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UNITED STATES DEPARTMENT OF AGRICULTURE **ANIMAL AND PLANT HEALTH INSPECTION SERVICE** **VETERINARY SERVICES** **NATIONAL ANIMAL HEALTH MONITORING SYSTEM** **2150 CENTRE AVE, BLDG B** **FORT COLLINS, CO 80526**	**HEALTH MANAGEMENT ON** **U.S. FEEDLOTS 2021** **PHASE 2 QUESTIONNAIRE**

Beginning time (military) .... Time_begin

Ending time (military)…………………………………………………………………………… Time_end

State FIPS: FIPS Operation #: Oper_Num   Interviewer: Initials Date: Date_Interview
2 digits   4 digits   initials   mm/dd/yy

The information you provide will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107–347 and other applicable Federal laws, your responses will be kept **confidential** and will not be disclosed in identifiable form to anyone other than employees or agents. By law, every employee and agent has taken an oath and is subject to a jail term, a fine, or both, if he or she willfully discloses ANY identifiable information about you or your feedlot. Response is **voluntary**.

General Instructions

Unless otherwise noted, questions refer to calendar year 2020, from January 1, 2020, to December 31, 2020.

We would like to know about all cattle and calves on feed for the slaughter market, regardless of ownership, on this particular feedlot.
- **Include** cattle being fed by you for others.
- **Exclude** any of your cattle being custom fed in feedlots operated by others.
- **Exclude** cattle being "backgrounded only" for sale as feeders, for later placement on feed on another feedlot, or to be returned to pasture.
- **Exclude** cows and bulls being fed by you for the slaughter market.

If "Don't Know" is provided as an answer option, it is abbreviated as "DK."
If "Not Applicable" is provided as an answer option, it is abbreviated as "NA."
The following 4-point scale is utilized in many questions when possible instead of asking specifically for percentages. This is done because we recognize that in many cases percentages supplied are approximations and we would like the response to reflect that.
"None" (0%)
"Some (50% or less)
"Most" (51% or more)
"All" (100%)

If a different scale is used it is specified in the question.

During 2020, the spread of coronavirus disease-2019 (COVID-19) led to market effects that impacted the operation of meatpacking plants and had downstream effects on feedlot operations. These effects were observed through a number of different sources, including the monthly NASS Cattle on Feed Survey. This questionnaire was revised to include questions to help further describe the effects of COVID-19 on the health and management of cattle on feedlots.

Section A—Cattle Health and Health Practices

Preconditioning and Backgrounding

1. Preconditioning and backgrounding comprises procedures such as acclimatization to feed bunks, vaccinations, implants, antibiotic use, weaning, deworming, castration, and dehorning that occur before cattle arrive at the feedlot. For this question, **reliable** information about preconditioning and backgrounding is defined as information that is trusted, but not necessarily documented.
For each of the following arrival weight and breed classes, answer yes or no for whether they were placed on this feedlot. If yes, for what proportion of these cattle did you have **reliable** information about preconditioning/backgrounding they received prior to arrival at this feedlot?

	Weight class and breed placed on the feedlot?		Reliable information?			
			None	Some	Most	All
a. Beef breed cattle (less than 400 lb at arrival)	$\square_1$ Yes $\square_3$ No **F101**	If No, SKIP to 1b If Yes → **F107**	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b. Beef breed cattle (400-699 lb at arrival)	$\square_1$ Yes $\square_3$ No **F102**	If No, SKIP to 1c If Yes → **F108**	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c. Beef breed cattle (700 lb or greater at arrival)	$\square_1$ Yes $\square_3$ No **F103**	If No, SKIP to 1d If Yes → **F109**	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d. Dairy or dairy cross breed cattle (less than 400 lb at arrival)	$\square_1$ Yes $\square_3$ No **F104**	If No, SKIP to 1e If Yes → **F110**	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e. Dairy or dairy cross breed cattle (less than 400-699 lb at arrival)	$\square_1$ Yes $\square_3$ No **F105**	If No, SKIP to 1f If Yes → **F111**	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f. Dairy or dairy cross breed cattle (700 lb or greater at arrival)	$\square_1$ Yes $\square_3$ No **F106**	If No, SKIP to 2 If Yes → **F112**	$\square_1$	$\square_2$	$\square_3$	$\square_4$

2. In 2020, were **all** cattle placed on this feedlot bred and raised by this operation? **F113**	$\square_1$ Yes $\square_3$ No $\square_8$ DK

[If Question 2 = Yes, then SKIP to Question 6]

3. How important is it to have reliable information on the preconditioning and backgrounding that cattle received prior to arrival? [*Choose one only*] **F114**

Not important	Slightly important	Moderately important	Very important	Extremely important
$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$

[If Question 3 = Not Important, SKIP to Question 6]

4. Are you able to access all the reliable information that you want about preconditioning and backgrounding? **F115**	$\square_1$ Yes $\square_3$ No

[If Question 4 = Yes, SKIP to Question 6]

5. Why can't you access the reliable information that you want?

a. Finding cattle to purchase for which this information is known is inconvenient. **F116**	$\square_1$ Yes $\square_3$ No
b. Cattle are purchased at a sale barn where this information is not available. **F117**	$\square_1$ Yes $\square_3$ No
c. Cattle for which this information is known are too expensive. **F118**	$\square_1$ Yes $\square_3$ No
d. There is no practical mechanism for transfer of this information. **F119**	$\square_1$ Yes $\square_3$ No
e. Other (specify:_____**F120 Other**_____) **F120**	$\square_1$ Yes $\square_3$ No

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6. When you were aware of the history of cattle you purchased, or in calves you raised yourself, what proportion of the cattle had the following preconditioning and backgrounding procedures performed before arriving at the feedlot?

	None	Some	Most	All	DK
a. Introduction to the feed bunk **F121**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
b. Given respiratory vaccines less than 2 weeks prior to or at weaning? **F122**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
c. Given respiratory vaccines more than 2 weeks prior to weaning? **F123**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
d. Given modified live, not killed, respiratory vaccines? **F124**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
e. Weaned 4-6 weeks before arrival at feedlot? **F125**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
f. Weaned more than 6 weeks before arrival at feedlot? **F126**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
g. Bull calves and/or bulls castrated at least 3 weeks prior to arrival at feedlot ? **F127**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
h. Non-polled cattle dehorned at least 3 weeks prior to arrival at feedlot? **F128** $\square_5$ Check if all cattle placed were naturally polled	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
i. Treated for external or internal parasites? **F129**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
j. Given antibiotics within 4 weeks prior to arrival at feedlot? **F130**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$

Initial Processing and Management at the Feedlot

7. Were cattle assessed for their risk for bovine respiratory disease when they arrived at this feedlot and initial processing protocols modified based on this assessment? **F131**	$\square_1$ Yes $\square_3$ No

[If Question 7 = No, SKIP to Question 9]

