United States Department of Agriculture

NAHMS

Health Management on U.S. Feedlots 2021

Phase 2 Questionnaire Manual

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Veterinary Services

PHASE 2 QUESTIONNAIRE MANUAL SECTIONS

Veterinary Services

SECTION 1. STUDY OVERVIEW

STUDY DESCRIPTION

Health Management on U.S. Feedlots 2021 is a 2-phase national study that will be conducted in 22 key cattle-producing States. The States included in both the large capacity (≥1000 head) and small capacity (50-999 head) parts of the study are CA, CO, ID, IL, IA, KS, MN, MO, ND, NE, SD, TX, and WY. The States included only in the large capacity part of the study are MT, OK, UT, and WA. The States included only in the small capacity part of the study are IN, MI, OH, PA, and WI. The Phase 1 Questionnaire will be administered by the National Agricultural Statistics Service (NASS) and focuses on cattle inventory, sourcing, housing, antibiotic stewardship, and use of veterinarians. The Phase 2 Questionnaire will be administered by USDA Veterinary Medical Officers, Animal Health Technicians, and State veterinary personnel to Phase 1 participants who elect to continue in the study. The Phase 2 Questionnaire goes into more depth on preconditioning and backgrounding of cattle, processing and health management at the feedlot, disease conditions, antibiotic use, nutrition, and biosecurity. This study will not include any collection of biologic samples from cattle.

This collection of data will support the following objectives:

1. Describe health management practices on U.S. feedlots with 50 or more head capacity.
2. Estimate the prevalence of important feedlot cattle diseases.
3. Describe antibiotic use and stewardship practices on U.S. feedlots.
4. Describe trends in feedlot cattle health management practices and important feedlot cattle diseases.

LAUNCH SHEET PREVIEW

USDA
United States Department of Agriculture

NAHMS Health Management on U.S. Feedlots 2021

Study Launch

From March through August 2021, the USDA's National Animal Health Monitoring System (NAHMS), in collaboration with the National Agricultural Statistics Service, will conduct a national study focusing on cattle health and management on U.S. feedlots with at least 50 head. The NAHMS Health Management on U.S. Feedlots, 2021 study is designed to provide a snapshot of current feedlot cattle health management practices. The information collected will also allow for the analysis of trends in specific topics related to cattle health, based on previous NAHMS feedlot studies.

Background

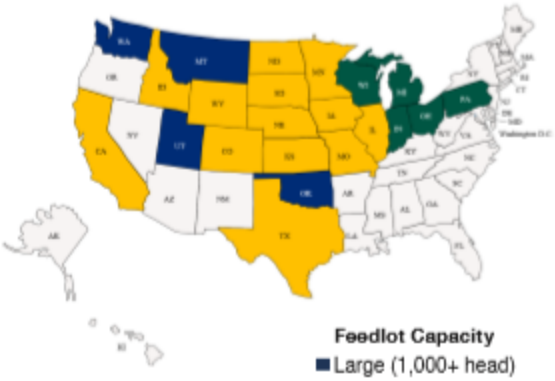
NAHMS collects scientifically accurate data for U.S. livestock, poultry, and aquaculture industries on a rotating basis. NAHMS studies are voluntary and confidential. For this feedlot study, priority issues facing the industry regarding cattle health were identified via responses to a needs assessment questionnaire and from discussions with representatives from various segments of the feedlot industry, including producer associations, feedlot veterinarians, and university and extension experts.

Study Objectives

The NAHMS Health Management on U.S. Feedlots, 2021 study is designed to provide stakeholders with valuable information about the U.S. feedlot industry. This study will

- Describe health management practices on U.S. feedlots with 50 or more head,
- Estimate the prevalence of important feedlot cattle diseases,
- Describe antibiotic use and stewardship practices on U.S feedlots, and
- Describe trends in feedlot cattle health management practices and important feedlot cattle diseases.

Figure 1. States participating in the NAHMS Health Management on U.S. Feedlots, 2021 study, by feedlot capacity



"The National Cattlemen's Beef Association appreciates the efforts of NAHMS to provide accurate and robust data for the U.S. beef cattle industry that can be used to detail trends in health management and antimicrobial use for feedyard cattle."

Mary Ann Kniebel, Vice Chair of NCBA's Cattle Health and Well-Being Committee

"The NAHMS reports for Cow/Calf and Feedlot have for decades provided solid, non-biased information to rancher and feedlot managers to help them understand how their colleagues in the beef industry manage cattle. From my long history as a veterinarian serving beef producers, I ask you to sincerely consider supporting the NAHMS survey efforts."

Dee Griffin, DVM, Director, VERO (Veterinary Education, Research & Outreach) Program, Texas A&M University College of Veterinary Medicine

Animal and Plant Health Inspection Service

Study Activities

Participating in any NAHMS study is voluntary. If you are selected to participate in the Health Management on U.S. Feedlots, 2021 study and decide to do so, your answers will statistically represent many other producers in your State.

Representatives from NASS will visit participating operations from March through April 2021 to complete a questionnaire. If participants choose to continue in the study, USDA or State veterinary health professionals will visit feedlots from June through August 2021 to complete a second questionnaire.

Benefits to Participating

Reports published from this study will benefit the U.S. feedlot industry by providing current and scientifically valid estimates to

- Aid in understanding disease preparedness strengths and vulnerabilities,
- Help policymakers and industry stakeholders make informed decisions,
- Identify research and development needs on vital issues related to feedlot cattle health,
- Enable economic analyses of the health and productivity of the U.S. feedlot industry,
- Identify educational needs and opportunities related to feedlot cattle health,
- Provide benchmark data on important feedlot cattle health management practices to inform quality assurance programs, and
- Provide transparent, credible, independent information on U.S. feedlot industry practices that is not collected by the industry itself.

NAHMS Feedlot Studies Have Impact!

- The NAHMS Feedlot 1994 and 1999 studies helped pioneer further research into injection sites, branding locations, and cattle handling practices, which led to data benchmarking for beef quality assurance programs.
- The NAHMS Feedlot 1994 study provided the industry's first look into the prevalence of *E. coli* O157:H7 shedding by feedlot cattle.
- The NAHMS Feedlot 2011 study provided data that were used to inform an economic analysis focusing on the market impacts of reducing the prevalence of bovine respiratory disease in feedlot cattle.
- Almost 1,500 scientific and industry publications have referenced NAHMS feedlot data since 1990.

"NAHMS studies provide critical information for animal science, veterinary science, and many other disciplines involving teaching and research in beef feedlot production. These data are used as a component of the Beef Checkoff's National Beef Quality Audit every 5 years, as well as a plethora of other applied research efforts. We should all support and advocate for contributing to this study!"

Keith Belk, Ph.D., Animal Sciences Department Head at Colorado State University

"NAHMS provides us with a snapshot of how our industry partners are operating their business and making decisions, serving as a benchmark and gut-check for us in making decisions on how to run our business. This helps us stay open-minded and current in today's practice of feeding cattle."

Josh Szasz, DVM, Ph.D., Five Rivers Cattle Feeding

Scientific Approach

NAHMS was established to collect accurate and valuable information on animal health and management in the United States. NAHMS studies are national in scope, science based, statistically valid, collaborative, voluntary, and anonymous.

Confidentiality

NAHMS is a recognized statistical unit by the Office of Management and Budget. All information acquired for the NAHMS Health Management on U.S. Feedlots, 2021 study will be used for statistical purposes only and will be treated as confidential in accordance with the Confidential Information Protection and Statistical Efficiency Act (CIPSEA). Only summary estimates based on the inference population will be reported. Data collected under CIPSEA are protected from Freedom of Information requests.

For More Information

USDA–APHIS–VS–CEAH
NRRC Building B, M.S. 2E7
2150 Centre Avenue
Fort Collins, CO 80526-8117
Phone: 970.494.7000
Email: NAHMS@usda.gov
Or visit NAHMS at: http://www.aphis.usda.gov/nahms
#791.1219

STUDY SCHEDULE

Study Process	Date
NASS Data Collection (Phase 1 Questionnaire)	March 1 to April 30, 2021
VS Virtual Coordinator/Field Training	May 18 and 19, 2021 (half days)
NASS consent form and participant turnover *Prior to consent form turnover, NAHMS Coordinators will complete CIPSEA training as well as sign an ADM-043 and a Representative Agreement. NAHMS will obtain NASS signatures on these forms	May 21, 2021
VMO Data Collection (Phase 2 Questionnaire)	June 14 to August 6, 2021

NAHMS CONTACTS

Name	Title	Phone Number	E-mail
Dr. Amy Delgado	Associate Director, CEAH	(970) 494-7301	amy.h.delgado@usda.gov
Dr. Kath Marshall	NAHMS Director	(970) 214-0253	Katherine.L.Marshall@usda.gov
Dr. Charles Fossler	Study Lead; Veterinary Epidemiologist	(970) 494-7595	charles.p.fossler@usda.gov
Ms. Lynn Elliston-Gittings	Field Liaison	(970) 494-7323	lanora.l.elliston-gittings@usda.gov
Mr. Matt Branan	Mathematical Statistician	(970) 494-7349	Matthew.A.Branan@usda.gov
Dr. Alice Green	Veterinary Epidemiologist	(970) 494-7528	Alice.Green@usda.gov

NAHMS E-MAIL

nahms@usda.gov

NAHMS MAILING ADDRESS

USDA:APHIS:VS:NAHMS
2150 Centre Avenue Bldg. B, Mail Stop 2E7
Fort Collins, CO 80526

Please send study materials, by UPS, to the attention of Lynn Elliston-Gittings. Please ensure that your shipments have a tracking number.

SECTION 2. THE VETERINARY SERVICES CONTACT

IN-PERSON VERSUS TELEPHONE INTERVIEWS

This section covers several topics regarding the VS contact. We use "contact" here to stand for both in-person interviews as well as interviews completed over the phone.

We understand that given the continually evolving COVID-19 situation we can't prescribe how each of you will be able to conduct the interviews for the Phase 2 questionnaire.

Our expectation is that you will make the decision to conduct in-person interviews based on information from your supervisor, COVID-19 restrictions at the State and local levels, plus your own and the producer's ability and willingness to conduct interviews in-person.

If, given the above information, you decide that you can conduct interviews in-person, we encourage you to do so as that has historically been the best way to collect accurate data, and it gives you a way to connect with producers you ordinarily might not be able to connect with in a non-regulatory context. If you decide not to conduct interviews in-person, then we assume the interview will be performed over the phone.

BEFORE THE CONTACT

It is important to thoroughly review this material before you make the initial call to the Producer. You should read through the Launch Sheet and Timeline (Section 1) to familiarize yourself with the NAHMS Health Management on U.S. Feedlots 2021 Study. Also, please look through the Phase 2 Questionnaire and the Phase 2 Questionnaire Guide (Section 3) so that you can give them an idea of the types of questions we will be asking.

Prior to receiving contact information to make contact for Phase 2, you and anyone else using the contact information must complete the following steps in order to receive the contact information for consenting producers. These are all critical steps in maintaining the strong data confidentiality we give to producers who participate in the study.

- NAHMS State Coordinators
    - Complete the CIPSEA Training, found on AgLearn at the following link: https://aglearn.usda.gov/course/view.php?id=38375.

    - Sign ADM-043 and NASS Representative Agreement forms.
    - Send the CIPSEA Training Completion Certificate, signed ADM-043, and signed NASS Representative Agreement forms to NAHMS.
- Other enumerators (VMO's, AHT's, State partners)
    - Complete the CIPSEA Training, found on AgLearn at the following link: https://aglearn.usda.gov/course/view.php?id=38375.
        - If the enumerator doesn't have access to AgLearn, let NAHMS know and we will forward you the training information and a CIPSEA quiz, which will be used in place of the completion certificate
    - Sign ADM-043 form and have the NAHMS State Coordinator sign.
    - Send CIPSEA completion certificate (or completed CIPSEA quiz) and completed ADM-043 form to NAHMS State Coordinator.
    - The NAHMS State Coordinator will sign the ADM-043 form and send both the signed form and CIPSEA completion certificate (or completed CIPSEA quiz) to NAHMS

A note on the forms:

- In the past, the ADM-043 forms needed to be witnessed by the NAHMS State Coordinators when being signed. This year, electronic signatures on both the ADM-043 and NASS Representative Agreement forms are perfectly acceptable. If electronic signatures are not possible, you may print the forms, hand-sign, scan, and send electronically. You can scan using the "Files" app on an iPhone.
- If you or your field staff are involved in both the NAHMS Swine 2021 and NAHMS Feedlot Health 2021 studies, you only need to complete the CIPSEA training and forms signings one time. You'll just need to specify that you will need access to data from both studies on the ADM-043 form, as shown below.
- These forms will be available on the NAHMS on the "Feedlot Studies" page: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/monitoring-and-surveillance/nahms/feedlot_questionnaires.

NAHMS State Coordinator ADM-043

NAHMS State Coordinator name

Check "Project collaboration only"

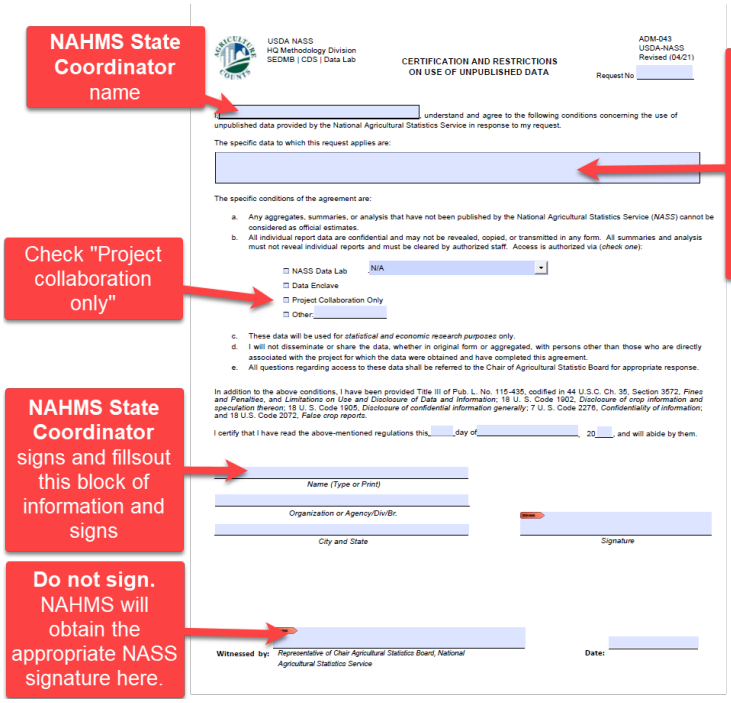
NAHMS State Coordinator signs and fillsout this block of information and signs

Do not sign. NAHMS will obtain the appropriate NASS signature here.

If you are a part of the Feedlot Health 2021 Study only, enter: "NAHMS Feedlot Health 2021"

If you are a part of the Swine 2021 Study only, enter: "NAHMS Swine 2021 Large Enterprise"

If you are a part of both the Swine 2021 and Feedlot Health 2021 studies, e "NAHMS Swine 2021 Large Enterprise and Feedlot Health 2021"



USDA NASS
HQ Methodology Division
SEDMB | CDS | Data Lab

CERTIFICATION AND RESTRICTIONS ON USE OF UNPUBLISHED DATA

ADM-043
USDA-NASS
Revised (04/21)

Request No

I understand and agree to the following conditions concerning the use of unpublished data provided by the National Agricultural Statistics Service in response to my request.

The specific data to which this request applies are:

The specific conditions of the agreement are:

a. Any aggregates, summaries, or analysis that have not been published by the National Agricultural Statistics Service (NASS) cannot be considered as official estimates.
b. All individual report data are confidential and may not be revealed, copied, or transmitted in any form. All summaries and analysis must not reveal individual reports and must be cleared by authorized staff. Access is authorized via (check one):

☐ NASS Data Lab N/A
☐ Data Enclave
☐ Project Collaboration Only
☐ Other:

c. These data will be used for statistical and economic research purposes only.
d. I will not disseminate or share the data, whether in original form or aggregated, with persons other than those who are directly associated with the project for which the data were obtained and have completed this agreement.
e. All questions regarding access to these data shall be referred to the Chair of Agricultural Statistic Board for appropriate response.

In addition to the above conditions, I have been provided Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35, Section 3572, *Fines and Penalties*, and *Limitations on Use and Disclosure of Data and Information*; 18 U. S. Code 1902, *Disclosure of crop information and speculation thereon*; 18 U. S. Code 1905, *Disclosure of confidential information generally*; 7 U. S. Code 2276, *Confidentiality of information*; and 18 U.S. Code 2072, *False crop reports*.

I certify that I have read the above-mentioned regulations this ____ day of _____ 20___, and will abide by them.

Name (Type or Print)

Organization or Agency/Div/Br.

