FMD Preparedness and Response: Where Animal Health Authority Leaves Off and Private Sector Agency Begins

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Planning for an FMD Outbreak is Complex
The goals of an FMD response are to

(1) detect, control, and contain FMD in animals as quickly as possible;

(2) eradicate FMD using strategies that seek to stabilize animal agriculture, the food supply, the economy, and protect public health; and

(3) provide science- and risk-based approaches and systems to facilitate continuity of business for non-infected animals and non-contaminated animal products.
• If at any point in the response it becomes apparent that stamping-out will not achieve control, containment, and eradication of FMD, alternative strategies will be immediately considered.

• Choosing one strategy or multiple response strategies in an FMD outbreak is a complex and important decision process, based on many factors.
FMD response strategies—strategies are not mutually exclusive:

- Stamping-out
- Stamping-out with vaccination to slaughter
- Stamping-out with vaccination to live
- Vaccination to live without stamping-out.
Conjectured Status of FMD

- Intermediate, sporadic
- Endemic
- Free
- Free with vaccination
- Countries with multiples zones: FMD-free, free with vaccination or not free
- Free. Virus present in game parks
FMD Outbreaks 2012

~ 650 Samples from 25 Countries

25 countries
~650 samples
~ 300 positive

FMD-Free
Free. Virus present in game parks
Intermediate, sporadic
Countries with multiples zones:
FMD-free, free with vaccination or not free
Common Operating Picture - FMD

Pool 1 East Asia: A, O, Asia 1

Pool 2 South Asia: A, O, Asia 1

Pool 3 Eurasia: A, O, Asia 1

Pool 4 East Africa: A, O, SAT1-3

Pool 5 West Africa: A, O, SAT1-2

Pool 6 South Africa: SAT1-3

Pool 7 South America: A, O
Common Operating Picture for North America

Inventory

<table>
<thead>
<tr>
<th></th>
<th>Cows (millions)</th>
<th>Pigs (millions)</th>
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<tbody>
<tr>
<td>United States</td>
<td>92.6</td>
<td>64.9</td>
</tr>
<tr>
<td>Canada</td>
<td>12.5</td>
<td>11.9</td>
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<tr>
<td>Mexico</td>
<td>21.5</td>
<td>9</td>
</tr>
</tbody>
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Import and Export Value

- Exports to Canada: Dairy, Red Meat ~$1.9 Billion
- Exports to Mexico: Dairy, Red Meat ~$2.6 Billion
- Imports from Canada: Dairy, Red Meat ~$2.2 Billion
- Imports from Mexico: Dairy, Red Meat ~$336 Million

Source: USDA FAS, 2011 (2010 data)
Swine Population by County

Source: NASS, 2007
Slaughter—Swine (Animals by State)

Source: NASS, 2009
Sheep Population by County

Source: NASS, 2007
Goat Population by County

Source: NASS, 2007
Interstate Movement of Sheep and Goats

Source: ERS, 2001
Consequences of an FMD Outbreak

- Disruptions to interstate commerce
- International trade halted
- Commodity prices impacted
- Collateral markets impacted (grains, products)
- Stakeholder impacts: economic losses, other damages
Challenges of an FMD Outbreak

- Response activities are complex
- Requires significant planning and preparation
- Requires multi-state and stakeholder coordination
- Communication is complex
- Outbreaks can become large or widespread
Lessons Learned

- Unified State-Federal-Tribal-industry planning needs to respect local knowledge
- Unified command sets clearly defined and obtainable goals
- Unified command acts with speed and certainty
- Science- and risk-based approaches
- Communication!
Lessons Learned - Continued

• High expectations for response requires:
  – Rapid scale-up of resources and trained personnel
  – Capability to quickly address competing interests before or during an outbreak.

• Early FAD detection and rapid tracing is essential for the effective and timely control of outbreaks
Public – Private – Academic - Industry

Mitigate

Prepare For

Respond To

Recover From
The FAD PReP Mission is…

…to raise awareness, define expectations, and improve capabilities for FAD preparedness and response.

https://fadprep.lmi.org
FMD Response Goals

What Are Your FMD Response Goals?

What are Your FMD Preparedness Goal?
Continuity of Business Planning:
Other National Initiatives for FMD

• **Secure Milk Supply**: for milk and milk movement in an FMD outbreak, to avoid and mitigate interruptions in movement.

• **Secure Pork Supply**: for pork and pork products, to avoid and mitigate interruptions in movement.
Response Planning for FMD

FOOT-AND-MOUTH DISEASE
RESPONSE PLAN
THE RED BOOK

FAD PReP
Foreign Animal Disease
Preparedness & Response Plan
National Center for Animal Health Emergency Management

United States Department of Agriculture • Animal and Plant Health Inspection Service • Veterinary Services

DRAFT SEPTEMBER 2011

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