Outbreak Response from a Packer Perspective

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Outbreak Response Network

Where is the packer in this complicated network?
Location of JBS Slaughter Facilities

JBS locations throughout the United States
Beef plant locations throughout the United States
Important Factors in Animal Disease Outbreaks

- Impact a large number of animals
- Potentially large and multiple geographical locations
- Animal health impact
- Economic consequences
- Human health
- Production implications
- Impacts movement
- Animal concentration
- Food supply
Outbreak Response Strategy

Prepare
Prevent
Respond
Recover
Outbreak Response Strategy

Prevent

Biosecurity measures at production facilities
IN-PLANT PROCEDURES
Food Defense Plan

- Intentional or accidental introduction of foreign disease agents
- Not a focus on live animals
- Security log
  - “The undersigned further states that she/he has not been in any of the countries listed below for a minimum of 30 days prior to entering this facility”
As a Federally-Inspected Packing Facility....

The presence of USDA FSIS in slaughter facilities makes the packer part of disease surveillance in addition to a potential location of first identification of disease.
In-plant Inspection Responsibilities Related to Foreign Animal Diseases (FADs)

• Trained on disease symptom/sign recognition

• Ante/post mortem inspection

• Line of communication
  - Report signs/symptoms of FADs found during ante and post mortem to the District Office (DO)
  - DO notifies the Area Veterinarian-in-Charge (AVIC) of APHIS or the State Animal Health Official (SAHO)
  - OIE within 24 hours
IMPACT ON OPERATIONS
Movement of Animals to Slaughter

• Swine and poultry usually located nearer to plants

• Movement of cattle across the country is not always most efficient
  
  - Cattle travel is like human movement – not a system of concentric circles

• Internally, centralizing information to shorten the distance that cattle have to travel
Cattle sourcing in an event
DISEASE OUTBREAK OF THE PAST
What have we learned from our past?

• Bovine Spongiform Encephalopathy (BSE) Crisis
  - Little information on disease; no standard rules
  - Uncertainty
  - Market closure and banned trade
  - Was there another option?
    • A country’s sovereign rights per WTO rules
    • Protect human and animal health
What have we learned from our past?

• We now understand:
  • Transmission of disease
  • Specified Risk Materials (SRMs)
  • Feed bans

• Importance of traceability
  - What if we had had a robust traceability system in 2003 to trace, isolate and id?
Traceability – how far back?

- A robust traceability system is necessary
  - USDA began working on a program
  - Discussion on mandate vs voluntary
  - Now: state-by-state traceability for breeding stock

- As a packer, maintain accurate records of cattle origin (immediate source, not birth)
  - Assigned a lot # at purchase; Producer information recorded; Drive # (kill order); Individual carcass ID
  - Certain verified programs trace back to birth
  - Feedlot/ranch vs sale barn/dairy
How can we minimize financial devastation the next time....?

- There will most likely always be a knee jerk reaction
- Can we minimize it?
- Rational approach to disease outbreak regarding trade agreements
World Trade Organization (WTO)

Regionalization: the requirement that governments recognize regions within or straddling other countries as being safe sources for imports of food and animal and plant products, instead of basing their measures entirely on national boundaries.

Geographically larger members (the EU, Brazil, Canada, etc) object to blanket bans on all their exports when a disease exists only in some regions.
Disease Impact on US Trade

Frozen Leg Quarter Prices

Cents/lb.

$0.00

$10.00

$20.00

$30.00

$40.00

$50.00

$60.00

$70.00

H5N1

H5N1
Disease Impact on US Trade

US Pork Exports To: South Korea

Korean Outbreak of Foot and Mouth Disease

- 86,075,111.13
- 85,289,813.44
Disease Impact on US Trade

US Pork Exports To: China (Mainland)

China outbreak of Foot and Mouth

China outbreak of Blue Ear

US Swine Flu

Million Pounds


117,762,598.35

36,525,069.12

196,000
LOGISTICS OF AN OUTBREAK
Minimize depopulation while maximize disease control
What if.....?

- FMD at one of our feedlots
- Current practice, identify, isolate and stamp out

- How do you stamp out 70,000 animals?
What if.....?

- To euthanize all animals, the procedure would be to bring them through the processing shed and knock with a captive bolt gun
  - Normal operation (ie. when an animal can move on its own into and out of processing facility) is 1200-1300 an hour, 58 hours to go through all animals
  - If the animal is euthanized it will significantly slow down the process
  - Maybe 300-400 an hour?
  - That would take 235 hours – weeks
  - How much feed is on hand?

- This plan could have potential negative impacts on animal welfare
Why not utilize the locations that are designed to euthanize animals?

- Packers are in the slaughtering business
- Would it be possible to figure out a way to transport animals out of a feedlot to euthanize at a packing facility?
- Would it be better to get the animals healthy and put into the food supply, if it could be done safely?
H7N9 Bird Flu Illnesses In China Climb By Eight To 71 Cases

The number of confirmed H7N9 bird flu cases in China increased by eight to 71 today, according to the official Xinhua news agency. The number of deaths was unchanged at 14.
Packer Involvement
Questions