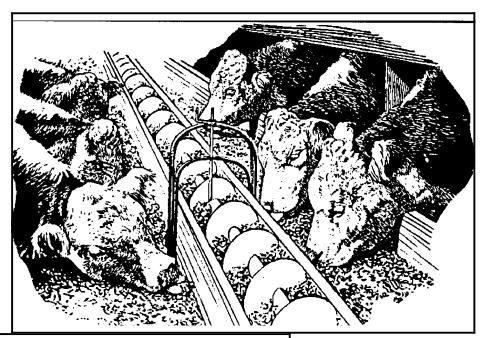
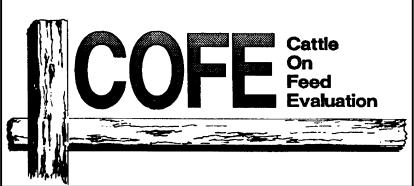
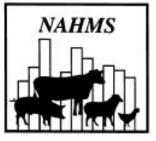
# Part I: Feedlot Management Practices







#### Acknowledgements

This report has been prepared from material received and analyzed by the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS).

The Cattle on Feed Evaluation was a cooperative effort between State and Federal agricultural statisticians, animal health officials, university researchers, and extension personnel. We want to thank the National Agricultural Statistics Service (NASS) enumerators and State and Federal Veterinary Medical Officers (VMO's) who visited the farms and collected the data for their hard work and dedication to the National Animal Health Monitoring System (NAHMS).

The roles of the producer, Area Veterinarian in Charge (AVIC), NAHMS Coordinator, Veterinary Medical Officer (VMO), Animal Health Technician (AHT), and NASS enumerators were critical in providing quality data for this report. All participants are to be commended for their efforts, particularly the producers whose voluntary efforts made the study possible.

Dr. Al Strating, Director Centers for Epidemiology & Animal Health

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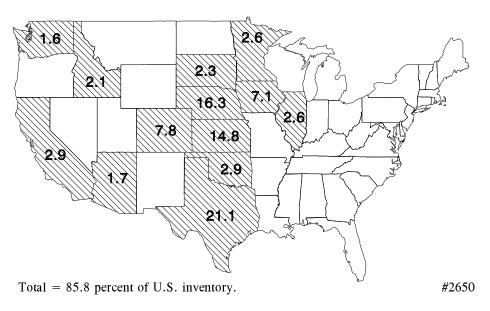
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### Introduction

As part of the National Animal Health Monitoring System (NAHMS), the USDA:APHIS:Veterinary Services (VS) conducted a National feedlot study designed to provide both participants and the industry with information on feedlot animal health, productivity, and management practices. This report is the first of a two-part release of National information resulting from the Cattle on Feed Evaluation (COFE).

Data for *Part I: Feedlot Management Practices* were collected from August 1 through September 16, 1994. The USDA's National Agricultural Statistics Service (NASS) collaborated with VS to select a producer sample (3,214 feedlots) that was statistically designed to provide inferences to the nation's feedlot animal population. Included in the study were 13 major cattle-on-feed States that accounted for 85.8 percent of the U.S. cattle-on-feed inventory as of January 1, 1994 (shown below).

# States Participating in the NAHMS Cattle on Feed Evaluation and Percent of U.S. Cattle-on-Feed Inventory, January 1, 1994



NASS telephone interviewers contacted 2,070 producers whose feedlot had less than 1,000-head, one-time capacity, while 1,144 producers with larger feedlots were contacted personally.

Descriptive tables in this report are population estimates, such as averages and proportions which have been weighted to represent the population. Most of the estimates are provided with a measure of variability called the standard error and denoted by (±). Chances are 95 out of 100 that the interval created by the estimate plus or minus two standard errors will contain the true population value. In the example

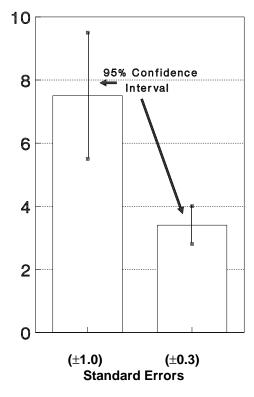
at right, an estimate of 7.5 with a standard error of  $\pm 1.0$  results in a range of 5.5 to 9.5 (two times the standard error above and below the estimate).

Data for *Part II: Feedlot Health Management Practices* were collected by State and Federal Veterinary Medical Officers from October 3 through December 21, 1994. The second report is scheduled for release in April 1995.

If you have questions about this report contact NAHMS at:

Centers for Epidemiology and Animal Health USDA:APHIS:VS, Attn. NAHMS 555 South Howes, Suite 200 Fort Collins, Colorado 80521 (303) 490-7800 Internet: NAHMS-INFO@aphis.usda.gov

### Examples of 95% Confidence Intervals



#999a<sup>1</sup>

Identification numbers are assigned to each graph in this report for public reference.

### **Section I: Population Estimates**

- 1. Placement Profile and Disposition
  - a. Percent of operations that placed the following types of cattle on feed:

|      |                                 | <u>Small (&lt;1,000 Head)</u> |              | <u>Large (1,000+ Head)</u> |             | <u>Total</u>      |             |
|------|---------------------------------|-------------------------------|--------------|----------------------------|-------------|-------------------|-------------|
|      |                                 | Percent                       | Standard     | Percent                    | Standard    | Percent           | Standard    |
|      |                                 | <b>Operations</b>             | <u>Error</u> | <b>Operations</b>          | Error       | <b>Operations</b> | Error       |
| i.   | Steers and heifers less than 70 | 00 lbs.:                      |              |                            |             |                   |             |
|      | Beef and crossbreeds            | 70.7                          | $(\pm 2.7)$  | 81.2                       | $(\pm 1.5)$ | 71.2              | $(\pm 2.6)$ |
|      | Dairy breeds                    | 14.8                          | $(\pm 2.2)$  | 18.4                       | $(\pm 1.1)$ | 15.0              | $(\pm 2.1)$ |
| ii.  | Steers and heifers 700 lbs. or  | more:                         |              |                            |             |                   |             |
|      | Beef and crossbreeds            | 26.0                          | $(\pm 2.5)$  | 81.9                       | $(\pm 1.5)$ | 28.5              | $(\pm 2.4)$ |
|      | Dairy breeds                    | 6.0                           | $(\pm 1.3)$  | 19.2                       | $(\pm 1.3)$ | 6.6               | $(\pm 1.2)$ |
| iii. | Cows and bulls:                 |                               |              |                            |             |                   |             |
|      | Beef and crossbreeds            | 1.0                           | $(\pm 0.7)$  | 8.7                        | $(\pm 1.0)$ | 1.4               | $(\pm 0.7)$ |
|      | Dairy breeds                    | 0.1                           | $(\pm 0.1)$  | 0.4                        | $(\pm 0.1)$ | 0.1               | $(\pm 0.1)$ |

|      |                                  | <u>Small (&lt;1,</u> | <u>Small (&lt;1,000 Head)</u> |         | <u> Large (1,000+ Head)</u> |         | <u>Total</u> |  |
|------|----------------------------------|----------------------|-------------------------------|---------|-----------------------------|---------|--------------|--|
|      |                                  | Percent              | Standard                      | Percent | Standard                    | Percent | Standard     |  |
|      |                                  | <u>Cattle</u>        | Error                         | Cattle  | Error                       | Cattle  | Error        |  |
| i.   | Steers and heifers less than 70  | 0 lbs.:              |                               |         |                             |         |              |  |
|      | Beef and crossbreeds             | 54.6                 | $(\pm 3.0)$                   | 43.4    | $(\pm 1.4)$                 | 44.7    | $(\pm 1.3)$  |  |
|      | Dairy breeds                     | 4.6                  | $(\pm 0.7)$                   | 5.1     | $(\pm 0.6)$                 | 5.1     | $(\pm 0.5)$  |  |
| ii.  | Steers and heifers 700 lbs. or a | more:                |                               |         |                             |         |              |  |
|      | Beef and crossbreeds             | 38.1                 | $(\pm 3.0)$                   | 49.1    | $(\pm 1.3)$                 | 47.8    | $(\pm 1.2)$  |  |
|      | Dairy breeds                     | 2.4                  | $(\pm 0.6)$                   | 1.9     | $(\pm 0.2)$                 | 1.9     | $(\pm 0.2)$  |  |
| iii. | Cows and bulls                   |                      |                               |         |                             |         |              |  |
|      | Beef and crossbreeds             | 0.3                  | $(\pm 0.2)$                   | 0.5     | $(\pm 0.1)$                 | 0.5     | $(\pm 0.1)$  |  |
|      | Dairy breeds                     | 0.0                  | $(\pm 0.0)$                   | 0.0     | $(\pm 0.0)$                 | 0.0     | $(\pm 0.0)$  |  |
|      | Total                            | 100.0                |                               | 100.0   |                             | 100.0   |              |  |
|      |                                  |                      |                               |         |                             |         |              |  |