City and State

Signature

Witnessed by: *Representative of Chair Agricultural Statistics Board, National Agricultural Statistics Service*

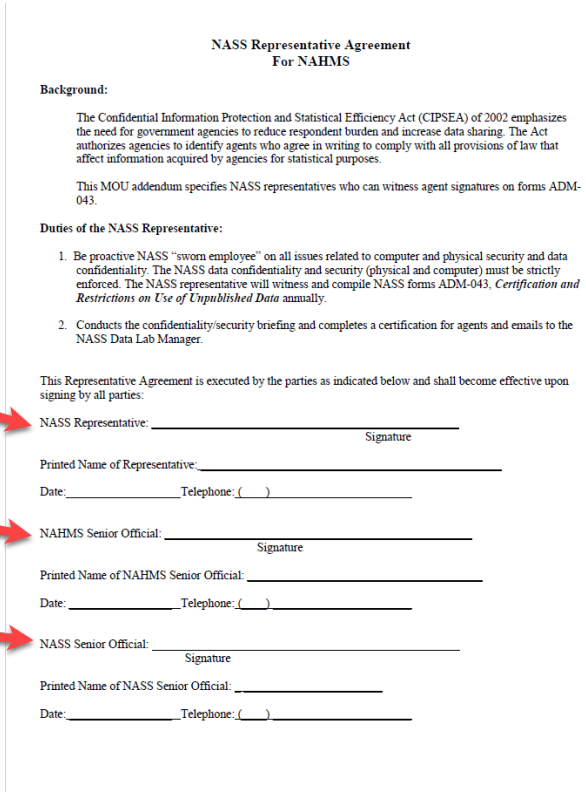
Date:

NAHMS State Coordinator NASS Representative Agreement

NAHMS State Coordinator signs as the "NASS Representative"

Do not sign. NAHMS will obtain the appropriate signature here.

Do not sign. NAHMS will obtain the appropriate signature here.



NASS Representative Agreement
For NAHMS

Background:

The Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002 emphasizes the need for government agencies to reduce respondent burden and increase data sharing. The Act authorizes agencies to identify agents who agree in writing to comply with all provisions of law that affect information acquired by agencies for statistical purposes.

This MOU addendum specifies NASS representatives who can witness agent signatures on forms ADM-043.

Duties of the NASS Representative:

1. Be proactive NASS "sworn employee" on all issues related to computer and physical security and data confidentiality. The NASS data confidentiality and security (physical and computer) must be strictly enforced. The NASS representative will witness and compile NASS forms ADM-043, ***Certification and Restrictions on Use of Unpublished Data*** annually.
2. Conducts the confidentiality/security briefing and completes a certification for agents and emails to the NASS Data Lab Manager.

This Representative Agreement is executed by the parties as indicated below and shall become effective upon signing by all parties:

NASS Representative: _____
Signature

Printed Name of Representative: _____

Date: _____ Telephone: (___) _____

NAHMS Senior Official: _____
Signature

Printed Name of NAHMS Senior Official: _____

Date: _____ Telephone: (___) _____

NASS Senior Official: _____
Signature

Printed Name of NASS Senior Official: _____

Date: _____ Telephone: (___) _____

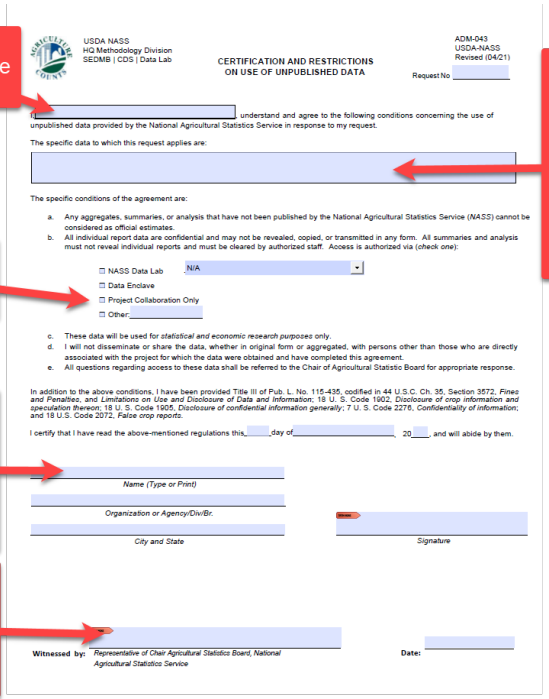
Non-Coordinator Field Staff ADM-043

Field Staff name

Check "Project collaboration only"

Field Staff signs and fillsout this block of information and signs

NAHMS State Coordinator signs and dates.



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a. Any aggregates, summaries, or analysis that have not been published by the National Agricultural Statistics Service (NASS) cannot be considered as official estimates.
b. All individual report data are confidential and may not be revealed, copied, or transmitted in any form. All summaries and analysis must not reveal individual reports and must be cleared by authorized staff. Access is authorized via (*check one*):

☐ NASS Data Lab N/A
☐ Data Enclave
☐ Project Collaboration Only
☐ Other:

c. These data will be used for *statistical and economic research purposes* only.
d. I will not disseminate or share the data, whether in original form or aggregated, with persons other than those who are directly associated with the project for which the data were obtained and have completed this agreement.
e. All questions regarding access to these data shall be referred to the Chair of Agricultural Statistic Board for appropriate response.

In addition to the above conditions, I have been provided Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35, Section 3572, *Fines and Penalties*, and *Limitations on Use and Disclosure of Data and Information*; 18 U. S. Code 1902, *Disclosure of crop information and speculation thereon*; 18 U. S. Code 1905, *Disclosure of confidential information generally*; 7 U. S. Code 2276, *Confidentiality of information*; and 18 U.S. Code 2072, *False crop reports*.

I certify that I have read the above-mentioned regulations this day of 20 , and will abide by them.

Name (Type or Print)

Organization or Agency/Div/Br.

City and State

Signature

Witnessed by: *Representative of Chair Agricultural Statistics Board, National Agricultural Statistics Service*

Date:

If you are a part of the Feedlot Health 2021 Study only, enter: "NAHMS Feedlot Health 2021"

If you are a part of the Swine 2021 Study only, enter: "NAHMS Swine 2021 Large Enterprise"

If you are a part of both the Swine 2021 and Feedlot Health 2021 studies, e "NAHMS Swine 2021 Large Enterprise and Feedlot Health 2021"

HEALTH MANAGEMENT ON U.S. FEEDLOTS 2021
PHASE 1 QUESTIONNAIRE INFORMATION

The data from the Phase 1 Questionnaire completed by the NASS enumerators will have been collected March 1 to April 30, 2021. The consent information for the Producers who agreed to have their names turned over (turnover data) to VS (and who you will be contacting) is scheduled to be given to the NAHMS Health Management on U.S. Feedlots 2021 NAHMS Coordinators by May 21, 2021. Those data will be made available to NAHMS State Coordinators through a secure SharePoint site, located at: https://usdagcc.sharepoint.com/sites/aphis-vs-stas/ceah/NAHMS/FeedlotHealth2021. Details to access this information will be sent directly to NAHMS State Coordinators, individually, and communicated to you once assignments have been made.

NAHMS is a recognized statistical unit by the Office of Management and Budget. All information acquired for the NAHMS Health Management on U.S. Feedlots 2021 study will be used for statistical purposes only and will be treated as confidential in accordance with the Confidential Information Protection and Statistical Efficiency Act (CIPSEA). Only summary estimates based on the inference population will be reported. Data collected under CIPSEA are protected from Freedom of Information Act requests.

CIPSEA allows agents to collect data that are limited to statistical use only. All information collected during the NAHMS Health Management on U.S. Feedlots 2021 study is protected from disclosure in identifiable form (i.e., the identity of the Respondent will not be disclosed). All identifiable information must be secured when not in use. All publications will use statistical aggregates and must clear a disclosure review process prior to distribution. No individual-level responses will be published.

Please note that the protection provided by CIPSEA only applies to this feedlot health study. Activities initiated by the Producer unrelated to this feedlot health study, such as testing for movement or sale, may cause unrelated regulatory action.

To meet confidentiality requirements, NASS must obtain the Producer's permission to release the Producer's name, address, telephone number, email address, and contact notes to APHIS personnel. This will be done via a question on the Phase I questionnaire. Respondents do not need to make a decision about participating in Phase 2 (VS phase) of the study until the time of the contact by the VS data collector. The VS data collector will explain the purpose and scope of the Phase 2 Questionnaire at the beginning of their contact. Some Producers may need encouragement from you to participate in the VS phase. One way you can encourage participation is by discussing the benefits of the study to the feedlot industry, found in the Launch Sheet and the Promotional Video. It is important to promote the study when you speak to Producers as they may not intuitively recognize the benefits of the study to the industry.

STUDY MATERIALS

Along with this manual, you will receive the following materials from your NAHMS Coordinator. All materials (except for the Producer Education Packet) will be available on the NAHMS website: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/monitoring-and-surveillance/nahms/feedlot_questionnaires.

NAHMS will mail copies of the Phase 2 Questionnaire, Confidentiality Pledge, Informed Consent for Feedlots in the State of California, Study Participant Survey, and Producer Education Packet to producers prior to the Phase 2 contacts. If the producer didn't receive the mailing, either provide them with the materials (if the interview is in person) or collect a good mailing address, let your NAHMS State Coordinator know, and NAHMS will mail them copies of the study materials.

- **Phase 2 Questionnaire**
  The Phase 2 Questionnaire (see Section 5) will be administered during the contact by VS or State representatives between June 14 and August 6, 2021. If VS data collectors have at least eAuth level 2 access or a LincPass, NAHMS will ensure that they have an iPad, which will be used to administer the Phase 2 Questionnaire using an electronic form using Mi-Co software.
    - *Our intention was for State folks to receive iPads as long as they have eAuth level 2 access. However, we ran into complications with IT folks when it came time to send out the iPads. This issue is now resolved, and State folks should be able to complete the Phase 2 surveys with iPads.*

If you are able, you should complete the Phase 2 questionnaire using the Mi-Co application on the iPad. In the case of an emergency (e.g., if the iPad dies while you're in the field or has other issues), then you may use a paper form as a back-up option. Paper copies of the needed materials will be sent to NAHMS State Coordinators and will also be available on the NAHMS website.

- **VS Reference Cards**
  Reference cards contain pertinent information to help the Producer answer questions about vaccinations, disease conditions, and antibiotic use. The VS data collector will have copies of the reference cards, and they will also be included at the end of the Phase 2 Questionnaire.
- **Informed Consent for Feedlots in the State of California** - *Only for feedlots in California*
  This is a form to obtain consent to release California state level aggregate data obtained from the Phase 2 questionnaire to the California Department of Food and Agriculture for the purposes of fulfilling California Food and Agricultural Codes 13300-14408. However, the actual consent will be obtained via question D.11 in the questionnaire. If the producer has questions about this consent, review the form with them using the copy in this manual or using Appendix 2 in the MiCo form.

- **Confidentiality Pledge**
  The Confidentiality Pledge is the contract between APHIS and the Producer. A copy of the Confidentiality Pledge will be signed by NAHMS staff and sent to Producers as part of the Producer Education Packet mailing. You should be prepared to go over the Confidentiality Pledge at the time of the interview. Refer to the copy in this manual or in Appendix 1 in the MiCo form.
- **Study Participant Survey**
  A paper form will be included in the Producer Education Packet that will be sent by NAHMS to the producer. This form allows participants who complete Phase 2 to provide feedback on the study. Participants who choose to complete this questionnaire will return it to NAHMS using a stamped business reply envelope.
- **Producer Education Packet**
  The materials in this packet will provide the Producer with general information about this study along with other useful information related to the feedlot industry and feedlot cattle health. NAHMS will mail the Producer Education Packets, along with the forms for Informed Consent for Feedlots in the State of California, the Confidentiality Pledge, the Study Participant Survey, and the Phase II Questionnaire to producers prior to the start of data collection.

PREPARATION FOR THE INTERVIEW

Review the Launch Sheet, Timeline, Promotional Video, and Questionnaire
Familiarize yourself with the Launch Sheet (pages 5-6) and Study Schedule (page 7), the Promotional Video (https://youtu.be/Njf3UnNj8kE), and the Phase 2 Questionnaire (Section 5).

Contact the Producer
Call the Producer and introduce yourself. Using the phone script below, explain that their name and contact information was provided to you by NASS per their request during Phase 1 of the NAHMS Health Management on U.S. Feedlots 2021 study, and you are contacting them to provide information about participation in Phase 2. Please make note of your contact history with attempted contacts, and if you are having trouble contacting a producer, let your NAHMS State Coordinator know and they can coordinate with NAHMS Staff or their NASS Regional Field Office (RFO) contact to facilitate contact of hard-to-reach producers.

It is important to administer the questionnaire to the person who is most knowledgeable about the operation. This person needs to have the authority to participate in the study and will need to sign the Confidentiality Pledge if the interview is done in-person.

Make an appointment to complete the interview. Determine whether it will be conducted in person or via telephone. Confirm the directions to the site, or confirm the telephone number to use for a telephone interview, and then explain what will be covered and how long it will take (about 1 hour). Let the Producer know that it will be helpful to have production records

available during the interview to answer some of the questions. You may provide a link to the questionnaire to the Producer prior to the visit, so they will be able to answer the questionnaire more easily during your in-person or telephone interview. The questionnaire can be found at: https://www.aphis.usda.gov/animal_health/nahms/feedlot/downloads/feedlotques/feedlothealth2021ques/phase2-questionnaire-508.pdf.

It may be useful to provide the Producer with your name, phone number, and e-mail when you speak for the first time. This will allow the Producer to contact you with any questions or concerns prior to or after the interview.

PHONE SCRIPT FOR CONTACTING THE PRODUCER

Hello, I am (*your name and position*). I am calling about the NAHMS Health Management on U.S. Feedlots 2021 study. Do you have a few minutes to talk now, or is there a better time for me to call back?

(*If they say now is an OK time to talk, continue*)

Thank you very much for participating in Phase 1 of this study. The data that you provided will be very useful to the U.S. feedlot industry. The National Agricultural Statistics Services representative, (*name of NASS representative if available*), who worked with you on that first questionnaire let us know that you indicated you may be interested in participating in Phase 2 of the study. Phase 2 consists of completing another questionnaire that gathers additional information about health management of cattle on feedlots in the U.S. Do you have any questions about Phase 2 that I can answer today?

(*Answer any questions they have about Phase 2*)

If you are willing to participate in Phase 2, I would like to schedule a time to meet with you either in person or by phone to complete the questionnaire. I expect that it will take about an hour to fill out the questionnaire. Are you interested in participating?

(*If yes, continue. If no, thank them for their time and say good-bye*).

When would you be available to meet? (*Establish date and time of appointment and verify that the contact number you have is a convenient one to use*). (*If in-person*) Where would you like to meet? It is not necessary to meet on the site of your operation, and I am happy to meet you wherever it is convenient for you. (*Establish location and make sure you have accurate directions*).

Having cattle health records on hand about disease and treatments of disease will help to make the process smoother. I can also send you a copy of the questionnaire ahead of time so you can familiarize yourself with the types of questions that are asked, if you like. Are you interested in receiving a copy of the questionnaire? (*If yes*) What would be the best way to send it, by U.S mail, or I can email you the link to the online version of the questionnaire? (*Get appropriate addresses to which to send the questionnaire*).

Thank you very much for your willingness to participate in the study! It is much appreciated. Talk to you/see you soon!

MATERIALS TO HAVE PREPARED FOR THE INTERVIEW

- Health Management on U.S. Feedlots 2021 Phase 2 Manual
- iPad for completing the Phase 2 Questionnaire electronically
- Phase 2 Questionnaire paper copy
- Confidentiality Pledge
- Informed Consent for Feedlots in the State of California (if in California)
- Study Participant Survey with stamped, addressed envelope
- Health Management on U.S. Feedlots 2021 Producer Education Packet
- Calculator or a smart phone with a calculator app
- Pens
- Business cards

CONFIDENTIALITY PLEDGE INSTRUCTIONS

The NAHMS Health Management on U.S. Feedlots 2021 Confidentiality Pledge is the contract between APHIS and the Producer. This form is designed to increase the participant's understanding of the study focus, highlight confidentiality safeguards, and explain participation requirements and benefits. This form will be mailed by NAHMS to producers, but you should review the form with the participant prior to questionnaire administration.

Note on confidentiality

The Confidentiality Pledge specifically states that data collected by NAHMS will be kept confidential and will not be used for regulatory purposes. The exception to data confidentiality is the suspicion or diagnosis of a dangerously contagious, infectious, or exotic disease foreign to the United States on the Producer's premises, such as foot and mouth disease.

