Bugs and Diseases, Oh My! How LHDs Work with Other MDARD Programs Beyond Food Inspections

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Panelists:
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Mike Philip, Pesticide and Plant Pest Management Division Director
Craig VanBuren, Laboratory Division Director

10/04/2023
Laboratory Division
Chemistry

- Animal Disease Testing
- Food and Feed Safety
- Hemp
- Liquor
- Fertilizer
Pesticide

• Pesticide Data Program
• Pesticide & Environmental Testing
• Formulations
Metrology Lab

• Mass and Volume Calibrations
Food & Dairy Microbiology

• Food and Feed Microbiology
• Dairy Testing
Weights & Measures

• Weights & Measures Act Enforcement
• Shopping Reform & Modernization Act
Motor Fuel Quality

- Motor Fuels Quality Act Enforcement
CSC/CLU

- MDARD Customer Service Center
- Central Licensing Unit
Animal Industry Division
Role of State Veterinarian

Protect, regulate, and promote animal health.

- 1.15M Cattle
- 1.24M Swine
- 26.3M Poultry
- 89,000 Sheep
- 29,000 Goats
- 64,000 Horses
- 1.8M Horses
- 2.4M Dogs
Core functions

- Reportable diseases
- Animal traceability
- Licensing
Purpose of Having Reportable Diseases

• Monitor for new/foreign conditions
• Protect public health
• Support eradication
• Enable control, if eradication is not feasible
• Assist in safe trade
• Monitor for changes in agent
• Encourage preventative measures
  • Vaccination
  • Biosecurity and other preventative measures
Reportable Animal Diseases

- Internationally: 86 diseases
- United States: 53 of 86 diseases are present
  - 42 (79%) have a potential wildlife component
  - 21 (40%) are known to be zoonotic
What the Law Says

Pursuant to Act 466 of 1988, MCL 287.709, a person who discovers or suspects or has reason to believe that an animal is either affected by a reportable disease or contaminated with a toxic substance shall immediately report this to the Michigan Department of Agriculture and Rural Development.
Reportable Animal Disease List

- Regulated diseases should be reported to MDARD within 24 hours.
- Regulated diseases generate a range of responses.
- Responses may include working with the veterinarian to ensure appropriate measures are taken, an on-farm visit, or possibly a quarantine—depending on the disease.

<table>
<thead>
<tr>
<th>CAPRINE/OVINE</th>
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<tbody>
<tr>
<td>EMERGENCY Must be reported immediately.</td>
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<tr>
<td>Akabane (congenital arthropocticosis)</td>
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<tr>
<td>Contagious caprine pleuropneumonia (CPP) (Mycoplasma capricolum caprine pneumonia, Mycoplasma bovis type F-3R, M. mycoides capri)</td>
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<tr>
<td>Crimean Congo Hemorrhagic Fever*</td>
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<td>Foot and mouth disease (FMD)</td>
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<td>Goat and sheep pox</td>
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<td>Heartwater (Ehrlichia ruminantium)</td>
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<td>Mange (Sarcoptes scabiei var ovis)*</td>
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<tr>
<td>Meliolosis (Burkholderia pseudomallei)*</td>
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<td>Navel Ileal Disease*</td>
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<td>Peste des petits ruminants</td>
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<td>Rift Valley Fever*</td>
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<td>Rinderpest</td>
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<td>Theileriosis (Theileria annulata, T. parva)</td>
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<tr>
<td>Screwworm*</td>
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<td>Sura (Trypanosoma evansi)</td>
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| REGULATED Must be reported within 24 hours. |
| Anaplasmosis (Anaplasma cyclorum, A. centrale, A. marginale)* |
| Anthrax (Bacillus anthracis)* |
| Brucellosis (all Brucella species)* |
| Echinococcus/hydatidosis (Hydatid fascism spp)* |
| Enzootic abortion of ewes (Ovine chlamydios, Chlamydia psittaci)* |
| Ovine epididymitis (Brucella ovis infection)* |
| Listeriosis (Listeria monocytogenes)* |
| Pseudorabies (Aujeszky's Disease, PRV)* |
| Rabies* |
| Scapie |
| Tuberculosis (All Mycobacterium species)* |
| Tularemia (Francella tularensis)* |
| Toxic substance contamination |
| Q fever (Coxiella burnetii)* |

| MONITORED Must be reported within 7 days. |
| Bluetongue |
| Contagious agalactia (Mycoplasma genitalium)* |
| Salmonellosis (Salmonella abortus ovis)* |
| West Nile virus (WNV)* |
One Health – Part of the “Ecosystem”
Bovine Tuberculosis (TB)
Bovine Tuberculosis (TB)

- Public health impact
- Agricultural impact
- Societal impact
TB-Infected Wild Deer: 2016 to 2022
Highly Pathogenic Avian Influenza (HPA)
Counties with HPAI-Infected Domestic Flocks

- Branch
- Eaton
- Genesee
- Ingham
- Kalamazoo
- Lapeer
- Livingston
- Macomb
- Menominee
- Muskegon
- Oakland
- Saginaw
- Sanilac
- Tuscola
- Washtenaw
- Wexford
Arboviruses: EEE and WNV
Arboviruses: EEE and WNV
Arbovirus Cases

MDARD actions:

- Notification of Public Health and industry stakeholders
- MDARD Equine Program Manager communicates as needed with DVM
- No field visit from MDARD DVM or quarantine
Official Identification

- Official ID must not be removed
- Official ID has a US shield
- Official U.S. Department of Agriculture (USDA) premises identification or scrapie flock ID (sheep/goats) required
Licenses and Registrations
Licensing and Registration

- Animal Shelters
- Aquaculture Facilities
- Dead Animal Dealer/Renderer
- Livestock Markets/Dealers/Truckers
Pesticide and Plant Pest Management Division
Pesticides

- Product Registration
- Applicator Certification
- Marketplace Surveillance
- Integrated Pest Management
- The Worker Protection Standard
- Misuse Investigations
Fertilizer

• Product Licensing
• Marketplace Surveillance
• Adulterants
• Beneficial Use 3
• Biosolids
Animal Feed

• Inspections
• Marketplace Surveillance
• Medicated Feed
• Veterinary Feed Directives
• Investigations
Invasive Species

• Prevention, Detection, Response
• Spotted Lanternfly
• Hemlock Woolly Adelgid
• Balsam Woolly Adelgid
• Ralstonia solanacearum R3B2
Emergency Management
Emergency Management

- Sample Team Exercise: Surge capacity field staff exercise; every three years
- Demonstrate capacity in:
  - Activation / practice of Incident Management Teams
  - Just-in-time training & safety
- Incident Command System classes
- Risk & Hazard Communication
Recent MDARD IMT Activations

- March 2020: COVID-19
- April 2020: Ralstonia in Geraniums
- October 2020: COVID-19 in Mink
- March 2021: Mobile Vaccination Units
- August 2021: Balsam Wooly Adelgid
- February 2022: Highly Pathogenic Avian Influenza
- March-September 2022: Sampling Team
- August 2022: Spotted Lanternfly
- Summer 2022: Fast food E. coli with locals
Emerging Contaminants

- Toxicology
- MPART
- Additional resources
Thank you!

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