USDA:APHIS:VS 3 Cattle on Feed

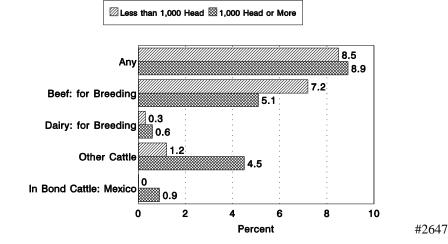
c. Percent of placements that were:

|     |                        | <u>Small (&lt;1,000 Head)</u> |                             | <u>Large (</u>                | 1 <u>,000+ Hea</u>          | <u>d) Total</u>         |                             |
|-----|------------------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|-------------------------|-----------------------------|
|     |                        | Percent                       | Standard                    | Percent                       | Standard                    | Percent                 | Standard                    |
| i.  | <u>Beef</u>            | <u>Placements</u>             | Error                       | <u>Placements</u>             | Error                       | <u>Placements</u>       | Error                       |
|     | Steers                 | 62.2                          | $(\pm 2.3)$                 | 65.4                          | $(\pm 0.9)$                 | 65.0                    | $(\pm 0.8)$                 |
|     | Heifers                | 37.5                          | $(\pm 2.3)$                 | 34.1                          | $(\pm 0.9)$                 | 34.5                    | $(\pm 0.8)$                 |
|     | Cows and Bulls         | 0.3                           | $(\pm 0.2)$                 | <u>0.5</u>                    | $(\pm 0.1)$                 | 0.5                     | $(\pm 0.1)$                 |
|     | Total                  | 100.0                         |                             | 100.0                         |                             | 100.0                   |                             |
|     |                        |                               |                             |                               |                             |                         |                             |
|     |                        | Small (<1,0                   | 000 Head)                   | <u>Large (1,00</u>            | 00+ Head)                   | <u>Tot</u>              | <u>tal</u>                  |
|     |                        | Small (<1,0<br>Percent        | 000 Head)<br>Standard       | Large (1.00<br>Percent        | 00+ Head)<br>Standard       | Tot<br>Percent          | <u>tal</u><br>Standard      |
| ii. | <u>Dairy</u>           | _ ` ` ′                       | ,                           |                               |                             |                         |                             |
| ii. | <u>Dairy</u><br>Steers | Percent                       | Standard                    | Percent                       | Standard                    | Percent                 | Standard                    |
| ii. | <del></del>            | Percent<br>Placements         | Standard<br>Error           | Percent<br>Placements         | Standard<br>Error           | Percent<br>Placements   | Standard<br>Error           |
| ii. | Steers                 | Percent Placements 96.1       | Standard<br>Error<br>(±1.3) | Percent<br>Placements<br>97.2 | Standard<br>Error<br>(±0.9) | Percent Placements 97.0 | Standard<br>Error<br>(±0.8) |

d. Percent of operations with 'other' cattle in the feedlot<sup>1</sup>:

|                              | Small (<1,000 Head) |             | <u>Large (1,000+ Head)</u> |             | <u>Total</u>      |             |
|------------------------------|---------------------|-------------|----------------------------|-------------|-------------------|-------------|
|                              | Percent             | Standard    | Percent                    | Standard    | Percent           | Standard    |
| Commodity                    | <b>Operations</b>   | Error       | <b>Operations</b>          | Error       | <u>Operations</u> | Error       |
| Any other cattle             | 8.5                 | $(\pm 2.6)$ | 8.9                        | $(\pm 1.0)$ | 8.5               | $(\pm 2.5)$ |
| Beef animals to be used for  |                     |             |                            |             |                   |             |
| breeding                     | 7.2                 | $(\pm 2.6)$ | 5.1                        | $(\pm 0.8)$ | 7.1               | $(\pm 2.5)$ |
| Dairy animals to be used for |                     |             |                            |             |                   |             |
| breeding                     | 0.3                 | $(\pm 0.2)$ | 0.6                        | $(\pm 0.2)$ | 0.3               | $(\pm 0.2)$ |
| Other cattle                 | 1.2                 | $(\pm 0.7)$ | 4.5                        | $(\pm 0.7)$ | 1.4               | $(\pm 0.7)$ |
| In bond cattle from Mexico   | 0.0                 | $(\pm 0.0)$ | 0.9                        | $(\pm 0.2)$ | 0.0               | $(\pm 0.0)$ |

# Percent of Operations with 'Other\*' Cattle in Feedlots by Feedlot Capacity



<sup>\*</sup>Other cattle include all those not on feed for the slaughter market.

Cattle on Feed 4 USDA:APHIS:VS

<sup>1</sup> Other cattle refers to cattle placed in the feedlot for purposes other than being finished for the U.S. slaughter market.

#2653

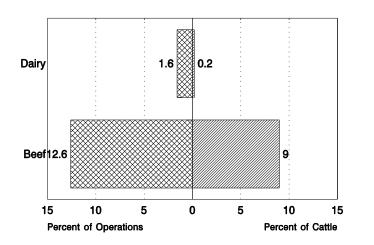
e. Percent of disposed animals by disposition category:

|                                 | <u>Small (&lt;1,000 Head)</u> |             | <u> Large (1,000+ Head)</u> |             | <u>Total</u>      |             |
|---------------------------------|-------------------------------|-------------|-----------------------------|-------------|-------------------|-------------|
|                                 | Percent                       | Standard    | Percent                     | Standard    | Percent           | Standard    |
| Category                        | <b>Placements</b>             | Error       | <u>Placements</u>           | Error       | <u>Placements</u> | Error       |
| Marketed for slaughter          | 96.5                          | $(\pm 0.5)$ | 95.8                        | $(\pm 0.5)$ | 95.9              | $(\pm 0.4)$ |
| Culled, sent to market prior to |                               |             |                             |             |                   |             |
| slaughter weight                | 0.2                           | $(\pm 0.1)$ | 0.4                         | $(\pm 0.1)$ | 0.4               | $(\pm 0.1)$ |
| Returned to grazing forage      | 1.5                           | $(\pm 0.5)$ | 1.6                         | $(\pm 0.2)$ | 1.6               | $(\pm 0.2)$ |
| Shipped to another feedlot      | 0.7                           | $(\pm 0.2)$ | 1.1                         | $(\pm 0.3)$ | 1.0               | $(\pm 0.3)$ |
| Died                            | 1.0                           | $(\pm 0.1)$ | 1.1                         | $(\pm 0.0)$ | 1.1               | $(\pm 0.0)$ |
| Stolen                          | 0.0                           | $(\pm 0.0)$ | 0.0                         | $(\pm 0.0)$ | 0.0               | $(\pm 0.0)$ |
| Lost for other reasons          | 0.1                           | $(\pm 0.0)$ | 0.0                         | $(\pm 0.0)$ | _0.0              | $(\pm 0.0)$ |
| Total                           | 100.0                         |             | 100.0                       |             | 100.0             |             |

#### 2. Source of Placements

| and): |                           | <u>Small (&lt;1,0</u> | 000 Head)   | <u>Large (1,000+ Head)</u> |             | <u>Total</u> |             |
|-------|---------------------------|-----------------------|-------------|----------------------------|-------------|--------------|-------------|
|       |                           |                       | Standard    |                            | Standard    |              | Standard    |
|       |                           | <u>Percent</u>        | Error       | Percent                    | Error       | Percent      | Error       |
| i.    | Operations:               |                       |             |                            |             |              |             |
|       | Dairy cattle              | 0.1                   | $(\pm 0.1)$ | 1.6                        | $(\pm 0.3)$ | 0.2          | $(\pm 0.1)$ |
|       | Beef cattle               | 0.1                   | $(\pm 0.1)$ | 12.6                       | $(\pm 0.7)$ | 0.7          | $(\pm 0.1)$ |
|       | All                       | 0.1                   | $(\pm 0.1)$ | 12.8                       | $(\pm 0.7)$ | 0.7          | $(\pm 0.1)$ |
| ii.   | Cattle:                   |                       |             |                            |             |              |             |
|       | Dairy cattle <sup>1</sup> | 0.0                   | $(\pm 0.0)$ | 0.2                        | $(\pm 0.1)$ | 0.2          | $(\pm 0.1)$ |
|       | Beef cattle <sup>1</sup>  | 0.0                   | $(\pm 0.0)$ | 9.0                        | $(\pm 1.1)$ | 7.9          | $(\pm 0.9)$ |
|       | All                       | 0.0                   | $(\pm 0.0)$ | 9.2                        | $(\pm 1.1)$ | 8.1          | $(\pm 1.0)$ |
|       |                           |                       |             |                            |             |              |             |

## Percent of Operations with 1,000 Head or More Capacity and Cattle on These Operations Placing Cattle of Mexican Origin



Mexican-origin beef and dairy cattle placed as a percent of all cattle placed on feed.

