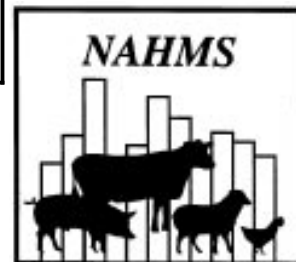
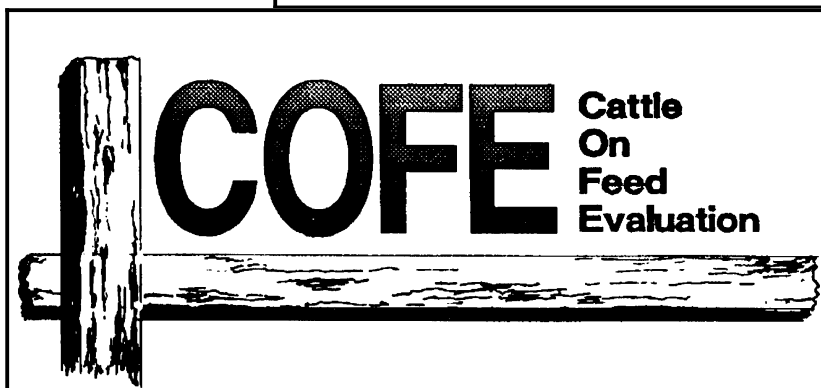
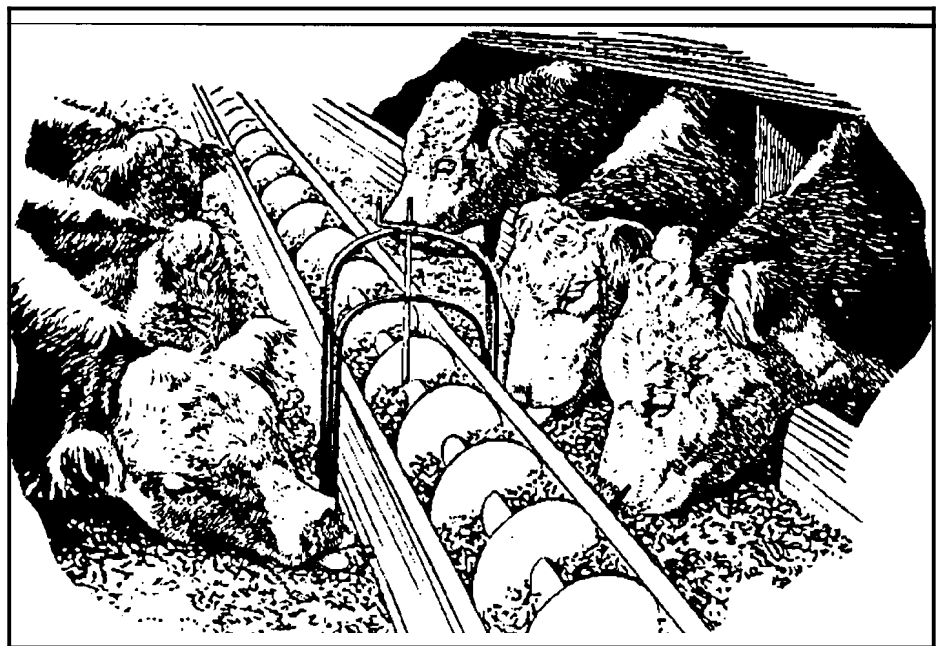


# Part I: Feedlot Management Practices

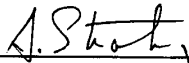


## Acknowledgements

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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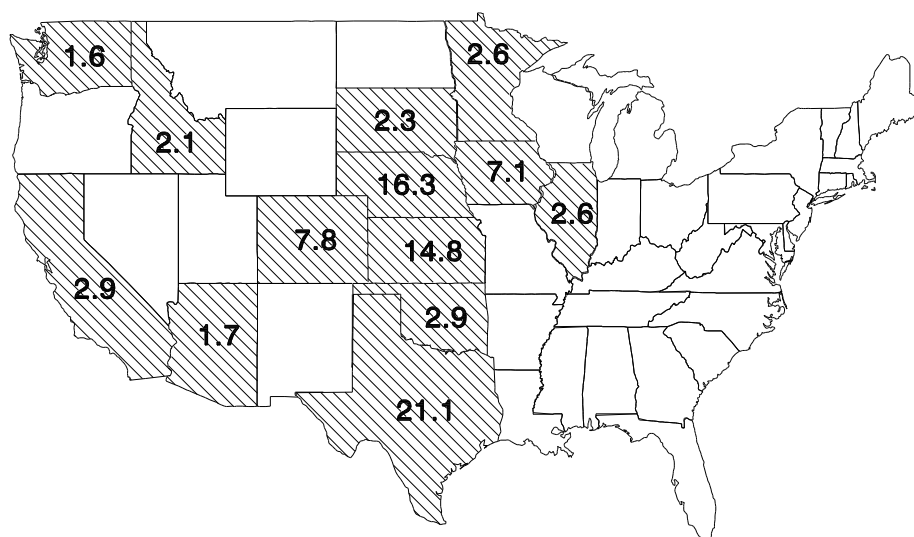
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## Introduction

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**



Total = 85.8 percent of U.S. inventory.

