

Avian Advice

...helping ensure the efficient production of top quality poultry products in Arkansas and beyond.

The University of Arkansas System Division of Agriculture is an equal opportunity/equal access/affirmative action institution.

POULTRY BIOSECURITY STANDARDS AND PROCEDURES

F. Dustan Clark¹, Brandon Doss², and Terry Conger³

¹ Extension Veterinarian and Associate Director for Center of Excellence for Poultry Science University of Arkansas Division of Agriculture Arkansas Cooperative Extension Service

² Asst. State Veterinarian/NPIP Coordinator, Arkansas Livestock and Poultry Commission

³ Poultry Health Specialist/Epidemiologist SPRS District 4 USDA/APHIS/Veterinary Services

Phone: 501-907-2254

Fax: 501-907-2259

The recent outbreak of Avian Influenza, December 2014-June 2015, was the largest animal health emergency in the history of the United States; affecting multiple states, including Arkansas. The disease outbreak caused the death and destruction of over 48 million+ birds (commercial layer chickens, turkeys, game fowl, and small hobby chicken flocks) with federal costs alone in disease control and indemnity exceeding 700+ million US dollars. The US poultry industry was severely affected by this outbreak from losses of poultry and eggs, quarantines, trade restrictions, bans, market losses, etc. There is great concern that with the Fall migration of waterfowl and shorebirds there could be renewed outbreaks.

One of the tools to assist in preventing the disease is the tool "Biosecurity". The definition of Biosecurity is any and all practices and procedures to prevent introduction of disease into a flock or prevent the spread of disease. A Biosecurity committee was developed by the Arkansas Livestock and Poultry Commission to develop a list of Minimum Biosecurity Standards for Arkansas Commercial Poultry growers. Those standards are listed as follows:

Minimum Biosecurity Standards for Arkansas Commercial Poultry Growers

1. Growers and farm workers should wear farm dedicated clean clothing and footwear.
2. A designated entry and exit point for each house should be identified and foot pans with fresh disinfectant and hand sanitizer must be provided at each.
3. Footwear should be cleaned and free of organic material, and then disinfected prior to entering each poultry house.
4. Use hand sanitizer prior to house entry and upon exit.
5. Growers and farm workers should not have contact with other birds.
6. Bird hunting is discouraged. Company personnel should be notified of hunting activities and refer to company specific policy.
7. Visitors to poultry farms should be discouraged (including family and friends). Company personnel and essential contract service providers must follow visitor guidelines when a service call is needed (see attached visitor guidelines).
8. Do not allow pets, livestock, wild animals or birds to enter poultry houses.
9. Implement effective vegetation, rodent, wild bird, and insect control. The area around the poultry houses should be well maintained and free of debris. Feed spills should be cleaned up immediately.
10. Keep workrooms clean.
11. When poultry are present, sharing of equipment between farms is not recommended. Sharing of equipment between farms must be preapproved by company personnel. Effective cleaning and disinfection of equipment must take place between farms.
12. Observed biosecurity violations should be immediately corrected and reported to company personnel.
13. Growers should have a designated farm vehicle that does not leave the immediate poultry house area and is used only for work on the poultry houses, not for other farm work or recreation. If a designated vehicle is not in use, the external surfaces (tires, wheel wells, etc...) of all vehicles should be cleaned and disinfected prior to entering the farm. Vehicles should be disinfected upon exit of the farm.
14. Biosecurity/Disease Control Area/Keep Out signs will be posted at farm entrance.
15. Keep poultry house doors locked and secure during off hours.

