Animal Health Emergency Preparedness Efforts

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MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT
Outline

• Responsibility
• AID Efforts
• FMD Exercise
• Summary
State Veterinarian’s Responsibility
Protect, regulate, and promote animal health.

1.15M Cattle
1.1M Swine
26.5M Poultry
82,000 Sheep
22,000 Goats
88,000 Horses
2.6M Cats
2.4M Dogs
Busy World We Live In
Animal Industry Efforts
Strategic Plan

- Animal Health
- Customer Service
- Preparedness
- Innovative Solutions

EED
Preparedness Pillar Goals

1. Continue the development of Incident Management Teams

2. Enhance disease/program specific preparedness plans

3. Ensure continuity of core functions that are legally mandated or have significant impacts on our customers
Green and White Teams

• Quarterly exercises

• Individual team member training

• Utilization of teams during real-world responses

• Fill vacancies in Command and General staff positions as needed
Enhance Program Specific Preparedness

• Create an EM operational planning tool/template for program managers

• Develop a Michigan specific FMD plan within 2 years

• Programs not impacted by FMD develop an operational plan for one of top three diseases within 3 years
Ensure Continuity of Operations

• Identify core functions in each program

• Enhance bench strength among program managers’

• Develop field staff supply processes for acquisition, disposition and maintenance of critical supplies.
Foot And Mouth Disease (FMD) Exercise
FMD

• Affects animals with cloven hoofs – two toes

• Most contagious animal disease

• Affected species
  • Cattle
  • Pigs
  • Sheep
  • Goats
  • Cervids

• Not a public health concern
Normal appearing cattle can shed 2-4 days before clinical signs.
Spread of FMD

Vehicle

Footwear

Equipment
FMD Exercise

• National three day exercise this week

• Michigan participated in day one

• Today have two activities
  • Industry workshop
  • Field staff deployment
FMD Exercise Goals

• Increase awareness of FMD

• Opportunity for AID staff to practice

• Identify what works and areas for improvement
Summary
Why We Do What We Do
Summary

• Protect, Regulate, and Promote Animal Health

• Diseases will always be present, need to be prepared

• If you are not learning, you are not living
Questions?

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Stay connected with MDARD.

@MichDeptoAg
Mlagriculture
Michigan Department of Agriculture
Michigan Consortium of Advanced Networks
21st Century Infrastructure Commission Background

- Began in March 2016
- Comprised of 27 appointed members:
  - Infrastructure experts
  - Government representatives
  - Academic scholars
  - Business representatives
- Provided a long-term, comprehensive set of infrastructure recommendations by November 30, 2016
  - Healthy systems ensure a better quality of life, spur economic activity and job growth
- For the next 30-50 years across all sectors
- Recommended the creation of the Michigan Consortium of Advanced Networks
Michigan Consortium of Advanced Networks

- Announced January 2018
- Seven appointed members representing business, agriculture, education, and others. Six state agency appointees
- Tasked with creating a broadband roadmap by August 1, 2018 that provides recommendations for improving broadband access and adoption
- Convened two subgroups of experts to advise and provide recommendations
- Held five listening tour events across Michigan to gather information from a diverse array of stakeholders
What is Broadband?

Broadband Access
- High-speed internet access that is always on and faster than traditional dial-up access
- The physical connection to high-speed infrastructure
- Fixed, terrestrial broadband: Service designed for permanent, stationary use at a home, business, or institution
- Mobile broadband: Wireless internet service designed for continuous use on a portable device

Broadband Adoption
- Recognizing the value of broadband and subscribing either at home, work, or via public institutions
- Adoption issues include affordability, digital literacy, awareness of broadband’s impacts, and others
- 64.9% of Michigan households currently subscribe to a fixed broadband connection
Why Does Broadband Matter?

Small businesses with faster internet connections tend to have a higher proportion of employees with advanced technology skills compared to those with slower speeds.

Small businesses (less than 20 employees) that have websites have higher annual revenues and are more likely to have recently hired than businesses without websites.

A study in Ohio found that having a broadband connection gave households an estimated economic benefit of $1,850 per year.

One study found that 50% of K-12 students surveyed said they couldn’t complete their homework due to the lack of an internet connection and 42% received a lower grade because of it.

Telemedicine applications are estimated to add $522,000 to rural economies and reduce hospitalizations of nursing home patients and generate savings for Medicare.