#2650

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.

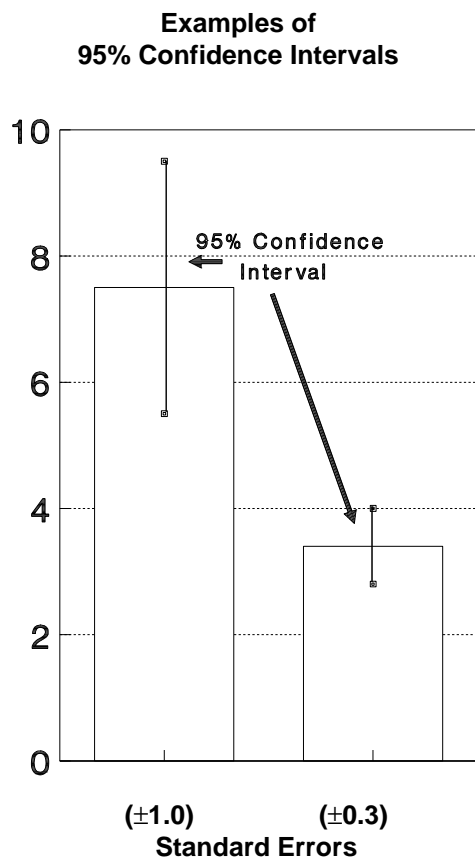
Descriptive tables in this report are population estimates, such as averages and proportions which have been weighted to represent the population. Most of the estimates are provided with a measure of variability called the standard error and denoted by ( $\pm$ ). Chances are 95 out of 100 that the interval 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



#999a<sup>1</sup>

<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
	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
i. Steers and heifers less than 700 lbs.:						
Beef and crossbreeds	70.7	(±2.7)	81.2	(±1.5)	71.2	(±2.6)
Dairy breeds	14.8	(±2.2)	18.4	(±1.1)	15.0	(±2.1)
ii. Steers and heifers 700 lbs. or more:						
Beef and crossbreeds	26.0	(±2.5)	81.9	(±1.5)	28.5	(±2.4)
Dairy breeds	6.0	(±1.3)	19.2	(±1.3)	6.6	(±1.2)
iii. Cows and bulls:						
Beef and crossbreeds	1.0	(±0.7)	8.7	(±1.0)	1.4	(±0.7)
Dairy breeds	0.1	(±0.1)	0.4	(±0.1)	0.1	(±0.1)

#### b. Percent of cattle placed by 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
	<u>Cattle</u>	<u>Error</u>	<u>Cattle</u>	<u>Error</u>	<u>Cattle</u>	<u>Error</u>
i. Steers and heifers less than 700 lbs.:						
Beef and crossbreeds	54.6	(±3.0)	43.4	(±1.4)	44.7	(±1.3)
Dairy breeds	4.6	(±0.7)	5.1	(±0.6)	5.1	(±0.5)
ii. Steers and heifers 700 lbs. or more:						
Beef and crossbreeds	38.1	(±3.0)	49.1	(±1.3)	47.8	(±1.2)
Dairy breeds	2.4	(±0.6)	1.9	(±0.2)	1.9	(±0.2)
iii. Cows and bulls						
Beef and crossbreeds	0.3	(±0.2)	0.5	(±0.1)	0.5	(±0.1)
Dairy breeds	<u>0.0</u>	(±0.0)	<u>0.0</u>	(±0.0)	<u>0.0</u>	(±0.0)
Total	100.0		100.0		100.0	

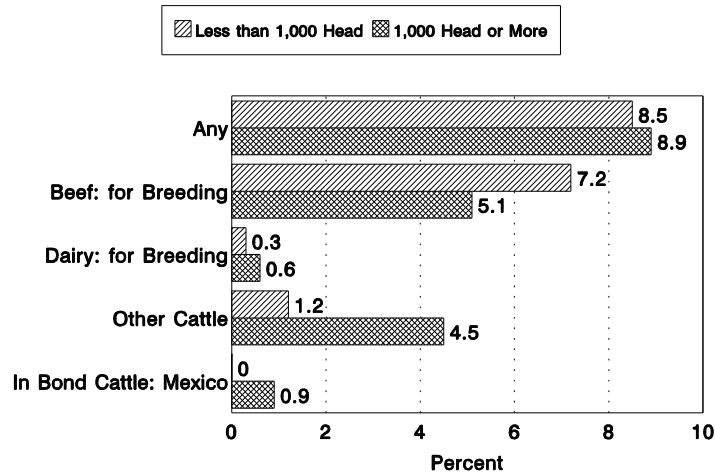
## c. Percent of placements that were:

	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	<u>Percent Placements</u>	<u>Standard Error</u>	<u>Percent Placements</u>	<u>Standard Error</u>	<u>Percent Placements</u>	<u>Standard Error</u>
i. <u>Beef</u>						
Steers	62.2	(±2.3)	65.4	(±0.9)	65.0	(±0.8)
Heifers	37.5	(±2.3)	34.1	(±0.9)	34.5	(±0.8)
Cows and Bulls	<u>0.3</u>	(±0.2)	<u>0.5</u>	(±0.1)	<u>0.5</u>	(±0.1)
Total	100.0		100.0		100.0	
ii. <u>Dairy</u>						
Steers	96.1	(±1.3)	97.2	(±0.9)	97.0	(±0.8)
Heifers	3.2	(±1.1)	2.8	(±0.9)	2.9	(±0.8)
Cows and Bulls	<u>0.7</u>	(±0.7)	<u>0.0</u>	(±0.0)	<u>0.1</u>	(±0.1)
Total	100.0		100.0		100.0	

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

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

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



#2647

\*Other cattle include all those not on feed for the slaughter market.

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



## e. Percent of disposed animals by disposition category:

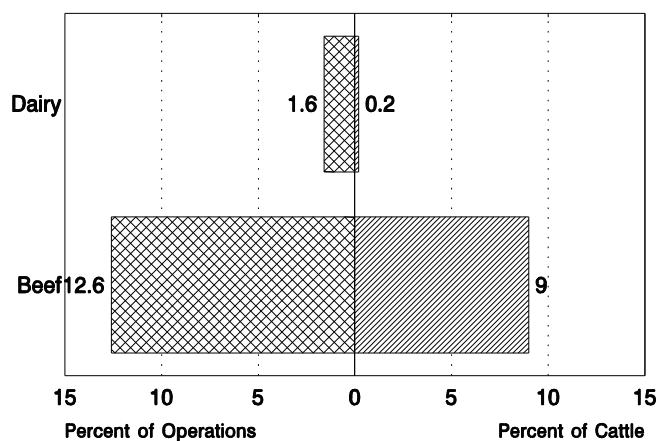
Category	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
	<u>Placements</u>	<u>Error</u>	<u>Placements</u>	<u>Error</u>	<u>Placements</u>	<u>Error</u>
Marketed for slaughter	96.5	(±0.5)	95.8	(±0.5)	95.9	(±0.4)
Culled, sent to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

## 2. Source of Placements

## a. Percent of operations (and cattle on these operations) placing cattle of Mexican origin (and identified with M brand):

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

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



#2653

<sup>1</sup> 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:

<u>Source</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>	<u>Error</u>	<u>Cattle</u>	<u>Error</u>	<u>Cattle</u>	<u>Error</u>
Born on this operation or another operation operated by this feedlot	N/A <sup>1</sup>	N/A <sup>1</sup>	0.8	(±0.1)	N/A <sup>1</sup>	N/A <sup>1</sup>
Purchased via auction	N/A <sup>1</sup>	N/A <sup>1</sup>	29.7	(±1.2)	N/A <sup>1</sup>	N/A <sup>1</sup>
Purchased via direct sale (cash or video, private treaty)	N/A <sup>1</sup>	N/A <sup>1</sup>	23.6	(±1.5)	N/A <sup>1</sup>	N/A <sup>1</sup>
Provided for custom feeding	N/A <sup>1</sup>	N/A <sup>1</sup>	43.4	(±1.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
Other source	N/A <sup>1</sup>	N/A <sup>1</sup>	<u>2.5</u>	(±0.8)	N/A <sup>1</sup>	N/A <sup>1</sup>
Total			100.0			

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

	<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>	<u>Error</u>	<u>Cattle</u>	<u>Error</u>	<u>Cattle</u>	<u>Error</u>
i. This feedlot	N/A <sup>1</sup>	N/A <sup>1</sup>	26.1	(±1.4)	N/A <sup>1</sup>	N/A <sup>1</sup>
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>	<u>65.7</u>	(±1.5)	N/A <sup>1</sup>	N/A <sup>1</sup>
Total			100.0			

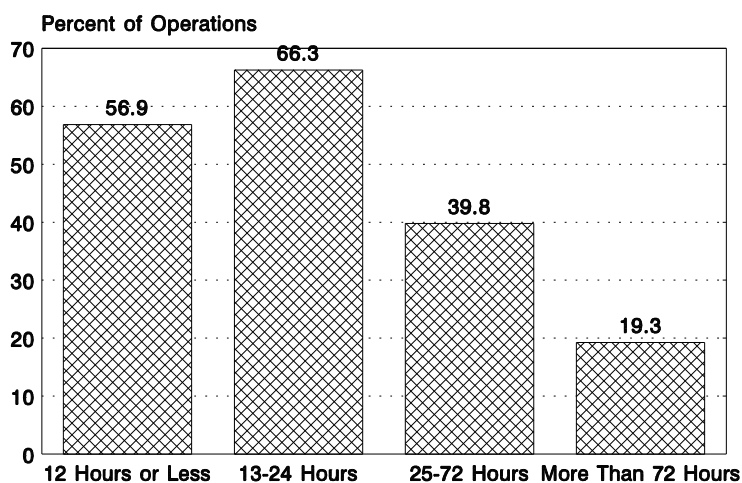
1 N/A = data not collected.

