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 was approximately $1 billion U.S. dollars. The U.S. poultry industry has been 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.

In January 2016, the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (APHIS) confirmed the presence of highly pathogenic H7N8 avian influenza and low pathogenic H7N8 avian influenza (LPAI) in one county in Indiana. The HPAI was in one flock of turkeys and the low pathogenic AI was present in nine other flocks. All of these flocks have been depopulated and there are no instances of this strain in Indiana or any other state, including Arkansas, at this time. This was a different strain of HPAI than the strains that caused the 2015 outbreak. At this writing there are no known cases of H7N8 infections in humans. There is concern that another outbreak could occur with the spring migration of waterfowl and shorebirds.

One of the tools to assist in preventing the Avian Influenza is “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 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 nostril
   - ruffled feathers
   - huddling
   - a bird keeping to itself
Hobby and Backyard Poultry Biosecurity Practices

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 and nest boxes could be contaminated with feces or exudates 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, hunting grounds) 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 or 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.

The keeping of small flocks of poultry is one of the fastest growing hobbies in the USA. 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. No one wants to have diseases in their own poultry flock or those of their colleagues, fellow exhibitors, or neighbors. You are the first line of defense for your poultry flock.
For more information on poultry diseases, care, and husbandry visit http://www.uaex.edu/farm-ranch/animals-forages/poultry/hobby-small-flocks.aspx or contact one of the resources listed below.

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

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