b. Percent of cattle placed on feed that were:

|                                      | Small (<1,000 Head) |                  | <u>Large (1,000+ Head)</u> |             | <u>Total</u>     |          |
|--------------------------------------|---------------------|------------------|----------------------------|-------------|------------------|----------|
|                                      | Percent             | Standard         | Percent                    | Standard    | Percent          | Standard |
| Source                               | Cattle              | Error            | Cattle                     | Error       | Cattle           | Error    |
| Born on this operation or another of | per-                |                  |                            |             |                  |          |
| ation operated by this feedlot       | $N/A^1$             | $N/A^1$          | 0.8                        | $(\pm 0.1)$ | $N/A^1$          | $N/A^1$  |
| Purchased via auction                | $N/A^1$             | $N/A^1$          | 29.7                       | $(\pm 1.2)$ | $N/A^1$          | $N/A^1$  |
| Purchased via direct sale (cash or   |                     |                  |                            |             |                  |          |
| video, private treaty)               | $N/A^1$             | $N/A^1$          | 23.6                       | $(\pm 1.5)$ | $N/A^1$          | $N/A^1$  |
| Provided for custom feeding          | $N/A^1$             | $N/A^1$          | 43.4                       | $(\pm 1.7)$ | $N/A^1$          | $N/A^1$  |
| Other source                         | $N/A^1$             | N/A <sup>1</sup> | 2.5                        | $(\pm 0.8)$ | N/A <sup>1</sup> | $N/A^1$  |
| Total                                |                     |                  | 100.0                      |             |                  |          |

c. Percent of cattle placed on feed that were owned by:

|      |   | Small (<1,000 Head) |                  | Large (1,000+ Head) |              | <u>Total</u>     |                  |
|------|---|---------------------|------------------|---------------------|--------------|------------------|------------------|
|      |   |                     | Standard         |                     | Standard     |                  | Standard         |
|      |   | Percent             | Error            | Percent             | <u>Error</u> | Percent          | Error            |
| i.   | This feedlot                                | N/A <sup>1</sup>    | $N/A^1$          | 26.1                | (±1.4)       | $N/A^1$          | $N/A^1$          |
| ii.  | Joint feedlot ownership with others         | N/A <sup>1</sup>    | N/A <sup>1</sup> | 8.2                 | (±0.5)       | N/A <sup>1</sup> | N/A <sup>1</sup> |
| iii. | Others (cattle being custom fed for others) | N/A <sup>1</sup>    | N/A <sup>1</sup> | 65.7                | (±1.5)       | N/A <sup>1</sup> | N/A <sup>1</sup> |
|      | Total                                       |                     |                  | 100.0               |              |                  |                  |

<sup>1</sup> N/A = data not collected.

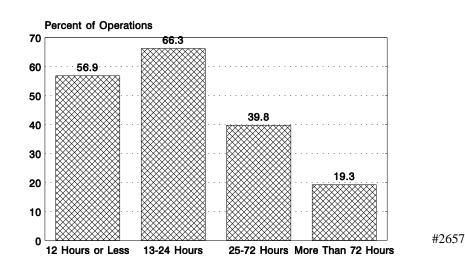
#### 3. Placement Processing

a. Percent of operations<sup>1</sup> initially processing some cattle as a group during the following time periods after arrival:

Small (<1,000 Head) Total

| vui.               | Dilluit ( 11.000 fice | munise (1.0 | OO   IICaa,       |             | <u> </u>          |          |
|--------------------|-----------------------|-------------|-------------------|-------------|-------------------|----------|
|                    | Percent               | Standard    | Percent           | Standard    | Percent           | Standard |
| Time Period        | <b>Operations</b>     | Error       | <b>Operations</b> | Error       | <b>Operations</b> | Error    |
| 12 hours or less   | $N/A^2$               | $N/A^2$     | 56.9              | $(\pm 1.8)$ | $N/A^2$           | $N/A^2$  |
| 13-24 hours        | $N/A^2$               | $N/A^2$     | 66.3              | $(\pm 1.8)$ | $N/A^2$           | $N/A^2$  |
| 25-72 hours        | $N/A^2$               | $N/A^2$     | 39.8              | $(\pm 1.8)$ | $N/A^2$           | $N/A^2$  |
| More than 72 hours | $N/A^2$               | $N/A^2$     | 19.3              | $(\pm 1.5)$ | $N/A^2$           | $N/A^2$  |
| Not processed      | $N/A^2$               | $N/A^2$     | 5.0               | $(\pm 0.8)$ | $N/A^2$           | $N/A^2$  |

### Percent of Operations Processing Cattle as a Group After Arrival by Time Period



b. Percent of placements initially processed as a group within the following time periods:

|                                  | Small (<1,000 Head) |          | <u>Large (1,000+ Head)</u> |              | <u>Total</u> |          |
|----------------------------------|---------------------|----------|----------------------------|--------------|--------------|----------|
|                                  | Number              | Standard | Number                     | Standard     | Number       | Standard |
| <u>Time Period</u>               | Hours               | Error    | Hours                      | <u>Error</u> | Hours        | Error    |
| 12 hours or less after arrival   | $N/A^2$             | $N/A^2$  | 42.4                       | $(\pm 2.0)$  | $N/A^2$      | $N/A^2$  |
| 13-24 hours after arrival        | $N/A^2$             | $N/A^2$  | 44.9                       | $(\pm 1.9)$  | $N/A^2$      | $N/A^2$  |
| 25-72 hours after arrival        | $N/A^2$             | $N/A^2$  | 10.3                       | $(\pm 0.7)$  | $N/A^2$      | $N/A^2$  |
| More than 72 hours after arrival | $N/A^2$             | $N/A^2$  | 2.0                        | $(\pm 0.2)$  | $N/A^2$      | $N/A^2$  |
| Not processed after arrival      | $N/A^2$             | $N/A^2$  | _0.4                       | $(\pm 0.1)$  | $N/A^2$      | $N/A^2$  |
| Total                            |                     |          | 100.0                      |              |              |          |

USDA:APHIS:VS 7 Cattle on Feed

<sup>1</sup> An operation may be counted in multiple categories.

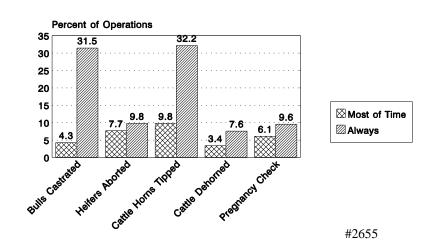
N/A = data not collected.

c. Processing practices for large operations (1,000+ head)

i. Percent of feedlots using selected management practices on cattle during the first 30 days after arrival at the feedlot:
 Percent of Operations

|                            |              |                  | Most of     |               | None                   |              |
|----------------------------|--------------|------------------|-------------|---------------|------------------------|--------------|
| Management Practice        | <u>Never</u> | <u>Sometimes</u> | the Time    | <u>Always</u> | Processed <sup>1</sup> | <u>Total</u> |
| Bulls castrated            | 36.2         | 19.5             | 4.3         | 31.5          | 8.5                    | 100.0        |
| Standard Error             | $(\pm 1.8)$  | $(\pm 1.5)$      | $(\pm 0.7)$ | $(\pm 1.5)$   | $(\pm 1.1)$            |              |
| Heifers aborted            | 43.9         | 30.3             | 7.7         | 9.8           | 8.3                    | 100.0        |
| Standard Error             | $(\pm 1.8)$  | $(\pm 1.7)$      | $(\pm 0.9)$ | $(\pm 1.1)$   | $(\pm 1.0)$            |              |
| Cattle horns tipped        | 34.3         | 19.1             | 9.8         | 32.2          | 4.6                    | 100.0        |
| Standard Error             | $(\pm 1.8)$  | $(\pm 1.4)$      | $(\pm 1.1)$ | $(\pm 1.6)$   | $(\pm 0.8)$            |              |
| Cattle dehorned            | 62.9         | 20.2             | 3.4         | 7.6           | 5.9                    | 100.0        |
| Standard Error             | $(\pm 1.8)$  | $(\pm 1.5)$      | $(\pm 0.7)$ | $(\pm 1.0)$   | $(\pm 0.9)$            |              |
| Intact (nonspayed) heifers |              |                  |             |               |                        |              |
| pregnancy checked          | 46.1         | 31.7             | 6.1         | 9.6           | 6.5                    | 100.0        |
| Standard Error             | $(\pm 1.9)$  | $(\pm 1.7)$      | $(\pm 0.9)$ | $(\pm 1.1)$   | $(\pm 1.0)$            |              |

# Use of Selected Processing Practices on Feedlots of 1,000 Head or More Capacity



ii. Percent of feedlots using animal identification during the first 30 days after arrival at the feedlot:

|  | <u>Percent of Operations</u> |                  |             |               |                  |              |  |
|--|------------------------------|------------------|-------------|---------------|------------------|--------------|--|
|  |                              |                  | Most of     |               | None             |              |  |
| Management Practice  | <u>Never</u>                 | <u>Sometimes</u> | the Time    | <u>Always</u> | <u>Processed</u> | <u>Total</u> |  |
| Identification - Individual: Cattle & calves tagged or otherwise individually with a unique number |                              |                  |             |               |                  |              |  |
|  | 46.9                         | 14.0             | 2.9         | 32.7          | 3.5              | 100.0        |  |
| Standard Error   | $(\pm 1.9)$                  | $(\pm 1.4)$      | $(\pm 0.6)$ | $(\pm 1.7)$   | $(\pm 0.7)$      |              |  |
| Identification - Owner: Animals ide  | ntified wi                   | ith a group or   | owner ident | ifier         |                  |              |  |
|  | 26.7                         | 8.8              | 5.3         | 56.9          | 2.3              | 100.0        |  |
| Standard Error   | $(\pm 1.7)$                  | $(\pm 1.1)$      | $(\pm 0.9)$ | $(\pm 1.7)$   | $(\pm 0.6)$      |              |  |

No animals were processed that would have been eligible for the procedure of interest, e.g., no bulls were processed in this feedlot. This is in contrast to the 'never' category which implies that some animals were processed that would have been eligible for the procedure, but were not subjected to it.