## 3. Placement Processing

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

<u>Time Period</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	<u>Percent Operations</u>	<u>Standard Error</u>	<u>Percent Operations</u>	<u>Standard Error</u>	<u>Percent Operations</u>	<u>Standard Error</u>
12 hours or less	N/A <sup>2</sup>	N/A <sup>2</sup>	56.9	(±1.8)	N/A <sup>2</sup>	N/A <sup>2</sup>
13-24 hours	N/A <sup>2</sup>	N/A <sup>2</sup>	66.3	(±1.8)	N/A <sup>2</sup>	N/A <sup>2</sup>
25-72 hours	N/A <sup>2</sup>	N/A <sup>2</sup>	39.8	(±1.8)	N/A <sup>2</sup>	N/A <sup>2</sup>
More than 72 hours	N/A <sup>2</sup>	N/A <sup>2</sup>	19.3	(±1.5)	N/A <sup>2</sup>	N/A <sup>2</sup>
Not processed	N/A <sup>2</sup>	N/A <sup>2</sup>	5.0	(±0.8)	N/A <sup>2</sup>	N/A <sup>2</sup>

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



#2657

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

<u>Time Period</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	<u>Number Hours</u>	<u>Standard Error</u>	<u>Number Hours</u>	<u>Standard Error</u>	<u>Number Hours</u>	<u>Standard Error</u>
12 hours or less after arrival	N/A <sup>2</sup>	N/A <sup>2</sup>	42.4	(±2.0)	N/A <sup>2</sup>	N/A <sup>2</sup>
13-24 hours after arrival	N/A <sup>2</sup>	N/A <sup>2</sup>	44.9	(±1.9)	N/A <sup>2</sup>	N/A <sup>2</sup>
25-72 hours after arrival	N/A <sup>2</sup>	N/A <sup>2</sup>	10.3	(±0.7)	N/A <sup>2</sup>	N/A <sup>2</sup>
More than 72 hours after arrival	N/A <sup>2</sup>	N/A <sup>2</sup>	2.0	(±0.2)	N/A <sup>2</sup>	N/A <sup>2</sup>
Not processed after arrival	N/A <sup>2</sup>	N/A <sup>2</sup>	0.4	(±0.1)	N/A <sup>2</sup>	N/A <sup>2</sup>
Total			100.0			

1 An operation may be counted in multiple categories.

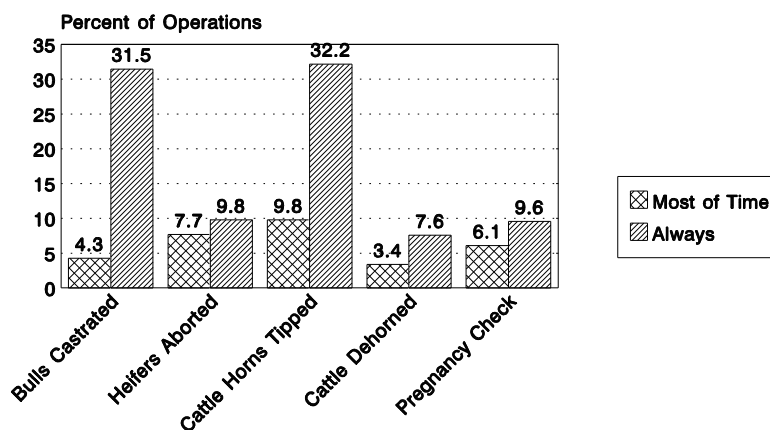
2 N/A = data not collected.

## 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:

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

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



#2655

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

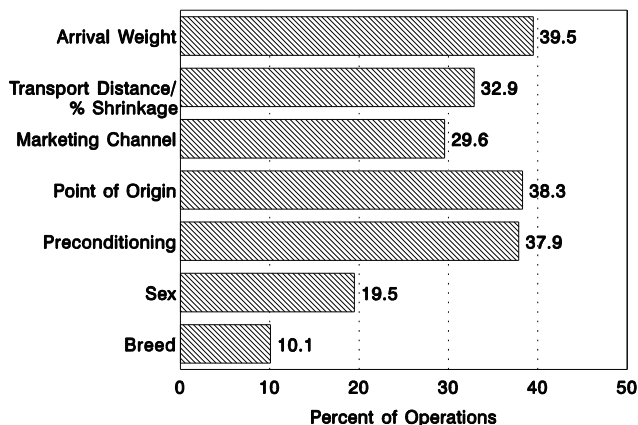
<u>Management Practice</u>	<u>Percent of Operations</u>					<u>Total</u>
	<u>Never</u>	<u>Sometimes</u>	<u>Most of the Time</u>	<u>Always</u>	<u>None Processed</u>	
Identification - Individual: Cattle & calves tagged or otherwise individually with a unique number	46.9	14.0	2.9	32.7	3.5	100.0
Standard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

<sup>1</sup> 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.