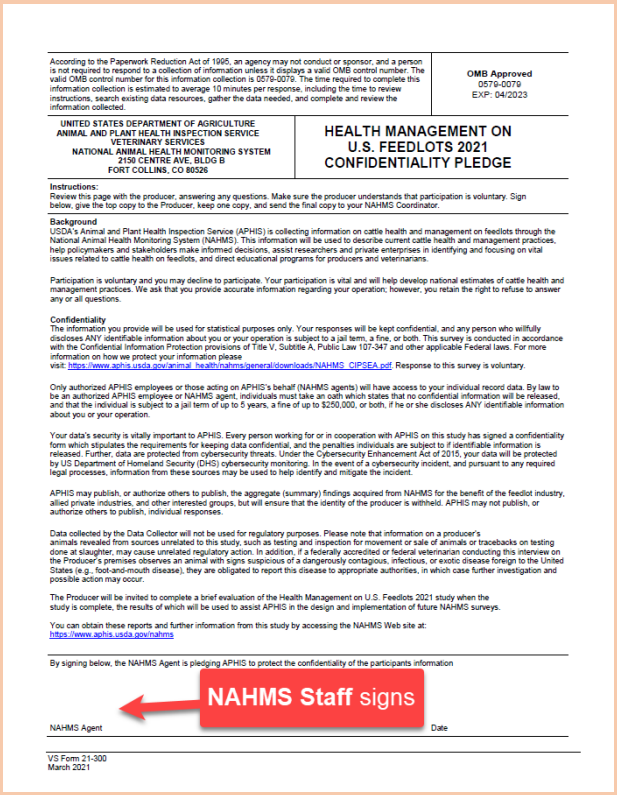
Review the information with the producer

Review the summarized information with the producer in the *Survey Introduction* section of the questionnaire and, if the producer wishes, read or show the full **Confidentiality Pledge** https://www.aphis.usda.gov/animal_health/nahms/feedlot/downloads/feedlotques/feedlothealth2021ques/phase2-confidentiality-pledge-508.pdf, from this manual, or in Appendix 1 in the MiCo Form.

Phone interview	In-person interview
• Ask if the producer received the Producer Education Packet with the **Confidentiality Pledge** from NAHMS • If they did, prepare to go over the **Confidentiality Pledge** with the producer during the interview. • If they did not receive the Producer Education Packet from NAHMS, obtain a	• Ask if the producer received the Producer Education Packet with the **Confidentiality Pledge** from NAHMS • If they did: ○ Prepare to go over the **Confidentiality Pledge** with the producer during the interview

good mailing address, and NAHMS will send a packet with the additional forms. Then, review the **Confidentiality Pledge** with the producer during the interview.

- If they did not receive the Producer Education Packet from NAHMS:
  - Sign the **Confidentiality Pledge** and leave a signed copy with the producer,
  - Keep one signed copy for yourself, and
  - Send the remaining signed copy to your NAHMS State Coordinator



According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 10 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.

OMB Approved
0579-0079
EXP: 04/2023

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 CONFIDENTIALITY PLEDGE

Instructions:
Review this page with the producer, answering any questions. Make sure the producer understands that participation is voluntary. Sign below, give the top copy to the Producer, keep one copy, and send the final copy to your NAHMS Coordinator.

Background
USDA's Animal and Plant Health Inspection Service (APHIS) is collecting information on cattle health and management on feedlots through the National Animal Health Monitoring System (NAHMS). This information will be used to describe current cattle health and management practices, help policymakers and stakeholders make informed decisions, assist researchers and private enterprises in identifying and focusing on vital issues related to cattle health on feedlots, and direct educational programs for producers and veterinarians.

Participation is voluntary and you may decline to participate. Your participation is vital and will help develop national estimates of cattle health and management practices. We ask that you provide accurate information regarding your operation; however, you retain the right to refuse to answer any or all questions.

Confidentiality
The information you provide will be used for statistical purposes only. Your responses will be kept confidential, and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws. For more information on how we protect your information please visit: https://www.aphis.usda.gov/animal_health/nahms/general/downloads/NAHMS_CIPSEA.pdf. Response to this survey is voluntary.

Only authorized APHIS employees or those acting on APHIS's behalf (NAHMS agents) will have access to your individual record data. By law to be an authorized APHIS employee or NAHMS agent, individuals must take an oath which states that no confidential information will be released, and that the individual is subject to a jail term of up to 5 years, a fine of up to $250,000, or both, if he or she discloses ANY identifiable information about you or your operation.

Your data's security is vitally important to APHIS. Every person working for or in cooperation with APHIS on this study has signed a confidentiality form which stipulates the requirements for keeping data confidential, and the penalties individuals are subject to if identifiable information is released. Further, data are protected from cybersecurity threats. Under the Cybersecurity Enhancement Act of 2015, your data will be protected by US Department of Homeland Security (DHS) cybersecurity monitoring. In the event of a cybersecurity incident, and pursuant to any required legal processes, information from these sources may be used to help identify and mitigate the incident.

APHIS may publish, or authorize others to publish, the aggregate (summary) findings acquired from NAHMS for the benefit of the feedlot industry, allied private industries, and other interested groups, but will ensure that the identity of the producer is withheld. APHIS may not publish, or authorize others to publish, individual responses.

Data collected by the Data Collector will not be used for regulatory purposes. Please note that information on a producer's animals revealed from sources unrelated to this study, such as testing and inspection for movement or sale of animals or tracebacks on testing done at slaughter, may cause unrelated regulatory action. In addition, if a federally accredited or federal veterinarian conducting this interview on the Producer's premises observes an animal with signs suspicious of a dangerously contagious, infectious, or exotic disease foreign to the United States (e.g., foot-and-mouth disease), they are obligated to report this disease to appropriate authorities, in which case further investigation and possible action may occur.

The Producer will be invited to complete a brief evaluation of the Health Management on U.S. Feedlots 2021 study when the study is complete, the results of which will be used to assist APHIS in the design and implementation of future NAHMS surveys.

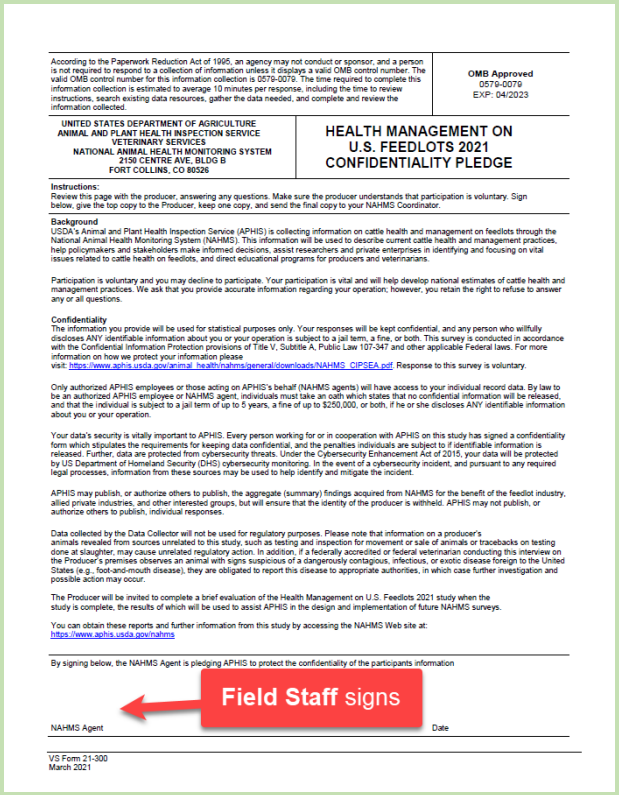
You can obtain these reports and further information from this study by accessing the NAHMS Web site at: https://www.aphis.usda.gov/nahms

By signing below, the NAHMS Agent is pledging APHIS to protect the confidentiality of the participants information

NAHMS Staff signs

NAHMS Agent _____ Date _____

VS Form 21-300
March 2021



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OMB Approved
0579-0079
EXP: 04/2023

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FORT COLLINS, CO 80526

HEALTH MANAGEMENT ON U.S. FEEDLOTS 2021 CONFIDENTIALITY PLEDGE

Instructions:
Review this page with the producer, answering any questions. Make sure the producer understands that participation is voluntary. Sign below, give the top copy to the Producer, keep one copy, and send the final copy to your NAHMS Coordinator.

Background
USDA's Animal and Plant Health Inspection Service (APHIS) is collecting information on cattle health and management on feedlots through the National Animal Health Monitoring System (NAHMS). This information will be used to describe current cattle health and management practices, help policymakers and stakeholders make informed decisions, assist researchers and private enterprises in identifying and focusing on vital issues related to cattle health on feedlots, and direct educational programs for producers and veterinarians.

Participation is voluntary and you may decline to participate. Your participation is vital and will help develop national estimates of cattle health and management practices. We ask that you provide accurate information regarding your operation; however, you retain the right to refuse to answer any or all questions.

Confidentiality
The information you provide will be used for statistical purposes only. Your responses will be kept confidential, and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws. For more information on how we protect your information please visit: https://www.aphis.usda.gov/animal_health/nahms/general/downloads/NAHMS_CIPSEA.pdf. Response to this survey is voluntary.

Only authorized APHIS employees or those acting on APHIS's behalf (NAHMS agents) will have access to your individual record data. By law to be an authorized APHIS employee or NAHMS agent, individuals must take an oath which states that no confidential information will be released, and that the individual is subject to a jail term of up to 5 years, a fine of up to $250,000, or both, if he or she discloses ANY identifiable information about you or your operation.

Your data's security is vitally important to APHIS. Every person working for or in cooperation with APHIS on this study has signed a confidentiality form which stipulates the requirements for keeping data confidential, and the penalties individuals are subject to if identifiable information is released. Further, data are protected from cybersecurity threats. Under the Cybersecurity Enhancement Act of 2015, your data will be protected by US Department of Homeland Security (DHS) cybersecurity monitoring. In the event of a cybersecurity incident, and pursuant to any required legal processes, information from these sources may be used to help identify and mitigate the incident.

APHIS may publish, or authorize others to publish, the aggregate (summary) findings acquired from NAHMS for the benefit of the feedlot industry, allied private industries, and other interested groups, but will ensure that the identity of the producer is withheld. APHIS may not publish, or authorize others to publish, individual responses.

Data collected by the Data Collector will not be used for regulatory purposes. Please note that information on a producer's animals revealed from sources unrelated to this study, such as testing and inspection for movement or sale of animals or tracebacks on testing done at slaughter, may cause unrelated regulatory action. In addition, if a federally accredited or federal veterinarian conducting this interview on the Producer's premises observes an animal with signs suspicious of a dangerously contagious, infectious, or exotic disease foreign to the United States (e.g., foot-and-mouth disease), they are obligated to report this disease to appropriate authorities, in which case further investigation and possible action may occur.

The Producer will be invited to complete a brief evaluation of the Health Management on U.S. Feedlots 2021 study when the study is complete, the results of which will be used to assist APHIS in the design and implementation of future NAHMS surveys.

You can obtain these reports and further information from this study by accessing the NAHMS Web site at: https://www.aphis.usda.gov/nahms

By signing below, the NAHMS Agent is pledging APHIS to protect the confidentiality of the participants information

Field Staff signs

NAHMS Agent _____ Date _____

VS Form 21-300
March 2021

INFORMED CONSENT FOR FEEDLOTS IN THE STATE OF CALIFORNIA INSTRUCTIONS

Only for operations in California

In *Section D. Conclusion (D.11)* of the Phase 2 Questionnaire, you will ask the Producer for consent to release California state level aggregate data obtained from the Phase 2 questionnaire to the California Department of Food and Agriculture for the purposes of fulfilling California Food and Agricultural Codes 13300-14408. This will reduce duplication of efforts between government agencies.

Review the information with the producer

Review the summarized consent information with the producer in *Section D. Conclusion (D.11)* on the questionnaire. Producers in California should have received a signed copy of the **Informed Consent for Feedlots in the State of California** form from NAHMS in the Producer Education Packet.
https://www.aphis.usda.gov/animal_health/nahms/feedlot/downloads/feedlotques/feedlothealth2021ques/phase2-cainformedconsent-508.pdf.

Indicate consent

Indicate consent (or non-consent) on the questionnaire in *Section D. Conclusion (D.11)*.

Phone interview	In-person interview
• Ask if the producer received the Producer Education Packet with the **Informed Consent for Feedlots in the State of California** form from NAHMS • If they did, prepare to go over this form with the producer when asking question D.11. • If they did not receive the Producer Education Packet from NAHMS, obtain a good mailing address, and NAHMS will send a packet with the additional forms and go over this form with the producer when asking question D.11.	• Ask if the producer received the Producer Education Packet with the **Informed Consent for Feedlots in the State of California** form from NAHMS • If they did: ○ Prepare to go over the **Informed Consent for Feedlots in the State of California** form when asking question D.11. • If they did not receive the Producer Education Packet from NAHMS: ○ Sign the form as the "U.S. Department of Agriculture or California Department of Food and Agriculture Employee and leave this copy with the producer ○ Keep one signed copy for yourself, and ○ Send the remaining signed copy to your NAHMS State Coordinator ○ Go over this form with the producer when asking question D.11

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EXP: 04/2023

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FORT COLLINS, CO 80526

HEALTH MANAGEMENT ON U.S. FEEDLOTS 2021 INFORMED CONSENT FOR FEEDLOTS IN THE STATE OF CALIFORNIA

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), the California Department of Food and Agriculture and the State of California, and the Producer hereby enter into this National Animal Health Monitoring System (NAHMS) Health Management on U.S. Feedlots 2021 INFORMED CONSENT, the terms of which are set forth below.

1. The California Department of Food and Agriculture (CDFA) is mandated by California Food and Agricultural Codes 14400-14408 to monitor antimicrobial use and management practices in livestock. The California Law furthermore directs that, when applicable, this information be gathered in coordination with NAHMS. The California Law stipulates that these data are collected in a voluntary manner. The collected data will be used for monitoring and educational, not regulatory, purposes.

2. Since the NAHMS Health Management on U.S. Feedlots 2021 study will include collection of data regarding antimicrobial use and health management in feedlot cattle in California, CDFA has requested that NAHMS share aggregate data collected in the NAHMS Health Management on U.S. Feedlots 2021 study from California cattle feedlots with them for the purposes of fulfilling California Food and Agricultural Codes 14400-14408.

3. Only aggregate (summary) data, not individual data, will be shared with CDFA. The identity of the Producer will be withheld. No individual responses will be shared or published.

Signature of U.S. Department of Agriculture or California Department of Food and Agriculture Employee :	Date:
Signature of Producer or authorized representative:	Date:

NAHMS Staff signs

Left blank

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 6 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.

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HEALTH MANAGEMENT ON U.S. FEEDLOTS 2021 INFORMED CONSENT FOR FEEDLOTS IN THE STATE OF CALIFORNIA

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), the California Department of Food and Agriculture and the State of California, and the Producer hereby enter into this National Animal Health Monitoring System (NAHMS) Health Management on U.S. Feedlots 2021 INFORMED CONSENT, the terms of which are set forth below.

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3. Only aggregate (summary) data, not individual data, will be shared with CDFA. The identity of the Producer will be withheld. No individual responses will be shared or published.

Signature of U.S. Department of Agriculture or California Department of Food and Agriculture Employee :	Date:
Signature of Producer or authorized representative:	Date:

Field Staff signs

(IF in-person) Producer signs, Otherwise, leave blank

STUDY PARTICIPANT SURVEY INSTRUCTIONS

This short survey gives an opportunity for producers to provide feedback about the study. The responses are anonymous and will only be used for planning purposes.

Phone interview	In-person interview
• Ask if the producer received the Producer Education Packet with the **Study Participant Survey** from NAHMS • If they did, remind them that they can submit the feedback form to NAHMS using the enclosed business reply envelope at their convenience. • If they did not receive the Producer Education Packet from NAHMS, obtain a good mailing address, and NAHMS will send a packet with the additional forms.	• Ask if the producer received the Producer Education Packet with the **Study Participant Survey** from NAHMS • If they did, remind them that they can submit the feedback form to NAHMS using the enclosed business reply envelope at their convenience. • If they did not receive the Producer Education Packet from NAHMS, provide them with a copy along with a business reply envelope and let them know that they can submit the feedback form to NAHMS at their convenience.

Submitting the Completed Study Participant Survey

Participants who choose to complete the Study Participant Survey will return the completed survey to NAHMS using a stamped business reply envelope.

SECTION 3. Mi-Co Introduction

The Health Management on U.S. Feedlots 2021 study questionnaire was developed to be an electronically-administered questionnaire that can be completed on iPads that will be supplied to VS data collectors and State partners who have at least eAuth level 2 access. The electronic version of the questionnaire was developed using Mi-Co, which is software created by a company named Mi-Corporation. Section 3 provides instructions for you to request access to Mi-Co and how to open and use the application on the supplied iPad.

We want you to use the Mi-Co version of the questionnaire rather than the paper version. In the case of an emergency (for example, if you're out in the field and your iPad dies unexpectedly), then you may fill out a paper copy of the questionnaire. The Mi-Co version of the questionnaire automates several convenient features such as automatic skips, which can help save time navigating the questionnaire. It also has automatic routing through review steps, and it provides simple access to reference materials through the "information" buttons (such as definitions of technical terms).