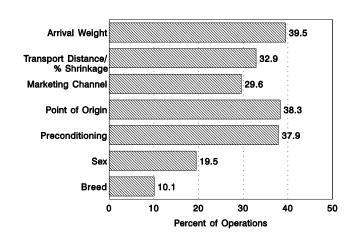
Cattle on Feed 8 USDA:APHIS:VS

d. Percent of operations that change procedures for processing new arrivals based upon each of the following:

Small (<1.000 Head) Large (1.000+ Head) Tot

| following:                   | <u>Small (&lt;1,0</u> | <u> )00 Head)</u> | <u> Large (1,0</u> | <u>00+ Head)</u> | <u>To</u>         | <u>tal</u>       |
|------------------------------|-----------------------|-------------------|--------------------|------------------|-------------------|------------------|
|                              | Percent               | Standard          | Percent            | Standard         | Percent           | Standard         |
| <u>Item</u>                  | <b>Operations</b>     | Error             | <b>Operations</b>  | Error            | <u>Operations</u> | Error            |
| Arrival weight               | $N/A^1$               | N/A <sup>1</sup>  | 39.5               | $(\pm 1.8)$      | $N/A^1$           | N/A <sup>1</sup> |
| Distance transported/percent |                       |                   |                    |                  |                   |                  |
| shrinkage                    | $N/A^1$               | $N/A^1$           | 32.9               | $(\pm 1.7)$      | $N/A^1$           | $N/A^1$          |
| Marketing channel used       | $N/A^1$               | $N/A^1$           | 29.6               | $(\pm 1.7)$      | $N/A^1$           | N/A <sup>1</sup> |
| Point of origin              | $N/A^1$               | $N/A^1$           | 38.3               | $(\pm 1.8)$      | $N/A^1$           | $N/A^1$          |
| Preconditioning              | $N/A^1$               | $N/A^1$           | 37.9               | $(\pm 1.8)$      | $N/A^1$           | $N/A^1$          |
| Sex                          | N/A <sup>1</sup>      | $N/A^1$           | 19.5               | $(\pm 1.3)$      | $N/A^1$           | $N/A^1$          |
| Breed                        | N/A <sup>1</sup>      | $N/A^1$           | 10.1               | $(\pm 1.0)$      | N/A <sup>1</sup>  | $N/A^1$          |

## Percent of Operations That Change Processing Procedures for New Arrivals by Selected Criteria



#2656

e. Percent of large operations (1,000+ head) that provide new arrivals with:

|                  | Additional | Standard    | Additional  | Standard    | Additional   | Standard    |
|------------------|------------|-------------|-------------|-------------|--------------|-------------|
| Frequency        | Pen Space  | Error       | Waterers    | Error       | Bunk Space   | Error       |
| Never            | 38.7       | $(\pm 1.8)$ | 40.8        | $(\pm 1.9)$ | 33.9         | $(\pm 1.8)$ |
| Sometimes        | 29.9       | $(\pm 1.7)$ | 30.1        | $(\pm 1.7)$ | 28.2         | $(\pm 1.7)$ |
| Most of the time | 17.0       | $(\pm 1.4)$ | 14.5        | $(\pm 1.3)$ | 19.3         | $(\pm 1.4)$ |
| Always           | 14.4       | $(\pm 1.3)$ | <u>14.6</u> | $(\pm 1.3)$ | <u> 18.6</u> | $(\pm 1.5)$ |
| Total            | 100.0      |             | 100.0       |             | 100.0        |             |

f. Percent of operations processing cattle a second time within 30 days after arrival and percent of cattle being processed a second time: Small(<1.000 Head) Large (1.000+ Head) Total

| ocessed a second time: |            | <u>Smail (&lt;1,</u> | <u>Smail (&lt;1,000 Head)</u> |         | <u>Large (1,000+ Head)</u> |                  | <u> 10tal</u> |  |
|------------------------|------------|----------------------|-------------------------------|---------|----------------------------|------------------|---------------|--|
|                        |            |                      | Standard                      |         | Standard                   |                  | Standard      |  |
|                        |            | Percent              | Error                         | Percent | Error                      | Percent          | Error         |  |
| i.                     | Operations | $N/A^1$              | N/A <sup>1</sup>              | 65.1    | $(\pm 1.8)$                | N/A <sup>1</sup> | $N/A^1$       |  |
| ii.                    | Cattle     | $N/A^1$              | $N/A^1$                       | 24.4    | $(\pm 1.4)$                | $N/A^1$          | $N/A^1$       |  |

<sup>1</sup> N/A = data not collected.

g. Percent of operations using the same pens for receiving and shipping cattle:

| Small (<1,0       | <u>00 Head)</u> | <u>Large (1,00</u> | <u>00+ Head)</u> | <u>Total</u>      |          |  |
|-------------------|-----------------|--------------------|------------------|-------------------|----------|--|
| Percent           | Standard        | Percent            | Standard         | Percent           | Standard |  |
| <b>Operations</b> | Error           | <b>Operations</b>  | Error            | <b>Operations</b> | Error    |  |
| $N/A^1$           | $N/A^1$         | 66.1               | $(\pm 1.8)$      | N/A <sup>1</sup>  | $N/A^1$  |  |

#### 4. Branding and Identification

i.

a. Percent of operations (and cattle on feed on these operations) that hide branded cattle received in thelast 12 months:

Small (<1,000 Head)

Large (1,000+ Head)

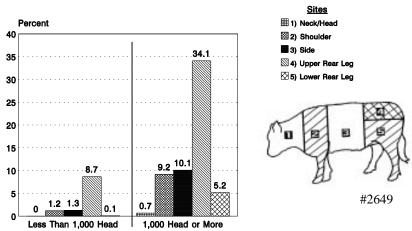
Total

| nonths:    | Small (<1.0    | Small (<1,000 Head) |         | <u>Large (1,000+ Head)</u> |         | <u>Total</u> |  |
|------------|----------------|---------------------|---------|----------------------------|---------|--------------|--|
|            |                | Standard            |         | Standard                   |         | Standard     |  |
|            | <u>Percent</u> | Error               | Percent | <u>Error</u>               | Percent | Error        |  |
| Operations | 11.2           | $(\pm 2.5)$         | 42.9    | $(\pm 1.7)$                | 12.7    | $(\pm 2.4)$  |  |
| Cattle     | 18.5           | $(\pm 3.0)$         | 33.8    | $(\pm 2.2)$                | 32.0    | $(\pm 2.0)$  |  |

b. Percent of all operations and all cattle branded by site:

| Operations     | Small (<1,000 Head) |             | <u>Large (1,000+ Head)</u> |             | <u>Total</u> |               |
|----------------|---------------------|-------------|----------------------------|-------------|--------------|---------------|
|                | Percent             | Standard    | Percent                    | Standard    | Percent      | Standard      |
| <u>Site</u>    | <b>Operations</b>   | Error       | <b>Operations</b>          | Error       | Operations   | Error         |
| Neck/Head      | 0.0                 | $(\pm 0.0)$ | 0.7                        | $(\pm 0.2)$ | < 0.1        | $(\pm < 0.1)$ |
| Shoulder       | 1.2                 | $(\pm 0.6)$ | 9.2                        | $(\pm 1.1)$ | 1.6          | $(\pm 0.5)$   |
| Side           | 1.3                 | $(\pm 0.6)$ | 10.1                       | $(\pm 1.1)$ | 1.7          | $(\pm 0.6)$   |
| Upper rear leg | 8.7                 | $(\pm 2.4)$ | 34.1                       | $(\pm 1.7)$ | 9.9          | $(\pm 2.3)$   |
| Lower rear leg | 0.1                 | $(\pm 0.1)$ | 5.2                        | $(\pm 0.8)$ | 0.4          | $(\pm 0.1)$   |

#### Percent of Operations Branding by Site & Feedlot Capacity



| ii. | Cattle branded   | <u>Small (&lt;1.</u> | Small (<1,000 Head) |         | <u>Large (1,000+ Head)</u> |         | <u>Total</u> |  |
|-----|------------------|----------------------|---------------------|---------|----------------------------|---------|--------------|--|
|     |                  | Percent              | Standard            | Percent | Standard                   | Percent | Standard     |  |
|     | <u>Site</u>      | <u>Cattle</u>        | Error               | Cattle  | Error                      | Cattle  | Error        |  |
|     | Neck/Head        | 0.0                  | $(\pm 0.0)$         | 0.3     | $(\pm 0.1)$                | 0.3     | (±0.1)       |  |
|     | Shoulder         | 1.6                  | $(\pm 0.7)$         | 1.9     | $(\pm 0.3)$                | 1.9     | $(\pm 0.3)$  |  |
|     | Side             | 3.1                  | $(\pm 1.8)$         | 1.6     | $(\pm 0.2)$                | 1.8     | $(\pm 0.3)$  |  |
|     | Upper rear leg   | 10.4                 | $(\pm 2.1)$         | 15.4    | $(\pm 1.5)$                | 14.8    | $(\pm 1.3)$  |  |
|     | Lower rear leg   | 0.7                  | $(\pm 0.7)$         | 1.0     | $(\pm 0.3)$                | 0.9     | $(\pm 0.2)$  |  |
|     | Not hide branded | 84.3                 | $(\pm 2.7)$         | 79.8    | $(\pm 1.6)$                | 80.3    | $(\pm 1.4)$  |  |

<sup>1</sup> N/A = data not collected.