8. How important were the following factors when making this risk assessment?

	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important
a. Long shipping distance **F132**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
b. Arrival weight class **F133**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
c. Appearance of cattle at arrival **F134**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
d. Respiratory disease in cattle previously received from same source **F135**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
e. Presence of respiratory disease in some cattle in group **F136**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
f. Whether cattle were commingled with other cattle prior to arrival **F137**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
g. Geographic origin of the cattle **F138**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
h. Lack of previous respiratory vaccination **F139**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
i. Lack of preconditioning/backgrounding **F140**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
j. Season of the year **F141**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
k. Weather at time of arrival at the feedlot **F142**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
l. Experience of receiving crew **F143**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
m. Breed of cattle **F144**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
n. History of prior antibiotic treatment **F145**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
o. Other (specify:___**F146_Other**_____) **F146**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$

9. Processing includes procedures such as vaccinations, tagging, implants, deworming, mineral or vitamin supplementation, castration, dehorning, and antibiotic administrations. Excluding cattle processed individually for treating illness, what proportion of cattle were processed as a group at, or within 4 weeks, of placement? **F147**	$\square_1$ None $\square_2$ Some $\square_3$ Most $\square_4$ All
a. Was the proportion of cattle processed as a group in calendar year 2020 different than the proportion of cattle processed as a group in calendar year 2019 due to COVID-19 or its effects? **F847**	$\square_1$ Yes $\square_3$ No $\square_8$ DK

[If Question 9a = No or DK, SKIP to Question 10]

b. Was the proportion of cattle processed as a group in calendar year 2020 more or less compared to the proportion of cattle processed as a group in calendar year 2019 due to COVID-19 or its effects? **F848**	$\square_1$ More than 2019 $\square_3$ Less than 2019

[If Question 9 = None, then SKIP to Question 15]

10. What proportion of cattle that were initially processed as a group (Question 9) were initially processed during the following time periods?

	None	Some	Most	All	DK
a. Less than 1 day after arrival **F148**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
b. 1 to 3 day(s) after arrival **F149**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
c. 4 to 13 days after arrival **F150**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
d. 14 to 28 days after arrival **F151**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$

11. When cattle were initially processed as a group at placement, what proportion of the cattle initially processed as a group (Question 9) had the following procedures performed? Select none, some, most, all, or DK for "don't know". Answer for all cattle of all weight classes at arrival.
[Refer to Reference Card 2 (Vaccine Examples) for examples of common trade names of vaccines. For combination products, enter information into all relevant rows]

	None	Some	Most	All	DK
Vaccinations					
a. Vaccination against bovine viral diarrhea (BVD)? **F153**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
b. Vaccination against clostridial diseases (e.g., blackleg)? **F154**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
c. Vaccination against tetanus? **F155**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
d. Vaccination against *Moraxella* (pinkeye)? **F156**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
e. Vaccination against any respiratory diseases? **F157**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
[If Question 11e = none, SKIP to Other Procedures 11i]					
f. Injectable vaccination against viral respiratory disease? **F158**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
g. Intranasal vaccination against viral respiratory disease? **F159**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
h. Vaccination against bacterial respiratory disease due to *Mannheimia* and/or *Pasteurella*? **F160**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
Other procedures					
i. Testing for bovine viral diarrhea (BVD) infection **F161**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
j. Implantation? **F162**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
k. Administration of a parasiticide? **F163**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$

l. Administration of an immunostimulant (e.g., Zelnate™)? **F164**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
m. Individual weighing of the animal? **F165**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
n. Taking the temperature of the animal? **F166**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
o. Listening to lungs with stethoscope? **F167**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
p. Administration of injectable antibiotic? **F168**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
q. Administration of vitamin and/or mineral injection? **F169**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$
r. Other procedure? **F170** (specify:_____**F170_Other**_____)	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$

12. Did group processing procedures in calendar year 2020 change when compared to those carried out in calendar year 2019 due to COVID-19 or its effects? **F853**	$\square_1$ Yes $\square_3$ No $\square_8$ DK

[If Question 12 = No or DK, SKIP to Question 14]

13. Please describe changes to group processing procedures in calendar year 2020 due to COVID-19 or its effects below: **F854**

14. Continue to select none, some, most, all, NA for "Not Applicable" (if cattle of the given subgroup are not placed or are not initially processed as a group), or DK for "Don't Know" for these questions about subgroups of cattle.

	None	Some	Most	All	DK	NA
a. For heifers, what proportion had a pregnancy check at arrival? **F171**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$	$\square_5$
[If Question 14a = NA, SKIP to Question 14c]						
b. For heifers, what proportion were administered an abortifacient such as prostaglandin at arrival? **F172**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$	
c. For bulls and bull calves, what proportion arrived at the feedlot uncastrated? **F173**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$	$\square_5$
d. What proportion of cattle arrived at the feedlot with horns? **F174**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$	
[If Question 14d = None, DK, or NA, SKIP to Question 15]						
e. What proportion of horned cattle were dehorned at the feedlot? **F175**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$	
f. What proportion of horned cattle were tipped at the feedlot? **F176**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$	

15. How frequently did you conduct pen-riding or walking procedures for:

	Less than once a day	Once a day	Twice a day	More than twice a day	No standard procedure
a. New arrivals (at feedlot less than 15 days)? **F177**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
b. Animals at feedlot 15 to 30 days? **F178**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
c. Animals at feedlot 30 days or more? **F179**	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$

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16. Were the following used to mitigate weather-related stress on this feedlot?

a. Shade/shelter **F180**	☐₁ Yes ☐₃ No ☐₈ DK
b. Sprinklers, misters, and/or water trucks **F181**	☐₁ Yes ☐₃ No ☐₈ DK
c. Wind breaks **F182**	☐₁ Yes ☐₃ No ☐₈DK
d. Building mounds **F183**	☐₁ Yes ☐₃ No ☐₈ DK
e. Feed additives, such as yeast, essential oils, or pepper extract **F184**	☐₁ Yes ☐₃ No ☐₈ DK
f. Other (specify: _____**F185_Other**_____) **F185**	☐₁ Yes ☐₃ No

Disease Conditions

17. What percentage of all placed cattle of the following arrival weight classes were **affected** with bovine respiratory disease (BRD) in 2020? What percentage of all placed cattle of the following arrival weight classes **died** due to bovine respiratory disease during this time period?
[If it is not possible to estimate these percentages stratified by weight classes, enter DK for Don't Know and complete the cattle of all arrival weight classes row. If it is not possible to estimate the percentage for all arrival weight classes, enter DK for Don't Know]

	Affected	**Died**
a. Cattle less than 400 lb at arrival	**F186** %	**F190** %
b. Cattle 400 to 699 lb at arrival	**F187** %	**F191** %
c. Cattle 700 lb or greater at arrival	**F188** %	**F192** %
OR		
d. Cattle of all arrival weight classes	**F189** %	**F193** %

18. Did the overall percentage of cattle on this feedlot affected with BRD in calendar year 2020 differ from the percentage of cattle that were affected with BRD in calendar year 2019 due to COVID-19 or its effects? **F886**	☐₁ Yes ☐₃ No ☐₈ DK

[If Question 18 = No or DK, SKIP to Question 20]

19. Was the overall percentage of cattle on this feedlot affected with BRD in calendar year 2020 higher or lower compared to the percentage of cattle that were affected with BRD in calendar year 2019 due to COVID-19 or its effects? **F887**	☐₁ Higher than 2019 ☐₃ Lower than 2019

