

Feed Store Biosecurity

An Introduction to Feed Store Biosecurity



What is Biosecurity?

- Simple, inexpensive steps taken to reduce the risk of potential exposure, infection, and spread of disease.
- It means doing everything you can to protect birds against bacteria, viruses, and other germs.



Why is Biosecurity Important?

- Healthy birds are highly profitable. Establishing and maintaining good biosecurity practices helps to protect your flock and business like a moat protects a castle.
- Biosecurity is the moat that protects your birds from “invaders”. It safeguards against diseases-causing agents such as viruses, bacteria, and parasites, many of which are carried on fomites.
- Build customer confidence in your business by investing in biosecurity.



What are Fomites?

- Fomites are objects that can carry disease-causing agents, such as bacteria and viruses.
- **Anything** that can carry germs from an infected bird to your flock can be considered a fomite!
- Some examples are:
 - Hands
 - Clothes
 - Shoes
 - Tools
 - Feed barrels



Examples of Poultry Diseases

- **Marek's Disease** – No. 1 killer of backyard poultry!
- Coccidiosis
- Fowl Cholera
- Fowlpox
- Infectious bursal disease (IBD)
- Infectious Coryza
- Infectious Laryngotracheitis
- Mycoplasmosis
- Salmonella*

- **Foreign Animal Diseases (FADs):**

- Highly Pathogenic Avian Influenza* (HPAI)
- Virulent Newcastle Disease (vND)



*Zoonotic diseases, can affect humans

Biosecurity Basics: Cleaning

- **Cleaning** removes germs (i.e. bacteria, viruses, etc.) and visible debris (i.e. manure, dirt, etc.) from surfaces.
 - **Dry Clean:** Brush, scrape, and shovel off the manure, litter, dust and other materials.
 - **Wet Clean:** Thoroughly scrub all surfaces with soap and water – working from top to bottom and back to front. Rinse thoroughly and repeat if necessary.



Biosecurity Basics: Disinfecting

- **Disinfecting** kills germs on surfaces.
- However, disinfectants are **useless on dirty surfaces**. It is a waste of money, time, and materials and does not help protect your birds.
- Prior to disinfecting, any surface that is **visibly dirty should be cleaned thoroughly** in order for the disinfectant to work properly.
- Always **double-check the manufacturer's label for the expiration date and contact time for a disinfectant**; it must sit on a surface for an allotted amount of time in order for it to effectively kill germs.



Biosecurity Basics: Pro Tips

- Maintaining proper biosecurity requires cleaning AND disinfecting.
- Gather everything you need to clean and disinfect. We recommend having:
 - Large bucket
 - Detergent (Soap)
 - Scraper
 - Water or water source
 - Shovel
 - Disinfectant
- Make sure your cages/coops are empty before cleaning. Use a paint scraper to scrape off feces and a sprayer bottle to get your cleaning solution into hard-to-reach areas.



Feed Store Biosecurity Guidelines

- Wear clean clothes and shoes.
- Clean and disinfect equipment.
- Handle birds with clean hands.
- Limit public access to birds.
- Establish employee biosecurity guidelines.
- Keep birds healthy and secure.
- Keep poultry and pet birds separate.
- Keep cages and coops clean.
- Dispose of waste properly.
- Maintain traceability records.
- Isolate any relinquished birds.
- Purchase birds from reputable hatcheries.
- Isolate and report sick birds.
- Submit dead birds to CAFHS for testing.
- Dispose of dead birds properly.



Wear Clean Clothes and Shoes

- Have dedicated clothing and shoes that are washed regularly and used **ONLY** when working with your poultry. Keep a pair of coveralls and rubber boots near your coops or cages so that you have easy access when working with your flock.
- Always change your clothes and shoes before **AND** after working with your birds. It is a simple, inexpensive way to protect your flock from any exposure or spread of disease.



Clean and Disinfect Equipment

- **Clean and disinfect equipment** that has been in contact with birds. Dry the feed barrels before adding feed to sell.
- **Avoid sharing equipment with other stores or clients.** Dirty barrels can act as fomites or have old feed with mold or other germs that can cause disease.
- If your store sells feed in reusable feed barrels, set up a clean and dirty line to separate clean barrels from incoming dirty barrels.