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

Item	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
Arrival weight	N/A <sup>1</sup>	N/A <sup>1</sup>	39.5	(±1.8)	N/A <sup>1</sup>	N/A <sup>1</sup>
Distance transported/percent shrinkage	N/A <sup>1</sup>	N/A <sup>1</sup>	32.9	(±1.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
Marketing channel used	N/A <sup>1</sup>	N/A <sup>1</sup>	29.6	(±1.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
Point of origin	N/A <sup>1</sup>	N/A <sup>1</sup>	38.3	(±1.8)	N/A <sup>1</sup>	N/A <sup>1</sup>
Preconditioning	N/A <sup>1</sup>	N/A <sup>1</sup>	37.9	(±1.8)	N/A <sup>1</sup>	N/A <sup>1</sup>
Sex	N/A <sup>1</sup>	N/A <sup>1</sup>	19.5	(±1.3)	N/A <sup>1</sup>	N/A <sup>1</sup>
Breed	N/A <sup>1</sup>	N/A <sup>1</sup>	10.1	(±1.0)	N/A <sup>1</sup>	N/A <sup>1</sup>

**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:

Frequency	<u>Additional</u>		<u>Additional</u>		<u>Additional</u>	
	<u>Pen Space</u>	<u>Error</u>	<u>Waterers</u>	<u>Error</u>	<u>Bunk Space</u>	<u>Error</u>
Never	38.7	(±1.8)	40.8	(±1.9)	33.9	(±1.8)
Sometimes	29.9	(±1.7)	30.1	(±1.7)	28.2	(±1.7)
Most of the time	17.0	(±1.4)	14.5	(±1.3)	19.3	(±1.4)
Always	14.4	(±1.3)	14.6	(±1.3)	18.6	(±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:

	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>
i. Operations	N/A <sup>1</sup>	N/A <sup>1</sup>	65.1	(±1.8)	N/A <sup>1</sup>	N/A <sup>1</sup>
ii. Cattle	N/A <sup>1</sup>	N/A <sup>1</sup>	24.4	(±1.4)	N/A <sup>1</sup>	N/A <sup>1</sup>

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

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

<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
Percent	Standard Error	Percent	Standard Error	Percent	Standard Error
<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
N/A <sup>1</sup>	N/A <sup>1</sup>	66.1	(±1.8)	N/A <sup>1</sup>	N/A <sup>1</sup>

## 4. Branding and Identification

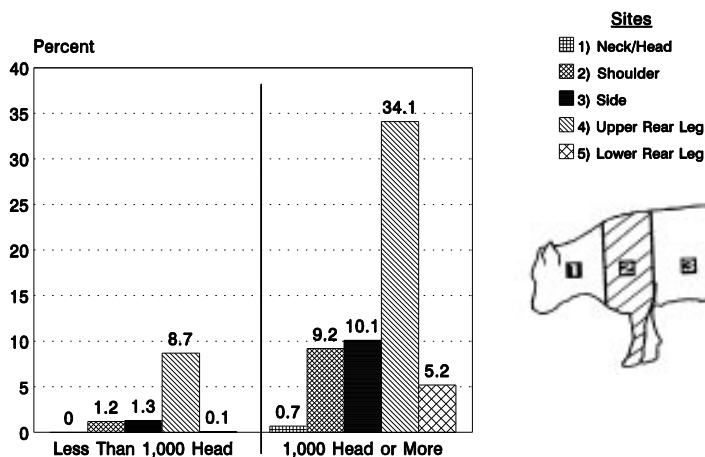
- a. Percent of operations (and cattle on feed on these operations) that hide branded cattle received in the last 12 months:

	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard Error	Percent	Standard Error	Percent	Standard Error
Operations	11.2	(±2.5)	42.9	(±1.7)	12.7	(±2.4)
Cattle	18.5	(±3.0)	33.8	(±2.2)	32.0	(±2.0)