20. What percentage of cattle developed the following conditions in 2020? If you are not familiar with the condition or do not think you can provide an accurate estimate of the percentage of cattle that developed it, answer DK.
[Refer to Reference Card 3 (Disease Conditions other than BRD) for the list of disease conditions]

a. Acute interstitial pneumonia (i.e., AIP, dust pneumonia, atypical pneumonia)	**F198** %	☐₋₈ DK
b. Bloat	**F199** %	☐₋₈ DK
c. Other digestive disorders excluding bloat (e.g., coccidiosis, diarrhea)	**F200** %	☐₋₈ DK
d. Footrot (infectious pododermatitis)	**F201** %	☐₋₈ DK
e. Hairy heel wart (papillomatous digital dermatitis)	**F202** %	☐₋₈ DK
f. Central nervous system (CNS) disease (e.g., polio, listeriosis, "brainers")	**F203** %	☐₋₈ DK
g. Pinkeye	**F204** %	☐₋₈ DK
h. Cardiovascular disease (e.g., heart failure, brisket disease)	**F205** %	☐₋₈ DK
i. Fatigued cattle syndrome	**F206** %	☐₋₈ DK
j. Other (specify:_____**F207 Other**_____)	**F207** %	

21. Did the overall percentage of cattle on this feedlot affected with any of the conditions below in calendar year 2020 differ from the percentage of cattle that were affected with those conditions in calendar year 2019 due to COVID-19 or its effects?

If yes, was the overall percentage of cattle on this feedlot affected with the condition in calendar year 2020 higher or lower compared to the percentage of cattle that were affected with the condition in calendar year 2019 due to COVID-19 or its effects?
[Refer to Reference Card 3 (Disease Conditions) for the list of disease conditions]

Condition	Percentage in 2020 different from 2019 due to COVID-19?	If yes, higher or lower than 2019?
a. Acute interstitial pneumonia (i.e., AIP, dust pneumonia, atypical pneumonia)	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F888**	**F898** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
b. Bloat	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F889**	**F899** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
c. Other digestive disorders excluding bloat (e.g., coccidiosis, diarrhea)	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F890**	**F900** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
d. Central nervous system (CNS) disease (e.g., polio, listeriosis, "brainers")	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F891**	**F901** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
e. Pinkeye	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F892**	**F902** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
f. Cardiovascular disease (e.g., heart failure, brisket disease)	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F893**	**F903** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
g. Fatigued cattle syndrome	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F894**	**F904** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
h. Footrot (infectious pododermatitis)	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F895**	**F905** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
i. Hairy heel wart (papillomatous digital dermatitis)	$\square_1$ Yes $\square_3$ No $\square_8$ DK **F896**	**F906** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019
j. Other (specify:_____ **F897 Other** _____)	$\square_1$ Yes $\square_3$ No **F897**	**F907** $\square_1$ Higher than 2019 $\square_3$ Lower than 2019

22. When cattle died on this feedlot, what proportion of cattle had a post-mortem examination (i.e., necropsy) performed? **F211**	None	Some	Most	All	DK
	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_8$

23. Are the following given to sick cattle as part of the **initial course** of treatment for:

Treatment	Bovine respiratory disease	Digestive disorders other than bloat (e.g., coccidiosis, diarrhea)	Footrot	Pinkeye
If no disease, SKIP column	**F212** $\square$ No BRD	**F226** $\square$ No digestive disorders	**F239** $\square$ No footrot	**F252** $\square$ No pinkeye
a. Injectable antibiotic?	$\square_1$ Yes $\square_3$ No **F213** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F227** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F240** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F253** $\square_8$ DK
b. Bolus-dosed oral antibiotic?	$\square_1$ Yes $\square_3$ No **F214** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F228** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F241** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F254** $\square_8$ DK
c. In feed antibiotic?	$\square_1$ Yes $\square_3$ No **F215** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F229** $\square_8$ DK		
d. Topical antibiotic?			$\square_1$ Yes $\square_3$ No **F242** $\square_8$ DK	$\square_1$ Yes $\square_3$ No **F255** $\square_8$ DK

e. Respiratory vaccine?	□₁ Yes □₃ No **F216** □₈ DK			
f. Corticosteroid (e.g., Dexium®)?	□₁ Yes □₃ No **F217** □₈ DK	□₁ Yes □₃ No **F230** □₈ DK	□₁ Yes □₃ No **F243** □₈ DK	□₁ Yes □₃ No **F256** □₈ DK
g. Nonsteroidal anti-inflammatory (e.g., Banamine®, aspirin)?	□₁ Yes □₃ No **F218** □₈ DK	□₁ Yes □₃ No **F231** □₈ DK	□₁ Yes □₃ No **F244** □₈ DK	□₁ Yes □₃ No **F257** □₈ DK
h. Antihistamine?	□₁ Yes □₃ No **F219** □₈ DK	□₁ Yes □₃ No **F232** □₈ DK	□₁ Yes □₃ No **F245** □₈ DK	□₁ Yes □₃ No **F258** □₈ DK
i. Vitamin B injection?	□₁ Yes □₃ No **F220** □₈ DK	□₁ Yes □₃ No **F233** □₈ DK	□₁ Yes □₃ No **F246** □₈ DK	□₁ Yes □₃ No **F259** □₈ DK
j. Vitamin C injection?	□₁ Yes □₃ No **F221** □₈ DK	□₁ Yes □₃ No **F234** □₈ DK	□₁ Yes □₃ No **F247** □₈ DK	□₁ Yes □₃ No **F260** □₈ DK
k. Immunostimulant (e.g., Zelnate™)?	□₁ Yes □₃ No **F222** □₈ DK	□₁ Yes □₃ No **F235** □₈ DK	□₁ Yes □₃ No **F248** □₈ DK	□₁ Yes □₃ No **F261** □₈ DK
l. Injectable mineral supplement (e.g., MultiMin®)?	□₁ Yes □₃ No **F223** □₈ DK	□₁ Yes □₃ No **F236** □₈ DK	□₁ Yes □₃ No **F249** □₈ DK	□₁ Yes □₃ No **F262** □₈ DK
m. Probiotic paste	□₁ Yes □₃ No **F224** □₈ DK	□₁ Yes □₃ No **F237** □₈ DK	□₁ Yes □₃ No **F250** □₈ DK	□₁ Yes □₃ No **F263** □₈ DK
n. Other? (specify:_____**F2XX_Other**_____)	□₁ Yes □₃ No **F225** □₈ DK	□₁ Yes □₃ No **F238** □₈ DK	□₁ Yes □₃ No **F251** □₈ DK	□₁ Yes □₃ No **F264** □₈ DK

24. Were there separate pens to house sick cattle (e.g., hospital pens)? **F265**	□₁ Yes □₃ No □₈ DK

[If Question 24 = No or DK, SKIP to Question 26]

25. Were the following resources provided to cattle in the hospital pen? Answer none of the time, some of the time (as needed), or all of the time.