Handle Birds with Clean Hands

- **Wash your hands** with regular hand soap (liquid is preferred) **BEFORE and AFTER** handling birds.
- If hand soap is unavailable, an alcohol-based (70%+) hand sanitizer is a suitable substitute, as long as hands are not visibly dirty.
- Place hand washing and/or hand sanitizer stations near your coops for easy access. Be sure to check them regularly.

Remember...

Handwashing seems simple, but it is an inexpensive way of protecting your flock and preventing the spread of disease.



Limit Public Access to Birds

- **Restrict access to your birds to employees only.** Members of the public may carry germs on their clothes or shoes. If this is not possible, ensure that everyone washes or disinfects their hands before (AND after) handling any birds.
- **Keep birds in a secure, low foot traffic area.** Birds should NOT be kept where passing customers, especially children, can easily access the birds unnoticed.
- Signs are a great way to inform customers not to touch birds and ask employees for assistance.



Keep Poultry & Pet Birds Separate

- To avoid cross contamination:
 - Do not commingle your poultry with pet birds.
 - Do not commingle different poultry species.
- Ideally, any cages containing poultry should be kept in a separate area of the store, away from pet birds.
- If this is not possible, a solid barrier should be placed between the poultry and pet birds.



Keep Birds Healthy and Secure

- **Birds should NOT be kept close to any feed sold in the store.** This is an easy way to avoid potential disease transmission.
- **Keep hatchery birds away from returned or abandoned community birds.** Ideally, all birds should be separated based upon their source.
- **Keep wild birds, insects, and rodents away from your birds and feed, especially if housed outdoors.**



Employee Biosecurity Guidelines

- Ensure any employees handling poultry in the store do not also handle pet birds in the store.
- Ideally, any employees working with birds in the store, should not own any poultry or pet birds. This helps to avoid cross contamination and helps minimize your flock's risk to diseases.
- Have employees wash their hands in between handling birds from different sources (e.g. hatchery, community, etc.)

BIOSECURE AREA
ÁREA DE BIOSEGURIDAD

**NO VISITORS ALLOWED TO ENTER OR
TOUCH BIRDS**
**NO SE PERMITE A LOS VISITANTES ENTRAR
O TOCAR LAS AVES**



Keep Cages and Coops Clean

- Offer clean food and water daily.
- Soiled bedding should be changed at least 2 -3 times per week. Ensure that all used bird litter and bedding is disposed of properly.
- Properly clean and disinfect coops and cages weekly.
- We recommend you keep a log recording the health of your birds. This is especially useful when tracking any sudden changes in health.



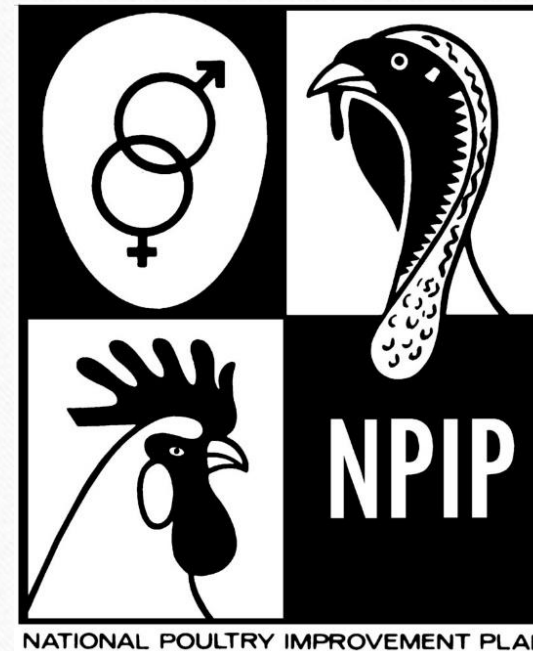
Dispose of Waste Properly

1. Place dirty bird litter or bedding in garbage bag.
 - a. If you suspect that your store has sick birds, spray the inside and outside of the bag with disinfectant spray.
2. Seal the bag and place in another bag.
3. After waste is double-bagged and sealed, dispose of it in a sealed trash can.



