

TEXAS A&M
AGRI LIFE
EXTENSION

Biosecurity and Bird Health

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Biosecurity and Sanitation

- ▶ What is “Biosecurity”?
 - ▶ Protecting your birds from disease
- ▶ What is a vector?
 - ▶ Something that may transmit a disease
 - ▶ Rodents, birds, insects, shoes, car tires, shared equipment, best friend, pet, feed, water, dust, air....



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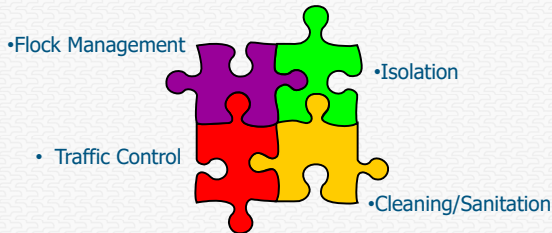
Biosecurity

- ▶ Strategies to control disease causing organisms and their carriers (vectors).
- ▶ Protect poultry flocks from any type of infectious agent.
 - ▶ viral, bacterial, fungal, or parasitic
- ▶ Control transmission of disease from flock to flock.
- ▶ Preventative measures
- ▶ Biosecurity is the cheapest, most effective means of disease control available.

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Major Components to Biosecurity



- Flock Management
- Isolation
- Traffic Control
- Cleaning/Sanitation

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Biosecurity and Sanitation

- ▶ Five steps to Cleaning and Disinfection
 1. Dry Clean
 2. Soap
 3. Rinse
 4. Dry
 5. Disinfect



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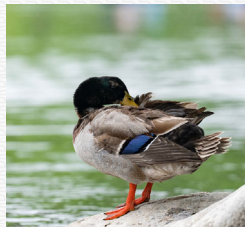
Biosecurity

- ▶ **Proactive Disease Control**
 - ▶ Keep pets and “yard birds” away from the show pen
 - ▶ No trading or uniformed buying – quarantine new birds
 - ▶ Dedicated footwear/clothing or disposable coveralls and boot covers for bird premises
 - ▶ Hand washing

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Biosecurity Measures

- ▶ Confine flocks to controlled environment
- ▶ Screen houses to protect flock from wild birds
- ▶ Avoid contact with migratory waterfowl and other birds
- ▶ Restrict visitors



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Biosecurity

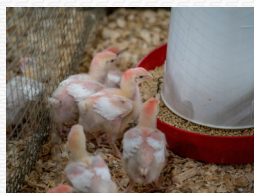
- ▶ Proactive Disease Control
 - ▶ **Control vector habitat and attractants**
 - ▶ birds
 - ▶ rodents
 - ▶ varmints
 - ▶ insects
- ▶ Make sure show pen is **animal and bird proof**



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Biosecurity

- ▶ Minimize stressors
 - ▶ Fresh feed
 - ▶ Clean water
 - ▶ Good ventilation
 - ▶ Provides an overall comfortable environment



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Disease/Health Checks

- ▶ Watch for symptoms such as:
 - ▶ Coughing, sneezing, watery eyes, ruffled feathers, loss of feathers, excessive picking, labored breathing and sudden drops in production and feed or water consumption
- ▶ Eliminate unhealthy or nonproductive birds



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Be Careful

- ▶ **Don't over medicate!**
- ▶ Follow label instructions
- ▶ Follow withdrawal requirements
- ▶ Be sure products are approved for poultry (chickens and/or turkeys)
- ▶ **Remember: If a little is good...it does not mean that a lot is better!**

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VFD

- ▶ **As of January 1, 2017, all medically important antibiotics to be used in feed or water for food animal species require a *Veterinary Feed Directive (VFD)* or a *prescription*.**
- ▶ FDA requires veterinary oversight whenever medically important antibiotics are administered to any food animal species via feed or water, **even if the animals are not intended for food production**. From pet rabbits and pigs, to backyard poultry, to large livestock farms, the same restrictions apply.

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VFD

- ▶ The government has placed medications into categories based on their importance to human medicine.
 - ▶ Examples of drugs considered critically or highly important to humans include Excede, Draxxin, Lincomycin, Penicillin and the Tetracyclines.
- ▶ The only antibiotics considered not important are Bacitracin, Meccadox, Tiamulin (Denegard), Narasin, and Bambermycin.

