



SOUTH AFRICAN POULTRY ASSOCIATION
SUID AFRIKAANSE PLUIMVEEVERENIGING

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A quick guide to the application of Biosecurity on a Poultry farm



Biosecurity Guidelines

What is Bio Security?

Biosecurity has multiple meanings and is defined differently according to various disciplines. The original definition of biosecurity started out as a set of preventive measures designed to reduce the risk of transmission of infectious diseases in crops and livestock, quarantined pests, invasive alien species, and living modified organisms (Koblentz, 2010).

Biosecurity and farm management will help decrease the chance of disease on the farm. The first step to disease prevention is protection from exposure to disease agents. Strictly following the biosecurity guidelines below will assist to decrease the chance of disease.

Poultry diseases are controlled by biosecurity, veterinary health care, complete vaccination programs, high-quality diet, enclosed housing, and high standard of farm and bird management.

Disease can occur if a flock is challenged with a new strain of a virus, bacteria, and parasite or if there is a breach in biosecurity. Biosecurity must be practiced at all times. All growers and workers should have documented biosecurity training. A biosecurity checklist should be posted or kept on each farm. Biosecurity measures should be audited frequently for compliance. The main concepts of commercial poultry production biosecurity are:

- ❖ Cleaning and Disinfecting
- ❖ Isolation
- ❖ Traffic Control
- ❖ Pest Control
- ❖ Dead Bird Disposal

Cleaning and Disinfecting

- Kills germs that cause diseases.
- Visitors, growers, and employees must wash hands before entering and leaving the farm. Acceptable methods include waterless gels, disinfecting hand wipes, or soap and water.
- Clean work clothes should be worn to prevent the spread of disease.
- Proper clothing requirements for visits to a commercial poultry operation are disposable coveralls, hairnet, gloves, and plastic boots. The disposable clothing should be disposed of on the farm before the individual leaves the premises.
- Farm workers should shower and wear clean clothes to work. Workers may be asked to change into work clothes on the farm.
- Growers and their workers, living on the farm premises, should have designated clothing to be worn while on the poultry farm. If a person leaves the premises they should change clothes, including footwear, before leaving.
- If a grower has employees who live off the farm premises, these employees should shower, prior to entering the farm, and wear clothing designated, including footwear, for farm use only. Special care should be taken to ensure contamination (disease) is not brought to the farm from outside the farm premises.
- Hands should be disinfected before leaving the dressing area and before entering each house.
- Boots should be dipped in the footbath between each house.
- All equipment used inside the poultry houses should be cleaned and disinfected prior to entering and after exiting the houses. This includes equipment used for clean out and new flock set up.
- Equipment should not be shared between farms, unless thoroughly cleaned and disinfected.

Isolation

- Keep birds away from germs.
- Keep birds away from objects or persons who can carry germs.
- Park away from poultry houses.
- Fence in the perimeter of the poultry operation and keep fence in good repair or a natural perimeter should be established around the farm. If anything from outside the area is entering the farm, it should be considered a source for contamination.
- Do not use open bodies of water such as a pond or lake as a source for poultry drinking water or for misting to cool the birds. Ponds and lakes can be contaminated with viruses such as Avian Influenza (AI) from migrating birds.