Purchase Birds from Reputable Hatcheries

- We recommend purchasing chicks from reputable U.S. hatcheries. If buying chicks from a feed store, ensure that they are sourcing their chicks from reputable hatcheries as well.
- Reputable U.S. hatcheries include NPIP-certified hatcheries or hatcheries that vaccinate for Marek's Disease and coccidiosis.
- Do not purchase birds from unreliable sources. Birds from unreliable breeders can introduce disease to your flock and expose your healthy birds.



Maintain Traceability Records

- Traceability means recording ALL movements of poultry into or out of your store.
- It is **critical** to maintain traceability records of relinquished community birds that may be returned, sold, or abandoned at your store. Whenever birds are returned or relinquished, a traceability form should be filled out. (see image)
- Not only will traceability records help reduce your store's risk of exposure to avian diseases, but it will also help to protect your flock.
- Accepting relinquished and/or abandoned birds from the community means increasing your flock's risk to disease.

Traceability Form/Formulario De Rastreo

Bird Owner Name / Nombre del Dueño de las aves	Date/ Fecha	Origin or Address of bird/ Origen o Dirección de las aves	Phone Number/ Número de teléfono	Type and number of birds (Pet/Hen/Rooster/Peafowl etc.)/ Tipo y Número de aves	Health concerns/ Preocupaciones de Salud	Reason for surrender/ Razón por haber cedido las Aves	Notified CDFA? / Notificaron a CDFA?
Ex. Sarah (did not give last name)	6/5/20	Cross streets: Apple Dr. and Orange Cir. in Riverside (92507)	Declined to give	1 roosters, 3 hens, 1 pet dove	One hen, has eyes closed, mouth open, won't stand	Cannot have chickens in her apartment complex	Yes, sick bird

CDFA Sick Bird Hotline (866) 922-2473
Línea Directa de Aves Enfermas (866) 922-2473



Isolate Any Relinquished Birds

- Any returned or relinquished birds, including chicks, should be quarantined (i.e. isolated) from your healthy flock and observed for any signs of illness for at least 30 days.
- Take care of your healthy flock BEFORE working with any quarantined birds.
- Separate clean, dedicated clothing should be used when taking care of any birds under quarantine.
- Educate customers about the difference between birds with known health and vaccination history and those with unknown history. This will help to build customer confidence in your business.



Isolate & Report Sick Birds

- **Isolate sick birds immediately and consult a veterinarian.** We recommend developing a relationship with a veterinarian beforehand.
- **Report sick or dead birds.** When an unusually large number of your birds are suddenly sick and/or die, it is especially important to contact us. Early disease detection (identification and containment) is **critical** to protecting your healthy birds.
 - **Sick Bird Hotline (866) 922-2473**



Submit Dead Birds to CAHFS for Testing

- Up to two dead birds from backyard flocks can be submitted to California Animal Health and Food Safety Laboratory System (CAHFS) for necropsy examinations (\$25 +shipping)
- A “backyard flock” is a flock of chickens, turkeys, squab, and water fowl of less than 1,000 in the flock.
- This does NOT include pet birds, quail, pheasants, racing pigeons, etc. (Additional costs may apply.)
- Bird carcasses must be kept refrigerated no more than 3 days prior to shipping. **DO NOT FREEZE.**
- For more information about CAHFS, please click [here](#).

U.C. DAVIS VETERINARY MEDICINE
California Animal Health and Food Safety Laboratory System
FOR MORE INFO VISIT: <https://cahfs.vetmed.ucdavis.edu/>

For Lab Use Only
Accn # _____ Rec'd by: _____
Case Coordinator: _____ Accn Type: _____
of Samples: _____ Date rec'd: _____ Section: _____
Paid Carrier: _____

Veterinarian's Name _____ **Owner Name** _____
Clinic Name _____ **Ranch** _____
Address _____ **Address** _____ **State** _____ **Zip** _____
City _____ **City** _____ **State** _____ **Zip** _____
Phone _____ **Fax** _____ **Phone** _____ **Fax** _____
Email _____ **Email** _____
Bill to: Vet Clinic Owner Other **Report to:** Vet Clinic Owner
 U.C. Recharge Acct # (required): _____ Add'l Copy to: _____
Bill to address if different than above: _____ **Preferred reporting method:** fax email, and/or mail
Email notification of sample receipt? Yes