Requesting Mi-Co Access

The user may request access, or their supervisor can request access on their behalf. Regardless of who submits the access request, supervisor approval is required in the User Management System (UMS). There are instructions below covering both request paths. Steps 1 & 2 must be completed by the user prior to a self-request or supervisor request.

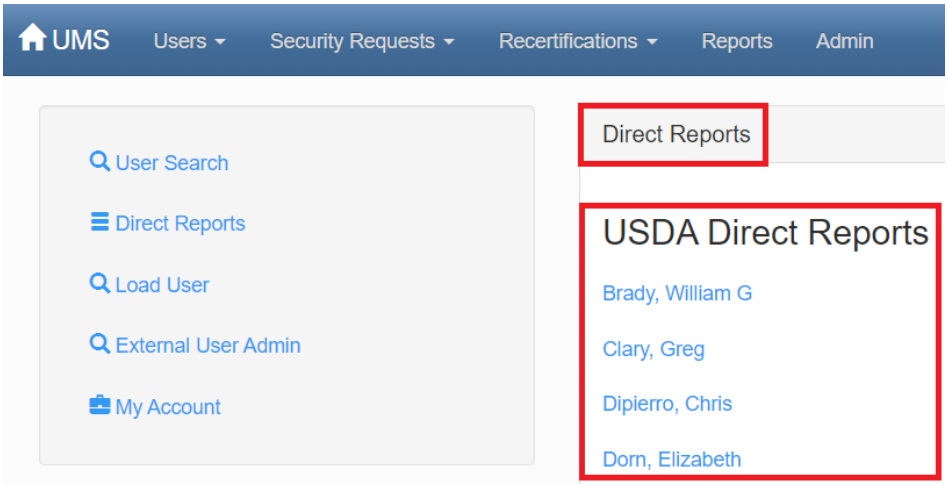
Supervisor Request: Steps 1 to 15
Employee Self-request: Steps 1 to 5 & 16 to 27

1. Ensure that your supervisor is correct in the Active Directory: http://addressbookupdate.
    - You will not be able to submit a request until your supervisor is correctly assigned to your account.
2. **If you are a state government employee**, ensure that you have eAuth level 2 access (https://www.eauth.usda.gov/eauth/b/usda/home). *If you are a federal government employee,your eAuth level is already correct for Mi-Co access.*
3. Determine the reason for requesting Mi-Co access:
    - Since you will be **completing forms and submitting real data**, request access in **production UMS**.
4. Determine if you need access to NAHMS forms and/or general surveillance forms
    - **Since you will need access to NAHMS forms**, please ensure you pass CIPSEA training prior to requesting access. Reach out to Bill Kelley (william.n.kelley@usda.gov) or Lynn Elliston-Gittings (lanora.l.elliston-gittings@usda.gov) for guidance on test materials and quiz link. You will not receive access to the NAHMS forms until this step is completed.
5. After completing steps 1 & 2, open the correct UMS site and log in. You will be asked to log invia eAuth (like AgLearn, webTA, etc.).

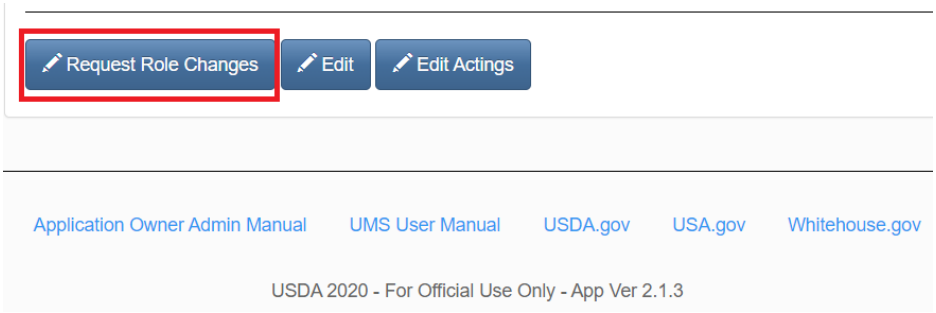
UMS Production	Real data collection	https://ncahapps.aphis.usda.gov/UserMgmt/

Supervisor Request

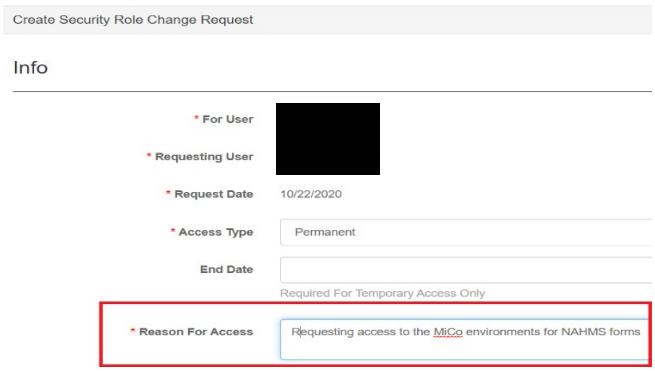
6. Once you log in successfully, you should arrive at the Direct Reports screen (see screenshot below)



7. Click on the name of the employee for whom you would like to submit a request.
8. Scroll to the bottom of the employee's page and click the "Request Role Changes" button.

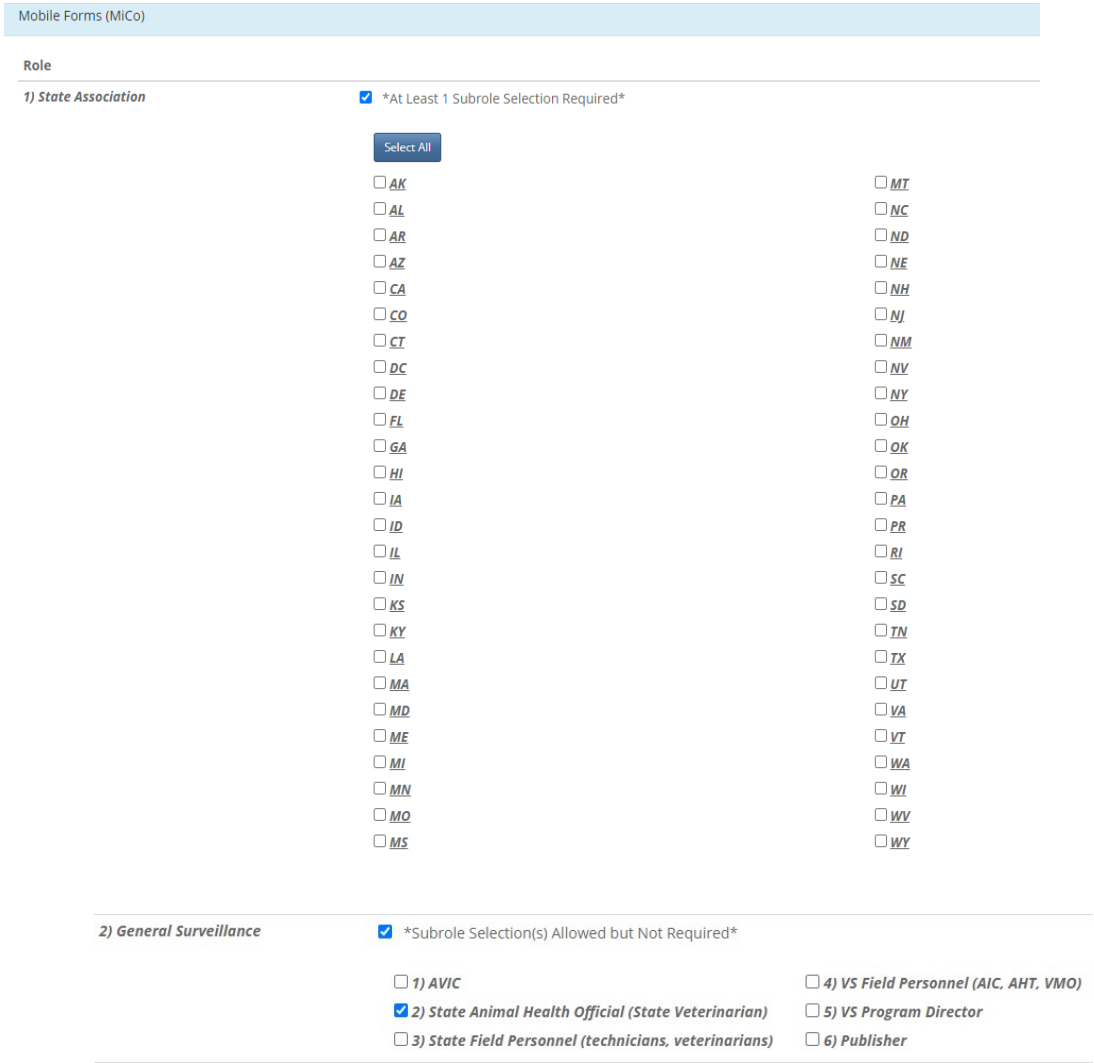


9. After clicking "Request Role Changes", a new screen will appear. Look for the "Info" section andtype a response in "Reason For Access".
    - Example: "Requesting Mi-Co access to NAHMS forms for reviewing and submitting forms."



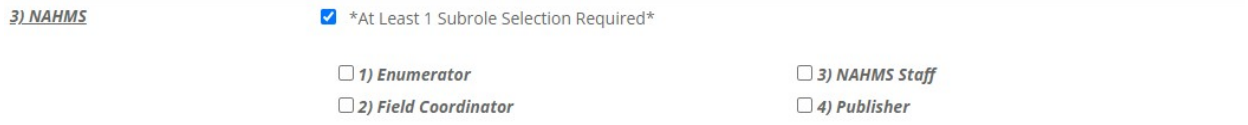
10. Next, locate the "Security Role Change" section and select "Mobile Forms (Mi-Co)" under the"Veterinary Services" header from the "Application" dropdown.

11. Click “+Add” after selecting Mi-Co in the dropdown.
12. After clicking “+Add” you should see a spot to specify roles **– this is required**.
13. Select the state or states in which the employee works (or state[s] to which they need data access) by clicking the checkbox next to “1) State Association”. If they need national access, clickthe “Select All” button under “1) State Association” to check all state boxes.



14. Check the box next to “3) NAHMS” and select a role that matches the employee’s role in the NAHMS study – please reach out to NAHMS staff if you areunsure which role to choose.

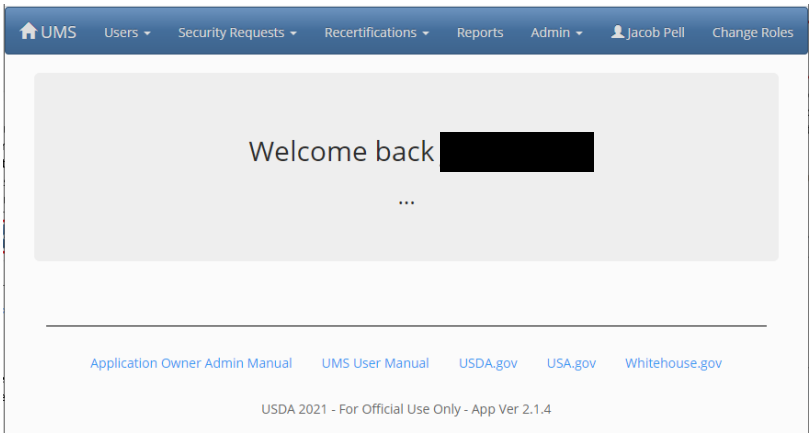
NOTE: If you are a NAHMS State Coordinator, select “2) Field Coordinator”. If you also plan to collect data, you may also select “1) Enumerator”. Otherwise, if you are not a NAHMS State Coordinator but will be collecting data, select “1) Enumerator”.



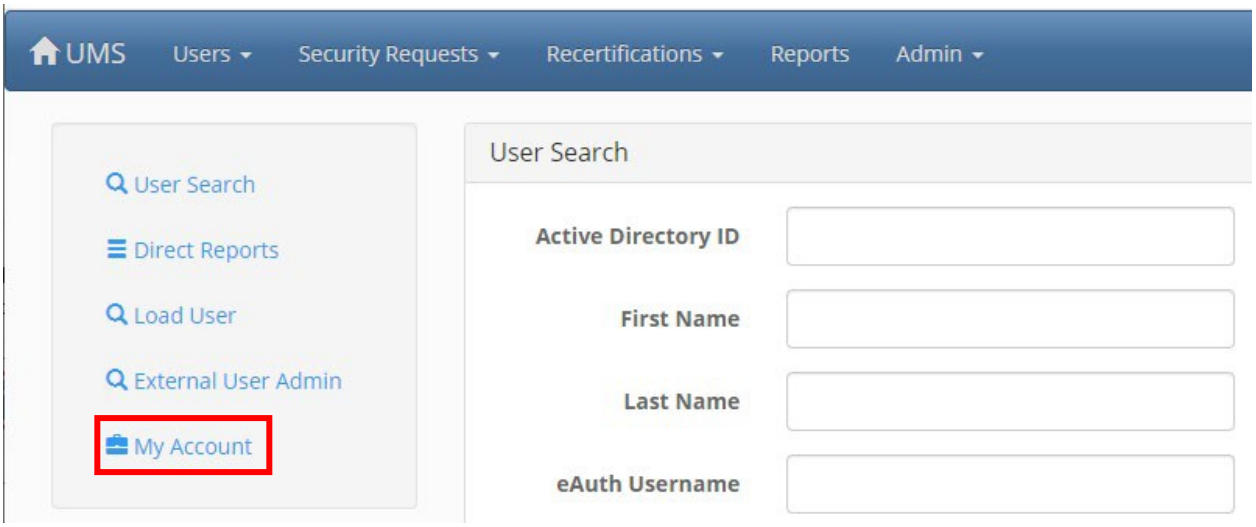
15. After making all appropriate role selections, click the green “Submit” button at the bottom of the page.

Employee Self-request

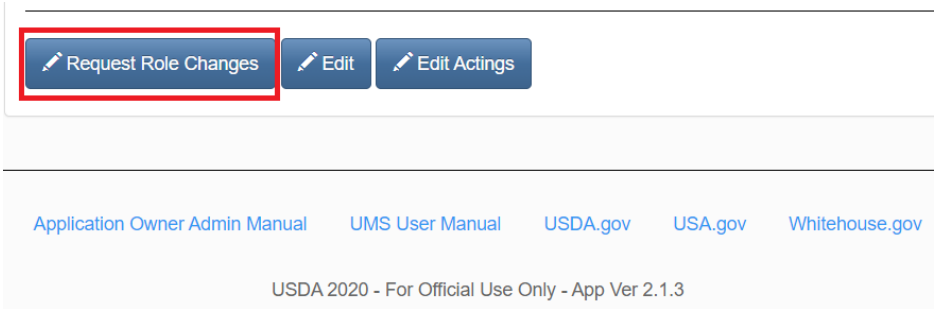
16. Once you log in successfully, you should arrive at the UMS home screen (see screenshot below)



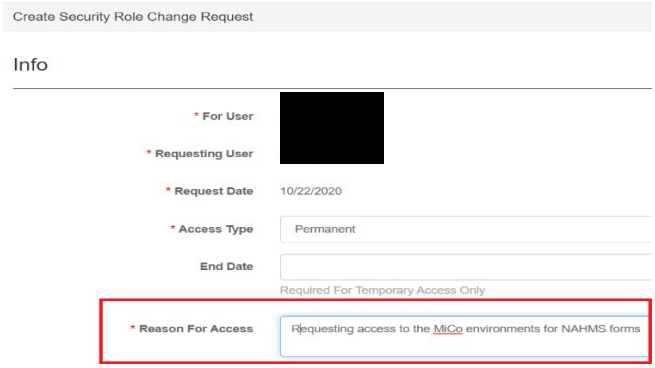
17. Click “Users” in the navigation ribbon at the top of the page then “User Search” in the drop-down menu.
18. You’ll be redirected to the user search page. Click “My Account” in the left-hand navigation menu (see screenshot below).