		None of the time	Some of the time	All of the time	DK
a. Wind breaks	**F266**	□₁	□₂	□₃	□₈
b. Shade	**F267**	□₁	□₂	□₃	□₈
c. Sprinklers/misters to keep cattle cool	**F268**	□₁	□₂	□₃	□₈
d. Additional bedding (e.g., straw) compared to home pen	**F269**	□₁	□₂	□₃	□₈
e. Additional hay to eat compared to home pen	**F270**	□₁	□₂	□₃	□₈
f. Increased waterer/bunk space per animal compared to home pen	**F271**	□₁	□₂	□₃	□₈
g. Increased observation/surveillance compared to home pen	**F272**	□₁	□₂	□₃	□₈
h. Dust control	**F273**	□₁	□₂	□₃	□₈
i. Other (specify: _____**F274_Other**_____)	**F274**	□₁	□₂	□₃	□₈

26. Did you receive information from slaughter facilities about the percentage of cattle from this feedlot affected with liver abscesses resulting in condemnation of livers? **F275**	□₁ Yes □₃ No □₈ DK

[If Question 26 = No or DK, SKIP to Question 28]

NAHMS ID: _____

27. Approximately what percentage of slaughtered cattle of the following types had liver condemnations due to liver abscesses?

	Placed on this feedlot?		Percentage with liver condemnations?	
a. Beef breed cattle given in-feed antibiotics to control liver abscesses	F276 □₁ Yes □₃ No	If No, SKIP to 27b If Yes →	F280 %	□₋₈ DK
b. Dairy or dairy cross breed cattle given in-feed antibiotics to control liver abscesses	F277 □₁ Yes □₃ No	If No, SKIP to 27c If Yes →	F281 %	□₋₈ DK
c. Beef breed cattle NOT given in-feed antibiotics to control liver abscesses	F278 □₁ Yes □₃ No	If No, SKIP to 27d If Yes →	F282 %	□₋₈ DK
d. Dairy or dairy cross breed cattle NOT given in-feed antibiotics to control liver abscesses	F279 □₁ Yes □₃ No	If No, SKIP to 28 If Yes →	F283 %	□₋₈ DK

28. Did the rate of death loss in late-fed cattle in this feedlot in calendar year 2020 differ from the rate of death loss in late-fed cattle in calendar year 2019 due to COVID-19 or its effects? F908	□₁ Yes □₃ No □₈ DK
[If Question 28 = No or DK, SKIP to Question 30]	
29. Was the rate of death loss in late-fed cattle in this feedlot in calendar year 2020 higher or lower compared to the rate of death loss in late-fed cattle in calendar year 2019 due to COVID-19 or its effects? F909	□₁ Higher than 2019 □₃ Lower than 2019

30. More generally, over the past 5 years, has there been an increase in death loss in late-fed cattle on this feedlot (i.e., cattle fed 100 days or more)? F284	□₁ Yes □₃ No □₈ DK

[If Question 30 = No or DK, SKIP to Section B]

31. Were the following associated with this increased late-fed death loss?

a.	Bovine respiratory disease, excluding acute interstitial pneumonia F285	□₁ Yes □₃ No □₈ DK
b.	Acute interstitial pneumonia (i.e., dust pneumonia, atypical pneumonia) F286	□₁ Yes □₃ No □₈ DK
c.	Injury (e.g., downers, fractures) F287	□₁ Yes □₃ No □₈ DK
d.	Fatigued cattle syndrome F288	□₁ Yes □₃ No □₈ DK
e.	Heart failure F289	□₁ Yes □₃ No □₈ DK
f.	Bloat F291	□₁ Yes □₃ No □₈ DK
g.	Other (specify: _____ F290_Other _____) F290	□₁ Yes

Section B—Antibiotic Use

1. Were **any** antibiotics used in cattle on this feedlot (all forms; e.g., injectable, bolus-dosed, in feed, and/or in water) in 2020? **F300**	☐1 Yes ☐3 No ☐8 DK

[If Question 1 = No or DK, SKIP to Section C]

Injectable and Bolus-Dosed Antibiotic Use

2. Were injectable or bolus-dosed antibiotics used on this feedlot? **F301**	☐1 Yes ☐3 No ☐8 DK

[If Question 2 = No or DK, SKIP to Question 11.a]

3. How important were the following factors in the selection of injectable and bolus-dosed antibiotics?

	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important
a. Veterinarian recommendations **F302**	☐1	☐2	☐3	☐4	☐5
b. Other producers' recommendations **F303**	☐1	☐2	☐3	☐4	☐5
c. Laboratory test results **F304**	☐1	☐2	☐3	☐4	☐5
d. Drug company advertisement **F305**	☐1	☐2	☐3	☐4	☐5
e. Personal experience (past response rates) **F306**	☐1	☐2	☐3	☐4	☐5
f. Cost of antibiotic **F307**	☐1	☐2	☐3	☐4	☐5
g. Approved route by which antibiotic is given **F308**	☐1	☐2	☐3	☐4	☐5
h. Duration of action (e.g., only needs to be given once) **F309**	☐1	☐2	☐3	☐4	☐5
i. Drug withdrawal time **F310**	☐1	☐2	☐3	☐4	☐5
j. Over the counter availability (i.e., no prescription required) **F311**	☐1	☐2	☐3	☐4	☐5
k. Other (specify ____**F312_Other**_____) **F312**	☐1	☐2	☐3	☐4	☐5

4. For this question, **individual treatment** is defined as the administration of antibiotics only to those cattle identified to be sick. Were cattle administered **injectable or bolus-dosed antibiotics** for the **individual treatment** of **bovine respiratory disease (BRD)?**	☐1 Yes ☐3 No ☐8 DK **F313**

[If Question 4 = No or DK, SKIP to Question 7]

5. For this question, consider only the cattle that you identified in Section A, Question 17; Page 6, to be **affected with BRD**. For each of the following **injectable or bolus-dosed antibiotics**, what percentage of these cattle were **individually treated for BRD** with this antibiotic for their initial treatment? *[Write in DK if the estimate is unknown. Refer to Reference Card 4 (Antibiotics Given via Injection or Bolus)]*

Active ingredient name (Trade name examples)	% all sick cattle
a. Tilmicosin (Micotil®)	F314
b. Gamithromycin (Zactran®)	F315
c. Tulathromycin (Draxxin®)	F316
d. Tylosin (Tylan® 200)	F317
e. Tildipirosin (Zuprevo®)	F318
f. Florfenicol (Nuflor®)	F319
g. Florfenicol w/ flunixin meglumine (Resflor Gold®)	F320
h. Enrofloxacin (Baytril®)	F321
i. Danofloxacin (Advocin™)	F322
j. Ceftiofur (Naxcel®, Excenel®, Excede®)	F323
k. Oxytetracycline (LA-200®, BioMycin®)	F324
l. Penicillin (Aquacillin™, Penicillin G Procaine)	F325
m. Ampicillin (Polyflex®)	F326
n. Sulfadimethoxine (Albon® Injection)	F327
o. Sulfadimethoxine (Albon® Bolus)	F328
p. Sulfamethazine (Sustain III® Bolus, Supra Sulfa® III)	F329

6. Of the sick cattle described in Question B5 that were initially treated for BRD, what percentage:
   [Write DK if unknown]

	% all sick cattle
a. Responded and recovered?	F330
b. Died or were euthanized?	F331
c. Were considered chronics and marketed early?	F332
d. Did not respond and were re-treated?	F333

