Cattle materials prohibited in animal feed: past and future effects on trade

Emerging Issues in Global Meat Trade
2008 Workshop
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Background

- Feed is the key to BSE.
- Existing FDA feed rule (1997) prohibited use of most mammalian proteins in ruminant feed.
- FDA published proposed revision to feed rule October 6, 2005.
- Final rule published on April 25, 2008.
  - Defined cattle material prohibited in all animal feed
Cattle material prohibited in animal feed

- Entire carcass of BSE-positive cattle
- Brains & spinal cord from cattle age 30 months & older
- Entire carcass of cattle not passed for human consumption, unless age less than 30 months or brain & spinal cord removed
- Tallow derived from BSE-positive cattle
- Tallow derived from cattle material prohibited in animal feed that contains more than 0.15% insoluble impurities
- Mechanically separated beef derived from cattle material prohibited in animal feed
Difference between SRM and CMPAF

- Some specified risk materials not included in cattle material prohibited in animal feed
  - skull, eyes, vertebral column (excluding tail, transverse processes of thoracic and lumbar vertebrae, and wings of the sacrum), trigeminal ganglia, and dorsal root ganglia of cattle age 30 months and older
  - Tonsils and distal ileum of the small intestine of all cattle
Estimated cost of final rule

- Total annualized cost = $64 million to $80 million
  - One-time cost = $23 million in the first year
  - Annual cost = $61 million – $77 million
  - Additional disposal cost of dead stock = $39 – $51 million
    - (about 63% of annual costs)

- Effects of reduced supply of rendered material
  - Initial effect on animal producers, slaughter facilities, and renderers, who bear largest cost compared with revenue
    - Animal producers: $31 – $46 million
    - Slaughter facilities: $2.4 million
    - Renderers: $30 - $35 million
  - Increased prices for animal feed because of increased cattle materials diverted from animal feed
## Alternatives compared

<table>
<thead>
<tr>
<th></th>
<th>Infectivity Reduction</th>
<th>Diverted from feed (million lbs)</th>
<th>Annualized cost ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final Rule</strong></td>
<td></td>
<td>90%</td>
<td>610 - 732</td>
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<td></td>
<td>Defines cattle material prohibited in animal feed.</td>
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<tr>
<td><strong>Proposed rule</strong></td>
<td></td>
<td>90%</td>
<td>724 – 975</td>
</tr>
<tr>
<td></td>
<td>Same as final rule except also bans dead &amp; downers, regardless of age (unless brain and spinal cord removed)</td>
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<td><strong>Full SRM ban</strong></td>
<td></td>
<td>99%</td>
<td>2,555</td>
</tr>
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<td>Prohibits from all animal feed full list of SRMs (as defined for the human food rules)</td>
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Expected benefits

- Protection against 1997 feed ban compliance failures
  - Remove highest risk material from feed channels
    - brain (64.1% of infectivity)
    - spinal cord (25.6% of infectivity)
- May increase access to foreign markets
  - Exports to Japan and South Korea still below 2003 levels.
Continuing effects of BSE-positive cow on major markets for U.S. beef

<table>
<thead>
<tr>
<th>U.S. Exports</th>
<th>2003</th>
<th>2007</th>
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<tbody>
<tr>
<td>Japan</td>
<td>918</td>
<td>159</td>
</tr>
<tr>
<td>Mexico</td>
<td>586</td>
<td>586</td>
</tr>
<tr>
<td>South Korea</td>
<td>587</td>
<td>78</td>
</tr>
<tr>
<td>Canada</td>
<td>227</td>
<td>339</td>
</tr>
</tbody>
</table>
U.S. loss from beef trade restrictions
Estimated net social losses in US from reduced exports

- Shaded area of trapezoid
  - $105 million in 2006 prices
    - Net of producer surplus over consumer surplus
- Uncertainty range
  - $80 million to $120 million
- Will change over time as international beef market adjusts and other events occur (or do not occur)
Potential effects of 2008 rule on trade

- Trading partners concerned over adequacy of U.S. 1997 feed ban in light of BSE-positive cows
- OIE classified U.S. as “Controlled BSE Risk”
  - 2008 final rule should help with restoring U.S. beef exports
  - **but** OIE *Ad Hoc* group also said…
    - “as long as potentially infective material continues to be rendered and enter the animal feed chain the potential for cross-contamination is still present”
    - “it is recommended that the United States carefully consider excluding specified risk material from use in animal feed”
- Will 2008 final rule help U.S. attain “Negligible Risk” OIE status?
More information

- 2008 feed rule
  - http://www.fda.gov/OHRMS/DOCKETS/98fr/08-1180.htm
- FDA Center for Veterinary Medicine questions and answers on the 2008 feed rule
  - http://www.fda.gov/cvm/bse_QA.htm