

Biosecurity In Poultry

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[DOI:10.5281/TrendsInAgri.14726113](https://doi.org/10.5281/TrendsInAgri.14726113)

Biosecurity refers to the measures and practices taken to prevent the entry and spread of diseases among poultry populations. 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. It is a crucial aspect of poultry farming to ensure the health of flocks, protect the economic interests of farmers, and reduce the risk of zoonotic diseases that can spread from animals to humans.

Key elements of poultry biosecurity include:

- 1. Physical Barriers-** Limiting access to poultry houses by outsiders, including vehicles, equipment, and people, to minimize the risk of disease transmission. Ensuring poultry houses, equipment, and any vehicles or tools used on the farm are regularly cleaned and disinfected to prevent contamination.
- 2. Control of Movement-** Any new birds or animals should be quarantined for a period of 14 days before being introduced to the existing flock to observe for any signs of illness. Infected birds should be isolated immediately to prevent the spread of diseases to healthy ones. Dead birds should be disposed to prevent contamination away from the farm & hands should be washed thoroughly.
- 3. Health Management-** Regular vaccination schedules should be followed for diseases common in the poultry industry, such as avian influenza, Newcastle disease, and Marek's disease. Continuous monitoring for signs of disease and the implementation of diagnostic testing to detect and control outbreaks early.
- 4. Hygiene and Sanitation-**Ensuring anyone entering poultry houses wears clean clothing, boots, and washes hands thoroughly to reduce contamination risks. Ensuring feed and water systems are regularly cleaned and free from contamination which Kills germs that cause diseases. Visitors, growers, and employees must wash hands before entering and leaving the farm. Farm workers should shower and wear clean clothes to work. Workers may be asked to change into work clothes on the farm. 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.

5. Proper Waste Management- Proper disposal of dead birds (such as composting or



incineration) to avoid contamination from diseases like avian influenza and Salmonella. Ensuring that poultry manure is safely stored and handled to avoid contamination of feed, water, and surrounding environments.

- 6. **Monitoring Wild Birds-** Wild birds can carry diseases that may affect poultry, so controlling their access to poultry houses (e.g., through netting or bird repellents) can reduce the risk.
- 7. **Training and Awareness-** Providing regular training for farm workers on the importance of biosecurity, how to implement the necessary measures, and recognizing signs of disease is vital to maintaining a healthy poultry environment.
- 8. **Record-Keeping-** Accurate records of flock health, vaccination, feed, and any movement of animals or materials help in tracing potential disease outbreaks and ensuring proper disease management practices.

Measures for achieving Biosecurity:

- 1. No contact with outside birds
- 2. Maintaining flock health by providing fresh feed, clean water, maintain litter dry & clean, proper ventilation, & provision of suitable & comfortable zone
- 3. Regular vaccinations & maintaining bird health
- 4. By following these biosecurity measures, poultry farmers can significantly reduce the risk of infectious diseases spreading within their flocks, which helps improve productivity and animal welfare.