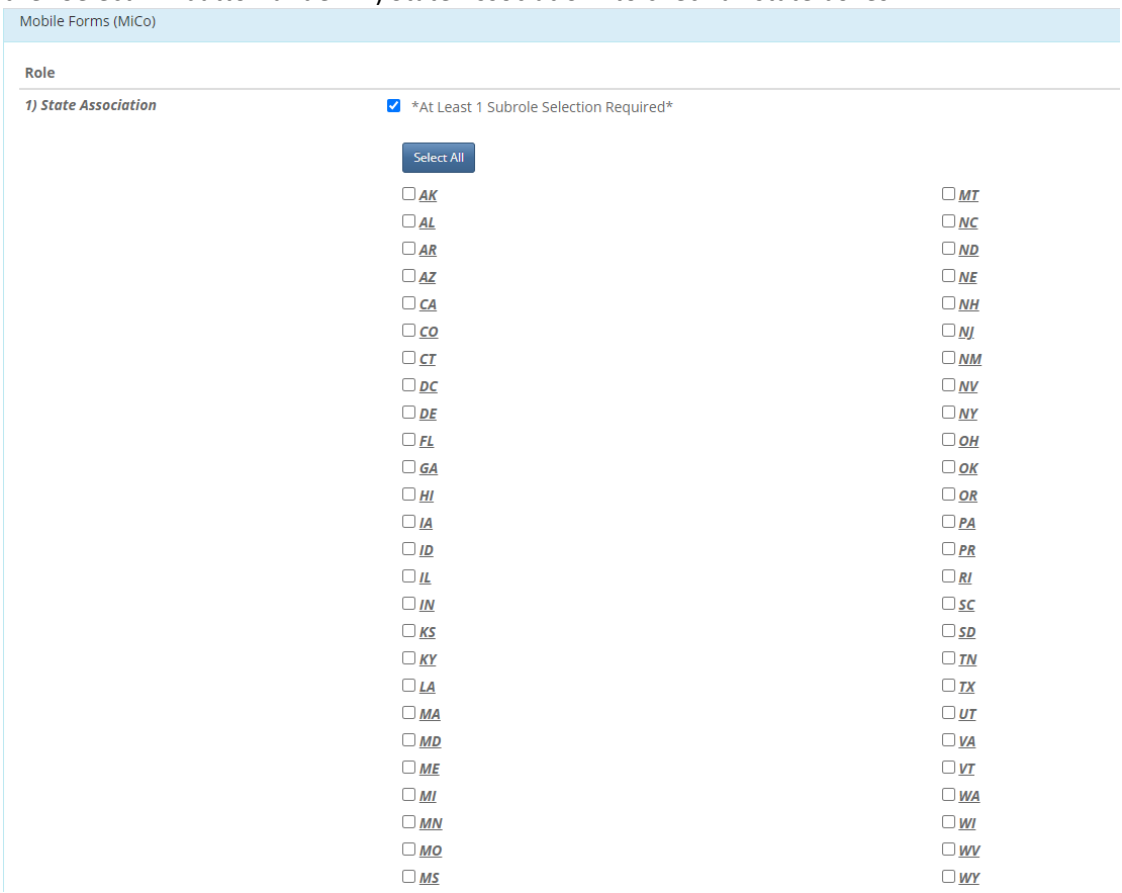
19. You will be redirected to your account profile. Scroll to the bottom of the page and click the blue“Request Role Changes” button.



20. After clicking “Request Role Changes”, a new screen will appear. Look for the “Info” section and type a response in “Reason For Access”.
    - Example: “Requesting Mi-Co access to NAHMS forms for reviewing and submitting forms.”



21. Next, locate the “Security Role Change” section and select “Mobile Forms (Mi-Co)” under the“Veterinary Services” header from the “Application” dropdown.
22. Click “+Add” after selecting Mi-Co in the dropdown.
23. After clicking “+Add” you should see a spot to specify roles – this is required.
24. Select the state or states in which you work (or state[s] to which you need data access) by clicking the checkbox next to “1) State Association”. If you need national access, click the “SelectAll” button under “1) State Association” to check all state boxes.



25. Check the box next to “3) NAHMS” and select a role(s) thatmatches your role in the NAHMS study – please reach out to NAHMS staff if you are unsure which role(s) to choose.

NOTE: If you are a NAHMS State Coordinator, select “2) Field Coordinator”. If you also plan to collect data, you may also select “1) Enumerator”. Otherwise, if you are not a NAHMS State Coordinator but will be collecting data, select “1) Enumerator”.

26. After making all appropriate role selections, click the green “Submit” button at the bottom ofthe page.
27. The request will be routed to your supervisor for approval, so make sure they know to expect anaccess request email.
    - Since you’re requesting access to NAHMS forms, the access request is then routed to a NAHMS team member for review/approval. They will not approve if your CIPSEA training is not on file.

Getting Started in Mi-Co

Accessing Mi-Co via a Web Browser

1. Mi-Co does not work in Internet Explorer. Please use Google Chrome, Microsoft Edge, or Firefox.
2. See the table of links below. Given your purpose for logging into Mi-Co, select the appropriate link.
    a. NOTE: Bookmarking each link with a description of when they're used is advised
1. Sign in using your PIV card or eAuth credentials.
2. Once you've successfully signed in, you should see a list of forms:

Links

Form Group	Access Type	Link
NAHMS	Production	https://ahs.aphis.usda.gov/miapps/?customer=nahms

First time setup of the Mi-Co Mobile App

Below are the steps to configure the MiApps mobile app on a mobile device (iPhone, iPad, etc.).

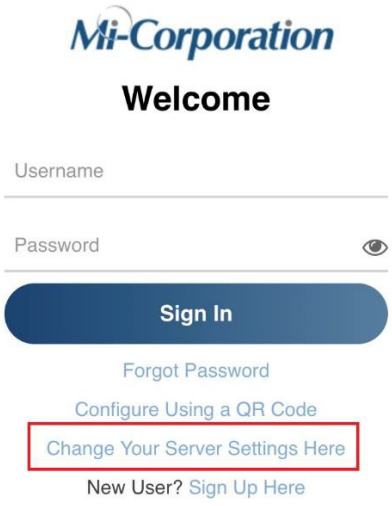
NOTE: This is a one-time setup / configuration and will not have to be done each time.

When you receive your iPads, before trying to access the Mi-Co app (called Mi-Apps), first connect the tablet to WiFi using the Settings app.

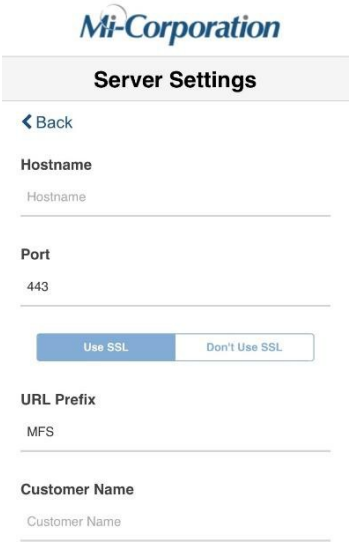
1. When you receive your iPads, before trying to access the Mi-Co app (called Mi-Apps), first connect the tablet to WiFi using the Settings app.
2. Open the mobile app. The icon should look like the following:

3. When the app opens, you should be presented with the main login screen. Do not sign in yet as the server settings need to be updated (see Step 4).

4. On the main login screen, **click on "Change Your Server Settings Here"**



5. You should come to the following screen:



6. There are **two fields to update or verify** on this screen:
    a. **Hostname** = ahs.aphis.usda.gov
    b. **Customer Name** = nahms (NOTE: This is lowercase)

7. Once the fields are updated, **click on the Back button**
8. Your logon screen should be updated to say "**Login with eAuth**".

Login with eAuth

Your LincPass will not work with the tablets. You need an eAuth username and password since there is no LincPass (PIV card) slot in the tablet. Your eAuth password is different from the PIN you use with your LincPass, and it is also different from the password we need to change on our laptops every two months or so.

To change your eAuth password, go to: https://www.eauth.usda.gov/home/. Use your laptop to access this site.

Then select "Manage Account"

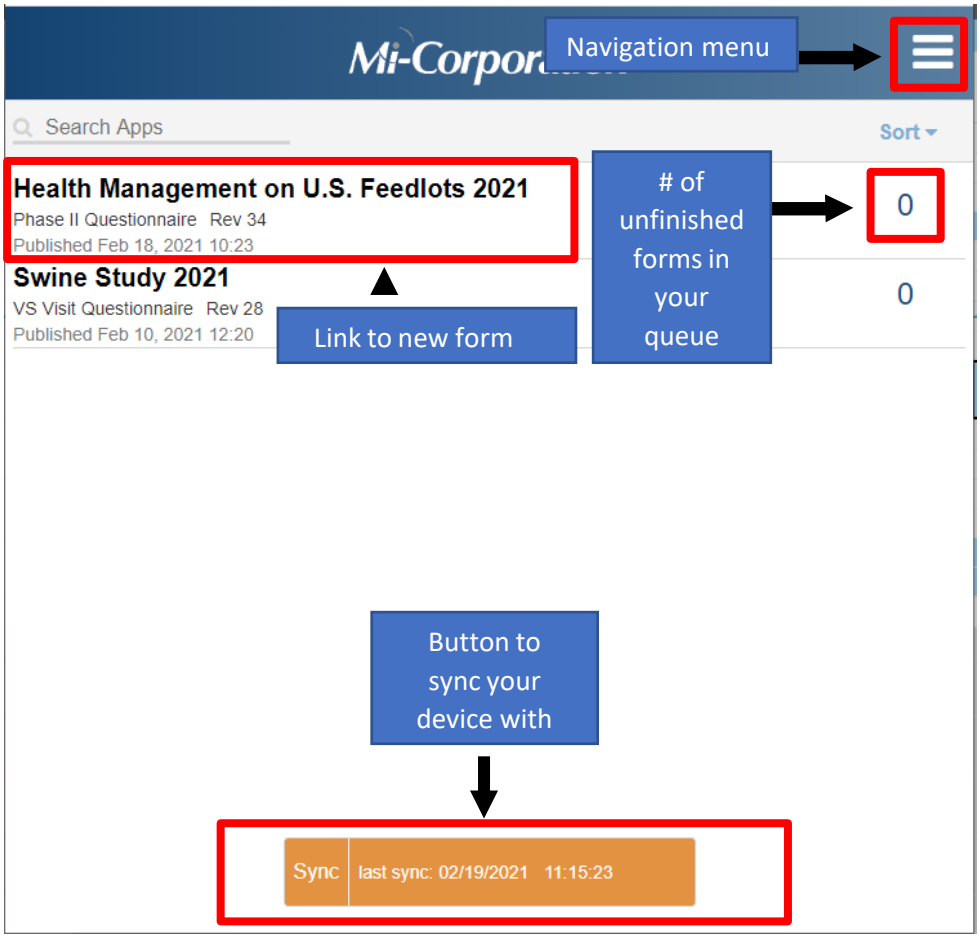
There will be options for "Change password," "Forgot password," and "Forgot User ID".

I chose change password because I did not remember setting one up. Once you set up a password, you should be able to login to Mi-Co. If you do not know your user ID, you will need to choose forgot user ID at the website above.

Navigating Mi-Co

General Navigation

Notable items are outlined in red below.



1. Navigation menu (see screenshot below)

a. Click to open, and you will see a menu with the following options:
    i. Apps List
        1. Forms home screen
    ii. Sync History
        1. This page tracks every sync instance. No need to worry about this page.
    iii. Batch Upload
        1. If you have multiple saved forms that need to be submitted, you can submitall from this screen. It is not necessary to submit from this screen, and you can ignore it.
    iv. Settings
        1. Here you will find links to the server settings & advanced settings.
            a. **Server Settings:** The server settings location is good to know if you will be switching between general surveillance and NAHMS forms.
            b. **Advanced Settings:** Ignore unless specifically told to access this page by a CFI team member. This is where you can do a hard reset of your Mi-Co account.
    v. Data Resources
        1. You can ignore this page unless told to sync data resources by a CFI team member. It outlines the data resources used in each form with buttons to sync all or individual forms.
    vi. Outbox
        1. If you're in the field without internet, submitted forms will land here until you have signal.
    vii. Help
        1. This page provides more descriptions of app elements.
    viii. Logout

2. Forms/apps list
    a. The number on the right-hand side of the form/app row indicates how many forms are in your "queue". If it's greater than 0, you will see a down arrow right next to the number for expanding/collapsing your list of saved forms.
    b. Click on the title of a form to open a new session for data entry.
3. **"Sync" Button**
    a. **Your device will automatically sync with the server after logging in.**
    b. **You need to wait until the orange bar stops scrolling across the top of the screen to progress into the survey.**
    c. **If you have been using the device offline, forms will not be sent to the server until you sync when back online. Clicking this button forces that sync.**
    d. **In practice, it was helpful to sync liberally to ensure that you can see all forms that are in your queue.**

General In-form Navigation

Notable items are outlined in red.

1. Form validation rules

- Indicates all required data has been entered
- Indicates required data is missing for the submission

2. Menu (see screenshot below)

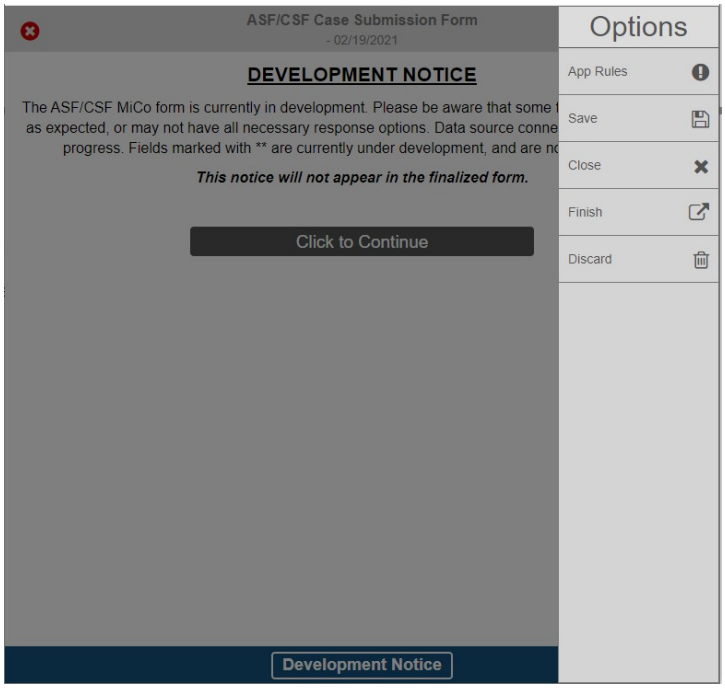
a. App Rules – alternate method for viewing form validation rules.

b. Save – Saves the form but does not close or submit the form. After clicking save, wait 5-10 seconds before closing the form.

c. Close – Closes the form but does not submit.

d. Finish – Saves and submits the form.

e. Discard – Trashes the form. If this is clicked, the form will be removed from your device.

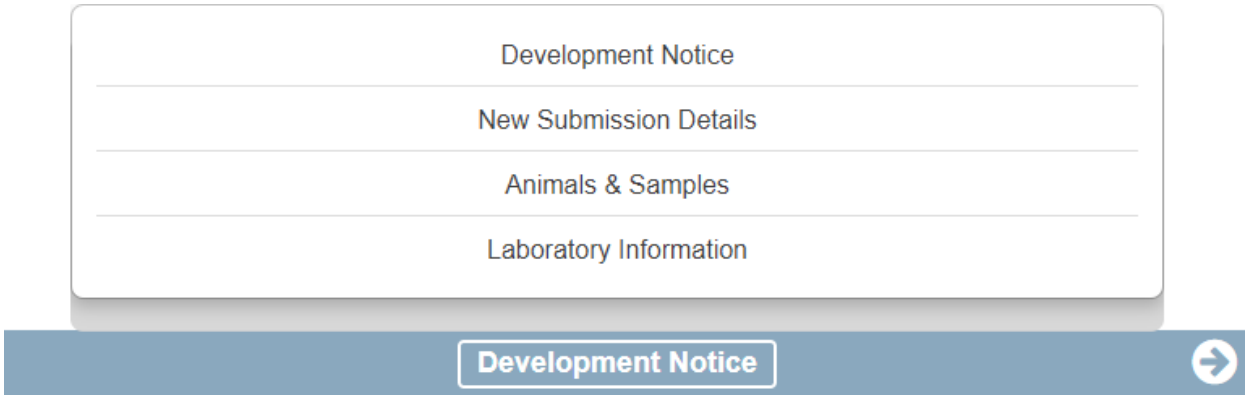


3. Navigation bar

a. This bar allows you to move between pages in the form.

i. Arrow buttons – navigates you forward or back depending on which arrow is clicked.

ii. Section list (see screenshot below) – Click the section name in the blue bar, and you will see a list of available pages. Click a page in the pop up to navigate there.



