United States Animal Health Association Committee on Animal Health Emergency Management

Cross Border Collaboration
FMD Preparedness and Control

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Safeguarding Animal Health
Outline

• Pacific Northwest Economic Region (PNWER) Cross Border Livestock Health Conference (CBLHC)

• North American FMD Vaccine Bank

• FMD Vaccination as a Response Tool

• Stakeholder Engagement

Safeguarding Animal Health
Cross Border Livestock Health Conference (CBLHC)

- Took place July 21 and 22, 2011 in conjunction with the 21st Pacific Northwest Economic Region Annual Summit

- Focused on the impact of a hypothetical Foot and Mouth Disease (FMD) outbreak in the Pacific Northwest affecting the USA/Canada border.

- Participants discussed preparedness, response and recovery using a scenario driven workshop format.
CBLHC – Meeting Objectives

• Enhanced relationships and build networks between US state and Canadian provincial jurisdictions

• Exchange information on animal health issues/concerns

• Develop a common understanding of disease policies

• Exchange information on emergency response for emerging and foreign/transboundary animal diseases

• Advance Canadian and American animal health interests

• Identify and execute action items to collectively address animal health and cross border issues
CBLHC – Action Items

• **Action Item 1 - FMD Vaccination**
  - Work with stakeholders to prepare in advance and build a common understanding of the tools (vaccination) and strategies that can be used to respond to an FMD outbreak in both Canada and the US

• **Action Item 2 - FAD Zoning and Regionalization Recognition**

• **Action Item 3 - Facilitation of Animal and Animal product trade through Information Technology**

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North American FMD Vaccine Bank

- Trilateral membership
  - Canada, Mexico and the United States
- NAFMDVB stores vaccine antigen concentrate
- 2005 MOU/1982 Cooperative Agreement
- NAFMDVB Guidelines
- Cross Border Communications

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FMD Vaccination as a Response Tool
The Expanding FMD Threat

- Last U.S. FMD case: 1929
- Today: livestock numbers greatly increased
- Concentrated operations may increase risk
- Mobile animals, products, & humans
- Increased global trade (including contraband)
- Worldwide increase in FMD
- Bioterrorism threats

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Current World FMD Status

- **Endemic**
- **Intermediate, sporadic**
- **Free with vaccination**
- **Countries with multiples zones:**
  - FMD-free, free with vaccination or not free
  - Free. Virus present in game parks
  - Free
Consequences of FMD Outbreaks

- Disruptions to commerce
- Collateral markets impacted (poultry, grains)
- Stakeholder impacts: emotional & economic loss
- Public fears: commodity price drops
- Strained State & Federal resources
- Length of recovery depends on extent

FMD: an infectious and economic disease
Traditional Response Goals

Focus: Eradication with no vaccination

1. Detect, control, & contain FMD quickly.
2. Stamp out FMD while stabilizing agriculture, the food supply, the economy, & protecting public health.
3. Provide science, risk-based approaches, & systems that allow commerce to continue.

Modern challenges require a new approach.
Challenges to Traditional Response Strategies

Mobility of animals

Huge herds, highly concentrated

625,000 pigs in transit every day

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Depopulation & Disposal Challenges

Captive bolting
- Labor intensive
- Slow

Swine Mobile Electro Units
- Expensive
- Few available

Rendering
- Preferred
- Capacity issues
- Logistics issues

Unlined Burial
- Polluting
- Long-term environmental impact

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Implications for the U.S.

- Stamping out generates more mortalities than we can handle
- Vaccination may be needed
- Minimizing depop & disposal protects the environment, ensures uninterrupted food supply

Best

- Rendering
- Controlled incineration

Intermediate

- Composting
- Permitted landfill
- Air curtain incin.

Worst

- Open burning
- Unlined burial

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Sustainable Response

REDUCE
Minimize Stamping Out

REUSE
Vaccinate for Food Chain

RECYCLE
Rendering, Landfilling, or Composting

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Consider All Tools

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Possible FMD Response Strategies

- Four possible strategies:
  1. Stamping-out, no vaccination
  2. Stamping-out, vaccination to kill/slaughter
  3. Stamping-out, vaccination to live
  4. Vaccination to live, no stamping-out (+/- endemic status)

- FMD vaccination--a tool:
  - To augment eradication
  - As a long-term control strategy

- Each strategy has a different effect on markets

- Time for FMD-free status (3 mos.) same for options 1 & 2
Balanced Response Strategy

Control Outbreak
Protect Environment
Minimize Waste

Limit Economic Losses
Maintain Food Supply
Sustain Commerce

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Modified FMD Response Goals

- Flexible response strategies
- Detect, control, contain FMD quickly
- Eradicate FMD, stabilize animal agriculture, the food supply, the economy, & protect public health
- If eradication impractical, control & mitigate through:
  - Vaccine
  - Enhanced biosecurity
  - Regionalization and zoning
  - Continuity of business plans
  - Animal commodity movement controls
- Use science & risk-based approaches for continuity of business

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FMD Response Details

- Modified response: flexible, nimble, tailored
- States should have their own plans
- Response is a complex process
- Stamping-out may not be cost effective
  - consider alternatives
- Depopulation still required to remove infected livestock
Stakeholder Engagement Crucial

• APHIS needs input from States, industry, Tribes

• FMD Stakeholder meetings:
  - Sept 2010 – Introductory meeting
  - May 2, 2011: FMD vaccination
  - Nov 3 & 4 Movement Control and Continuity of Business

• May 2 meeting: Vaccination
  - Viable response tool
  - Rational strategies in development with trigger points

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Questions?

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