SOUTH AFRICAN POULTRY ASSOCIATION

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Checklist | Biosecurity

Implementing Biosecurity on your farm – the basics

South Africa has diverse production systems ranging from subsistence and small commercial farmers to large commercial entities with multiple sites. Regardless of the size of the enterprise, biosecurity remains pivotal to the successful rearing of birds.

Why is biosecurity important?

It is important because it prevents chickens from being exposed to germs that can cause diseases. It does this by reducing the risk of these germs from coming onto the farm (introduction of pathogens) or leaving an infected house or farm and spreading to other houses or farms.

It is also important because preventing diseases from entering farms is better than having to deal with the consequences of an infected farm. It is cheaper to implement biosecurity measures than to lose a flock to avian influenza and have to pay for the cost of depopulation, disposal as well as cleaning and disinfection of the houses afterwards.

How are biosecurity measures implemented?

Biosecurity measures focus on a number of different factors which when implemented or put together reduce the possibility of introducing a disease on to a farm. A number of factors are looked at when a biosecurity plan for a farm is developed. Although the principles are general, their importance will differ from farm to farm. It is therefore important to consider your farm's unique circumstances when developing a plan.

What are the key considerations when developing a biosecurity plan?

The factors you need to consider and their importance are outlined below in a checklist format as a means to assist you the farmer in implementing your biosecurity measures and keeping your flock healthy. Please note that the following checklists outline the basic factors you the farmers needs to consider. Implementing a biosecurity plan is only one aspect, and the management of the plan is crucial in your efforts to maintain a healthy farm.

Is that all there is to Biosecurity?

No that is not all there is. One also needs to consider how one achieves biosecurity. It is not just based on one action but the accumulative effect of good practices. The layers or levels of biosecurity are:

1. Conceptual Biosecurity: This is the first rung of biosecurity to consider. It deals with where the farm is situated e.g. is it next to a busy road, is it amongst many other poultry farms, etc. We usually cannot change this aspect and have to build our biosecurity plan around it. If planning to a new farm however one can plan around these factors and make sure that the risk they pose is reduced e.g. plan to have your free-range farm away from an area that has many other farms.

2. Structural Biosecurity: This is the second rung of biosecurity and deals with how the farm is structured. This includes issues like layout, type of housing, is it fenced, where are the silos situated, etc. Again, all of these factors are important to maintenance of biosecurity and need to be considered in the planning phase where possible.

3. Operational Biosecurity: This is the third and last rung of biosecurity and deals with people and other, the procedures used on the farm to prevent introduction of diseases or its spread.

All these aspects need to be taken seriously and everyone involved needs to be trained at least every year on implementing these measure to ensure that the farm remains protected.

Biosecurity Checklists

	Your farm location and infrastructure (Facts for you to consider)
1	Farms close to dams are at high risk of diseases such as avian influenza. Dams should be at least 5 kms away
2	How far is your chicken houses to major (public) roads? This may pose a disease risk to your chickens
3	How far are other farms from your farm location?
4	Your perimeter fence should be well maintained, in order to prevent predators and intruders and should be 1,8m high.
5	Housekeeping on the farm and around the houses – there should be no old equipment lying around that could attract unwanted pests (rodents etc)
7	Grass and vegetation around the houses or in close proximity to the houses should be kept short
6	Type of housing on the farm and the level of bird proofing

	Your type of operation and biosecurity (Things for you to consider)
1	Biosecurity and diseases on multi age sites are more difficult to manage
2	Employing an all-in and all-out system on every site is ideal for good biosecurity
3	What other operations do you have on site, e.g. feed mill? Having other operations on site increases your risk of biosecurity breaches
4	You need to manage flock placements, depletion, turnaround times, etc. as poor management of these may lead to biosecurity breaches

	Water on your farm
1	Needs to be potable (Potable water, also known as drinking water, that comes from surface and ground sources and is treated to levels that meets the standards for consumption).
2	Needs to be disinfected and tested at least twice a year Water from natural sources is treated for microorganisms, bacteria, toxic chemicals, viruses and faecal matter.
3	Needs to be suitable for the production of poultry

	The Feed and Litter you use on your farm
1	Your feed should be sourced from a reputable supplier with a Hazard Analysis and Critical Control Points (HACCP) programme in place
2	The feed should be stored in such a way that the feed quality is maintained
3	There should be good housekeeping around feed silos and storage areas to prevent attracting unwanted birds and vermin
4	The fresh litter you use should be sourced from a reputable supplier
5	The litter should be decontaminated and stored in closed bags before use
The Farm Premises	
1	Develop a comprehensive biosecurity plan which should be implemented and shared with all employees after training.
2	Signs warning people not to enter the farm or any of its buildings because of disease control (No Admittance—Biosecurity Zone) should be posted at all entrances.
3	External entrances to poultry houses should be kept locked during non-business hours.
4	Houses should be bird-proofed against wild or free-flying birds.
5	Backyard poultry and any other animals must be prohibited from the premises for example in chicken houses and egg processing areas.

