Layer Biosecurity

USAHA Transmissible Diseases of Poultry - Oct 2015

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Historical Disease Control by Vaccination

Adequate immunization:


- *Mycoplasma synoviae* as challenge model...
Genetic Excellence

Chicks

Other Poultry and Animals

Feed and Water

People

Manure

Housing

Vaccines & Equipment

Wild Birds

Vehicles and Equipment

Hatchery

Rodents

Insects
Layer Complex Daily Inputs/Outputs

- Contract crews
- Farm personnel
- Lunches
- Tools
- Personal vehicles
- Feed ingredient trucks (Hundreds!)
- Feed trucks
- Pullet trucks/carts
- MAK carts/CO2 tanks
- Package deliveries - UPS, USPS, FedEx
- Office supplies
- Egg packing materials
- Eggs
- Manure handling trucks
- Manure
- Tractors
- Liquid egg trucks
- Dead birds

All are potentially **shared** and **difficult and expensive to clean** ($$$ and time)
Manure Handling

- Belted style houses produce dry manure
- “Local” land application may be 50+ miles
- Neighbors spreading manure/litter on windy days
  - Contaminate equipment/personnel
- Difficult to wash trucks/tractors
  - A dirty job!
  - Many trips to move manure
Contract Crews in Layer Facilities

Contract crew activities:
- Vaccination
- Beak treatment
- Pullet moving
- Trucking
- Flock depletion
- Farm staffing?

Downtime difficult to enforce
- How to get an honest answer?
- Want full time work
Considerations for Contract Crews and Employees

- Personal vehicles
- Clothing and shoes
- Lunches
- Where they live, who they live with?
  - Cross traffic in small towns
Geographic Biosecurity

- Infected layer complexes produced insane amounts of HPAI virus
- Wouldn’t want to be downwind!
- Filters are not economical...
Biosecurity Limitations

- **Communication**
  - Mandating rather than discussing

- **Understanding all farm inputs and out-puts**
  - Shower in-shower out sounds so nice!
  - Is all equipment “showering in”?  
  - Truck sanitation

- **Management and farm staff buy-in**
  - What “pencils out”
  - Practices followed everyday, every time

- **Deviations from protocol**
  - How and who handles?
Employee Buy-In

- Describing why procedures are important
- Provide choices:
  - Footwear and clothing – comfort and safety
  - Minimize inconvenience (not for the pathogens!)
- Feedback on reality vs written protocol
  - Anonymous? Regular meetings
- All visitors, contractors, maintenance, management must follow same procedures
- Incentives
  - Example: build in shower time for hourly
- Short-cuts cause problems
Conclusions

- Cultural biosecurity takes time and repetition
- Top down, bottom up involvement
- Practical and effective > complicated
- Education at every opportunity
- Continual improvement
“Biosecurity is inconvenient.”
- Dr. John Glisson