#### 5. Pen Riding or Walking Protocols

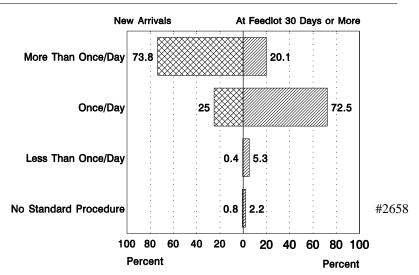
- a. Percent of operations using the following pen riding or walking protocols
  - i. For new arrivals (at feedlot less than 30 days):

|                         | Small (<1,000 Head) |                  | <u>Large (1,000+ Head)</u> |             | <u>Total</u> |          |
|-------------------------|---------------------|------------------|----------------------------|-------------|--------------|----------|
|                         | Percent             | Standard         | Percent                    | Standard    | Percent      | Standard |
| Protocol Frequency      | <b>Operations</b>   | Error            | <b>Operations</b>          | Error       | Operations   | Error    |
| More than once a day    | $N/A^1$             | N/A <sup>1</sup> | 73.8                       | $(\pm 1.7)$ | $N/A^1$      | $N/A^1$  |
| Once a day              | $N/A^1$             | $N/A^1$          | 25.0                       | $(\pm 1.6)$ | $N/A^1$      | $N/A^1$  |
| Every other day         | $N/A^1$             | $N/A^1$          | 0.4                        | $(\pm 0.3)$ | $N/A^1$      | $N/A^1$  |
| Every third day or more | $N/A^1$             | $N/A^1$          | 0.0                        | $(\pm 0.0)$ | $N/A^1$      | $N/A^1$  |
| No standard procedure   | $N/A^1$             | $N/A^1$          | 0.8                        | $(\pm 0.3)$ | $N/A^1$      | $N/A^1$  |

ii. For those animals at feedlot 30 days or more:

|                         | Small (<1,000 Head) |                  | <u>Large (1,000+ Head)</u> |             | <u>Total</u>      |                  |
|-------------------------|---------------------|------------------|----------------------------|-------------|-------------------|------------------|
|                         | Percent             | Standard         | Percent                    | Standard    | Percent           | Standard         |
| Protocol Frequency      | <b>Operations</b>   | Error            | <b>Operations</b>          | Error       | <u>Operations</u> | Error            |
| More than once a day    | $N/A^1$             | $N/A^1$          | 20.1                       | $(\pm 1.5)$ | $N/A^1$           | $N/A^1$          |
| Once a day              | $N/A^1$             | $N/A^1$          | 72.5                       | $(\pm 1.7)$ | $N/A^1$           | $N/A^1$          |
| Every other day         | $N/A^1$             | $N/A^1$          | 2.7                        | $(\pm 0.7)$ | $N/A^1$           | $N/A^1$          |
| Every third day or more | $N/A^1$             | $N/A^1$          | 2.6                        | $(\pm 0.7)$ | $N/A^1$           | $N/A^1$          |
| No standard procedure   | $N/A^1$             | N/A <sup>1</sup> | 2.2                        | $(\pm 0.6)$ | N/A <sup>1</sup>  | N/A <sup>1</sup> |

# Pen Riding or Walking Protocols on Feedlots of 1,000 Head or More Capacity by Time on Feedlot



USDA:APHIS:VS 11 Cattle on Feed

<sup>1</sup> N/A = data not collected.

#### 6. Nutritional Management - Implants

a. For calves less than 700 lbs. when placed, percent of calves implanted by number of times implanted:

|                 | <u>Small (&lt;1,0</u> | <u>)00 Head)</u> | <u> Large (1,000+ Head)</u> |             | <u>Total</u> |             |
|-----------------|-----------------------|------------------|-----------------------------|-------------|--------------|-------------|
|                 |                       | Standard         |                             | Standard    |              | Standard    |
| Number of Times | Percent               | Error            | Percent                     | Error       | Percent      | Error       |
| 0               | 23.3                  | $(\pm 2.8)$      | 1.3                         | $(\pm 0.2)$ | 4.3          | $(\pm 0.4)$ |
| 1               | 47.4                  | $(\pm 4.0)$      | 21.1                        | $(\pm 1.6)$ | 24.8         | $(\pm 1.5)$ |
| 2 or More       | 29.3                  | $(\pm 3.9)$      | <u>77.6</u>                 | $(\pm 1.6)$ | <u>70.9</u>  | $(\pm 1.6)$ |
| Total           | 100.0                 |                  | 100.0                       |             | 100.0        |             |

b. For calves 700 lbs. or more when placed, percent of calves implanted by number of times implanted:

|                 | <u>Small (&lt;1,0</u> | <u>)00 Head)</u> | <u>Large (1,000+ Head)</u> |             | <u>Total</u> |             |
|-----------------|-----------------------|------------------|----------------------------|-------------|--------------|-------------|
|                 |                       | Standard         |                            | Standard    |              | Standard    |
| Number of Times | Percent               | Error            | Percent                    | Error       | Percent      | Error       |
| 0               | 25.3                  | $(\pm 4.5)$      | 1.1                        | $(\pm 0.2)$ | 3.4          | $(\pm 0.5)$ |
| 1               | 56.1                  | $(\pm 4.5)$      | 63.9                       | $(\pm 2.1)$ | 63.1         | $(\pm 2.0)$ |
| 2 or More       | <u> 18.6</u>          | $(\pm 3.1)$      | _35.0                      | $(\pm 2.2)$ | 33.5         | $(\pm 2.0)$ |
| Total           | 100.0                 |                  | 100.0                      |             | 100.0        |             |

#### 7. Nutritional Management - Addititives

a. Percent of operations that fed (and percent of cattle placed that were fed) the following additives:

| i. Operations  | Small (<1,         | 000 Head)               | Large (1,000+ Head) |                        | <u>Total</u> |                          |
|--|--------------------|-------------------------|---------------------|------------------------|--------------|--------------------------|
|  |                    | Standard                |                     | Standard               |              | Standard                 |
| <u>Additive</u>  | Percent            | Error                   | Percent             | Error                  | Percent      | Error                    |
| Ionophore <sup>1</sup>                                       | $N/A^2$            | $N/A^2$                 | 97.3                | $(\pm 0.6)$            | $N/A^2$      | $N/A^2$                  |
| Coccidiostat <sup>3</sup>                                    | $N/A^2$            | $N/A^2$                 | 58.6                | $(\pm 1.8)$            | $N/A^2$      | $N/A^2$                  |
| Probiotic  | $N/A^2$            | $N/A^2$                 | 37.3                | $(\pm 1.8)$            | $N/A^2$      | $N/A^2$                  |
|  |                    |                         |                     |                        |              |                          |
| ii. Cattle placed on feed                                    | Small (<           | 1,000 Head)             | Large (1,           | 000+ Head)             | <u>To</u>    | <u>otal</u>              |
| ii. Cattle placed on feed                                    | Small (<           | 1,000 Head)<br>Standard | Large (1,           | 000+ Head)<br>Standard | To           | o <u>tal</u><br>Standard |
| <ul><li>ii. Cattle placed on feed</li><li>Additive</li></ul> | Small (<)  Percent |                         | Large (1,           | ,-                     | To Percent   |                          |
| •  |                    | Standard                |                     | Standard               |              | Standard                 |
| Additive   | Percent            | Standard<br>Error       | Percent             | Standard<br>Error      | Percent      | Standard<br>Error        |

Ionophore such as Rumensin, Bovatec, or Cattlyst.

N/A = data not collected.

<sup>3</sup> Coccidiostat other than an ionophore such as Corid or Deccox.

