Influenza (AI) – What Poultry Growers Need to Know

The virus is carried by healthy waterfowl .....but can make domestic poultry very sick!

**Definitions:** AI is a virus disease of poultry. AI can be of low pathogenicity (LPAI), causing mild disease, or of high pathogenicity (HPAI), causing severe disease and mortality. There are different strains of AI viruses: examples are H1N1 or H5N2. Some AI viruses can mutate and become HPAI viruses.

**What are the clinical signs (symptoms) of AI?** LPAI in chickens and turkeys resembles any other mild respiratory disease (noise, swollen faces, conjunctivitis – photos 1, 2). In breeders, it can also cause a production drop, and birds may produce soft shelled eggs (photo 7). With HPAI, the birds may become very quiet, not eat or drink, have diarrhea, and discolored combs and feet (photos 3, 4, 5, 6). Birds may also die suddenly without any signs of disease.

**Where does AI virus come from?** Natural carriers are wild birds, especially waterfowl (ducks and geese). Swine are sometimes infected with influenza viruses. Influenza viruses may change and adapt to be able to infect different mammals and birds, including humans.

**Do we have AI in our state? What would happen if my flock was diagnosed?** We do not have AI in poultry in our state but are continuously monitoring for it. Every broiler flock is tested before processing and breeders and layers are tested several times during their productive life. Many hobby and small production flocks are also checked for the virus. An AI outbreak in commercial poultry would have disastrous consequences to the growers and industry. Appropriate steps would be taken for a rapid eradication of the virus from the area affected.



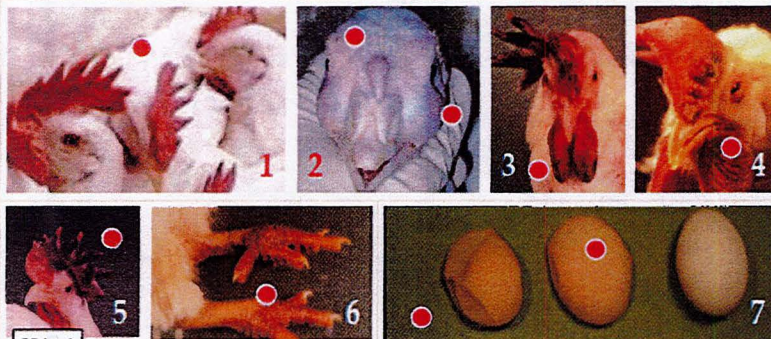
WHAT CAN THE GROWER DO TO HELP PREVENT HIS FARM FROM BECOMING INFECTED WITH AVIAN INFLUENZA?

● : Represents AI virus

1. ALWAYS use dedicated foot wear or use provided foot baths or boot wash to go into the poultry house.
2. Do not let poultry drink untreated surface water (from lakes, streams, ponds or rivers)
3. Clean up all outside feed spills promptly.
4. Bird proof houses; do not let wild birds build nests close by.
5. Do not let waterfowl become residents on nearby ponds.
6. Dispose of all mortality completely and promptly.
7. Do not enter your poultry house directly after hunting or after a contact with ANY other birds, including those from pet shops, zoos, live bird markets or people's backyards.
8. Do not come into contact with your poultry after visiting birds in another country.



ALWAYS PRACTICE BIOSECURITY



# Salmonella on Pullet and Breeder Farms: Sources and Control

## Sources



Salmonella is a bacteria commonly found in the environment of humans and animals. In chickens, it may be present in the intestinal tract but usually does not cause disease. Salmonella is controlled in poultry because of the public health risk it poses when present in uncooked or undercooked poultry meat and eggs.

*There are multiple sources of Salmonella on farms. Salmonella can be:*

1. In the environment when chickens are placed, possibly carried from a previous flock.
2. In the chickens coming in (Salmonella may be egg transmitted, come from chicks hatched from contaminated shells or from chicks in contact with contaminated hatchery equipment).
3. In domestic animals, wildlife, insects and rodents around the farm.
4. In contaminated feed and water.
5. In dirty and wet storage or work areas.
6. Tracked in on contaminated equipment and people, including visitors.

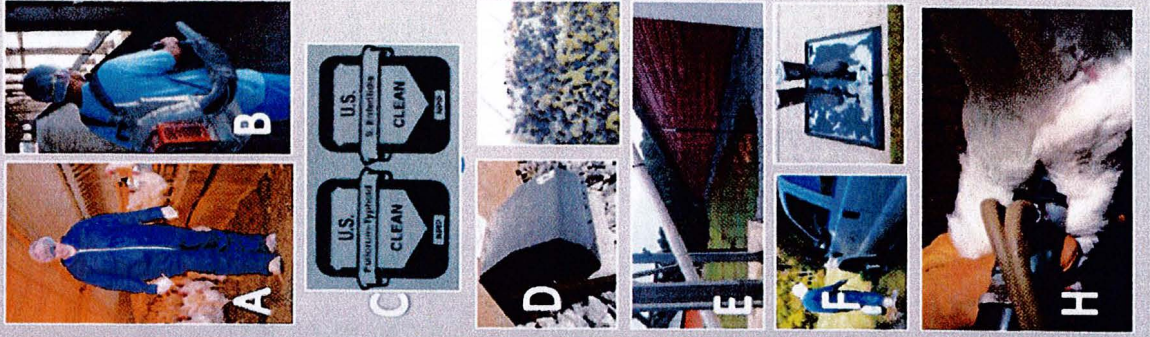
*In order to control Salmonella, we need to make sure that:*

