



Lecture title: Biosecurity in poultry
Lecturer Affiliation: poultry diseases

Summary:

Biosecurity in poultry

Biosecurity is an important part of any avian health management program. “Bio” means “life” and “security” implies “protection,” so such a program is designed to protect life

it means keeping the infectious agents away from the poultry and keeping the poultry away from infectious agents and other hazards to health

the following steps can be taken to reduce the interaction of poultry and infectious agents:

- (i) a conscious examination of how infectious agents can be introduced to birds through humans; other poultry; food; water; infected equipment; and other animals such as pets and pests
- (ii) implementation of a routine cleaning and disinfection program

Minimizing the contact between poultry and infectious agents such as bacteria, viruses, fungi, and parasites can reduce the likelihood of a disease outbreak. Steps can also be taken to reduce the risk of disease and other health risks to humans and other animals, such as pets, that may have contact with poultry and/ or their environment

6 ways to prevent poultry diseases

1. Keep Your Distance. Restrict access to your property and your birds. Consider fencing off the area where you keep your birds to form a barrier between “clean” and “dirty” areas. Allow only people who take care of your birds to come into contact with them. If visitors have birds of their own, do not let them enter your bird area or have access to your birds. Game birds and migratory waterfowl should not have contact with your flock because they can carry germs and diseases.

2. Keep It Clean. Wear clean clothes and scrub your shoes with disinfectant. Wash your hands thoroughly with soap and water before entering your bird area. Keep cages clean and change food and water daily. Clean and disinfect equipment that



comes in contact with your birds or their droppings, including cages and tools. Remove manure before disinfecting. Properly dispose of dead birds.

3. Don't Haul Disease Home. Car and truck tires, poultry cages, and equipment can all harbor germs. If you travel to a location where other birds are present, or even to the feed store, be sure to clean and disinfect these items before returning to your property. Have your birds been to a fair or exhibition? Keep them separated from the rest of your flock for at least 2 weeks after the event. New birds should be kept separate from your flock for at least 30 days.

4. Don't Borrow Disease From Your Neighbor. Do not share lawn and garden equipment, tools, or poultry supplies with your neighbors or other bird owners. If you do bring these items home, clean and disinfect them before they reach your property.

5. Know the Warning Signs of Infectious Bird Diseases.

Early detection is important to prevent the spread of disease. Here's what to look for:

- **Sudden increase in bird deaths in your flock**
- **Sneezing, gasping for air, coughing, and nasal discharge**
- **Watery and green diarrhea**
- **Lack of energy and poor appetite**
- **Drop in egg production or thin- or soft-shelled, misshapen eggs**
- **Swelling around the eyes, neck, and head**
- **Purple discoloration of the wattles, comb, and legs (avian influenza)**
- **Tremors, drooping wings, circling, twisting of the head and neck, or lack of movement (exotic Newcastle disease)**

6. Report Sick Birds. Don't wait. If your birds are sick or dying, contact your agricultural extension office/agent, local veterinarian, local animal health diagnostic laboratory, or the State veterinarian. Or, call

Tips Recommendations for poultry flock owner to prevent diseases

1. Thorough cleaning and disinfection of the poultry house is an important factor in disease prevention.

2. Do not bring new chickens, especially adult birds from other flocks, and mix them immediately with your flock.

3. Do not permit visitors in your poultry house if they have had contact with other poultry. If you do have visitors, they should not be wearing clothes and shoes that have come into contact with other birds and/or their feces



-
4. Purchase feed from a reliable source; do not use old moldy feed.
 5. Vaccinations are important in disease prevention, if needed Provide a well-ventilated but draft-free building with appropriate space available for the number of chickens housed
 6. Properly dispose of all dead birds and old Litter
 7. Keep all sick chickens separated from the rest of the flock
 8. In the event of a disease outbreak in your flock, get an accurate diagnosis as soon as possible

Methods Used to Reduce Interactions Between Poultry and Infectious Agents

The following procedures can be used to reduce interactions between poultry and infectious agents: minimizing human contact, establishing a visitor's policy, reducing exposure from contaminated food and water, Reducing exposure from pests, and reducing exposure from new poultry introductions.

- 1) Minimizing Human Contact and Establishing a Visitor Policy.**
- 2) Reducing Exposure from Contaminated Feed and Water.**
- 3) Reducing Exposure from Pests.**
- 4) Reducing Exposure from New Poultry Introductions.**

Keeping Poultry Away from Infectious Agents

The following procedures can be used to Minimize the introduction of poultry to areas

where infectious agents are present: management of sick birds, carcass management, and vaccination.

- 1) Management of Sick Birds.**
- 2) Carcass Management.**
- 3) Vaccination Program.**
- 4) Cleaning and Disinfecting.**
- 5) Maintaining Adequate Records.**