#### 8. Nutritional Management - Other

a. For operations placing female cattle, percent of operations feeding  $MGA^1$ :

| Small (<1,0       | 000 Head) | Large (1,00       | 00+ Head)   | Tot               | <u>tal</u> |
|-------------------|-----------|-------------------|-------------|-------------------|------------|
| Percent           | Standard  | Percent           | Standard    | Percent           | Standard   |
| <b>Operations</b> | Error     | <b>Operations</b> | Error       | <b>Operations</b> | Error      |
| $N/A^2$           | $N/A^2$   | 63.7              | $(\pm 1.9)$ | $N/A^2$           | $N/A^2$    |

b. For operations placing female cattle, percent of operations by percent of females fed MGA<sup>1</sup>:

| Percent Females Fed MGA <sup>1</sup> | Percent Operations | Standard Error |
|--------------------------------------|--------------------|----------------|
| 0                                    | 36.3               | $(\pm 2.0)$    |
| 1-24                                 | 6.9                | $(\pm 1.0)$    |
| 25-49                                | 1.2                | $(\pm 0.5)$    |
| 50-74                                | 2.7                | $(\pm 0.7)$    |
| 75-99                                | 2.7                | $(\pm 0.6)$    |
| 100                                  | <u>50.2</u>        | $(\pm 2.0)$    |
| Total                                | 100.0              |                |

c. Percent of operations that fed the following levels of concentrates (dry matter basis) to cattle upon arrival:

Small (<1,000 Head)

Large (1,000+ Head)

Total

| rrival:             | Small (<1,0       | 000 Head) | Large (1,00       | 00+ Head)   | <u>Tot</u>        | <u>tal</u>   |
|---------------------|-------------------|-----------|-------------------|-------------|-------------------|--------------|
| Percent             | Percent           | Standard  | Percent           | Standard    | Percent           | Standard     |
| <u>Concentrates</u> | <b>Operations</b> | Error     | <b>Operations</b> | Error       | <b>Operations</b> | <u>Error</u> |
| 0                   | $N/A^2$           | $N/A^2$   | 5.3               | (±0.9)      | $N/A^2$           | $N/A^2$      |
| 1-35                | $N/A^2$           | $N/A^2$   | 40.0              | $(\pm 1.9)$ | $N/A^2$           | $N/A^2$      |
| 36-55               | $N/A^2$           | $N/A^2$   | 30.1              | $(\pm 1.7)$ | $N/A^2$           | $N/A^2$      |
| 56-74               | $N/A^2$           | $N/A^2$   | 13.6              | $(\pm 1.3)$ | $N/A^2$           | $N/A^2$      |
| 75+                 | $N/A^2$           | $N/A^2$   | <u>11.0</u>       | $(\pm 1.2)$ | $N/A^2$           | $N/A^2$      |
| Total               |                   |           | 100.0             |             |                   |              |

MGA is melengesterol acetate, a heat suppresant for females.

N/A = data not collected.

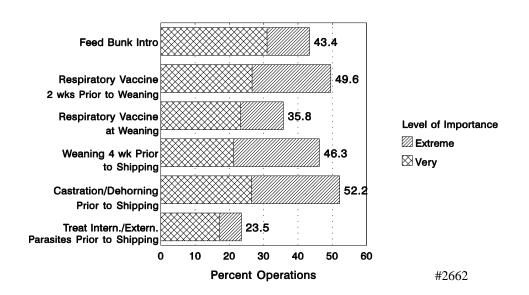
#### 9. Producer Opinions on Pre-Arrival Processing

a. For large operations (1,000 + head), percent of producers by opinion of pre-arrival processing to significantly reduce morbidity and mortality:

Percent of Operations

| į,                          | Extremely | Stand.      | Very      | Stand.      | Moderately | Stand.      | Not/Slightly | Stand.      | No             | Standard    |
|-----------------------------|-----------|-------------|-----------|-------------|------------|-------------|--------------|-------------|----------------|-------------|
| Conditions                  | Effective | Error       | Effective | Error       | Effective  | Error       | Effective    | Error       | <u>Opinion</u> | Error       |
| Feed bunk introduction      | 12.4      | $(\pm 1.3)$ | 31.0      | $(\pm 1.7)$ | 16.1       | (±1.3       | ) 1.8        | $(\pm 0.5)$ | 38.7           | $(\pm 1.9)$ |
| Respiratory vaccine at lea  | st        |             |           |             |            |             |              |             |                |             |
| 2 weeks prior to weanir     | ng 23.0   | $(\pm 1.6)$ | 26.6      | $(\pm 1.6)$ | 8.9        | $(\pm 0.9)$ | ) 1.4        | $(\pm 0.4)$ | 40.1           | $(\pm 1.8)$ |
| Respiratory vaccine         |           |             |           |             |            |             |              |             |                |             |
| given at weaning            | 12.5      | $(\pm 1.2)$ | 23.3      | $(\pm 1.6)$ | 16.6       | (±1.4       | ) 3.7        | $(\pm 0.7)$ | 43.9           | $(\pm 1.8)$ |
| Calves weaned at least      |           |             |           |             |            |             |              |             |                |             |
| 4 weeks prior to shipping   | ng 25.1   | $(\pm 1.6)$ | 21.2      | $(\pm 1.5)$ | 9.4        | (±1.2       | ) 2.2        | $(\pm 0.5)$ | 42.1           | $(\pm 1.8)$ |
| Calves castrated and        |           |             |           |             |            |             |              |             |                |             |
| dehorned prior to shippi    | ng 25.7   | $(\pm 1.6)$ | 26.5      | $(\pm 1.6)$ | 8.1        | (±1.0       | ) 2.7        | $(\pm 0.7)$ | 37.0           | $(\pm 1.8)$ |
| Calves treated for internal | l         |             |           |             |            |             |              |             |                |             |
| or external parasites       |           |             |           |             |            |             |              |             |                |             |
| prior to shipping           | 6.4       | $(\pm 0.9)$ | 17.1      | $(\pm 1.4)$ | 22.6       | $(\pm 1.5)$ | 8.8          | $(\pm 1.1)$ | 45.1           | $(\pm 1.9)$ |

### Percent of Operations of 1,000 Head or More Capacity by Producers' Opinions of Importance of Pre-Arrival Processing to Reduce Morbidity & Mortality



USDA:APHIS:VS 15 Cattle on Feed

#### 10. Health Records Maintained

a. For large operations (1,000+ head), frequency of recording the following for sick animals:

Percent of Operations

|                             |       | Percent of Operations |          |             |          |              |               |              |
|-----------------------------|-------|-----------------------|----------|-------------|----------|--------------|---------------|--------------|
|                             |       | Standard              |          | Standard    | Most of  | Standard     |               | Standard     |
| Record                      | Never | Error                 | Sometime | es Error    | the Time | <u>Error</u> | <u>Always</u> | <u>Error</u> |
| Body temperature            | 19.0  | $(\pm 1.5)$           | 13.0     | $(\pm 1.3)$ | 13.3     | $(\pm 1.3)$  | 54.7          | $(\pm 1.8)$  |
| Date treated                | 15.0  | $(\pm 1.4)$           | 7.2      | $(\pm 1.0)$ | 6.0      | $(\pm 0.9)$  | 71.8          | $(\pm 1.6)$  |
| Weight                      | 56.2  | $(\pm 1.7)$           | 13.2     | $(\pm 1.2)$ | 7.3      | $(\pm 0.9)$  | 23.3          | $(\pm 1.4)$  |
| Treatment given             | 12.8  | $(\pm 1.3)$           | 4.9      | $(\pm 0.9)$ | 4.6      | $(\pm 0.8)$  | 77.7          | $(\pm 1.6)$  |
| Treatment withdrawal        |       |                       |          |             |          |              |               |              |
| period                      | 25.2  | $(\pm 1.7)$           | 6.3      | $(\pm 0.9)$ | 5.2      | $(\pm 0.9)$  | 63.3          | $(\pm 1.8)$  |
| Disease condition (shipping | ng    |                       |          |             |          |              |               |              |
| fever, lameness,            |       |                       |          |             |          |              |               |              |
| pneumonia, etc.)            | 22.0  | $(\pm 1.6)$           | 8.5      | $(\pm 1.1)$ | 7.8      | $(\pm 1.0)$  | 61.7          | $(\pm 1.8)$  |
| Outcome (return to          |       |                       |          |             |          |              |               |              |
| pen, dead, or culled)       | 21.8  | $(\pm 1.6)$           | 8.1      | $(\pm 1.1)$ | 7.8      | $(\pm 1.0)$  | 62.3          | $(\pm 1.8)$  |

#### b. Percent of deaths that had a postmortem examination by:

|                         | <u>Small (&lt;1,000 Head)</u> |                  | Large (1,0    | 00+ Head)    | <u>Total</u>  |              |
|-------------------------|-------------------------------|------------------|---------------|--------------|---------------|--------------|
|                         | Percent                       | Percent Standard |               | Standard     | Percent       | Standard     |
| <u>Examiner</u>         | <u>Deaths</u>                 | Error            | <u>Deaths</u> | <u>Error</u> | <u>Deaths</u> | <u>Error</u> |
| A veterinarian          | 16.8                          | $(\pm 2.8)$      | 15.5          | $(\pm 1.5)$  | 15.7          | $(\pm 1.4)$  |
| A nonveterinarian       | 1.2                           | $(\pm 0.6)$      | 30.4          | $(\pm 2.4)$  | 26.0          | $(\pm 2.1)$  |
| No postmortem performed | 82.0                          | $(\pm 2.9)$      | _54.1         | $(\pm 2.5)$  | _58.3         | $(\pm 2.2)$  |
| Total                   | 100.0                         |                  | 100.0         |              | 100.0         |              |

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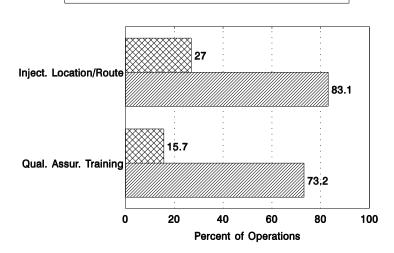
#### 11. Quality Assurance

a. Percent of operations making the following changes in the past 5 years due to concern for quality assurance or food safety: Small (<1.000 Head) Large (1.000+ Head) Total

| drance of food safety.             | Dillati (<1,000 ficaci) |             | Large (1,000   Tread) |             | <u>10tai</u> |             |
|------------------------------------|-------------------------|-------------|-----------------------|-------------|--------------|-------------|
|                                    | Percent                 | Standard    | Percent               | Standard    | Percent      | Standard    |
| Program                            | Operations              | Error       | <b>Operations</b>     | Error       | Operations   | Error       |
| Location or route of injections    | 27.0                    | $(\pm 2.7)$ | 83.0                  | $(\pm 1.4)$ | 29.6         | $(\pm 2.7)$ |
| Quality assurance training program | n 15.7                  | $(\pm 2.5)$ | 73.2                  | $(\pm 1.7)$ | 18.4         | $(\pm 2.4)$ |