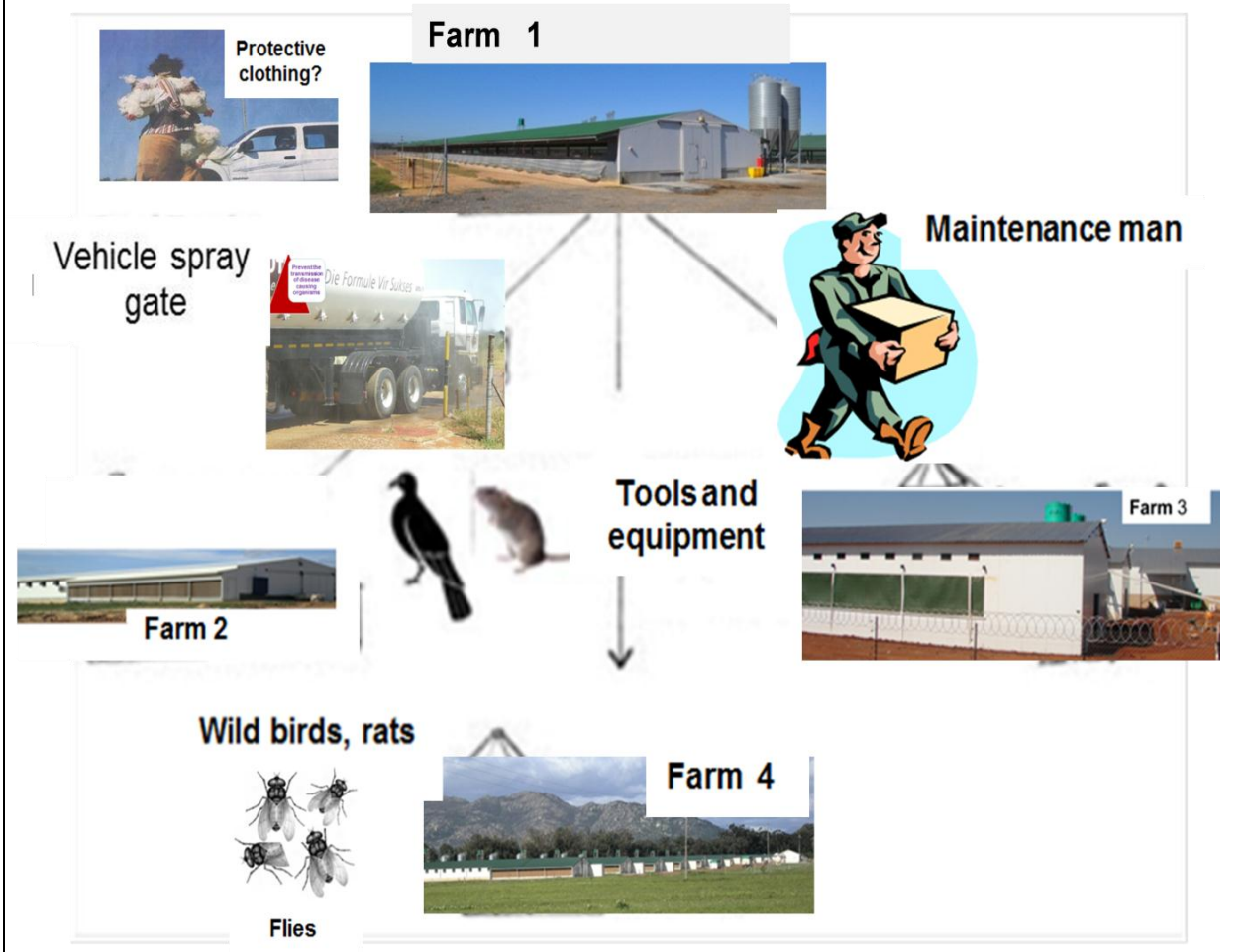
Traffic Control

- Keep germs away from birds.
- Do not allow anyone to enter poultry houses, unless biosecurity rules are followed.
- All visitors must sign a visitor log book and indicate recent bird exposure. Visitors should have a purpose for being on the premises that relates to the proper care and well-being of the flock. Anyone who needs to visit the grower or his agents who does not need to physically be on the farm should contact the grower prior to going to the farm and arrange to meet away from the farm.
- Post a biosecurity sign stating “no entrance” on all entrances to poultry housing areas. If appropriate, the sign should also be in Spanish.
- Vehicles, upon entering and leaving the farm, should have the tires disinfected.
- Footbath with disinfectant should be placed at the entrance of each house and should be used before entering and after leaving the poultry house. The footbath should be a minimum of 1” deep with the proper dilution of disinfectant. If the baths are located outside the house, they should be covered to keep rain and foreign matter out.
- Hands should be disinfected before entering and after leaving the poultry house.
- Doors to each house may be kept locked to decrease unauthorized entry.
- Visit sick flock last.
- Visit farms or houses in order of youngest to oldest flocks.

