

# Biosecurity for Commercial Poultry

Jennifer L. Rhodes

Principal Agent

Agriculture and Food Systems

UNIVERSITY OF  
MARYLAND  
EXTENSION

AgFS  
Agriculture & Food Systems



# Outline



- Biosecurity and its importance in preventing HPAI
  - Definition
  - Key elements
  - Key considerations
- Summary and Final Thoughts

# Review of Biosecurity

- Biosecurity is not:
  - a “one size fits all”
  - an additional expense
    - It is actually a wise investment!
  - the sole responsibility of company or government officials
    - It requires everyone’s input and cooperation
  - “cut in stone”
    - Must be regularly reviewed and updated according to current needs and conditions



# Key Elements of Biosecurity

- **Isolation**
  - Keep poultry within a fenced area and maintain a security gate at the farm entrance
  - Keep young birds isolated from older birds



# Key Elements of Biosecurity

- **Isolation**

- Isolate poultry from livestock, e.g. cattle and swine
- Keep people, dogs, cats, and wild animals away from poultry houses
- Screen all poultry house openings to control insects, wild birds, and rodents



# Key Elements of Biosecurity

- **Traffic Control**
  - Restrict entry of visitors and non-essential vehicles to your farm
  - Keep a record (logbook) of essential visitors indicating their names, affiliation, and date, time and purpose of visit
  - Do not visit other poultry facilities





# Key Elements of Biosecurity

- **Hygiene and Sanitation**
  - Wear clean, dedicated clothing and footwear when working inside poultry houses
  - Wash hands with soap and water or use a hand sanitizer before entering and upon leaving a poultry house



# Key Elements of Biosecurity

- **Hygiene and Sanitation**
  - Use disposable plastic boots or use a footbath or bucket with disinfectant and boot brush to disinfect footwear before entering and upon leaving a poultry house
  - Thoroughly clean and disinfect poultry house and equipment between flocks





# Key Elements of Biosecurity

- **Hygiene and Sanitation**
  - Keep feeders and drinkers clean
  - Practice good litter management



<https://www.usatoday.com/story/news/nation-now/2017/03/07/tennessee-bird-flu-outbreak/98841334/>

# Key Elements of Biosecurity

- **Hygiene and Sanitation**

- Dispose of dead birds promptly, preferably through composting
- Dispose of manure/used litter properly.
  - Do not stockpile manure or litter near poultry houses



# Avian Influenza Biosecurity Video



<https://youtu.be/ZrzwyMS-tME>

# Key Biosecurity Considerations (Vaillancourt\*)

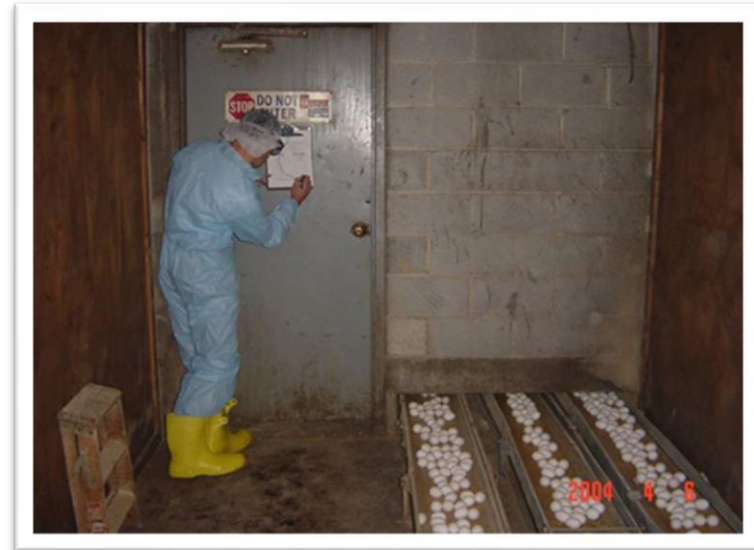
- Focus on basic measures that are known to work, such as:
  - changing boots
  - putting on coveralls
  - washing hands
  - using an alcohol-based gel before touching anything that may come into contact with birds.



\*<https://poultryhealthtoday.com/biosecurity-in-poultry-production-what-makes-it-work-and-what-doesnt/>

# Key Biosecurity Considerations (Vaillancourt\*)

- Make compliance easy
  - Provide ample space for changing boots, putting on coveralls and washing hands.
  - Make sure the necessary supplies and equipment are available and readily accessible.



\*<https://poultryhealthtoday.com/biosecurity-in-poultry-production-what-makes-it-work-and-what-doesnt/>

# Key Biosecurity Considerations (Vaillancourt\*)

- Emphasize proper communication
  - Have a plan in place that enables rapid communication among key poultry people, particularly those who may come onto the farm.



\* <https://poultryhealthtoday.com/biosecurity-in-poultry-production-what-makes-it-work-and-what-doesnt/>

# **FINAL THOUGHTS**

- A poultry disease prevention/biosecurity plan is only good if properly implemented.
- A poultry disease prevention/biosecurity plan must be reviewed and revised periodically.
- Biosecurity is an investment, not an expense.
- Biosecurity and good management practices prevent disease outbreaks, improve livability, and promote profitability.



# Thank You

Jon Moyle, Ph.D.  
Poultry Specialist  
University of Maryland Extension  
443-754-0539  
jmoyle@umd.edu

Jenny Rhodes  
Ag Educator, Queen Anne's County  
University of Maryland Extension  
410-310-0103  
jrhodes@umd.edu

Maegan Perdue  
Ag Educator, Worcester County  
University of Maryland Extension  
443-523-4389  
mperdue@umd.edu

Nathaniel L. Tablante, DVM, MPVM, MS, DACPV  
Professor and Extension Poultry Veterinarian  
Tel: 301-314-6810  
nlt@umd.edu

Mostafa Ghanem BVSC, MVSC, PhD  
Assistant Professor  
mghanem@umd.edu  
Tel: 301-314-1191

<http://extension.umd.edu/poultry>