### Changes in Management Practices Due to Concern for Quality Assurance or Food Safety in Feedlots by Feedlot Capacity





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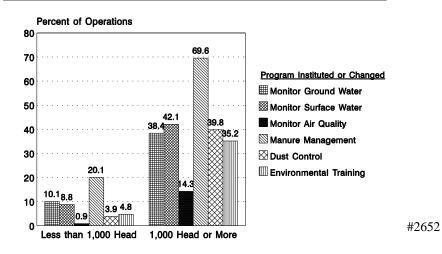
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#### 12. Environmental Programs

a. Percent of operations that instituted or changed programs in the past 5 years due to public concern about environmental quality in the following ways:

|                                  | Small (<1,000 Head) |             | <u>Large (1,000+ Head)</u> |             | <u>Total</u>      |             |
|----------------------------------|---------------------|-------------|----------------------------|-------------|-------------------|-------------|
|                                  | Percent             | Standard    | Percent                    | Standard    | Percent           | Standard    |
| Action                           | <b>Operations</b>   | Error       | <b>Operations</b>          | Error       | <b>Operations</b> | Error       |
| Instituted a ground water        |                     |             |                            |             |                   |             |
| monitoring program               | 10.1                | $(\pm 2.4)$ | 38.4                       | $(\pm 1.7)$ | 11.4              | $(\pm 2.2)$ |
| Instituted a surface water       |                     |             |                            |             |                   |             |
| monitoring program               | 8.8                 | $(\pm 2.2)$ | 42.1                       | $(\pm 1.7)$ | 10.3              | $(\pm 2.1)$ |
| Instituted an air quality        |                     |             |                            |             |                   |             |
| monitoring program               | 0.9                 | $(\pm 0.2)$ | 14.3                       | $(\pm 1.0)$ | 1.6               | $(\pm 0.2)$ |
| Changed the manure management    |                     |             |                            |             |                   |             |
| program                          | 20.1                | $(\pm 2.6)$ | 69.6                       | $(\pm 1.7)$ | 22.5              | $(\pm 2.5)$ |
| Changed the dust control program | 3.9                 | $(\pm 0.9)$ | 39.8                       | $(\pm 1.7)$ | 5.6               | $(\pm 0.9)$ |
| Developed a training program on  |                     |             |                            |             |                   |             |
| environmental concerns           | 4.8                 | $(\pm 1.1)$ | 35.2                       | $(\pm 1.7)$ | 6.2               | $(\pm 1.1)$ |

### Percent of Beef Feedlots that Instituted or Changed Environmental Programs in the Past 5 Years by Feedlot Capacity



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#### b. Percent of operations testing:

|   |  | <u>Small (&lt;1,0</u> | <u>00 Head)</u> | <u> Large (1,000+ Head)</u> |             | <u>Total</u>      |             |
|---|--|-----------------------|-----------------|-----------------------------|-------------|-------------------|-------------|
|   |  | Percent               | Standard        | Percent                     | Standard    | Percent           | Standard    |
|   |  | <b>Operations</b>     | Error           | <b>Operations</b>           | Error       | <b>Operations</b> | Error       |
| i | . Ground water   | 10.5                  | $(\pm 1.5)$     | 44.9                        | $(\pm 1.8)$ | 12.1              | $(\pm 1.5)$ |
| i | i. Nutrient content of manure  | 7.7                   | $(\pm 2.4)$     | 38.0                        | $(\pm 1.7)$ | 9.1               | $(\pm 2.3)$ |
| i | ii. Soil   |                       |                 |                             |             |                   |             |
|   | i. Of producers disposing of manure on their own land, per                       | rcent                 | (+2.2)          | 69.1                        | (±1.0)      | 40.4              | (+2.2)      |
|   | testing nutrient content of soi  |                       | $(\pm 3.3)$     | 09.1                        | $(\pm 1.9)$ | 49.4              | $(\pm 3.2)$ |
|   | <ul><li>ii. Of producers testing soil<br/>percent testing to determine</li></ul> | ,                     |                 |                             |             |                   |             |
|   | manure application rate  | 32.5                  | $(\pm 4.5)$     | 62.4                        | $(\pm 2.4)$ | 34.2              | $(\pm 4.2)$ |

#### c. Percent of operations using the following methods of waste disposal:

|                        | Small (<1,000 Head) |             | <u>Large (1,00</u> | <u>00+ Head)</u> | <u>Total</u>      |             |  |
|------------------------|---------------------|-------------|--------------------|------------------|-------------------|-------------|--|
|                        | Percent             | Standard    | Percent            | Standard         | Percent           | Standard    |  |
| Method                 | <b>Operations</b>   | Error       | <b>Operations</b>  | Error            | <u>Operations</u> | Error       |  |
| On own land            | 99.5                | $(\pm 0.2)$ | 88.0               | $(\pm 1.0)$      | 99.0              | $(\pm 0.2)$ |  |
| Sold                   | 0.0                 | $(\pm 0.0)$ | 9.3                | $(\pm 1.0)$      | 0.5               | $(\pm 0.1)$ |  |
| Given away             | 0.1                 | $(\pm 0.1)$ | 23.0               | $(\pm 1.3)$      | 1.2               | $(\pm 0.1)$ |  |
| Pay someone to take it | 0.0                 | $(\pm 0.0)$ | 6.6                | $(\pm 0.7)$      | 0.3               | $(\pm 0.0)$ |  |
| Other                  | 0.8                 | $(\pm 0.2)$ | 4.1                | $(\pm 0.6)$      | 0.9               | $(\pm 0.2)$ |  |

### d. Percent of operations that performed the following dust control practices: Small (<1.000 Head) | Large (1.000+

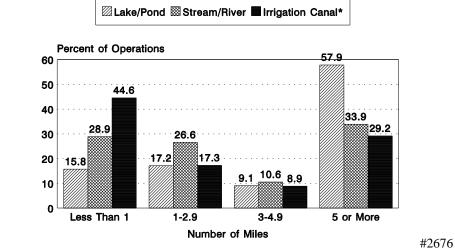
| <u>Small (&lt;1,000 Head)</u> |   | <u> Large (1,000+ Head)</u>   |  | <u>Total</u>   |   |
|-------------------------------|---|---|--|--|---|
| Percent                       | Standard  | Percent   | Standard   | Percent  | Standard  |
| <b>Operations</b>             | Error   | <b>Operations</b>   | Error  | <b>Operations</b>  | Error   |
| $N/A^1$                       | $N/A^1$   | 9.0   | $(\pm 0.9)$  | $N/A^1$  | $N/A^1$   |
| $N/A^1$                       | $N/A^1$   | 36.3  | $(\pm 1.5)$  | $N/A^1$  | $N/A^1$   |
| $N/A^1$                       | $N/A^1$   | 72.9  | $(\pm 1.6)$  | $N/A^1$  | $N/A^1$   |
| $N/A^1$                       | $N/A^1$   | 80.2  | $(\pm 1.5)$  | $N/A^1$  | $N/A^1$   |
|                               | Percent Operations N/A <sup>1</sup> N/A <sup>1</sup> N/A <sup>1</sup> | $ \begin{array}{ccc} \textbf{Operations} & \textbf{Error} \\ N/A^1 & N/A^1 \\ N/A^1 & N/A^1 \\ N/A^1 & N/A^1 \\ N/A^1 & N/A^1 \end{array} $ | Percent Operations         Standard Error         Percent Operations           N/A <sup>1</sup> N/A <sup>1</sup> 9.0           N/A <sup>1</sup> N/A <sup>1</sup> 36.3           N/A <sup>1</sup> N/A <sup>1</sup> 72.9 | PercentStandardPercentStandardOperationsErrorOperationsError $N/A^1$ $N/A^1$ $9.0$ $(\pm 0.9)$ $N/A^1$ $N/A^1$ $36.3$ $(\pm 1.5)$ $N/A^1$ $N/A^1$ $72.9$ $(\pm 1.6)$ | PercentStandardPercentStandardPercentOperationsErrorOperationsErrorOperations $N/A^1$ $N/A^1$ $9.0$ $(\pm 0.9)$ $N/A^1$ $N/A^1$ $N/A^1$ $36.3$ $(\pm 1.5)$ $N/A^1$ $N/A^1$ $N/A^1$ $72.9$ $(\pm 1.6)$ $N/A^1$ |

N/A = data not collected.

e. For large operations (1,000+ head), percent of operations by distance from the feedlot to nearest open water:

|                               | Percent of Operations |              |                |              |                |              |                |               |
|-------------------------------|-----------------------|--------------|----------------|--------------|----------------|--------------|----------------|---------------|
|                               | Less T                | han 1 Mile   | 1-2.9          | <u>Miles</u> | <u>3-4.9</u>   | Miles        | <u>5+ N</u>    | <u> Iiles</u> |
|                               |                       | Standard     |                | Standard     |                | Standard     |                | Standard      |
| Water Source                  | Percent               | <u>Error</u> | <u>Percent</u> | Error        | <u>Percent</u> | <u>Error</u> | <u>Percent</u> | Error         |
| Lake or pond (not lagoon)     | 15.8                  | $(\pm 1.5)$  | 17.2           | $(\pm 1.5)$  | 9.1            | $(\pm 1.1)$  | 57.9           | $(\pm 1.9)$   |
| Stream or river               | 28.9                  | $(\pm 1.7)$  | 26.6           | $(\pm 1.7)$  | 10.6           | $(\pm 1.2)$  | 33.9           | $(\pm 1.6)$   |
| Irrigation canal <sup>1</sup> | 44.6                  | $(\pm 3.3)$  | 17.3           | $(\pm 2.5)$  | 8.9            | $(\pm 2.2)$  | 29.2           | $(\pm 2.9)$   |

### Distance to Nearest Open Water Feedlot Operations of 1,000 Head or More Capacity



<sup>\*</sup>Data collected in irrigated regions as determined by producers

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Data collected only in irrigated regions, as determined by producers.