Pest Control

- Maintain satisfactory rodent and fly control programs.
- Keep doors shut and locked.
- Always look for evidence of rodents.
- Block holes and trap rodents or wild birds.
- Do not allow wild birds to nest on or around the poultry houses.
- Keep areas around houses clean to prevent rodent infestation.
- Remove all nonessential items from within and around the poultry houses.
- The area within 100 feet of the houses should be kept mowed.
- The ditches should be maintained to allow for water to leave the area and not puddle. These items will help limit the exposure to disease from mosquitoes and other pests.
- Keep animals and wild birds out of and away from the poultry houses. It is important to minimize animal activity around the poultry houses. This includes pets, wild animals, and other farm animals.
- Feed spills should be cleaned up promptly to minimize a food source for wild animals which can be carriers of disease

How disease can be spread on a poultry farm



Dead Bird Disposal

- Keep contamination away from the flock.
- Proper disposal of dead birds is essential for a good biosecurity program. If dead birds are to be left outside the house at any time, they should be placed in a covered container.
- Collect mortality last and dispose of properly to prevent spread of disease to other houses and to prevent pest activity.
- Wash hands after handling dead birds.

Spent litter

- Wear protective clothing and dust mask
- Remove litter and dispose of it well away from the house.
- During full cleanouts, end of batch litter must not be stockpiled on the farm site nor should the next batch's litter be placed in the houses before total disinfection has taken place.

General observations

- Growers and poultry workers should not have birds of any type on their farm premises or where they reside.
- It is very important for all persons to restrict their contact with birds and people who are associated with birds. If contact does occur then wash clothes as soon as possible and clean vehicle inside and out.
- Growers and poultry workers should not visit other poultry operations.
- Collect and properly dispose of any loose birds outside the house.
- Workers should report sick birds, production decreases, or odd shaped eggs immediately to their supervisor.
- Do clean jobs, such as gathering eggs, first thing in the working day.
- Do dirty jobs, such as collecting mortality, last thing of the working day.
- Migratory birds may use this area as part of their flyway. If migratory birds are in the area, special care should be taken to avoid infecting the flock with diseases that may be carried by these birds such as AI.
- Anytime there is a change in labour, new employees should be trained on biosecurity.
- Poultry should not be allowed to leave or enter the farm, except under the control of the company that owns the birds.
- Poultry should not be sold or given away, unless the grower is authorized to do so.

Know the Warning Signs for Infectious Diseases

- Diseases can be difficult to diagnose, but you can recognize potential problems and contact a veterinarian to diagnose the disease.
- Some poultry diseases are AI, Newcastle disease, infectious bronchitis, infectious laryngotracheitis, infectious bursal disease, infectious coryza, and mycoplasmosis.
- High mortality and sudden death in a flock should be reported immediately.
- Signs of disease to look for are:
 - ❖ Unusual drop in egg production
 - ❖ Soft or misshapen eggs
 - ❖ Weight loss
 - ❖ Sneezing, coughing, gasping for air, nasal discharge
 - ❖ Greenish watery diarrhoea
 - ❖ Listlessness, muscular tremors, drooping wings
 - ❖ Twisting of head or neck
 - ❖ Complete paralysis
 - ❖ Swelling around eyes and neck

- ❖ Lameness and tumours
- ❖ Sudden death or unusual number of birds dying

Report Sick Birds

- To report sick birds, contact your local veterinarian or contact the State Veterinarian's office.
- It is important to diagnose and stop a disease problem before it spreads.

Useful contact numbers

South African Poultry association
011 795 9929
Poultry Disease Management Agency
012 529 8281

DAFF state Veterinarian's Office

STATE VETERINARY SERVICES

(National Department of Agriculture and the provincial departments of agriculture) For a complete list and further information, contact: Directorate Veterinary Services (National Department of Agriculture), Private Bag X138, Pretoria 0001.
Tel. (012) 319 7488.
Fax: 012-3296892.