SECTION 4. SPECIFIC INSTRUCTIONS FOR MI-CO PHASE 2 QUESTIONNAIRE

GOALS

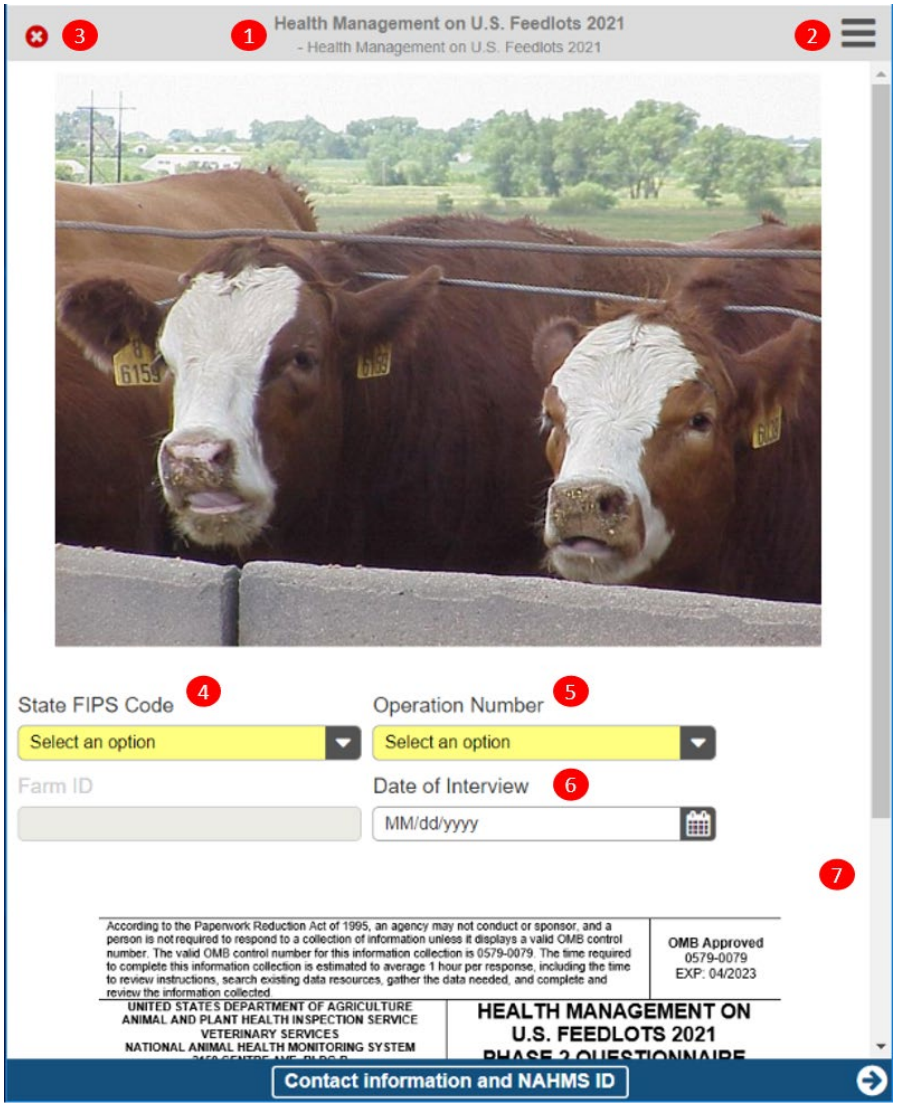
This manual consists of screen shots of selected pages of the Mi-Co version of the Phase II questionnaire for the NAHMS Feedlot study – "Health Management on U.S. Feedlots 2021". The selected pages illustrate various aspects of the electronic survey.

The Mi-Co User guide is a separate document which covers

1) how to request access to Mi-Co.
2) how to set up Mi-Apps, i.e. user sign-in and server settings
3) General navigation of Mi-Co and accessing the Feedlot questionnaire

Contents of this section

CONTACT INFORMATION AND NAHMS ID



This is the initial page that loads when you open the "Health Management on U.S. Feedlots 2021" survey using the Mi-Apps.

1. The survey title and subtitle will appear on every page.

2. The hamburger menu. It is covered in detail in the Mi-Co User Guide.

3. The validation status icon is a red circle with an "x" when there are error messages. It is a green dot when there are none.

4. Enter the State FIPS code for this farm using the dropdown menu.

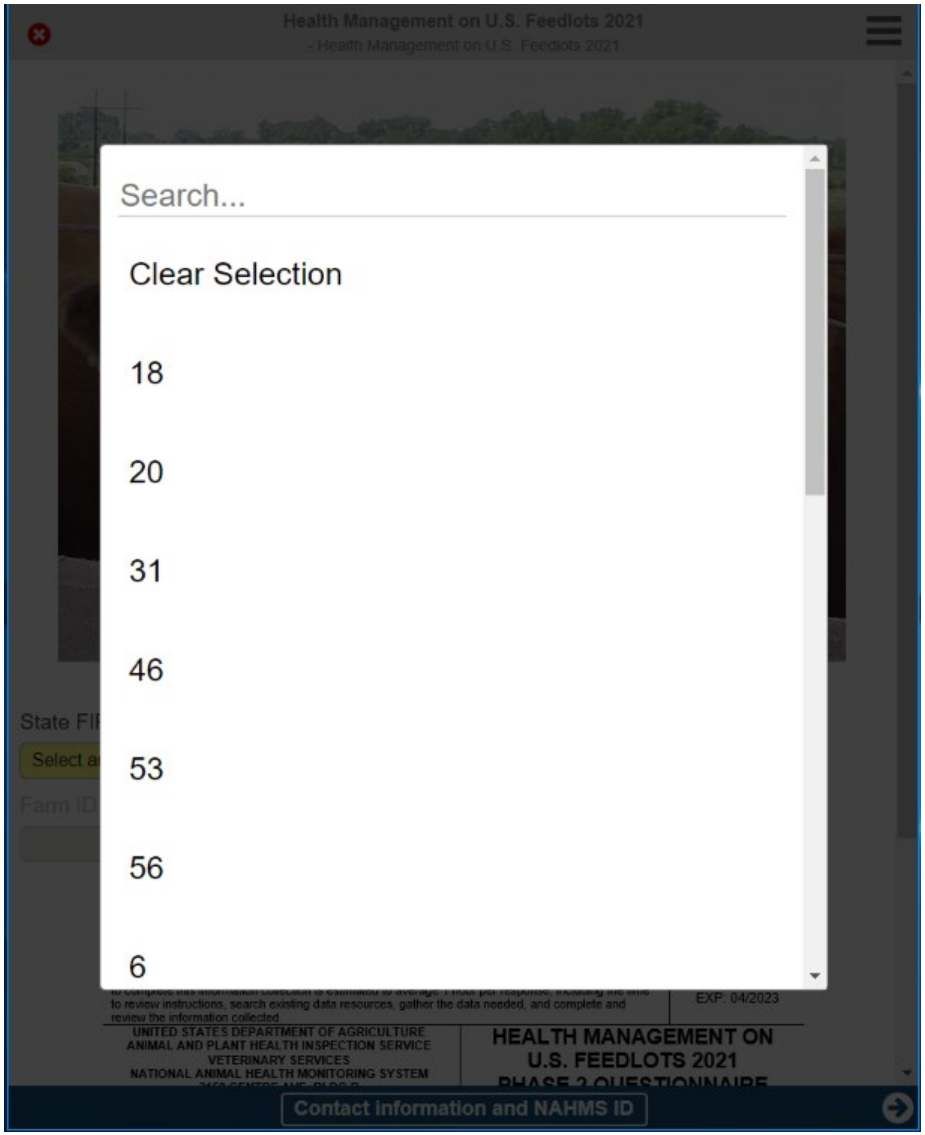
5. Enter the Operation number for this farm using the dropdown menu.

   These two fields are concatenated together to create the NAHMS Farm ID.

6. Enter the date of the interview using the data picker.

7. Notice the scroll bar on the righthand side of the screen. Many pages are longer than the screen size. You will need to scroll down to see the remainder of the page. For example, in this case, the paperwork reduction act statement is only partially visible.

DROPDOWN MENU FOR “STATE FIPS CODE” FIELD

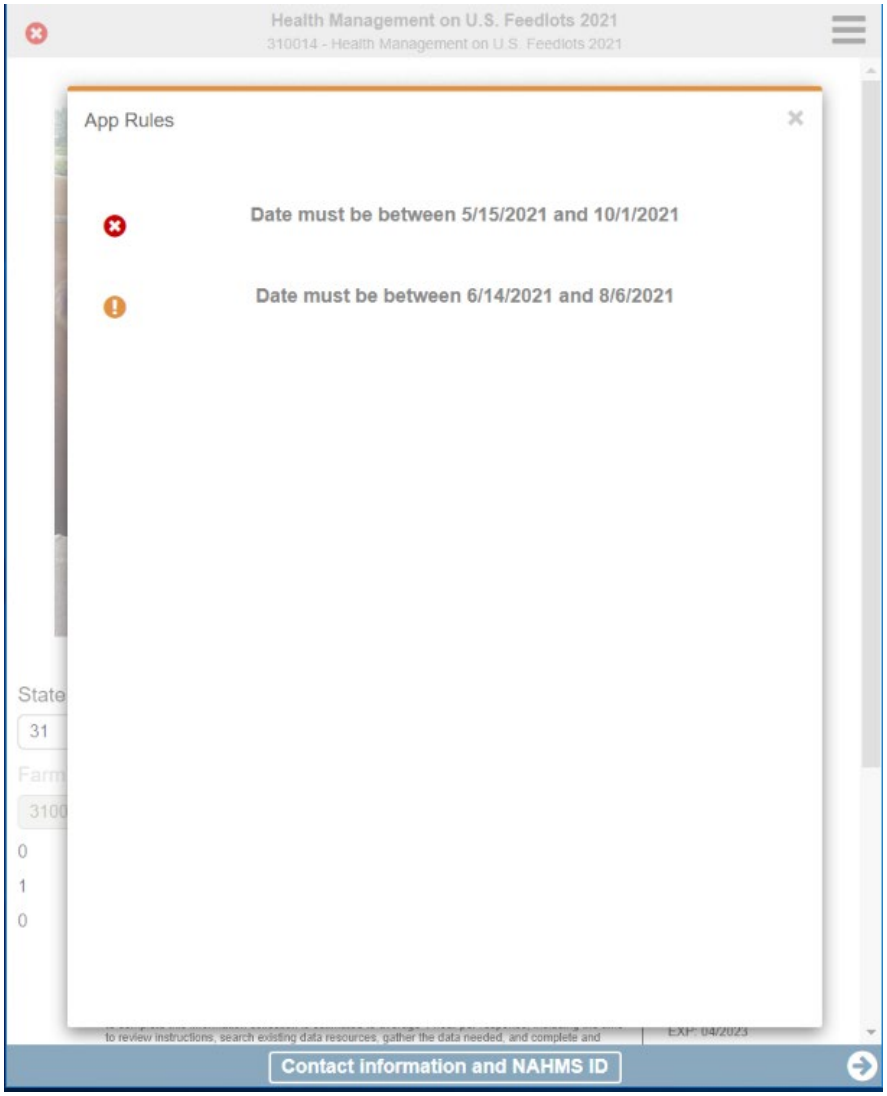


This is the dropdown menu for the “State FIPS Code” field.

Find the two-digit FIPS code for the operation. This will be the first two digits of the NASS “NAHMS ID”.

You can either scroll down to the correct FIPS code or search for the code.

VALIDATION MESSAGES

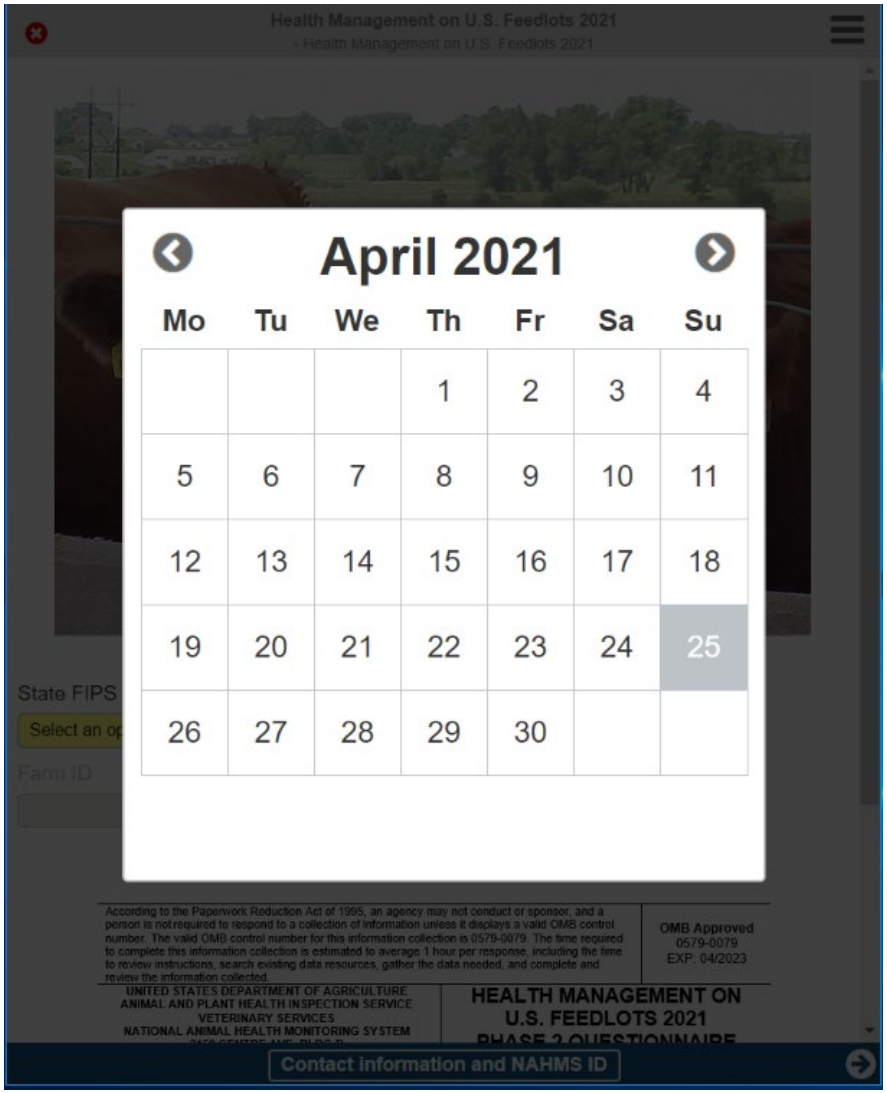


When the survey is first loaded, the validation icon will indicate there are errors with the survey.

Hard validation errors are indicated with a red circle with an "x" in the middle. The survey cannot be submitted until these "red circle" errors are addressed.

Soft validation errors are indicated with a yellow circle with a "!" in the middle. These warning messages should be noted and addressed appropriately.

DATE PICKER FOR “DATE OF INTERVIEW” FIELD

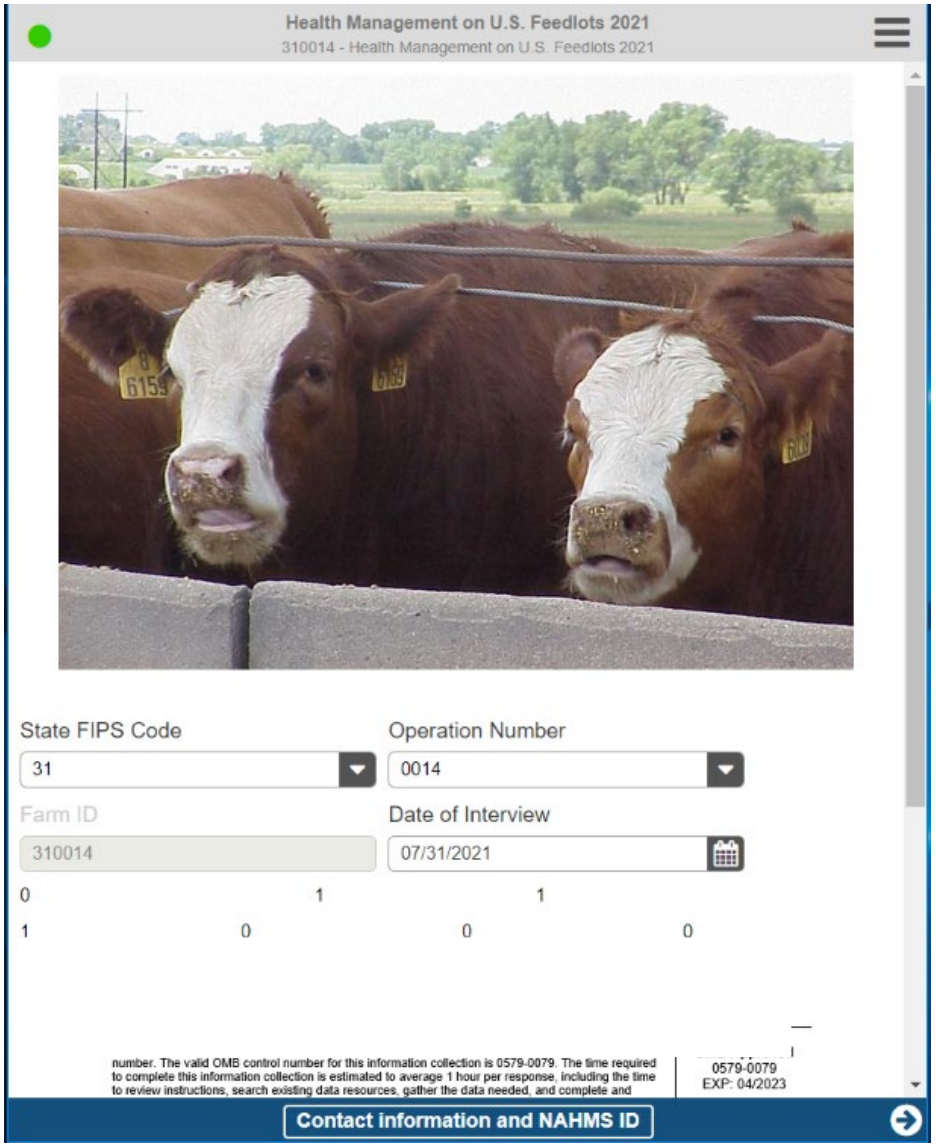


This is the date-picker for the “Date of Interview” field.