- A. Farms are monitored for Salmonella status.
- B. The houses where birds are placed have been cleaned and disinfected, and are found free of Salmonella by pre-placement testing.
- C. The birds placed are from NPIP PT & SE clean flocks.
- D. **Rodent, wildlife and insect control programs are in place.**
- E. **Farms are kept clean, mowed, and free of loose equipment and "junk" that can attract rodents (harborage); the inside work and storage areas are maintained clean and dry.**
- F. **Visitor and equipment biosecurity procedures are in place.**
- G. Feed and water sources are treated, or tested clean.
- H. Birds are vaccinated. Vaccination of pullets is effective in reducing Salmonella numbers.

What can the grower do?



## Control

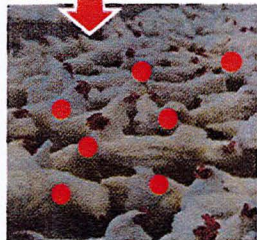
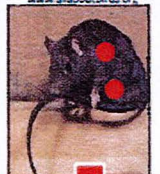
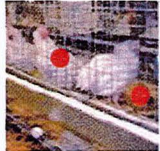
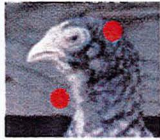
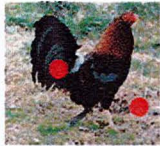




# Mycoplasma on GA farms: Prevention and Containment

Mycoplasma infections (MG or MS) are important because positive flocks can transmit the organism to the progeny (usually broilers), possibly making them sick. Mycoplasma positive breeder flocks may also show signs of disease, affecting their productivity. Hatching eggs exports are disturbed. The flocks lose their "clean" NPIP classification and may have to be sold early.

● : MG or MS



## My birds tested positive: how did they get it?

**THE MOST COMMON WAY TO GET MYCOPLASMA IN THE FIELD: IT WALKS IN, USUALLY ON TWO LEGS!**

**DIRECT CONTACT OF THE FARM OR GROWER with:** Persons, vehicles, equipment that have been in contact with non-commercial poultry, commercial layers, positive farms: hired help, contractors, crews, family members, other visitors are by far the most common means of infecting a flock!

**A FARM CAN ALSO GET MYCOPLASMA FROM MIGRATION (less likely)** from a Mycoplasma positive source or farm through rodents or insects

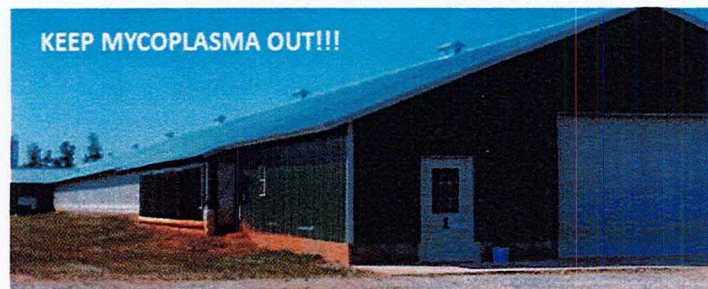
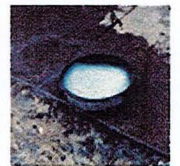
**A FARM CAN ALSO GET CONTAMINATED THROUGH THE AIR or wild birds (least likely)** MG and MS are sensitive to heat. They do not survive well outside the birds. However, they will withstand freezing. MG may also come from wild birds (ex. house finches)

## How do I keep Mycoplasma from spreading from my farm to others?

- Do not lend equipment out
- Practice enhanced rodent, insect control before load out.
- After load out, make sure all birds are disposed of promptly and properly.
  - Keep house empty for a week before removing the litter; Wash and disinfect houses. (Mycoplasma are sensitive to disinfectants).
  - In GA, MG infected birds have to be treated before transportation to decrease shed.

## MOST IMPORTANTLY: How do I keep my birds CLEAN in the first place?

- Avoid contact with other birds
- Dispose of all dead birds promptly and properly
- Make sure your visitors and hired help have not been in contact with high risk poultry; No pets in houses
- Use dedicated equipment and vehicles on the farm
- Practice entry biosecurity at all times (no exceptions): Shower (on some farms), change of clothing or disposable coveralls, use dedicated footwear or disposable boots and hairnets, use foot pans. **THIS IS VERY EFFECTIVE IN PREVENTING ENTRY!**
- Bird proof houses, practice rodent and insect control



**GPLN**  
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