6	Feed bins should be secured to prevent contamination by wild birds or rodents, and spilled feed must be cleaned up promptly to prevent attracting wild birds and rodents.
7	Water is drawn from secure sources that cannot be accessed by free-flying birds or rodents.

Your Farm Personnel	
1	Everyone must clean and disinfect their footwear or wear site-provided footwear or footwear covers prior to entering chicken houses, processing areas, and office areas.
2	Everyone must wash/sanitize their hands before entering and after leaving poultry houses and processing areas.
3	Employees should receive biosecurity training when hired, and annually after that. Records of biosecurity training should be kept up to date.
4	Employees should sign a document when hired and during annual biosecurity training sessions stating that they will avoid contact with other birds not owned by the business.
5	In the event that contact is made with other birds, employees should agree that they will comply with 48 hours waiting period prior to any entry into any on the farm to include the barns, processing plant, and office.
6	Personnel must be prohibited from exposing equipment from other farms that has not been washed and disinfected.
7	Personnel must use separate showers at the point of entry and exit onto the site. Change clothes at the line of separation.
8	Spent hen and cull removal personnel are prohibited from entering other chicken houses or egg processing
9	Employees should not be shared between operations.

The farm equipment	
1	Footwear disinfection stations, site-provided footwear, or site-provided foot covers should be available outside all external entrances. If footbaths are used, they must be changed at least daily or more often if the footbath collects dirt, egg contents, or manure. Hand washing or hand-sanitizing stations should be available at entrances.
2	Equipment and tools brought to the farm must be thoroughly cleaned and disinfected prior to use.
3	Equipment must as far as possible be site and/or house specific and not rotated between the houses
3	Poultry transport equipment (carts, loaders, ramps) should be cleaned and disinfected prior to use.
4	For egg-laying facilities, only clean, sanitized, and disinfected plastic egg flats or new disposable egg flats should be allowed on the premises.
5	Cleaned and disinfected equipment should be kept and stored under conditions that prevent exposure to wild birds.

The visitors and hygiene on your farm	
1	Restrict visitor access as far as possible
1	Visitors should not be allowed to enter the chicken houses unless absolutely necessary.
2	Visitors Logbook should be on hand and should record the (a) visitor's name, (b) company, (c) time of entry, (d) statement confirming no contact with premises containing birds or rendering activities during the preceding 48 hours, (e) time of leaving, and (f) a contact telephone number.
3	Visitors and contractors who have had contact with birds during the preceding 3 days must be prohibited from entering chicken houses or egg processing areas.

4	Clean coveralls/overalls (or disposable suits), disinfected boots (or shoe covers), and hairnets should be available and required for visitors and contractors to wear before entering barns, egg processing areas, or other work areas.
5	Visitors must have authorization to be on site
6	All people accessing your farm must follow good hygiene practices
7	Where possible provide shower facilities for the visitors
8	Clean Personal Protective Equipment must always be available for your visitors
9	Farm checks should be done in sequence from young birds to older birds
10	Always avoid visiting farms with sick birds. Where necessary farms with sick birds must be visited last regardless of age.

Vehicles entering your farm	
1	All vehicles entering your farm premises must be disinfected at point of entry
2	If drivers are required to make multiple stops at more than one individual farm in any given day, they must be prohibited from entering chicken houses or egg processing areas.
3	Your farm policy should require the cleaning and disinfection of vehicles and containers from a rendering plant before they enter an egg layer premises.
4	Manure trucks should never go from one poultry farm to another on the same day. However, if required, the manure trucks must be washed with detergent and disinfected prior to arrival at the next farm.

Managing your manure and dead bird disposal	
1	Used Litter and dead birds should be stored and managed in such a way that they don't pose a biosecurity risk
2	Used litter should be removed off site following depletion
3	Mortalities (dead birds) should also be stored away from the houses in a manner that does not attract vermin and minimizes the spread of disease

Quality of the birds and flock health	
1	Source birds(chicks or pullets) of a good quality from a reliable supplier
2	Good suppliers will be able to share with you the health status of the breeder flocks and/or the history of the chicks or pullets e.g. whether the birds have been vaccinated and what vaccines have been used
3	A relevant vaccination programme should be followed and the flock monitored for any signs of disease

Exposure to Birds and other Animals	
1	There must be no contact between your chickens and any other birds whether it is domestic or wild birds
2	You should implement a pest control programme
3	Employees should not keep poultry at home
4	No pets such as, cats or dogs, should be allowed near the houses
5	Where contact or near contact has occurred with other poultry, employees must report the incident and quarantine measures must be applied Should such contacts lead to a disease outbreak quarantine the farm

Other factors you need to consider	
1	You need to have good record keeping
2	You need to have a good cleaning and disinfection programme in place