Access to infrastructure of all types is positively associated to business start-ups, however broadband is more conducive to start-ups than highways, rail, etc.
Michigan’s Broadband Access

Density of Households Unserved at 10 Mbps/1 Mbps

<table>
<thead>
<tr>
<th>Speed</th>
<th>Rural</th>
<th>Non-Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Mbps</td>
<td>91.3%</td>
<td>98.2%</td>
</tr>
<tr>
<td>25 Mbps</td>
<td>75.3%</td>
<td>93.7%</td>
</tr>
<tr>
<td>100 Mbps</td>
<td>70.4%</td>
<td>91.6%</td>
</tr>
</tbody>
</table>
MCAN Guiding Principles

- Expand access to fixed broadband service at a speed of at least 10/1 Mbps to all unserved residents and businesses by 2022, and achieve future connectivity of speeds at 25/3 Mbps or more by 2026.
- Work to remove barriers to residential, business, and institutional broadband adoption in coordination with infrastructure investments.
- Ensure connectivity for community anchor institutions, (e.g. schools, libraries, hospitals, public safety, etc.).
- Promote coordination, cooperation, and communication between private and public asset owners, communities, institutions, local, regional, state, and federal governments, and others.
- Utilize existing and emerging funding sources more effectively by targeting investments and leveraging a variety of public and private financing resources.
- Focus on embracing all technologies, visionary planning principles, and innovative approaches to ensure high levels of broadband service.
- Create twenty-first century broadband infrastructure across the state of Michigan that offers appropriate levels of cyber security protection.
MCAN Recommendation Areas

Availability in Unserved Areas
- Support and promote public-private partnerships for infrastructure deployment
- Identify and connect community anchor institutions
- Modify residential/commercial development standards for improved broadband deployment

Policy/Regulatory
- Develop standards and support dig once policies
- Explore personal property tax relief for telecommunications infrastructure
- Monitor and promote one-touch make-ready processes for pole attachments
- Streamline access to the right of way
MCAN Recommendation Areas (continued)

Broadband Adoption
- Promote low-cost broadband services
- Explore broadband service tax credit for low-income households
- Organize, develop, and promote digital literacy and technology training programs
- Support community/business partnerships to build awareness for broadband

Technical Assistance, Data, and Capacity Building
- Provide comprehensive broadband technical assistance to communities
- Continue and improve broadband coverage data collection
MCAN Short-Term Action Items

- Catalyst Grant
- Special assessment districts
- Tools for demand aggregation
- Institution connectivity inventory
- New construction ISP “wish list”
- Model dig once policies
- Research PPT opportunities
- Research Metro Act revisions
- Low-income adoption program clearinghouse and outreach
- Digital literacy clearinghouse
- Best practice guide for building awareness
- State broadband single point of contact
- Community engagement framework development
- Host state broadband conference
- Broadband solutions competition
- Continue broadband data refinement, mapping, & validation
Questions?
CWD Working Group Recommendations

Natural Resources Commission
January 11, 2018

Kelly Straka DVM MPH
State Wildlife Veterinarian

James Averill DVM PHD
State Veterinarian
Presentation Roadmap

- Background
- Working Group
- Charge
- Process
- Focus Areas
- Recommendations
Background

- CWD Symposium October 3-4, 2017
- 20 Speakers from 10 states
- Presented cutting edge research and management strategies
- www.mi.gov/cwd
- CWD Working Group in attendance
April 13, 2017 NRC unanimously accepted charge related to CWD Working Group

“The NRC, in conjunction with the DNR, will establish a scientific panel of experts, selected by the Chairman of the NRC, the Director of the DNR, and the Director Department of Agriculture and Rural Development, or such other officials as the Chairman of the NRC and the Director of the DNR deem appropriate…..”

9 Working Group members selected
Working Group

- CWD Working Group members:

  James Averill, co-chair  MI Dept. of Agriculture and Rural Development
  Kelly Straka, co-chair  MI Dept. of Natural Resources
  Alan Ettenhofer  U.P. Whitetails and U.P. Sportsmen Alliance
  William Porter  Boone and Crockett Quantitative Wildlife Research Center, Michigan State University
  Paul Rose  Michigan United Conservation Club
  Bill Rustem  Private Citizen and Sportsman
  George Smith  Michigan State University AgBioResearch
  Kent Syers  United Deer Farmers of Michigan
  Chad Thelen  Quality Deer Management Association
The Working Group was assembled “……. for the purposes of advising the NRC, DNR or other applicable Agencies on further steps and actions which could be implemented to substantially mitigate or eliminate CWD in Michigan.”