#### 13. Use of Veterinarian and Nutritionist

a. Percent of operations that used the following consultants during the year ending June 30, 1994:

Small (<1,000 Head) Large (1,000+ Head) Total

|                                  | <u>Small (&lt;1,000 Head)</u> <u>Large</u> |                  | <u>Large (1,00</u> | <u> arge (1,000+ Head)</u> |                   | <u>Total</u>     |  |
|----------------------------------|--|------------------|--------------------|----------------------------|-------------------|------------------|--|
|                                  | Percent                                    | Standard         | Percent            | Standard                   | Percent           | Standard         |  |
| <u>Use</u>                       | <b>Operations</b>                          | Error            | <b>Operations</b>  | Error                      | <b>Operations</b> | Error            |  |
| Veterinarian, any                | $N/A^1$                                    | $N/A^1$          | 99.0               | $(\pm 0.3)$                | $N/A^1$           | $N/A^1$          |  |
| Veterinarian, full-time          | $N/A^1$                                    | $N/A^1$          | 3.6                | $(\pm 0.6)$                | $N/A^1$           | $N/A^1$          |  |
| Veterinarian, regular or routine |  |                  |                    |                            |                   |                  |  |
| visits                           | $N/A^1$                                    | $N/A^1$          | 39.3               | $(\pm 1.6)$                | N/A <sup>1</sup>  | $N/A^1$          |  |
| Veterinarian, call as needed     | N/A <sup>1</sup>                           | N/A <sup>1</sup> | 72.7               | $(\pm 1.4)$                | N/A <sup>1</sup>  | N/A <sup>1</sup> |  |
| Nutritionist, any                | N/A <sup>1</sup>                           | N/A <sup>1</sup> | 87.7               | (±1.3)                     | N/A <sup>1</sup>  | $N/A^1$          |  |
| Nutritionist, full-time          | $N/A^1$                                    | $N/A^1$          | 3.9                | $(\pm 0.6)$                | $N/A^1$           | $N/A^1$          |  |
| Nutritionist, regular or routine |  |                  |                    |                            |                   |                  |  |
| visits                           | $N/A^1$                                    | $N/A^1$          | 64.8               | $(\pm 1.7)$                | $N/A^1$           | $N/A^1$          |  |
| Nutritionist, call as needed     | $N/A^1$                                    | $N/A^1$          | 33.1               | $(\pm 1.8)$                | $N/A^1$           | $N/A^1$          |  |

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<sup>1</sup> N/A = data not collected.

#### 14. Carcass Disposal Methods

a. Percent of operations (and percent of dead animals) by disposal method of dead animals in year ending June 30, 1994:

| Operations      | Small (<1,000 Head)   |  | Large (1,00   | 0+ Head)  | <u>Total</u>  |   |
|-----------------|---|--|---|---|---|---|
|                 | Percent   | Standard   | Percent   | Standard  | Percent   | Standard  |
| <u>Disposal</u> | <b>Operations</b>   | <u>Error</u>   | <b>Operations</b>   | <u>Error</u>  | <u>Operations</u>                                     | <u>Error</u>  |
| Buried on farm  | 19.4  | $(\pm 5.8)$  | 11.8  | $(\pm 1.0)$   | 18.5  | $(\pm 5.1)$   |
| Landfill        | 0.8   | $(\pm 0.5)$  | 1.2   | $(\pm 0.4)$   | 0.8   | $(\pm 0.4)$   |
| Renderer        | 80.8  | $(\pm 5.8)$  | 94.3  | $(\pm 0.7)$   | 82.4  | $(\pm 5.2)$   |
| Other           | 1.4   | $(\pm 0.6)$  | 1.0   | $(\pm 0.4)$   | 1.3   | $(\pm 0.5)$   |
| Dead animals    | Small (<1,0   | 00 Head)   | Large (1,00   | 0+ Head)  | Tot   | tal   |
|                 | Percent   | Standard   | Percent   | Standard  | Percent   | Standard  |
| <u>Disposal</u> | <b>Operations</b>   | <u>Error</u>   | <b>Operations</b>   | <u>Error</u>  | <u>Operations</u>                                     | <u>Error</u>  |
| Buried on farm  | 12.5  | $(\pm 3.8)$  | 3.5   | $(\pm 0.8)$   | 4.4   | $(\pm 0.7)$   |
| Landfill        | 0.4   | $(\pm 0.2)$  | 0.7   | $(\pm 0.5)$   | 0.7   | $(\pm 0.3)$   |
|                 |   |  |   |   |   |   |
| Renderer        | 86.2  | $(\pm 3.8)$  | 95.8  | $(\pm 0.9)$   | 94.8  | $(\pm 0.8)$   |
|                 | Disposal Buried on farm Landfill Renderer Other Dead animals  Disposal Buried on farm | Disposal         Percent Operations           Buried on farm         19.4           Landfill         0.8           Renderer         80.8           Other         1.4           Dead animals         Small (<1.0) | Percent<br>DisposalPercent<br>OperationsStandard<br>ErrorBuried on farm $19.4$ $(\pm 5.8)$ Landfill $0.8$ $(\pm 0.5)$ Renderer $80.8$ $(\pm 5.8)$ Other $1.4$ $(\pm 0.6)$ Dead animals $\frac{\text{Small }(<1.000 \text{ Head})}{\text{Percent}}$ $\frac{\text{Standard}}{\text{Standard}}$ Disposal $\frac{\text{Operations}}{\text{Operations}}$ $\frac{\text{Error}}{\text{Error}}$ Buried on farm $12.5$ $(\pm 3.8)$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |

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### **Section II: Sample Profile**

1. Descriptive Statistics of Responding Operations

|                              | Small (<1,000 Head)       | Large (1,000+ Head) | <u>Total</u>      |
|------------------------------|---------------------------|---------------------|-------------------|
|                              | Number of                 | Number of           | Number of         |
|                              | <b>Operations</b>         | <b>Operations</b>   | <b>Operations</b> |
| a. Number of respondents:    | 913                       | 498                 | 1,411             |
| b. Number of operations tha  | t placed any dairy:       |                     |                   |
| Yes                          | 164                       | 159                 | 323               |
| No                           | 743                       | 329                 | 1,072             |
| N/A <sup>1</sup>             | <u>6</u>                  | <u>10</u>           | <u>16</u>         |
| Total                        | 913                       | 498                 | 1,411             |
| c. Number of operations that | t placed both beef and da | airy:               |                   |
| Yes                          | 84                        | 152                 | 236               |
| No                           | 823                       | 336                 | 1,159             |
| N/A <sup>1</sup>             | <u>_6</u>                 | <u>10</u>           | <u>16</u>         |
| Total                        | 913                       | 498                 | 1,411             |
| d. Number of operations tha  | t placed cows or bulls:   |                     |                   |
| Yes                          | 5                         | 48                  | 53                |
| No                           | 903                       | 440                 | 1,343             |
| $N/A^1$                      | <u>_5</u>                 | <u>10</u>           | <u>15</u>         |
| Total                        | 913                       | 498                 | 1,411             |
| e. Number of operations that | t placed Mexican cattle:  |                     |                   |
| Yes                          | 4                         | 81                  | 85                |
| No                           | 909                       | 417                 | 1,326             |
| N/A <sup>1</sup>             | _0                        | 0                   | 0                 |
| Total                        | 913                       | 498                 | 1,411             |
| f. Number of operations by i | number of placements:     |                     |                   |
| 1-2,499                      | 908                       | 161                 | 1,069             |
| 2,500-9,999                  | 4                         | 143                 | 147               |
| 10,000-39,999                | 0                         | 118                 | 118               |
| 40,000+                      | 0                         | 76                  | 76                |
| $N/A^1$                      | _1                        | _0                  | 1                 |
| Total                        | 913                       | 498                 | 1,411             |

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N/A = missing data.

Centers for Epidemiology and Animal Health USDA:APHIS:VS, Attn. NAHMS 2150 Centre Ave., Bldg., B, MS 2E7 Fort Collins, CO 80526-8117 (970) 494-7000 NAHMSweb@aphis.usda.gov

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