7. For this question, **GROUP** administration of antibiotics means that the majority of the pen was given an antibiotic at one time. Were cattle on your feedlot administered **injectable or bolus-dosed** antibiotics **as a GROUP** for the prevention, control, or treatment of **BRD?**	□₁ Yes □₃ No □₈ DK F334

[If Question 7 = No or DK, SKIP to Question 9]

8. For each of the following injectable or bolus-dosed antibiotics, what percentage of cattle were given this antibiotic **as a GROUP** for the prevention, control, or treatment of **BRD**?
[Answer by weight class at arrival if possible. If not, answer for all cattle overall. Write in DK if the estimate is unknown. Refer to Reference Card 4 (Antibiotics Given via Injection or Bolus)]

Active ingredient name (Trade name examples)	Arrival Weight				% all cattle
	% cattle <400 lb	% cattle 400 - 699 lb	% cattle ≥700 lb		
a. Tilmicosin (Micotil®)	Fa335	Fb335	Fc335		F335
b. Gamithromycin (Zactran®)	Fa336	Fb336	Fc336	OR	F336
c. Tulathromycin (Draxxin®)	Fa337	Fb337	Fc337		F337
d. Tylosin (Tylan® 200)	Fa338	Fb338	Fc338		F338
e. Tildipirosin (Zuprevo®)	Fa339	Fb339	Fc339		F339
f. Florfenicol (Nuflor®)	Fa340	Fb340	Fc340		F340

g. Florfenicol w/ flunixin meglumine (Resflor Gold®)	Fa341	Fb341	Fc341		F341
h. Enrofloxacin (Baytril®)	Fa342	Fb342	Fc342		F342
i. Danofloxacin (Advocin™)	Fa343	Fb343	Fc343		F343
j. Ceftiofur (Naxcel®, Excenel®, Excede®)	Fa344	Fb344	Fc344		F344
k. Oxytetracycline (LA-200®, BioMycin®)	Fa345	Fb345	Fc345		F345
l. Penicillin (Aquacillin™, Penicillin G Procaine)	Fa346	Fb346	Fc346		F346
m. Ampicillin (Polyflex®)	Fa347	Fb347	Fc347		F347
n. Sulfadimethoxine (Albon® Injection)	Fa348	Fb348	Fc348		F348
o. Sulfadimethoxine (Albon® Bolus)	Fa349	Fb349	Fc349		F349
p. Sulfamethazine (Sustain III® Bolus, Supra Sulfa® III)	Fa350	Fb350	Fc350		F350

9. Were sick cattle on your feedlot administered **injectable or bolus-dosed antibiotics** for the **individual treatment** of conditions **other than BRD?**	☐₁ Yes ☐₃ No ☐₈ DK **F351**

[If Question 9 = No or DK, SKIP to Question 11.a]

10. For this question, consider only the cattle that you identified in Section A, Question 19; Page 6 to have developed the conditions in that question, also listed in the reason codes below. If an injectable or bolus-dosed antibiotic in the list below was used to individually treat cattle with these conditions, enter the reason code corresponding to the **most common reason** (primary reason) in the list that this antibiotic was used. *[Refer to Reference Cards 3 (Disease conditions other than BRD) and 4 (Antibiotics Given via Injection or Bolus)]*

Active ingredient name (Trade name examples)	Reason Code		Reason Codes for Question 10	
a. Tilmicosin (Micotil®)	F352		1	Acute Interstitial Pneumonia
b. Gamithromycin (Zactran®)	F353			
c. Tulathromycin (Draxxin®)	F354		2	Bloat
d. Tylosin (Tylan® 200)	F355		3	Other digestive disorders
e. Tildipirosin (Zuprevo®)	F356		4	Footrot
f. Florfenicol (Nuflor®)	F357		5	Hairy heel warts
g. Florfenicol with flunixin meglumine (Resflor Gold®)	F358		6	CNS disease
h. Ceftiofur (Naxcel®, Excenel®, Excede®)	F359		7	Pinkeye
i. Oxytetracycline (LA-200®, BioMycin®)	F360		8	Cardiovascular disease
j. Penicillin (Aquacillin™, Penicillin G Procaine)	F361		9	Fatigued cattle syndrome
k. Ampicillin (Polyflex®)	F362		10	Other (specify:_____**F3XX_Other**_____)
l. Sulfadimethoxine (Albon® Injection)	F363			
m. Sulfadimethoxine (Albon® Bolus)	F364			
n. Sulfamethazine (Sustain III® Bolus, Supra Sulfa® III)	F365			

Antibiotic Use in Feed

11.a. Were **any** antibiotics that DO NOT require a veterinary feed directive (VFD) used in **feed** on this feedlot? Examples of antibiotics that DO NOT require a VFD include ionophores (e.g., Rumensin®, Monovet®, Bovatec®, and Cattlyst®), bambermycin, and bacitracin.	☐₁ Yes ☐₃ No ☐₈ DK **F366a**
11.b. Were **any** antibiotics that DO require a VFD used in **feed** on this feedlot? Examples of antibiotics that DO require a VFD include chlortetracycline and tylosin.	☐₁ Yes ☐₃ No ☐₈ DK **F366b**

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[If Question 11.a AND 11b = No or DK, SKIP to Question 16
If Question 11.a = No or DK and Question 11.b = Yes, skip to Question 13
If Question 11.a = Yes and Question 11.b = No or DK, answer Question 12 then SKIP to Question
16]

12. For each of the following antibiotics that DO NOT require a VFD**,** what percentage of cattle overall received it in feed for any reason? If the antibiotic was used, designate up to 2 reason codes from the box below and the percentage of cattle that received it specifically for the reason(s). If the antibiotic was used for only one reason, leave the Reason Code II columns blank.
[Refer to Reference Card 5 (Antibiotics Given via Feed or Water)]

Reason codes for Question 12	
1	Coccidiosis
2	Growth promotion/improved feed efficiency
3	Reduction in the incidence of liver abcesses
4	Other (specify:_____**Fa36X_Other**_____OR_____**Fc36X_Other**_____)

Active ingredient name (Trade name examples)	% cattle overall	Reason Code I	% cattle for Reason Code I	Reason Code II	% cattle for Reason Code II
a. Any ionophore (e.g., Rumensin®, Bovatec®)	F367	Fa367	Fb367	Fc367	Fd367
b. Bambermycin (Gainpro® 10)	F368	Fa368	Fb368	Fc368	Fd368
c. Bacitracin (BMD®, Baciferm®)	F369	Fa369	Fb369	Fc369	Fd369

13. This question asks about in-feed antibiotics that DO require a VFD used in cattle that were **less than 700 lb** at arrival. For each of the following antibiotics**,** what percentage of cattle **less than 700 lb** at arrival overall received it in feed for any reason? If the antibiotic was used, designate up to 2 reason codes from the box below and the percentage of cattle that received it specifically for the reason(s). If the antibiotic was used for only one reason, leave the Reason Code II columns blank.
[Refer to Reference Card 5 (Antibiotics Given via Feed or Water)]

Reason codes for Question 13	
1	Reduction in the incidence of liver abscesses
2	Respiratory disease (e.g., bacterial pneumonia, shipping fever)
3	Gastrointestinal disease (e.g., bacterial enteritis [diarrhea])
4	Anaplasmosis
5	Other (specify:___**Fa37X_Other**___OR__**Fc37X_Other**_____)