“Such recommendations may include matters or subjects that would require legislative action or which jurisdiction for such action resides in other agencies.”

NRC Resolution 4/13/2017
Three in-person, facilitated meetings
  - October
  - November
  - December

Decision-making model
  - Majority rules, minority report

Email primary communication between meetings
Focus Areas

- Recommendations divided between four “Focus Areas”
  1. Communication,
  2. Research Consortium,
  3. Farmed Cervidae, and
  4. Harvest and Removal
Communication
Due to the complexity of CWD, and the importance of communications, the Working Group recommends:

1. The Natural Resources Commission should pursue the help of an outside marketing agency in development of messaging Michigan’s vision for CWD Surveillance and Management.

This messaging should place emphasis on the importance of herd health and Michigan’s commitment to sustainable, healthy deer populations across the state.
Messaging should emphasize Michigan’s commitment to sustainable, healthy deer populations and should:

- Build direct partnerships between the DNR and hunting organizations;
- Educate hunters on the importance of doe harvest for population management and the movement/disposal of carcasses;
- Develop public education for CWD;
- Help people understand management steps;
- Learn from other state experiences.
Research Consortium
Recommendations

The lack of funding is a significant detriment to the fight against CWD, and research is needed to develop new tools and improve epidemiologic understanding of the disease. Therefore,

2. The Natural Resources Commission should take the lead in forming a consortium of states and provinces to seek federal, state and private funding and share research on CWD surveillance methods, diagnostic tools, transmission pathways and management practices.
Research Consortium

Research priorities for the consortium should include:

• Development of a live animal test;
• Improved high throughput diagnostics;
• Disinfectant development and techniques;
• Mitigation and management of infected sites;
• Management techniques to remove disease from landscape;
• Human dimension studies for prevention and management;
• Advanced techniques for surveillance; and
• Transmission pathways, including evaluating possible vectors of disease
Farmed Cervidae
Recommendations

CWD is a disease that can affect both wild and privately-owned cervids in Michigan. Therefore,

3. The Natural Resources Commission should work cooperatively with the Agriculture and Rural Development Commission to assess the effectiveness and direction of the Farmed Cervidae Program, with a focus on biosecurity and CWD risk factors.
Farmed Cervidae

This assessment should consider, but not be limited to, the following:

• Mandatory participation in the Herd Certification Program for all facilities (with exemptions for Class III facilities);
• A review of program requirements for infrastructure of facilities;
• The creation of a standard manifest for the movement of live cervids;
• A reduction on the reliance of Fish and Game funds.
Harvest and Removal
Regulations for disease mitigation should proactively address risk with the best available science. Therefore,

4. The Natural Resources Commission should continue to employ science-based strategy for the regulatory framework of CWD management.
Harvest and Removal

This strategy should include, but not be limited to:

• Reinstatement of 2002 CWD response plan statewide ban on the feeding and baiting of deer
  • Minority Report: One member of the Working Group did not support the reinstatement of a statewide feeding and baiting ban.

2002 Plan: In the event CWD is documented within Michigan or within 50 miles of Michigan’s border with another state or Canadian province, the MDNR Director shall issue an interim order banning the use of bait and banning the feeding of deer and elk within the peninsula adjacent to the adjoining state or province with CWD or containing CWD (p. 14).
Finally, CWD surveillance and management plans should be grounded in science, and consider social, economic, and recreational interests. Therefore,

5. The Natural Resources Commission should develop statewide, science-based management plans based on regional prevalences of CWD.

Hunters and cervid farmers should be engaged in the development of the plans.
Harvest and Removal

These plans will be specific for areas where the disease is prevalent, areas where it may be emerging, and for the remainder of the state.

Management objectives should be designed for the disease, not the cervid population, and may differ based on established versus emerging infections.

These management plans should include:

• Best management practices for carcass handling and disposal
• A mechanism to expand CWD sampling protocol statewide
• Harvest considerations including surveillance goals, hunting seasons and practices, management and regulatory tools and epidemiological metrics
Summary

The CWD Working Group realizes that this document is a first step toward development of a holistic, science-based approach to deer herd health in the face of CWD.

Much more has to be done, but we are committed to the effort.
CWD TIMELINE

- Communications – internal and external
- Audience research - surveys
- Public meetings
- Potential regulation changes
- Deer hunting seasons

Thank you!

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