The default will be the previous date selected. Select the previous or next buttons until you are at the correct month. Then select the current date for beginning the interview.

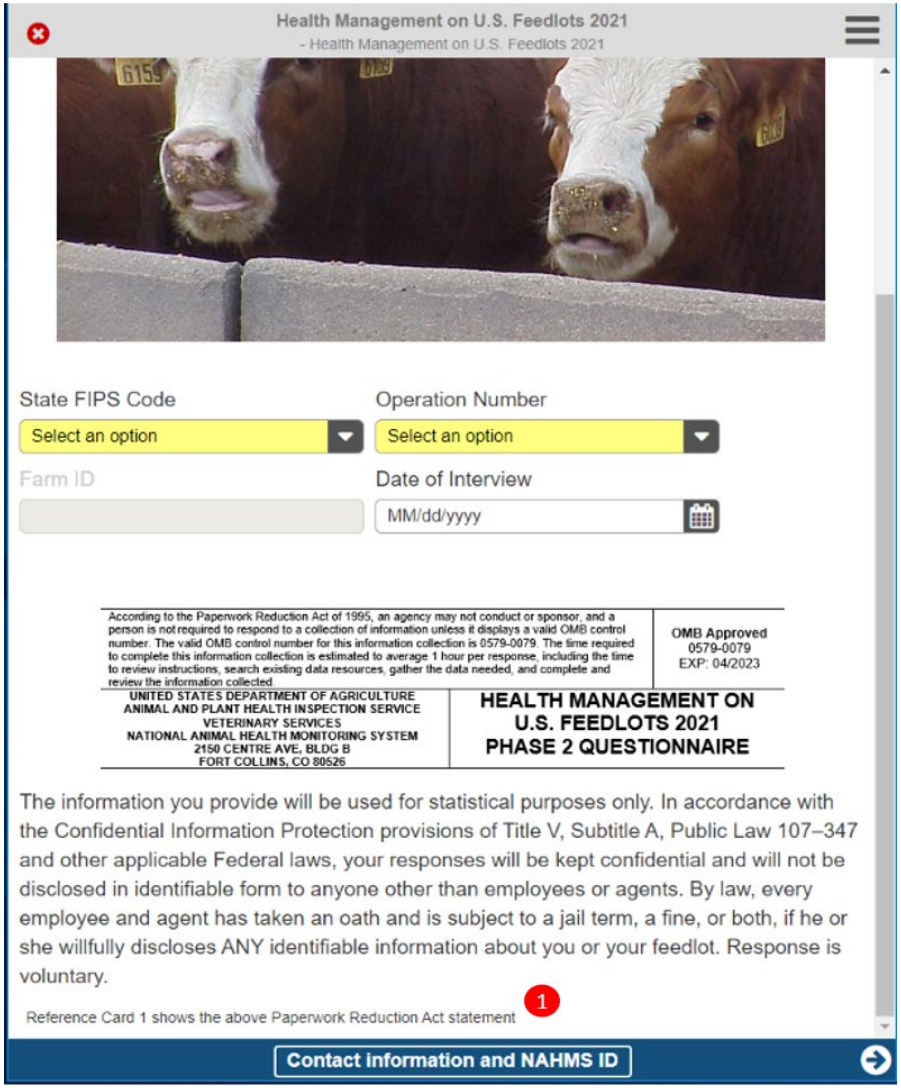
Valid dates for beginning Feedlot interviews are between June 14 – August 6, 2021.

VALIDATION GREEN LIGHT



When all fields in the survey contain valid data, the validation status icon (upper right corner of the page) will be a green circle.

SCROLL BAR AND INTERVIEW INSTRUCTIONS



It's very important to note that many of the pages in this questionnaire are longer than the screen. In these instances, the scroll bar will appear on the right side and can be used to scroll down the page.

1 Instructions appear in a smaller font. Several times in the survey you will be instructed to show the respondent a reference card.

REFERENCE CARD 1

NAHMS ID: _____

REFERENCE CARD 1: Paperwork Reduction Act

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 1 hour per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.

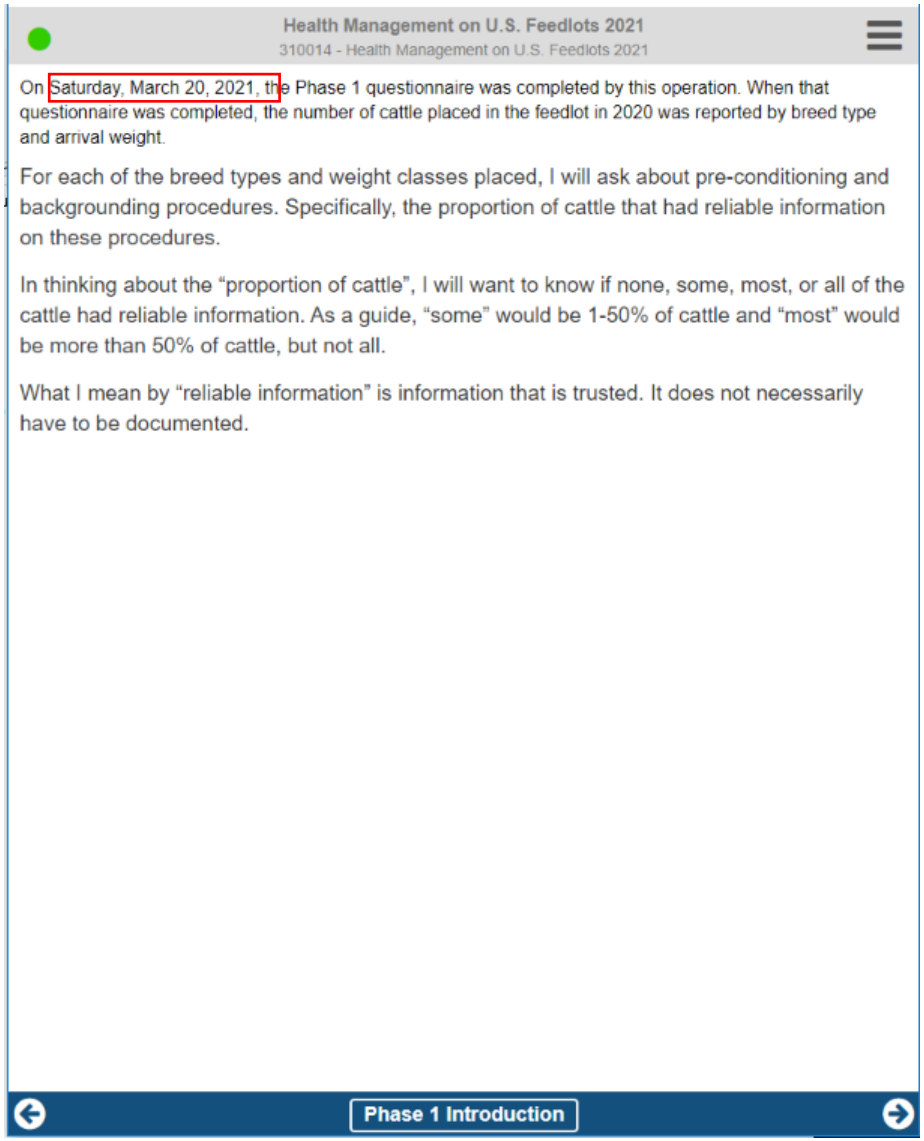
OMB Approved
0579-0079
EXP: 04/2023

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

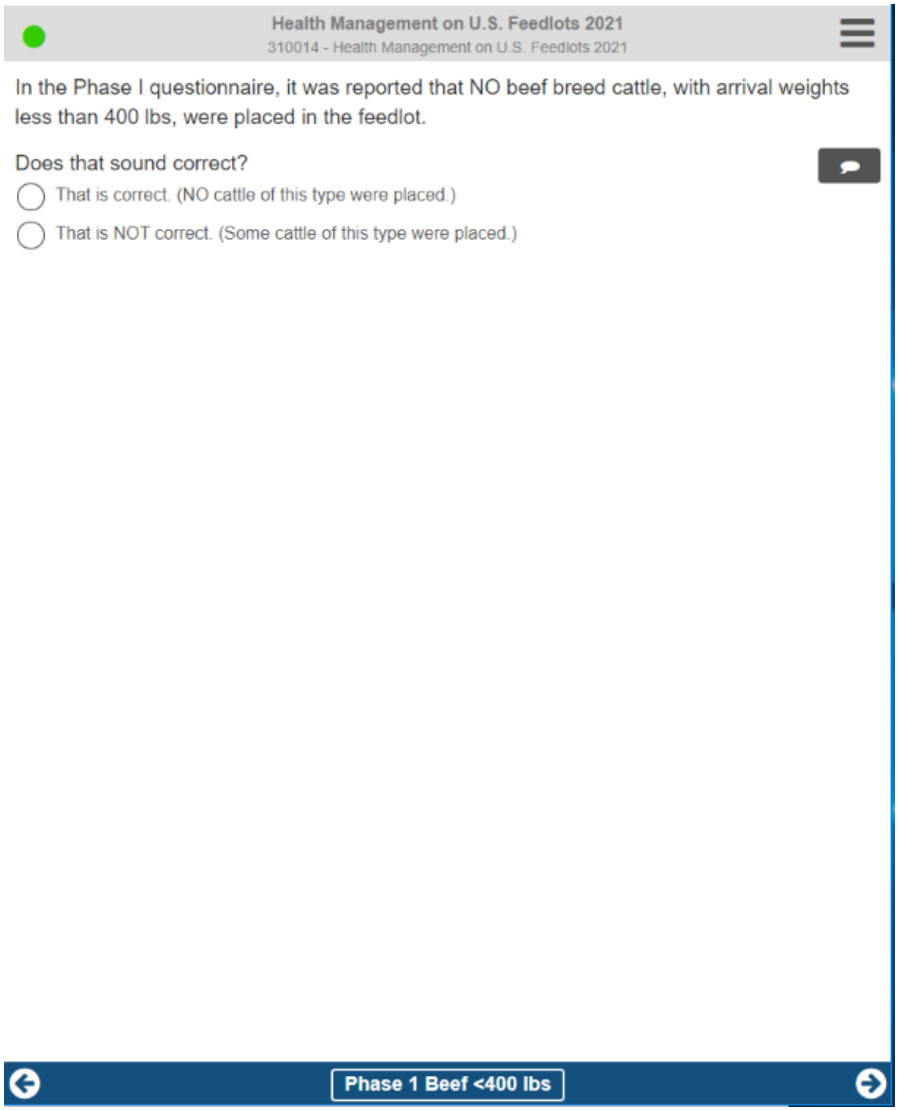
REFERENCE CARD 1 shows the paperwork reduction act. This can be read or shown to the respondent.

PIPED TEXT



Text used in the survey can be "piped" in from data sources or user input. There are a few instances in the survey where this occurs. On this page, the "Saturday, March 20, 2021" is piped in from a data source that contains Phase 1 responses.

SURVEY ROUTING - QUESTIONS

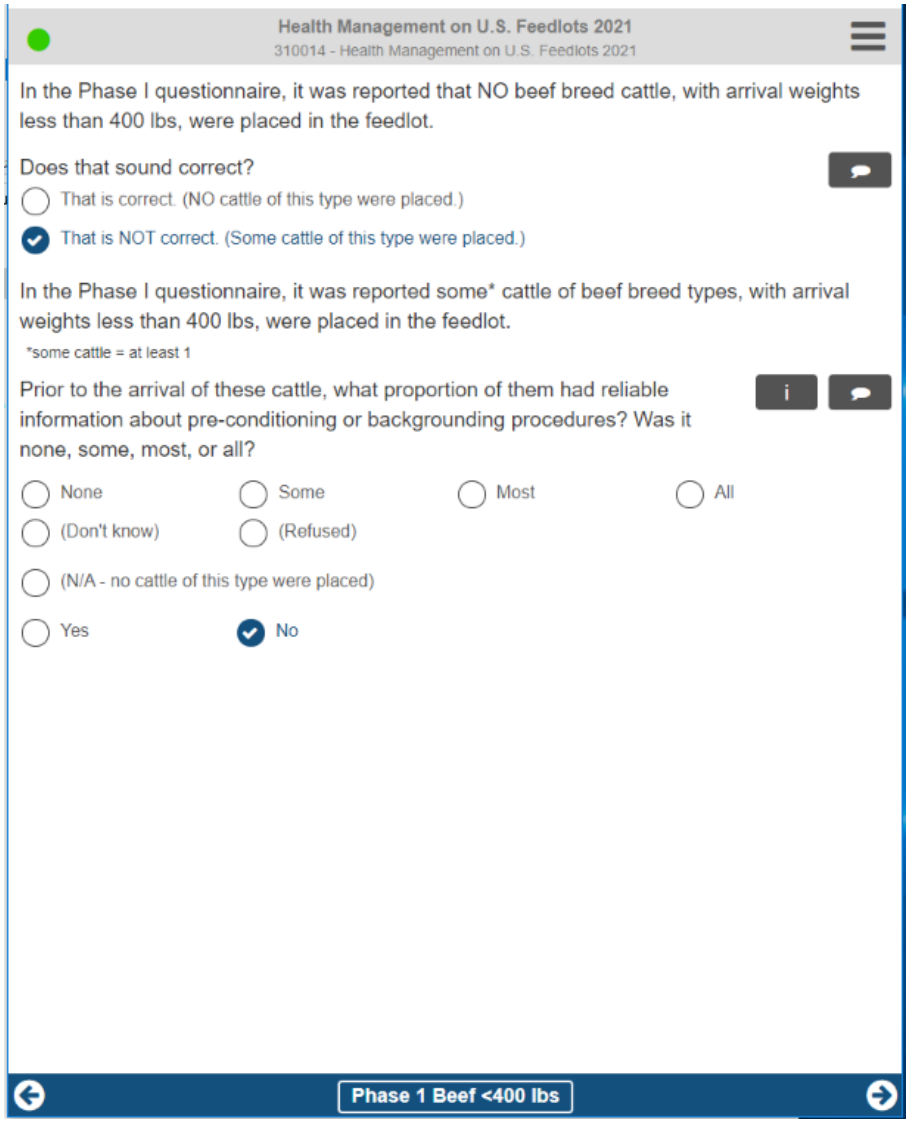


The paper version of the questionnaire contains directions for skip patterns to follow. In the Mi-Co version, question routing occurs automatically. This can be based on a data source, e.g. Phase I responses or from user input, e.g. choosing a response option to a filter question.

In the case shown, the questions regarding placement of cattle in three weight classes for beef and dairy breeds (six questions in total) are routed based on responses to the NASS Phase I questionnaire.

This is the version of the question shown when no cattle of the specific weight class and breed type were reported on the Phase I questionnaire. In the vast majority of cases, the respondent should be in agreement with this statement.

