Missouri Agriculture

• **Economic Driver of Missouri**

$88 BILLION

- Forestry Products Manufacturing: $8.34 billion
- Food & Related Products Manufacturing: $48.51 billion
- Ag Inputs & Services: $14.56 billion
- Crops, Livestock, Forestry & Fisheries Production: $16.96 billion

99 industries
Missouri Agriculture

• Top Ten in the United States

SOYBEANS - 9TH
181 million bushels

BEEF COWS - 3RD
2 million head

CORN - 10TH
437 million bushels

BROILERS - 9TH
294 million head

HOGS - 7TH
3 million head

TURKEYS - 5TH
19 million head

RICE - 4TH
12 million cwt

COTTON - 8TH
400,000 bales

• Export Market is growing
Missouri Department of Agriculture

- **Director:** Chris Chinn
- **Deputy Director:** Loyd Wilson
- **Animal Health Division**
  - State Veterinarian: Dr. Linda Hickam
  - **Animal Health Programs**
    - Livestock Markets and Dealers
    - National Poultry Improvement Program
    - Animal Care Facility Act
    - Animal Disease Traceability
    - Chronic Wasting Disease
    - Veterinary Diagnostic Laboratories
    - Meat and Poultry Inspection Program
    - Emergency Management
    - **Other Disease Programs**
      - Tuberculosis, Brucellosis, etc.
USDA - APHIS, VS

- Missouri AD (Assistant Director)
  - Dr. Thomas Easley
- District 4
  - Missouri
  - Oklahoma
  - Arkansas
  - Texas
  - Louisiana
  - Mississippi
Disease Response in Missouri

- Classifications of disease
- When to call
- Who to call
- Response procedures
- Prevention
Classifications of Disease

- **Regulatory Diseases and/or Reportable Diseases**
  - Brucellosis
  - Tuberculosis
  - Chronic Wasting Disease
  - Psuedorabies
  - Johne’s
  - Rabies

- **Non Regulatory Diseases**
  - Pneumonia
  - Shipping Fever
  - Strangles
  - IBR
  - Swine influenza
  - Canine influenza
Foreign Animal Diseases

- Screwworm
- Swine cholera
- Avian Influenza
  - High Pathogenic (HPAI) or Low Pathogenic (LPAI)
    - H5
    - H7
- Foot and Mouth Disease (FMD)
- Other diseases on the OIE list
When to call for disease concern

- Unusual symptoms in herd or flock
- Unexplained death losses
- Any suspicion of FAD
- Unusual circumstances associated with illness in herd or flock
- Recommendation of practicing veterinarian
Who should you call?

1. Your local veterinarian
2. State Veterinarian
RESPONSE TO DISEASE INCIDENT
Regulatory Diseases

- Quarantine
- Perform Epidemiological Investigation
- Conduct necessary testing/sampling
  - Samples submitted to state regulatory diagnostic laboratory
  - Confirmation by National Veterinary Services Laboratory (NVSL)
- **Determine course of action**
  - Monitor herd/flock and/or controlled marketing
  - Test and remove positive animals
  - Depopulate the herd/flock
Non-Regulatory Diseases

- State involvement is dependent upon the disease and severity
- Actions state has authority to implement
  - Quarantine
  - Testing
  - Epidemiological investigation
  - Implementation of control/eradication protocols
Foreign Animal Disease Incidents

- **Foreign Animal Disease Diagnostician**
  - Conducts investigation within 12 hours of notification
  - Collects samples for diagnostic testing (if warranted)
    - Submitted to NVSL or Plum Island
    - Quarantines premises
- **Actions are dependent upon disease**
  - Depopulate
  - Monitor/test and move through controlled
  - Established Control Area
  - Permitted movement of animals and/or product within the Control Area
Quarantine Procedures

Establish buffer & surveillance zones
Plum Island

• **Biosafety Level 3 Agriculture Facility**
  – Restricted access with 24/7 security
  – Highly monitored by trained staff to prevent contamination
  – Shower in and out of facility
  – No exposure to animals for 5 days after leaving Plum Island
  – Anything that enters the laboratory stays unless thoroughly decontaminated
# Time Line of Moving to Plum Island to Manhattan, Kansas

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Description</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>Environmental Impact Study</td>
<td>Determined Suitability of the Kansas Site</td>
<td>Completed</td>
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<tr>
<td>Record of Decision</td>
<td>The Department Stated that NBAF will be Sited in Kansas</td>
<td>Completed</td>
</tr>
<tr>
<td>Design</td>
<td>Develop Detailed Design</td>
<td>Completed</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>Prepare Site for Construction</td>
<td>Completed</td>
</tr>
<tr>
<td>Construction</td>
<td>Construction of Central Utility Plant</td>
<td>Completed</td>
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<tr>
<td>Construction</td>
<td>Begin Lab Construction</td>
<td>2015</td>
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<tr>
<td>Commissioning</td>
<td>Complete Facility Commissioning</td>
<td>2021*</td>
</tr>
<tr>
<td>Facility Accreditation</td>
<td>Receive Select Agent Permit</td>
<td>2022*</td>
</tr>
<tr>
<td>Mission Transition</td>
<td>Complete transition form Plum Island</td>
<td>2023*</td>
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</tbody>
</table>
Biosecurity is Prevention

• **Important actions for everyday activities on farm**
  – Dedicated work clothes and footwear
  – Manageable for doing business daily - practical

• **Written plan**
  – Training for everyone on farm

• **Test and audit of plan**
  – Observe yourself and others – is plan always followed

• **Review on regular basis**
  – Has anything on my operation changed that requires a change in my biosecurity plan