Availability and Use of Veterinarians by Small-Scale Livestock Operations

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Outline

• Background
• Objectives
• Methods
• Results
• Conclusions
Background

• Shortage of food supply veterinarians?

Future demand, probable shortages, and strategies for creating a better future in food supply veterinary medicine

J. Bruce Prince, PhD; David M. Andrus, PhD; Kevin P. Gwinner, PhD
JAVMA, Vol 229, No. 1, July 1, 2006
Food Animals Per Veterinarian - FSVMC
Veterinary Medicine Loan Repayment Program (VMLRP)

- The VMLRP began in 2010
- The program helps veterinarians repay student loans if they work in designated shortage areas
Objectives

• Small-scale livestock operations
  – Describe use of veterinarians and reasons for not using veterinarians
  – Identify geographic areas (counties) where producers have limited access to veterinarians
Methods

- **APHIS National Animal Health Monitoring System (NAHMS)**
  - In spring 2011, NAHMS surveyed 8,123 producers in all 50 States.
  - The surveys focused on operations with $10,000-$499,999 in gross sales/year.
  - Statistical analysis:
    - Weighted population estimates, and
    - Hot-spot analysis (Getis Ord Gi) to identify veterinary shortage areas.
## Participating Operations

<table>
<thead>
<tr>
<th>Primary Animal Species</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef cattle</td>
<td>80.1</td>
</tr>
<tr>
<td>Dairy cattle</td>
<td>9.6</td>
</tr>
<tr>
<td>Horses/equine</td>
<td>3.2</td>
</tr>
<tr>
<td>Poultry</td>
<td>2.7</td>
</tr>
<tr>
<td>Sheep/goats</td>
<td>2.0</td>
</tr>
<tr>
<td>Swine</td>
<td>1.2</td>
</tr>
<tr>
<td>Other</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Results

Percentage of operations that used a veterinarian in the previous 12 months, by farm sales

- < $100,000: 59.0%
- $100,000-$249,999: 87.0%
- $250,000-$499,999: 86.5%
- All operations: 62.0%
For the 38 percent of operations that did not use a veterinarian, reasons for not using a veterinarian:

- No disease or other need for vet: 65.8%
- Provide own health care for animals: 44.2%
- Too expensive: 12.4%
- No vet available or too far away: 3.6%
- Other reason: 2.0%
Percentage of operations by distance to nearest veterinarian, by region

- **<30 miles**
  - North Central: 85.2%
  - Northeast: 76.6%
  - South: 83.2%
  - West: 71.0%
  - All operations: 82.0%

- **30-99 miles**
  - North Central: ...
  - Northeast: ...
  - South: ...
  - West: ...
  - All operations: ...

- **100+ miles/not avail**
  - North Central: ...
  - Northeast: ...
  - South: ...
  - West: ...
  - All operations: ...

- **Don't know**
  - North Central: ...
  - Northeast: ...
  - South: ...
  - West: ...
  - All operations: ...
• Nearest veterinarian was 100 or more miles away or no veterinarian available:
  – 1.4 percent of operations
  – Estimated 4,969 operations out of 350,000 total small operations in the United States
  – 41 States
Results – Hot Spot Analysis

Red = Areas with low access
Limitations

• Distance to veterinarians was estimated by producers
• Distance is not the only factor that affects access to veterinarians
• Results apply only to small-scale operations
• Not all counties were included in study
  – There may be more areas with low access
Conclusions

19 percent of hot spot counties were listed as 2011 VMLRP shortage areas
Conclusions

• 62.0 percent of operations used a veterinarian
  – Most common reason for not using a veterinarian: “No disease or other need.”

• Veterinary shortage (100+ miles or not available)
  – 1.4 percent of operations
  – Multiple areas spread across United States
  – Combining data sources can help define areas with potential for low veterinarian access

• Shortfall in number of food animal veterinarians in private practice?
  – About 80 percent had a veterinarian available within 30 miles
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  • CSU Department of Agricultural and Resource Economics
Questions?