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

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

Percent of Operations Branding by Site &amp; Feedlot Capacity



- ii. Cattle branded

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

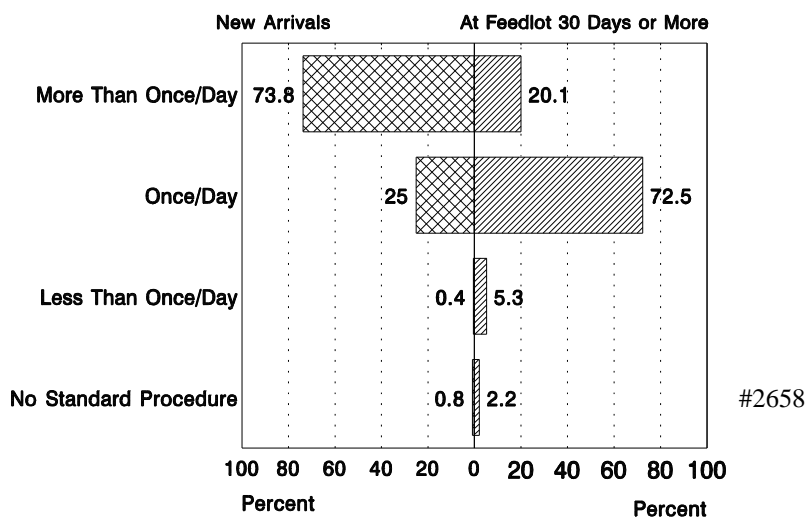
## i. For new arrivals (at feedlot less than 30 days):

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

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

<u>Protocol Frequency</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	<u>Percent Operations</u>	<u>Standard Error</u>	<u>Percent Operations</u>	<u>Standard Error</u>	<u>Percent Operations</u>	<u>Standard Error</u>
More than once a day	N/A <sup>1</sup>	N/A <sup>1</sup>	20.1	(±1.5)	N/A <sup>1</sup>	N/A <sup>1</sup>
Once a day	N/A <sup>1</sup>	N/A <sup>1</sup>	72.5	(±1.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
Every other day	N/A <sup>1</sup>	N/A <sup>1</sup>	2.7	(±0.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
Every third day or more	N/A <sup>1</sup>	N/A <sup>1</sup>	2.6	(±0.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
No standard procedure	N/A <sup>1</sup>	N/A <sup>1</sup>	2.2	(±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**



<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>Number of Times</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Standard		Standard		Standard	
	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>
0	23.3	(±2.8)	1.3	(±0.2)	4.3	(±0.4)
1	47.4	(±4.0)	21.1	(±1.6)	24.8	(±1.5)
2 or More	<u>29.3</u>	(±3.9)	<u>77.6</u>	(±1.6)	<u>70.9</u>	(±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>Number of Times</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Standard		Standard		Standard	
	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>
0	25.3	(±4.5)	1.1	(±0.2)	3.4	(±0.5)
1	56.1	(±4.5)	63.9	(±2.1)	63.1	(±2.0)
2 or More	<u>18.6</u>	(±3.1)	<u>35.0</u>	(±2.2)	<u>33.5</u>	(±2.0)
Total	100.0		100.0		100.0	



## 7. Nutritional Management - Additives

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

i. Operations	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Standard		Standard		Standard	
<u>Additive</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>
Ionophore <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	97.3	(±0.6)	N/A <sup>2</sup>	N/A <sup>2</sup>
Coccidiostat <sup>3</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	58.6	(±1.8)	N/A <sup>2</sup>	N/A <sup>2</sup>
Probiotic	N/A <sup>2</sup>	N/A <sup>2</sup>	37.3	(±1.8)	N/A <sup>2</sup>	N/A <sup>2</sup>
ii. Cattle placed on feed	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Standard		Standard		Standard	
<u>Additive</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>	<u>Percent</u>	<u>Error</u>
Ionophore <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	98.2	(±0.5)	N/A <sup>2</sup>	N/A <sup>2</sup>
Coccidiostat <sup>3</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	35.2	(±2.4)	N/A <sup>2</sup>	N/A <sup>2</sup>
Probiotic	N/A <sup>2</sup>	N/A <sup>2</sup>	17.2	(±1.6)	N/A <sup>2</sup>	N/A <sup>2</sup>

1 Ionophore such as Rumensin, Bovatec, or Cattlyst.

2 N/A = data not collected.

3 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
- <sup>1</sup>
- :

<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
Percent	Standard	Percent	Standard	Percent	Standard
<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
N/A <sup>2</sup>	N/A <sup>2</sup>	63.7	(±1.9)	N/A <sup>2</sup>	N/A <sup>2</sup>

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

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

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

	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
Percent Concentrates						
0	N/A <sup>2</sup>	N/A <sup>2</sup>	5.3	(±0.9)	N/A <sup>2</sup>	N/A <sup>2</sup>
1-35	N/A <sup>2</sup>	N/A <sup>2</sup>	40.0	(±1.9)	N/A <sup>2</sup>	N/A <sup>2</sup>
36-55	N/A <sup>2</sup>	N/A <sup>2</sup>	30.1	(±1.7)	N/A <sup>2</sup>	N/A <sup>2</sup>
56-74	N/A <sup>2</sup>	N/A <sup>2</sup>	13.6	(±1.3)	N/A <sup>2</sup>	N/A <sup>2</sup>
75+	N/A <sup>2</sup>	N/A <sup>2</sup>	<u>11.0</u>	(±1.2)	N/A <sup>2</sup>	N/A <sup>2</sup>
Total			100.0			