Sample Reference _____ **Date sample(s) collected** _____ **Date sample(s) shipped** _____
 Cattle Turkey **If testing for animal movement please specify:** Domestic Export out of U.S. In herd/flock
 Horse Chicken **Animal being shipped to:** _____ In group/house
 Swine Psittacine (Specify test methods below) **Destination** / **Date of Shipment** _____ Sled
 Sheep Goat **Current Location of Animal(s)** _____ (county, state)
 Other _____ **Production Class** _____ (in herd/flock of each sex)

History (clinical signs, nutrition, housing, vaccination, treatment, production level, etc. Use back page if more space is needed.)
Duration of illness: _____ **Date of death:** _____ **Euthanized?** Yes No **Method/Agent used:** _____ **Injured?** Yes No

Disease(s) or condition(s) suspected: _____ (continue on rear page if necessary)
Treatments/Medications (type & when given): _____

Animal/Specimen Information (continue on back)

Lab Unit	Animal Name/Specimen ID	Breed	Sex (F/M)	Age in Units (days, weeks, months, years)	City	Specimen Type	Test(s) Requested

CAHFS, Davis University of California, Davis
620 W. Health Sciences Dr
Davis, CA 95616
General Info: (530) 752-8790
Fax: (530) 752-6223

CAHFS, Turlock University of California, Davis
1300 N. Stakebrand
Turlock, CA 95369
General Info: (530) 634-6837
Fax: (530) 667-4321

CAHFS, Tulare University of California, Davis
18760 Road 112
Tulare, CA 95324
General Info: (530) 689-7943
Fax: (530) 688-2985

CAHFS, San Bernardino University of California, Davis
100 West Central Avenue
San Bernardino, CA 92408
General Info: (951) 383-4297
Fax: (951) 384-0460

Understand that specimens submitted are the property of CAHFS. Use of specimens submitted to CAHFS and the test results from samples submitted to CAHFS will be handled in accordance with applicable regulations, including, but not limited to, the California Business and Professions Code section 4907 and Evidence Code section 9105. Such confidential information will not be divulged to third parties without written consent of the client, except where 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 attorney's 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:** _____



Dispose of Dead Birds Properly

- Only dispose of dead birds **AFTER** testing has been completed and it is appropriate to dispose of the carcass. [If you are unsure, please contact the Sick Bird Hotline.](#)
- To properly dispose of the carcass(es):
 1. Place the carcass in a plastic bag. Spray the inside and outside of the plastic bag with disinfectant spray (e.g. Lysol®). Seal the bag.
 2. Place the sealed bag containing the carcass in another bag. Spray the outside of the second bag with disinfectant spray.
 3. Dispose of the carcass.



Additional Recommendations

- We recommend that stores:
 - Clean and disinfect floors at the end of each day.
 - Have customers disinfect their shoes with disinfectant before entering the area where the poultry and/or pet birds are housed.
 - Offers customers disposable shoe covers or disinfectant when entering the store for added protection.
 - Set up a foot bath at the entrance of poultry area for employees.



Employee Footbaths: Dry vs Wet

- **Wet Footbaths:** 1 part bleach to 10 parts water
- **Dry Foot baths:** Dry Bleach or chlorine foot powder.
- **Always follow manufacturer's instructions** included on the label of the disinfectant. This maintains the effectiveness of the solution and avoids creating one that is too potent.
- **Footbaths must be maintained clean.** There is the risk that using dirty footbaths may actually help spread disease instead of helping to reduce the spread. .
- **There are potential liability risks (e.g. slip-and-fall accidents) associated with foot baths.** It may be best to use disposable shoe covers or a disinfectant spray to disinfect the bottom of footwear.



Contact Us

- To Report Sick or Dead Birds, call the Sick Bird Hotline at (866)922-2473
- For more information, visit [CDFA's Avian Health Website!](#)
- Like us on Facebook: [California Avian Health Education Network](#)
- Follow us on Instagram: [CAHENet](#)