Active ingredient name (Trade name examples)	% cattle overall	Reason Code I	% cattle for Reason Code I	Reason Code II	% cattle for Reason Code II
a. Chlortetracycline (Aureomycin®, Aureomix®, CTC)	F370	Fa370	Fb370	Fc370	Fd370
b. Oxytetracycline (Terramycin®, OTC)	F371	Fa371	Fb371	Fc371	Fd371
c. Sulfamethazine/sulfadimethoxine (Aureomix®)	F372	Fa372	Fb372	Fc372	Fd372
d. Neomycin (Neomix)	F373	Fa373	Fb373	Fc373	Fd373
e. Tylosin (Tylan, Tylovet)	F374	Fa374	Fb374	Fc374	Fd374
f. Virginiamycin (Vmax)	F375	Fa375	Fb375	Fc375	Fd375
g. Tilmicosin (Pulmotil®, Tilmovet®)	F376	Fa376	Fb376	Fc376	Fd376

14. This question asks about in-feed antibiotics that DO require a VFD used in cattle that were **700 lb or greater** at arrival. For each of the following antibiotics, what percentage of cattle **700 lb or greater** at arrival overall received it in feed for any reason? If the antibiotic was used, designate up to 2 reason codes from the box below and the percentage of cattle that received it specifically for the reason(s). If the antibiotic was used for only one reason, leave the Reason Code II columns blank.
[Refer to Reference Card 5 (Antibiotics Given via Feed or Water)]

Reason codes for Question 14	
1	Reduction in the incidence of liver abscesses
2	Respiratory disease (e.g., bacterial pneumonia, shipping fever)
3	Gastrointestinal disease (e.g., bacterial enteritis [diarrhea])
4	Anaplasmosis
5	Other (specify:_____**Fa3XX_Other**__OR__**Fc3XX_Other**_____)

Active ingredient name (Trade name examples)	% cattle overall	Reason Code I	% cattle for Reason Code I	Reason Code II	% cattle for Reason Code II
a. Chlortetracycline (Aureomycin®, Aureomix®, CTC)	F377	Fa377	Fb377	Fc377	Fd377
b. Oxytetracycline (Terramycin®, OTC)	F378	Fa378	Fb378	Fc378	Fd378
c. Sulfamethazine/sulfadimethoxine (Aureomix®)	F379	Fa379	Fb379	Fc379	Fd379
d. Neomycin (Neomix)	F380	Fa380	Fb380	Fc380	Fd380
e. Tylosin (Tylan, Tylovet)	F381	Fa381	Fb381	Fc381	Fd381
f. Virginiamycin (Vmax)	F382	Fa382	Fb382	Fc382	Fd382
g. Tilmicosin (Pulmotil®, Tilmovet®)	F383	Fa383	Fb383	Fc383	Fd383

[If Question 13.a and 14.a = 0, i.e. no chlortetracycyline was used in feed, SKIP to Question 16. If chlortetracycline was used but reason code was NOT 2, SKIP to Question 16]

15. In-feed chlortetracycline (10 mg/lb/day) is currently approved for use in cattle for 5 days to treat respiratory disease. If cattle do not respond to this pulse treatment, producers have the option to obtain a second VFD from a veterinarian to administer a second pulse, and so on.

	None	Some	Most	All	DK
When chlortetracycline was used in feed for the **treatment** of respiratory disease, what proportion of cattle received more than one pulse treatment? **F384** Answer None (0%), Some (50% or less), Most (more than 50%), or All (100%).	□₁	□₂	□₃	□₄	□₈

Antibiotic Use in Water

16. Were any antibiotics used **in water** on this feedlot? **F385**	□₁ Yes □₃ No □₈ DK

[If Question 16 = No or DK, SKIP to Section C]

17. For each of the following **in-water antibiotics,** what percentage of cattle overall received it in water for any reason? If the antibiotic was used, designate up to 2 reason codes from the box below and the percentage of cattle that received it specifically for the reason(s).
[Refer to Reference Card 5 (Antibiotics Given via Feed or Water)]

NAHMS ID: _____

	Reason codes for Question 16
1	Respiratory disease (e.g., bacterial pneumonia, shipping fever)
2	Gastrointestinal disease (e.g., bacterial enteritis [diarrhea])
3	Pinkeye
4	Footrot
5	Other (specify:_____ **Fa3XX_Other** OR **Fc3XX_Other** _____)

Active ingredient name	% cattle overall	Reason Code I	% cattle for Reason Code I	Reason Code II	% cattle for Reason Code II
a. Chlortetracycline (Aureomycin®, CTC)	F386	Fa386	Fb386	Fc386	Fd386
b. Oxytetracycline (Terramycin®, OTC)	F387	Fa387	Fb387	Fc387	Fd387
c. Tetracycline (Duramycin, Tet-Sol)	F388	Fa388	Fb388	Fc388	Fd388
d. Sulfamethazine/sulfadimethoxine (Sulfasol)	F389	Fa389	Fb389	Fc389	Fd389
e. Neomycin (Neosol)	F390	Fa390	Fb390	Fc390	Fd390
f. Spectinomycin (Spectam, SpectoGard)	F391	Fa391	Fb391	Fc391	Fd391

Section C—Nutrition

1. Of all cattle placed on feed, what percentage were ever given the following during the feeding period?

a.	A coccidiostat other than an ionophore, such as amprolium (e.g., Corid®) or decoquinate (e.g., Deccox®)?	**F400** %	□-8 DK
b.	A beta-agonist (e.g., ractopamine)	**F401** %	□-8 DK
c.	Was the percentage of cattle fed a beta-agonist (e.g., ractopamine) in calendar year 2020 different than the percentage of cattle fed a beta-agonist in calendar year 2019 due to COVID-19 or its effects?	**F800**	□1 Yes □3 No □8 DK
[If Question 1c = No or DK, SKIP to Question 2]			
d.	Was the percentage of cattle fed a beta-agonist in calendar year 2020 more or less than the percentage of cattle fed a beta-agonist in calendar year 2019 due to COVID-19 or its effects?	**F801**	□1 More than 2019 □3 Less than 2019

2. Did this feedlot use the services of a nutritionist? **F402**   □1 Yes □3 No □8 DK

3. Which of the following water sources were used for the cattle on this feedlot?

a.	Ground water (well)	**F403**	□1 Yes □3 No □8 DK
b.	Surface water (ponds, lakes, streams, water storage from river flows)	**F404**	□1 Yes □3 No □8 DK
c.	Municipal water supply	**F405**	□1 Yes □3 No □8 DK

4. Were any of the following feed additives used on this feedlot? If yes, which of the following were reasons they were included in the ration? *[Check all that apply]*