1 MGA is melengesterol acetate, a heat suppressant for females.

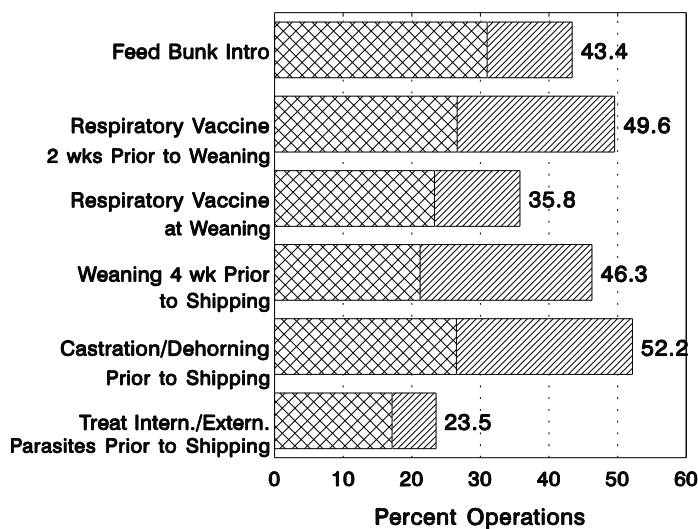
2 N/A = data not collected.

## 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:

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



#2662

## 10. Health Records Maintained

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

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

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

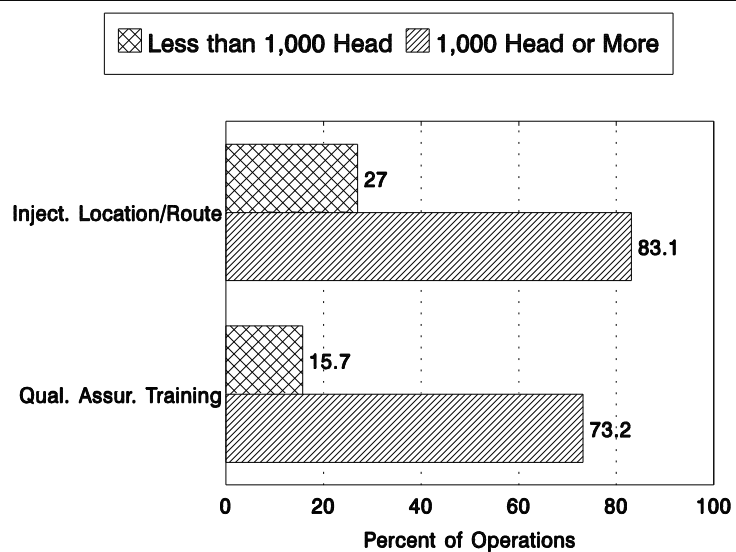
<u>Examiner</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	<u>Percent Deaths</u>	<u>Standard Error</u>	<u>Percent Deaths</u>	<u>Standard Error</u>	<u>Percent Deaths</u>	<u>Standard Error</u>
A veterinarian	16.8	(±2.8)	15.5	(±1.5)	15.7	(±1.4)
A nonveterinarian	1.2	(±0.6)	30.4	(±2.4)	26.0	(±2.1)
No postmortem performed	<u>82.0</u>	(±2.9)	<u>54.1</u>	(±2.5)	<u>58.3</u>	(±2.2)
Total	100.0		100.0		100.0	

## 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:

<u>Program</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	<u>Percent</u>	<u>Standard</u>	<u>Percent</u>	<u>Standard</u>	<u>Percent</u>	<u>Standard</u>
	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
Location or route of injections	27.0	(±2.7)	83.0	(±1.4)	29.6	(±2.7)
Quality assurance training program	15.7	(±2.5)	73.2	(±1.7)	18.4	(±2.4)

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



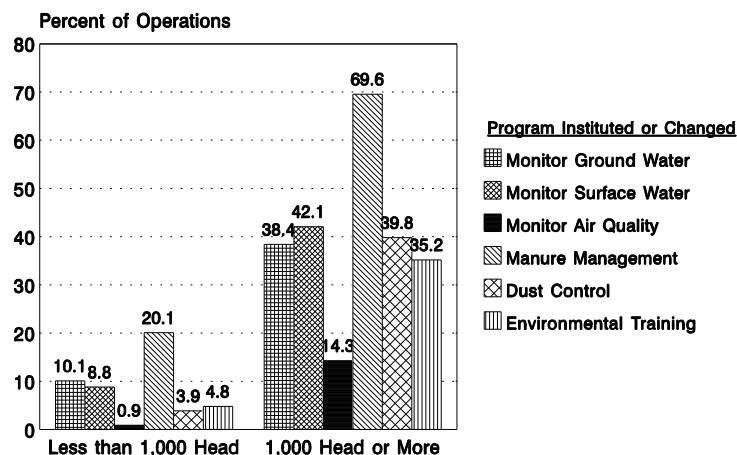
#2608

## 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:

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

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



#2652

## b. Percent of operations testing:

	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
i. Ground water	10.5	(±1.5)	44.9	(±1.8)	12.1	(±1.5)
ii. Nutrient content of manure	7.7	(±2.4)	38.0	(±1.7)	9.1	(±2.3)
iii. Soil						
i. Of producers disposing of manure on their own land, percent testing nutrient content of soil	48.6	(±3.3)	69.1	(±1.9)	49.4	(±3.2)
ii. Of producers testing soil, percent testing to determine manure application rate	32.5	(±4.5)	62.4	(±2.4)	34.2	(±4.2)

