

Practical Disease Prevention

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Biosecurity on Poultry Farms

Biosecurity is preventing disease causing agents from spreading between birds and/or farms. Biosecurity needs to be incorporated into every day farm practices and will pay off in the long run.

Goals in biosecurity: 1. Prevent the agents from entering the farm.
2. If farm becomes infected, keep the disease contained to that farm.

Disease causing agents: 1. Bacteria -- *Salmonella*, *Pasteurella*
2. Viruses – Newcastle (NDV), Bronchitis (IBV), Avian Influenza (AI)
3. Fungi -- *Aspergillus*
4. Parasites -- Coccidia

Disease causing agents are brought onto the farm by:

- **1. People
- *2. Equipment
- *3. New birds to flock
- 4. Other animals -- wild birds, rodents, insects, pets
- 5. Feed / Water

How to prevent these agents from spreading to your birds:

1. People:
 - a. Restrict access onto your farm by using gates, locks on doors, and no entry signs.
 - b. Restrict the number of people visiting your farm.
 - c. Have visitors wear coveralls and boots (rubber or disposable plastic boots).
 - d. Have disinfect boot dip pans located next to entry doors to the hatchery, breeder, and grow-out areas. Dip boots as you enter and leave these areas. Change disinfect every day. Or wear designated rubber boots/galoshes for the hatchery, breeder, and grow-out areas.
 - e. Wash hands before and after working in the hatchery or with birds.
 - f. Wear “farm” clothes and shoes when working with the birds, then shower and change into “street” clothes and shoes when leaving the farm.
 - g. Bird hunters -- keep hunting clothes and dead game away from resident birds.
2. Equipment:
 - a. Don't share equipment with neighbors.
 - b. If absolutely needed, wash and disinfect the equipment before and after using.
 - c. Keep working areas clean and neat. Wash and disinfect equipment and areas once the eggs/birds are out (incubators, pens, cages, etc.).
3. Resident birds & new birds:
 - a. Separate the young birds from the adults; separate the breeder birds from other birds.

- b. Work from young birds to older birds.
- c. Quarantine new birds (2 to 4 weeks) that come onto your farm and work with these birds last. Shower or at least change clothes and shoes before returning to other resident birds. New birds can introduce infectious or vaccine agents to established flock.

4. Other animals:

- a. Rodents -- can carry diseases like *Salmonella*, use bait stations/traps and monitor them frequently for usage. Determine what kind of rodents are present and bait accordingly. If the bait is not being used move the bait station or traps to a different area. Rinse bait stations every month with water – dominate rodents will urinate in the stations and will keep out the more submissive rodents. Keep the grass mowed and pick up garbage from around the buildings and pens -- rodents avoid open areas.
- b. Wild birds -- can carry *Salmonella* and viruses, keep nest building from occurring around the houses. Open ponds can attract wild waterfowl which are reservoirs for Avian Influenza (AI).
- c. Insects -- flies, mosquitoes, and beetles can spread disease from neighboring farms.

5. Feed:

- a. Use good quality feed and keep it dry to avoid mold growth.
- b. Store in rodent-proof containers.
- c. Clean up spills so as to not attract wild birds or rodents.

6. Water:

- a. Have well water tested for metals and bacteria.
- b. Clean and disinfect drinkers daily to prevent bacteria build up.
- c. Avoid using pond water, this can spread Avian Influenza if the pond is used by infected waterfowl.

7. Pets and wild mammals:

- a. Keep pets from entering bird areas, cats and dogs can carry bacteria in their mouths (ie. *Salmonella*, *Pastuerella*).
- b. Raccoons, skunks, and rodents sharing a waterfowl habitat (ponds) can become infected with Avian Influenza.

8. International travel:

If you travel to another country you may not know what types of exotic diseases their birds may have that you may come into contact with and mistakenly bring back home to your own flock. If you have any contact with foreign flocks, you should not even go near any types of birds back home for at least 5 days. Thoroughly clean all travel clothing, shoes and equipment after returning home.