In the USA the keeping of small flocks of poultry is one of the fastest growing hobbies. If you have a small poultry flock or are thinking of getting one you will be investing time and money. Biosecurity procedures to protect that investment can be used to prevent the introduction of disease and/or the spread of disease. These procedures can and do work. There is a tremendous difference between growing a commercial poultry flock and a hobby flock; but many if not all of the standards listed for commercial poultry growers can be used and/or adapted for small hobby and exhibition flocks. A few simple Biosecurity procedures that can be used by the hobby/backyard/small flock owner are as follows:

1. Recognize the signs of illness.

You as the poultry owner know your birds and in fact you probably look at your birds more than once a day. As such you can detect early signs of illness such as a change in the bird's behavior; you just know that your birds are just not acting right. There are many poultry diseases but typically some of the first signs of



illness are a drop or cessation of egg production, a lack of appetite, sneezing, gasping, diarrhea, a drop in water consumption, discharges from the eye and/or nostrils, ruffled feathers, huddling, and a bird keeping to itself.

2. Do Not Bring Disease Home With You

If you purchase new birds make sure you look at them closely (even if from a reputable source) to check for signs of illness. This also is correct if it is your own bird returning from a poultry exhibit. Admittedly, poultry exhibitors are trying to place at a show and a sick bird does not win. Unfortunately, it is possible that a bird could still be incubating a disease and some diseases cause few signs unless a bird becomes stressed. It is always best to isolate (quarantine) new and returning birds away from your home flock for a period of at least 30 days. Most diseases should manifest within this quarantine period. Isolate the birds as far away from your home flock as you can (at least 100 feet, if possible) and be sure and care for these quarantined birds last. Since equipment, such as crates, nest boxes, etc. could be contaminated with feces, exudates, etc. that can contain disease organisms, it is best to not borrow equipment. If that is not possible, then thoroughly clean and disinfect the equipment before taking it onto your premise and before and after usage. If you visit an area where there are waterfowl (such as ponds, lakes, and hunting) or areas with poultry make sure you change clothes and shoes and wash your hands before checking on your birds.

3. Clean and disinfect.

Keep poultry facilities clean and free of weeds,

debris, spilled feed etc. In addition, clean areas around your poultry pens and facilities

4. Practice good vermin control.

Mice and rats can carry diseases that can infect your birds. They can also attract snakes. Fly, buffalo gnat, and mosquito control are also important since these insects can carry and spread diseases. Wild birds should be excluded from your poultry pens as well. Secure poultry pens are necessary to exclude other wildlife, which may be predators of your poultry or could bring in diseases. Although not vermin, pets should also be kept out of the poultry pens.

5. Keep away/Restrict visitors

Visitors could accidentally contaminate your poultry. Restrict visitors to your farm/poultry facility. Have all visitors clean their shoes/-boots and disinfect before visiting your poultry flock. A pair of boots for visitors to wear and a pair you wear just around your birds are even better. Keep your poultry pens and facilities locked to prevent access.

6. Get Help/Report the Unusual

If you see something in your bird that is unusual or is "just not right" get help immediately. Contact your local veterinarian, local county extension agent, Extension poultry veterinarian, state veterinarian, or USDA hotline. If you do have a bird die consider submitting it to your state or university diagnostic laboratory for evaluation. This diagnostic service may be free or have a minimal fee.

You, the poultry grower, are the first line of defense of your flock be it a commercial

flock or a hobby flock. Commercial poultry growers should follow their integrators policies on Biosecurity and should contact their service personnel if they have questions or problems. Hobby and small flock owners with questions can contact the Arkansas Cooperative Extension service (or visit the website at www.uaex.edu), local county Extension agent, Extension poultry veterinarian, assistant state veterinarian, or USDA poultry health specialist.

Contact phone numbers for Arkansas:

- F. Dustan Clark, DVM, Arkansas Extension Poultry Veterinarian. fdclark@uark.edu 479-957-4245
- Brandon Doss, DVM, Assistant Arkansas State Veterinarian and Arkansas Livestock and Poultry Commission. info@alpc.ar.gov 501-907-2400
- Terry Conger, DVM, Poultry Health /Epidemiologist. : Terry.H.Conger@aphis.usda.gov 501- 224-9515

U of A DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System



Co-Editor Karen Christensen, Associate Professor/Extension Specialist



Co-Editor F. Dustan Clark, Extension Poultry Health Veterinarian