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

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

## d. Percent of operations that performed the following dust control practices:

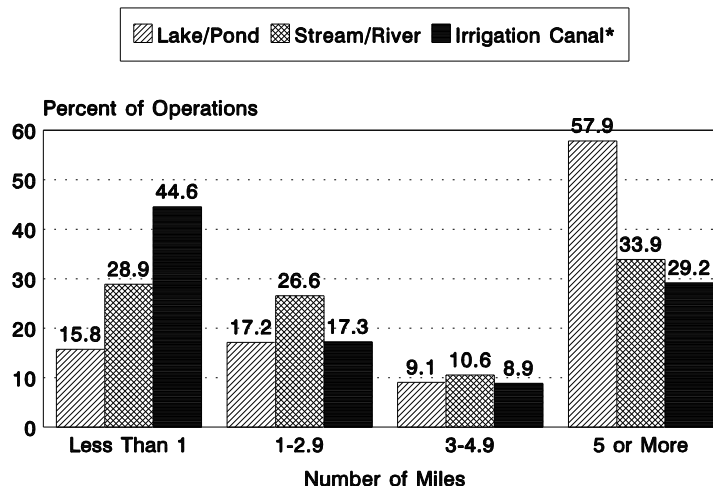
<u>Practice</u>	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>	<u>Operations</u>	<u>Error</u>
Control dust with sprinklers	N/A <sup>1</sup>	N/A <sup>1</sup>	9.0	(±0.9)	N/A <sup>1</sup>	N/A <sup>1</sup>
Control dust with water truck	N/A <sup>1</sup>	N/A <sup>1</sup>	36.3	(±1.5)	N/A <sup>1</sup>	N/A <sup>1</sup>
Mechanical scraper	N/A <sup>1</sup>	N/A <sup>1</sup>	72.9	(±1.6)	N/A <sup>1</sup>	N/A <sup>1</sup>
Any of above	N/A <sup>1</sup>	N/A <sup>1</sup>	80.2	(±1.5)	N/A <sup>1</sup>	N/A <sup>1</sup>

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:

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

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



\*Data collected in irrigated regions, as determined by producers

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<sup>1</sup> 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:

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

<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:

i. Operations	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent Operations	Standard Error	Percent Operations	Standard Error	Percent Operations	Standard Error
<u>Disposal</u>						
Buried on farm	19.4	(±5.8)	11.8	(±1.0)	18.5	(±5.1)
Landfill	0.8	(±0.5)	1.2	(±0.4)	0.8	(±0.4)
Renderer	80.8	(±5.8)	94.3	(±0.7)	82.4	(±5.2)
Other	1.4	(±0.6)	1.0	(±0.4)	1.3	(±0.5)
ii. Dead animals	<u>Small (&lt;1,000 Head)</u>		<u>Large (1,000+ Head)</u>		<u>Total</u>	
	Percent Operations	Standard Error	Percent Operations	Standard Error	Percent Operations	Standard Error
<u>Disposal</u>						
Buried on farm	12.5	(±3.8)	3.5	(±0.8)	4.4	(±0.7)
Landfill	0.4	(±0.2)	0.7	(±0.5)	0.7	(±0.3)
Renderer	86.2	(±3.8)	95.8	(±0.9)	94.8	(±0.8)
Other	0.9	(±0.3)	0.0	(±0.0)	0.1	(±0.0)

## Section II: Sample Profile

### 1. Descriptive Statistics of Responding Operations

	<u>Small (&lt;1,000 Head)</u>	<u>Large (1,000+ Head)</u>	<u>Total</u>
	<u>Number of</u>	<u>Number of</u>	<u>Number of</u>
	<u>Operations</u>	<u>Operations</u>	<u>Operations</u>
a. Number of respondents:	913	498	1,411
b. Number of operations that 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 placed both beef and dairy:			
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 that placed cows or bulls:			
Yes	5	48	53
No	903	440	1,343
N/A <sup>1</sup>	<u>5</u>	<u>10</u>	<u>15</u>
Total	913	498	1,411
e. Number of operations that placed Mexican cattle:			
Yes	4	81	85
No	909	417	1,326
N/A <sup>1</sup>	<u>0</u>	<u>0</u>	<u>0</u>
Total	913	498	1,411
f. Number of operations by 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 <sup>1</sup>	<u>1</u>	<u>0</u>	<u>1</u>
Total	913	498	1,411

<sup>1</sup> N/A = missing data.