

# CASE

*Curriculum for Agricultural  
Science Education*

**Principles of Agricultural Science – Animal**

# Biosecurity

Unit 3 – Lesson 3.3 Home Sweet Home

# What is Biosecurity?

The practices that protect herd health by preventing the spread of pathogens.

- Reducing the potential for diseases to reach the farm
- Controlling the spread of diseases on the farm

# Risk Management

- Balancing the likelihood of an uncertain event happening with the cost of protection
- Preventative maintenance
- Watch this video for an introduction to cleanliness of a backyard poultry farm....

<https://www.youtube.com/watch?v=S9fCDU2pn5l>

# Control Points

- Area where risk can be influenced
- Reduce the risk that something bad will happen
- Monitor the control points

# Risk Factors

- New Animals on the Farm
  - Comingling new animals
  - Returning animals from fairs
- Strategies to Overcome:
  - Quarantine for 2-4 weeks
  - Wear different clothing and shoes
  - Use parasite controls and vaccinate



# Risk Factors

- Visitors to the Farm
  - Carry pathogens from farm to farm
- Strategies to Manage
  - Provide clean coveralls and disposable boots
  - Minimize contact with animals



# Risk Factors

- Equipment and Trucks
  - Tires moving manure from group to group
  - Using the same loader for manure and feed
- Strategies to Reduce Harm
  - Limit traffic on and through farm
  - Clean and sanitize equipment regularly

# Risk Factors

- Wildlife
  - Less common carrier due to species specific diseases
- Strategies to Prevent Problems
  - Keep feed areas clean and materials put away
  - Property perimeter maintained
  - Fences



# Limiting Exposure

- Isolation
  - Keep new and returning animals separate
  - Limit contact with outside people
- Resistance
  - Vaccination and parasite control programs
- Sanitation
  - Clean and disinfect facilities regularly
  - Provide clean clothing and boots

# Disinfectants

- Should be used as part of a biosecurity plan; not the only measure
- Boots and shoes must be clean and manure free before disinfecting
- Must be used properly to achieve disinfecting properties



# References

- Lawhead, J., & M. Baker. (2005). *Introduction to veterinary science*. Clifton Park, NY: Delmar.
- Snively, D. (2008). *Biosecurity on the farm*. Retrieved from <http://www.wvu.edu/~agexten/Biosecure/Farm.pdf>.