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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Joanne Ortiz

Michael Abbott

Egg Safety & Quality Management
https://www.cdfa.ca.gov/ahfss/mpes/esqm.html
Small Producer Outreach Program
https://www.cdfa.ca.gov/ahfss/mpes/spop.html
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
Biosecurity Notes...

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:
Grading and Labeling Notes...

About Registration, Labeling and Signage:

About Egg Washing:

About Defects:

About Grades:

Other Notes:
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:
Resources

- 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:

• 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:

- 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:

- 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:

• 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

- Checks
- Leaker
- Dirty
Common Internal Egg Defects

- Meat Spot

- Blood Spot

- Bloody White

- Mixed Rot
Chicken 101 Summary:

- **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 to 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 chick's 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:

• Evolution of Birds Info from:
  • 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
  • http://www.onekind.org/education/animals_a_z/chicken/
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.
# EGG HANDLER AND PRODUCER REGISTRATION FORM

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<th>Section 1: Applicant Information</th>
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<td><strong>Business Name:</strong></td>
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<td><strong>Mailing Address:</strong> Street</td>
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<td><strong>City</strong></td>
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<td><strong>State</strong></td>
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<td><strong>Contact Person:</strong></td>
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<td><strong>Phone:</strong></td>
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<td><strong>Email:</strong></td>
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<th>Address of Business Operation: Street</th>
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<td><strong>City</strong></td>
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<td><strong>State</strong></td>
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<th>Business Phone:</th>
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<td><strong>Fax:</strong></td>
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<th>Web Page:</th>
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<th>USDA Egg Grading Program?</th>
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<td><strong>Yes</strong></td>
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<th>Section 2: Business Information</th>
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<th>Business Type: (Check Applicable Boxes)</th>
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<tr>
<td><strong>1. Producer Only</strong></td>
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<td><strong>2. Packer Only</strong></td>
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<td><strong>3. Producer/ Packer</strong></td>
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<td><strong>4. Distributor/ Wholesale</strong></td>
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<td><strong>5. Broker</strong></td>
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<td><strong>6. Breaker</strong></td>
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<td><strong>7. Hatchery</strong></td>
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<td><strong>8. Other ___________________________</strong></td>
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<th>Egg Product Type(s): (Check Applicable Boxes)</th>
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<td><strong>Shell Eggs</strong></td>
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<td><strong>Liquid and/or Dry Egg Products</strong></td>
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<th>How many cases of shell eggs graded/ produced/ handled monthly? (1 case = 30 dozen shell eggs)</th>
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<td><strong>How many cases of egg products processed/handled monthly?</strong> (1 case = 40 lbs. liquid, 9 lbs. dry)</td>
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<th>Section 3: Flock Information</th>
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<th>What is the size of laying flock?</th>
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<td><strong>Is flock(s) located at business operation above?</strong></td>
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<td><strong>Do you sell ALL your eggs to consumers on your premises?</strong></td>
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<td><strong>Do you sell at Certified Farmers Markets?</strong></td>
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<td><strong>If yes, list County(s):</strong></td>
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<th>Do you sell organic eggs?</th>
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<td><strong>Yes</strong></td>
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<th>If yes, CA Organic Registration # <strong>USDA Certification #</strong></th>
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<th>Do you produce Special Requirement Eggs?</th>
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<td><strong>Yes</strong></td>
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<th>If yes, list type(s):</th>
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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:

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<th>Handler Code</th>
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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:

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<th>Handler Code</th>
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Section 5: California Designee Information (Out-of-State Registrants) *Refer to FAC Section 27685

Resident Agent Name: ___________________________ City: ___________________________ State: __ Zip: ___
Resident Agent Address: ___________________________ Phone Number: ___________________________ Email Address: ___________________________

Registration fees:

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<th>Required Fees</th>
<th>Optional Materials</th>
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<td>☐ Registration Fee: $75.00</td>
<td>☐ Inspection Manual: (15.00)</td>
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Total Fees: $

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/ahfss/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
### Julian Calendar

#### Julian Date Calendar

**Perpetual**

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#### Julian Date Calendar

**For Leap Years Only**

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*Use in 2016, 2020, 2024, 2028, 2032, 2036, 2040, etc.*

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**Image:** Julian Calendar showing perpetual and leap year date tables.
NPIP Explanation Sheet

• WHAT IS NATIONAL PROULTRY 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:


Suppliers:
Bio Gear, Cleaning and Disinfecting and Egg Candlers and Scales

<table>
<thead>
<tr>
<th>Company</th>
<th>Website</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>FARMTEK</td>
<td><a href="http://www.farmtek.com">www.farmtek.com</a></td>
<td>Tyvek Coveralls, Disposable Boots, Disposable Gloves, Egg Scales</td>
</tr>
<tr>
<td>TRACTOR SUPPLY</td>
<td><a href="http://www.tractorsupply.com">www.tractorsupply.com</a></td>
<td>Egg Candler, Egg Wash Solution, Equipment Disinfectants</td>
</tr>
<tr>
<td>VALLEY VET</td>
<td><a href="http://www.valleyvet.com">www.valleyvet.com</a></td>
<td>Tyvek Coveralls, Disposable Boots, Disposable Gloves, Disinfectants, Egg Wash Solutions</td>
</tr>
</tbody>
</table>
FDA Guidance for Shell Egg Cleaners

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

Small Producer Resources and Contacts

USEFUL WEBSITES

- 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.c CIF.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
- Dr. Christine Alvarado (Texas A&M Poultry): calvarado@poultry.tamu.edu
- Felicia Pohl (Avian Outreach Coordinator with Animal Health Branch): Felicia.pohl@cdfa.ca.gov 916-900-5044
- Kaliko Orian: kaliko.orian@gmail.com

CDFA USEFUL INFORMATION

- Website: https://www.cdfa.ca.gov/ahfss/mpes/esqm.html
- Complaints and Inquiries: C DFA.ESQM_Inquiries@cdfa.ca.gov
- Jenna Celigia (Northern District Supervisor): jenna.celigia@cdfa.ca.gov
- Gail Jones (Registration): gail.jones@cdfa.ca.gov 916-900-5090
- Rebecca McCallister (Workshops): Rebecca.mccallister@cdfa.ca.gov
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.
**Veterinarian’s Name:**

**Clinic Name:**

**Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Fax:**

**Email:**

---

**Owner’s Name:**

**Ranch:**

**Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Fax:**

**Email:**

---

**Reference #:**

**Date sample(s) taken:**

**Date shipped:**

---

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

**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.)

---

**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 □**

---

**Disease(s) or condition(s) suspected:**

(continue on next page if necessary)

---

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

<table>
<thead>
<tr>
<th>Animal ID/Name</th>
<th>Breed</th>
<th>Sex (F/M)</th>
<th>Age</th>
<th>Qty</th>
<th>Specimen Type</th>
<th>Test(s) Requested</th>
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**CAHFS, Davis**

University of California, Davis
620 W. Health Sciences Dr
Davis, CA 95616
General Info: (530) 752-8700
FAX (530) 752-6253

**CAHFS, Turlock**

University of California, Davis
1550 N. Soderquist
Turlock, CA 95381
General Info: (209) 634-5837
FAX (209) 667-4261

---

**CAHFS, Tulare**

University of California, Davis
18830 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) 584-5980

---

I understand that specimens submitted are the property of CAHFS. Client information provided to CAHFS, and the test 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 8-2015
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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/mpeas/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

Program Staff Information
Tony Herrera, Program Supervisor, HQ
Jenna Celigija, Northern District (916) 216-8621
Bill Rohner, Southern District (619) 481-0247
Tuan Nguyen, Support Staff, HQ
Emmily Miller, Support Staff, HQ
Rosie Chedaris, Support Staff, HQ
Penny Short, Support Staff, HQ

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 at https://www.cdfa.ca.gov/shfss/MPES/pdfs/EggHandlersRegistrationApplication.pdf

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

<table>
<thead>
<tr>
<th>SIZE OR WEIGHT CLASS</th>
<th>OUNCES</th>
<th>GRAMS</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>
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<tr>
<td>MEDIUM</td>
<td>1-2/3</td>
<td>47.25</td>
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<tr>
<td>SMALL</td>
<td>1-5/12</td>
<td>40.16</td>
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<tr>
<td>PEE WEE</td>
<td>NO MINIMUM</td>
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</tbody>
</table>

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

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.
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

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

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:
- 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

<table>
<thead>
<tr>
<th>GRADE</th>
<th>QUALITY REQUIRED</th>
<th>TOLERANCE PERMITTED</th>
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<tr>
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<td>PERCENT</td>
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<td>AA</td>
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## Destination Tolerances

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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

• 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
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)
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.

**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.

**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.

**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.

www.cdac.ca.gov/ahfss/Animal_Health/Newcastle_Disease_Info.html
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!

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
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-VS (916) 854-3950 or (877) 741-3690

For more information, please visit:
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 water 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

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 (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.

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

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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_Heath/Newcastle_Disease_Info.html

CDFA Animal Health Branch: 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?**

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.
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, moved, 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.
Mycoplasma on GA farms: Prevention and Containment

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

KEEP MYCOPLASMA OUT!!!