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Drugs Transitioning From OTC to VFD Status (from FDA website)

Established drug name	Examples of proprietary drug name(s)
chlortetracycline (CTC)	Aureomycin, CLTC, CTC, Chloratet, Chlorachel, ChlorMax, Chlortetracycline, Deracin, Inchlor, Pennchlor, Pfichlor
chlortetracycline/sulfamethazine	Aureo S, Aureomix S, Pennchlor S
chlortetracycline/sulfamethazine/ penicillin	Aureomix 500, Chlorachel/Pfichlor SP, Pennchlor SP, ChlorMax SP
hygromycin B	Hygromix
lincomycin	Lincomix
oxytetracycline (OTC)	TM, OXTC, Oxytetracycline, Pennox, Terramycin
oxytetracycline/neomycin	Neo-Oxy, Neo-Terramycin
penicillin	Penicillin, Penicillin G Procaine
sulfadimethoxine/orometrim	Rofenaid, Romet
tylosin	Tylan, Tylosin, Tylovet
tylosin/sulfamethazine	Tylan Sulfa G, Tylan Plus Sulfa G, Tylosin Plus Sulfamethazine
virginiamycin	Stafac, Virginiamycin, V-Max

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Probiotics

- ▶ Used to establish a normal and healthy microflora
 - ▶ Better gut health, pathogen resistance and slight increases in weight gain seen in commercial birds
 - ▶ Effects for show birds???
- ▶ Useful following antibiotic administration

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Other Health Issues

- ▶ Colibacillosis – *E. coli* infection
- ▶ Air sac Infection – poor air quality
- ▶ Ammonia irritation – poor air quality, wet litter
- ▶ Coccidiosis – dirty conditions, poor litter quality
- ▶ Ascites (flip-over) – over heating, stress, fast growth

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Other Health Issues

- ▶ Slip tendons (splay-legged)
 - ▶ Slick surfaces in pen
 - ▶ Turkeys very susceptible
 - ▶ Vitamin deficiency
 - ▶ Prevention is only treatment



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Finding Help

- ▶ Local Vet
- ▶ Texas Veterinary Medical Diagnostic Laboratories – Poultry Labs
 - ▶ Gonzales – (830) 672-2834
 - ▶ Dr. Ficken
 - ▶ Center – (936) 598-4451
 - ▶ Dr. Cue



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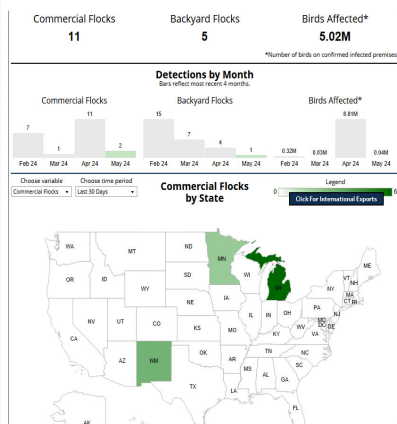
Vaccination of Show Birds

- Broilers not needed



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How does the AI spread in birds?

- AI is spread by direct contact between birds, and through indirect contact with virus contaminated equipment and materials.
- The virus is spread by in the feces of infected birds or through secretions from the nose, mouth and eyes.
 - Exposure to infected fecal material is the most common mode of bird-to-bird transmission.
 - Wild ducks often introduce AI into domestic flocks raised on range or in open flight pens through environmental fecal contamination.
- The spread of avian influenza between poultry premises almost always follows the movement of contaminated people and equipment.
- Airborne transmission from farm to farm is highly unlikely under usual circumstances.

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Symptoms of Avian Influenza

- Birds that are infected with highly pathogenic avian influenza are more severely ill and could exhibit one or more of the following clinical signs:
 - Sudden death
 - Lack of energy and appetite
 - Decreased egg production
 - Soft-shelled or misshapen eggs
 - Swelling
 - Purple discoloration
 - Nasal discharge
 - Coughing, sneezing
 - Lack of coordination and diarrhea

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