	Used on feedlot?	If used on feedlot, for what reason(s)					
		Improve growth rate and/or feed efficiency	Antibiotic Alternative	Bovine respiratory disease	Hoof health	Pre-harvest food safety	Reduce liver abscesses
a. Direct-fed microbial or probiotic (e.g., *Lactobacillus acidophilus* or yeast)	□1 Yes □3 No **F406**	□1 **Fa406**	□2 **Fb406**	□3 **Fc406**	□4 **Fd406**	□5 **Fe406**	□6 **Ff406**
b. Yeast fermentation products	□1 Yes □3 No **F407**	□1 **Fa407**	□2 **Fb407**	□3 **Fc407**	□4 **Fd407**	□5 **Fe407**	□6 **Ff407**
c. Prebiotics (e.g., mannan-oligosaccharides)	□1 Yes □3 No **F408**	□1 **Fa408**	□2 **Fb408**	□3 **Fc408**	□4 **Fd408**	□5 **Fe408**	□6 **Ff408**
d. Vitamin supplements	□1 Yes □3 No **F409**	□1 **Fa409**	□2 **Fb409**	□3 **Fc409**	□4 **Fd409**	□5 **Fe409**	□6 **Ff409**
e. Organic mineral supplements	□1 Yes □3 No **F410**	□1 **Fa410**	□2 **Fb410**	□3 **Fc410**	□4 **Fd410**	□5 **Fe410**	□6 **Ff410**
f. Inorganic mineral supplements	□1 Yes □3 No **F411**	□1 **Fa411**	□2 **Fb411**	□3 **Fc411**	□4 **Fd411**	□5 **Fe411**	□6 **Ff411**

g. Enzymes	$\square_1$ Yes $\square_3$ No **F412**	$\square_1$ **Fa412**	$\square_2$ **Fb412**	$\square_3$ **Fc412**	$\square_4$ **Fd412**	$\square_5$ **Fe412**	$\square_6$ **Ff412**
h. Essential oils and plant-derived products (e.g., yucca extract)	$\square_1$ Yes $\square_3$ No **F413**	$\square_1$ **Fa413**	$\square_2$ **Fb413**	$\square_3$ **Fc413**	$\square_4$ **Fd413**	$\square_5$ **Fe413**	$\square_6$ **Ff413**
i. Other (specify:____**F414 Other**____)	$\square_1$ Yes $\square_3$ No **F414**	$\square_1$ **Fa414**	$\square_2$ **Fb414**	$\square_3$ **Fc414**	$\square_4$ **Fd414**	$\square_5$ **Fe414**	$\square_6$ **Ff414**

Section D—Biosecurity

1. Were the following practices used on this feedlot?

a.	Control access for visitors entering animal areas	**F500**	☐₁ Yes ☐₃ No ☐₄ No visitors
b.	Restrict access of visitors onto the feedlot premises	**F804**	☐₁ Yes ☐₃ No ☐₄ No visitors
c.	Disposable or clean boots for visitors entering animal areas	**F501**	☐₁ Yes ☐₃ No ☐₄ No visitors
d.	Footbaths for visitors entering animal areas	**F502**	☐₁ Yes ☐₃ No ☐₄ No visitors
e.	Control access for vehicles entering animal areas	**F503**	☐₁ Yes ☐₃ No ☐₄ No vehicles
f.	Restrict access of vehicles onto the feedlot premises	**F805**	☐₁ Yes ☐₃ No ☐₄ No vehicles
g.	Restrict movement of horses onto the feedlot premises	**F504**	☐₁ Yes ☐₃ No ☐₄ No horses
h.	Did any of these practices change in calendar year 2020 due to COVID-19 or its effects? **F806**		☐₁ Yes ☐₃ No ☐₈ DK

[If Question 1h = No or DK, then SKIP to Question 2]

i. Please describe changes to the above biosecurity practices in 2020 due to COVID-19 or its effects below: **F807**

2. Were the following practices used on this feedlot?

a.	Insect control	**F505**	☐₁ Yes ☐₃ No
b.	Rodent control	**F506**	☐₁ Yes ☐₃ No
c.	Bird control	**F507**	☐₁ Yes ☐₃ No
d.	Have dead cattle picked up at edge of property	**F508**	☐₁ Yes ☐₃ No
e.	Compost deads on site	**F509**	☐₁ Yes ☐₃ No

3.	Did this feedlot have a written or electronic biosecurity plan?	**F510**	☐₁ Yes ☐₃ No ☐₈ DK

4.	Does this feedlot have a shared fenceline with another operation such that there could be nose to nose contact with other cattle, bison or other domestic ruminants?	**F511**	☐₁ Yes ☐₃ No ☐₈ DK

[If Question 4 = YES, then SKIP to Question 6]

5.	How close, to the nearest ½ mile, is this feedlot to another operation with cattle, bison, or other domestic ruminants? **F512**	**miles**

Number of employees

6.	How many employees directly involved in cattle care did this feedlot have on average in 2020? **F513**	

[If Question 6 = 0, SKIP to Question 8]

7. Did employees of this feedlot…

a.	Have contact with cattle, bison, or other ruminants on other operations?	**F514**	☐₁ Yes ☐₃ No ☐₈ DK
b.	Own cattle, bison, or other ruminants at another location?	**F515**	☐₁ Yes ☐₃ No ☐₈ DK

NAHMS ID: _____

8. Did cattle stay in the same pen during the entire feeding period?	**F516**	$\square_1$ Yes $\square_3$ No $\square_8$ DK

[If Question 8 = YES or DK, then SKIP to Question 10]

Number

9. How many times were cattle re-sorted during the feeding period? **F517**	

10. How familiar are you with the Secure Beef Supply Plan? *[Check one only]* **F518**

$\square_1$ Very familiar
$\square_2$ Somewhat familiar
$\square_3$ Heard of name only
$\square_4$ Not familiar

Thank you for your help in completing this survey. Please feel free to use this space or the back of this questionnaire to communicate comments about the survey or any other information about health management on your feedlot that you think is relevant, including any information about the impact of COVID-19 on the operations of the feedlot.

Comments fcmnts: _____

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NAHMS ID: _____

Section E—Office Use Only

State FIPS:_____	**Operation #:**_____	**Interviewer:**_____	**Date:** ___/___/___
2-digits	5-digits	Initials	(mm/dd/yy)

1. Total time for interview [include time to discuss the program
    and complete the questionnaire] .... Time_interview min

2. Total travel time [round trip] .... Time_travel min

3. Data collector(s) (Enter the number for each category.)

    _____ Federal VMO   _____ Other (specify in margin)   VFED/VOTH

    _____ State VMO   VST

4. Enter response code 99 if questionnaire is completed or enter
    one code of 00 through 07 that best describes the reason why the owner
    is not participating..Response_code code

    99 = Survey completed
    00 = Producer not contacted by VMO
    01 = Poor time of year to contact or no time available to participate
    02 = Doesn't want anyone on operation
    03 = Bad experience with government veterinarian(s)
    04 = Doesn't want to do another survey or divulge information
    05 = Told NASS they didn't want to be contacted by VS
    06 = Ineligible (no longer in operation)
    07 = Other (explain in the comments section below)

5. Which of the following best describes the respondent's position
    with this operation?... Respondent_role__code

    1 = Owner
    2 = Manager
    3 = Family member (other than owner or manager)
    4 = Other hired employee (non-veterinarian)
    5= Veterinarian on staff (e.g., company veterinarian)
    6= Herd veterinarian or other veterinarian
    7 = Other (specify: _____)

6. Producer data quality..PDQ   □₁ Good to excellent   □₂ OK   □₃ Poor

7. Comments regarding this questionnaire or operation: Final_Comments

VMO signature: _____VMO_signature_____

TO BE COMPLETED BY COORDINATOR:

8. Field data quality……………………………………FDQ……□₁ Good to excellent   □₂ OK   □₃ Poor

NAHMS ID: _____

REFERENCE CARD 1: Paperwork Reduction Act

NAHMS ID: _____

REFERENCE CARD 2: Vaccine Examples

[For use with Phase 2 questionnaire, Section A, Question 11]

Type of Vaccine	Example trade names
Injectable vaccines against BVD and/or viral respiratory disease (e.g., IBR, BVD, PI3, BRSV)	Boehringer Ingelheim Elite, Express, Prism, Pyramid, Triangle Colorado Serum Pre-Breed, Respira Elanco Master Guard, Titanium, Vira Shield Merck Vista Texas Vet Lab Multi-Vac 3L, Super Poly-Bac B Zoetis Bovi-Shield 4, GOLD, and IBR, Cattle Master, One Shot BVD or Ultra 7, PregGuard GOLD FP 10, Resvac 4/Somubac
Intranasal vaccines against BVD and/or viral respiratory disease (e.g., IBR, BVD, PI3, BRSV)	Zoetis Inforce 3, TSV-2 Merck Nasalgen IP
Vaccines against bacterial respiratory disease (*Mannheima haemolytica* and *Pasteurella multocida*)	AgriLabs Pulmo-Guard Boehringer Ingelheim Bar Somnus 2P, Presponse, Triangle 4 or 9 PH-K, Pyramid+Presponse, Bo-Bac 2X Colorado Serum Mannheimia Haemolytica-Pasteurella Multocida Bacterin Elanco Titanium PH-M, Nuplura PH, Vira Shield 6 +/- Somnus Durvet Durvac Past HM Immvac ENDOVAC Merck Vista Once SQ, Once PMH Texas Vet Lab Poly-Bac B or Super Poly-Bac B Zoetis Bovi-Shield GOLD One Shot, One Shot, One Shot Ultra

Vaccines against clostridial diseases	Boehringer Ingelheim Alpha 7 or CD, Bar-Vac,, Caliber 3 or 7
	Colorado Serum Essential
	Elanco Pili Shield + C, Clostri Shield, Scour Bos 9
	Merck 20/20 Vision 7 with Spur, Cavalry 9, Covexin 8, Guardian,
	    Vision 7, 8, CD, or DC-T with Spur, Piliguard Pinkeye + 7,
	    Super-Tet with Havlogen
	Professional Biological Clostridium perfringens Type C&D Toxoid
	    and Toxoid-Tetanus Toxoid
	Zoetis One Shot Ultra 7 or 8, Ultrabac 7, 8, or CD, UltraChoice 7,
	    8, or CD, ScourGuard 4KC

Vaccines against *Moraxella* (pinkeye)	AgriLabs I-Site XP, *Moraxella bovoculi* bacterin Addison Maxi/Guard Pinkeye Bacterin Boehringer Ingelheim Ocu-Guard-MB-1, Alpha7/MB-1 Elanco Pinkeye Shield XT4 Merck 20/20 Vision 7 with Spur, Piliguard Pinkeye+7, Piliguard Pinkeye-1 Trivalent Zoetis SolidBac Pinkeye IR/PR

REFERENCE CARD 3: Disease Conditions other than BRD

[For use with Phase 2 questionnaire, Section A, Questions 20-21 and Section B, Question 10]

Code	Disease Condition
1	Acute Interstitial Pneumonia (e.g., AIP, dust pneumonia, atypical pneumonia
2	Bloat
3	Other digestive disorders (e.g., coccidiosis, diarrhea)
4	Footrot
5	Hairy heel wart
6	Central Nervous System disease (e.g., polio, listeriosis, "brainers")
7	Pinkeye
8	Cardiovascular disease (e.g., heart failure, brisket disease)
9	Fatigued cattle syndrome
10	Other

REFERENCE CARD 4: Antibiotics Given via Injection or Bolus

[For use with Phase 2 questionnaire, Section B, Questions 5, 8, and 10]

Codes are provided for use in electronic questionnaire and are not necessary for paper-administered questionnaire

ANTIBIOTICS GIVEN VIA INJECTION OR BOLUS		
Code	**Active Ingredient**	**Product Name**
1	Tilmicosin	Micotil
2	Gamithromycin	Zactran
3	Tulathromycin	Draxxin
4	Tylosin	Tylan 200
5	Tildipirosin	Zuprevo
6	Florfenicol	Nuflor
7	Florfenicol with Flunixin meglumine	Resflor Gold
8	Enrofloxacin*	Baytril
9	Danofloxacin*	Advocin
10	Ceftiofur	Naxcel, Excenel, Excede
11	Oxytetracycline	LA-200, BioMycin
12	Penicillin	Aquacillin, Penicillin G Procaine
13	Ampicillin	Polyflex
14	Sulfadimethoxine (injectable)	Albon Injection
15	Sulfadimethoxine (Bolus)	Albon Bolus
16	Sulfamethazine	Sustain III Bolus, Supra Sulfa

*These antibiotics are labeled only for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, *Histophilus somni* and *Mycoplasma bovis* in beef and non-lactating dairy cattle and for the control of BRD in beef and non-lactating dairy cattle at high risk of developing BRD associated with *Mannheimia haemolytica*, *Pasteurella multocida*, *Histophilus somni* and *Mycoplasma bovis,* and their extra-label use is prohibited. Therefore, these antibiotics are not presented as options for Section B, Question 10 (individual treatment of conditions other than BRD).

NAHMS ID: _____

REFERENCE CARD 5: Antibiotics Given via Feed or Water

[For use with Phase 2 questionnaire, Section B, Questions 12, 13, 14, 15, & 17]

Codes for antibiotics that don't require a veterinary feed directive (VFD) are not necessary for either the electronic questionnaire or the paper-administered questionnaire so are not provided

| ANTIBIOTICS USED IN FEED THAT DO NOT REQUIRE A VFD ||
Active Ingredient	Product Name
Ionophore	Rumensin, Bovatec
Bambermycin	Gainpro 10
Bacitracin	BMD, Baciferm

Codes for VFD antibiotics and antibiotics used in water are provided for use in electronic questionnaire and are not necessary for paper-administered questionnaire

| ANTIBIOTICS USED IN FEED THAT DO REQUIRE A VFD |||
Code	Active Ingredient	Product Name
1	Chlortetracyline	Aureomycin, Aureomix
2	Oxytetracycline	Terramycin, OTC
3	Chlortetracycline/Sulfamethazine	AS700, Aureo S 700, Aureomix S 700
4	Neomycin	Neomix
5	Tylosin	Tylan, Tylovet
6	Virginiamycin	Vmax
7	Tilmicosin	Pulmotil, Tilmovet

| ANTIBIOTICS USED IN WATER |||
Code	Active Ingredient	Product Name
1	Chlortetracyline	Aureomycin, Chloronex
2	Oxytetracycline	Terramycin, OTC
3	Tetracycline	Duramycin, Tet-Sol
4	Sulfamethazine / Sulfadimethoxine	Sulfasol
5	Neomycin	Neosol
6	Spectinomycin	Spectam, SpectoGard