TOOL TIPS AND COMMENT BOXES

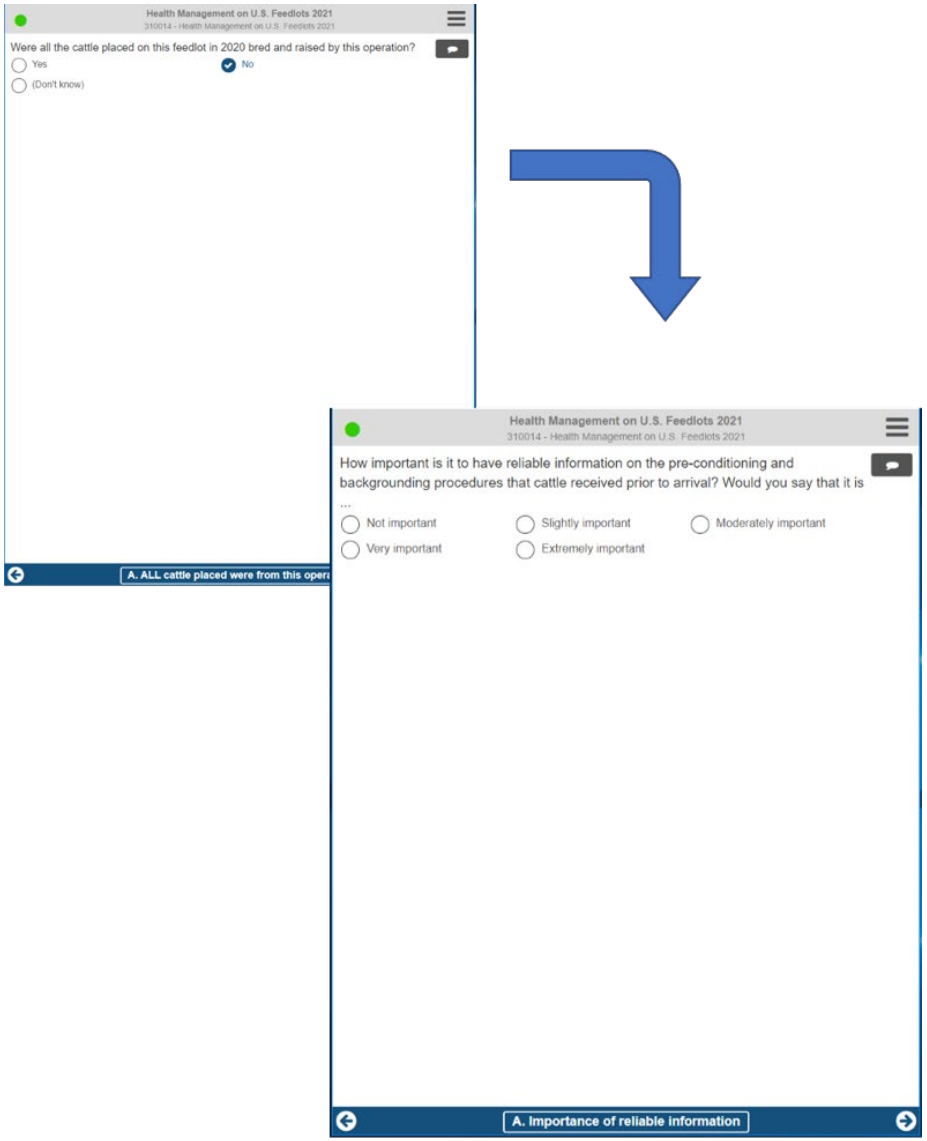


Survey routing continued – this screen illustrates how the routing works. When "NOT correct" is selected by the user then additional questions appear. Sometimes these new questions are on the same screen / page and other times they are on a separate screen / page.

Many of the fields will have an "information" icon to the right of them. Select these icons, and "tool tips" will define technical terms or provide further clarification of what is being asked.

Nearly every question will have a "comment" box to the right of them. These can be used to jot down notes about anything. For example, answers that don't quite fit the available response options, explanations, further background to the response, reasons for refusing to answer the question, etc.

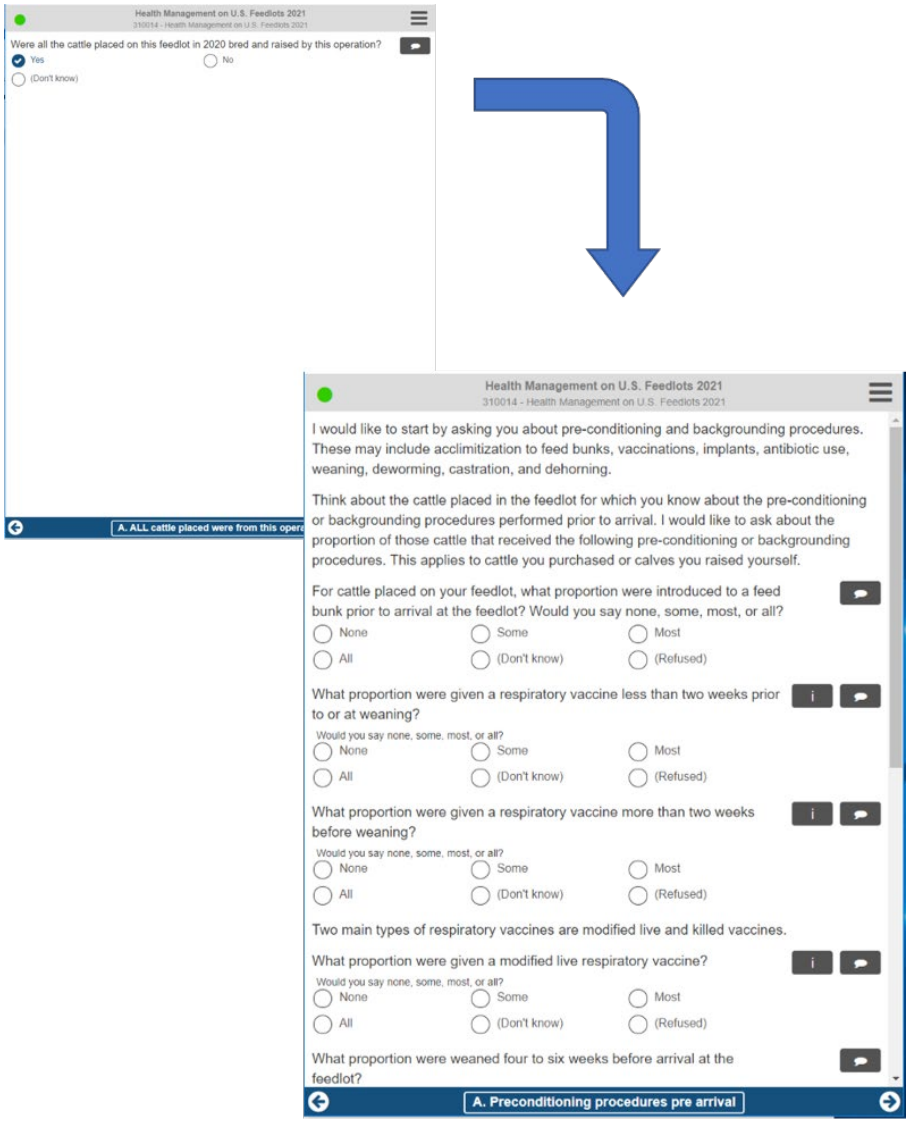
SURVEY ROUTING - SECTIONS



The question on the page labeled "A. ALL cattle placed were from this operation" illustrates automatic routing patterns based on user input.

When the "No" response option is chosen and the "Next" button is selected, the next page shown is "A. Importance of reliable information".

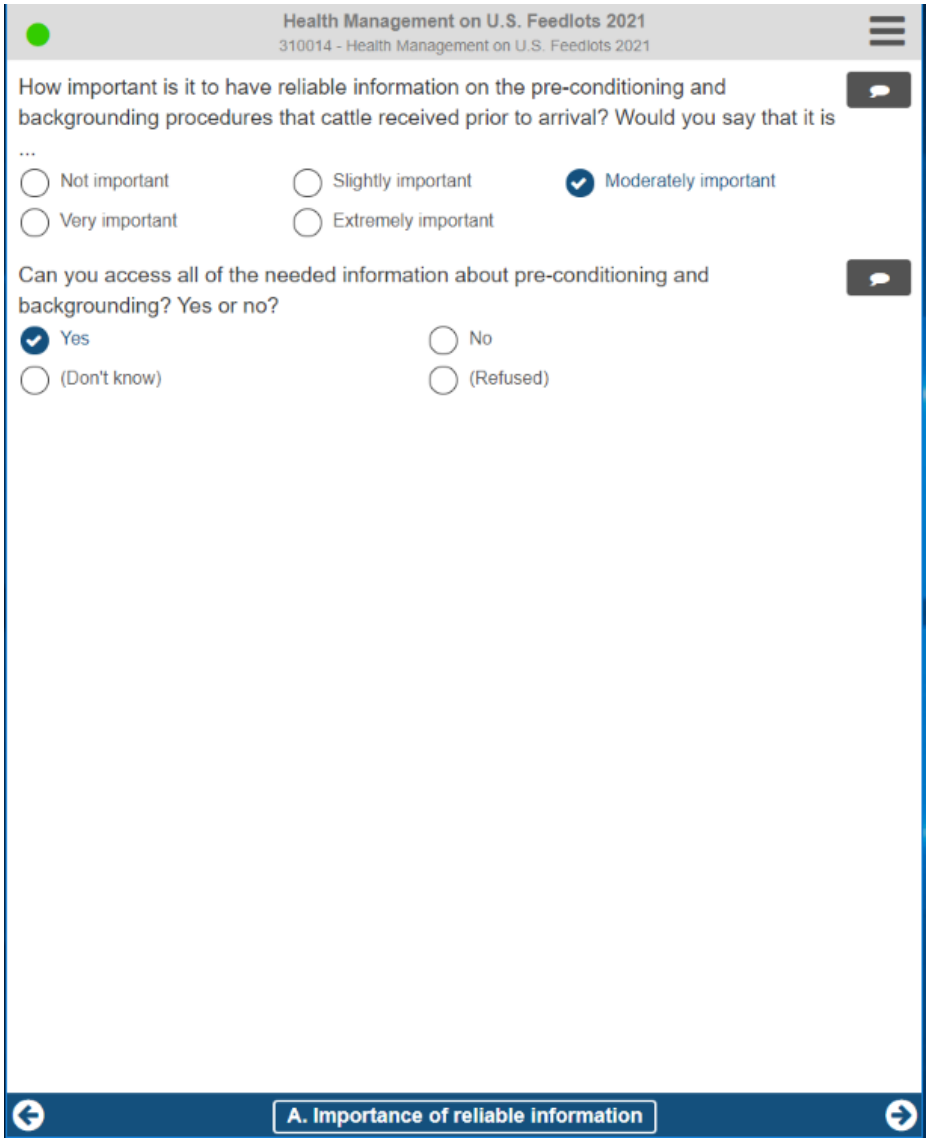
SURVEY ROUTING - SECTIONS



When the “Yes” response option is chosen and the “Next” button is selected, the next page shown is “A. Preconditioning procedures pre-arrival”.

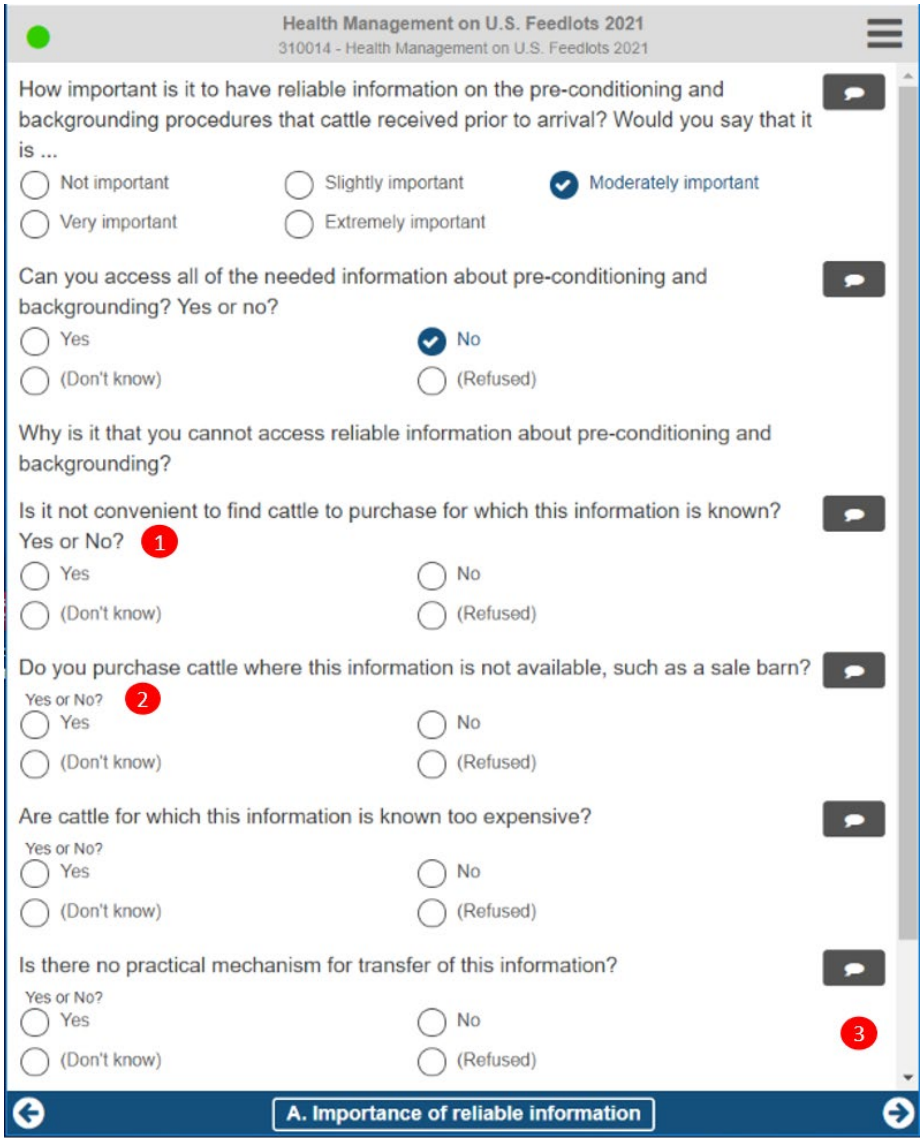
Using the back button will take you to the previous screen. If a different response option is chosen then the appropriate screen will display when advancing to the next page.

RESPONSE OPTIONS



This survey is delivered verbally, not visually as with the paper version. Therefore, it is important to read the response options to the respondent. Most of the questions have been worded to facilitate this.

RESPONSE OPTIONS CONTINUED

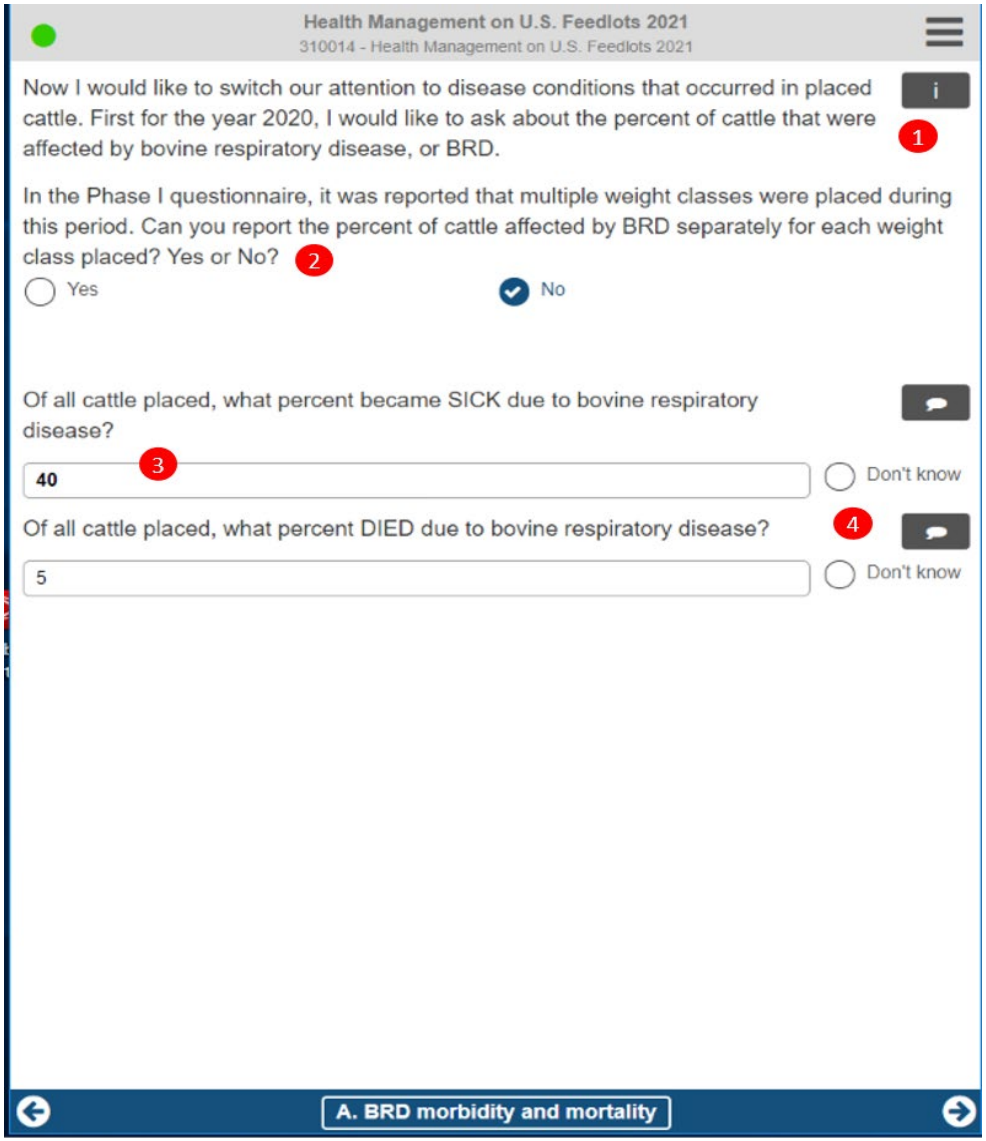


1. When there is a series of questions with the same response options, the first question will have the response options as part of the question text.

2. Subsequent questions in the series will have the response options presented as "instructions," so they are available for prompting if the respondent is unsure of the response options for the question asked.

3. Another example of a page that is longer than the screen. Moving the scroll bar allows you to see the remainder of the page.

ENTERING NUMERIC RESPONSES



1. Another implication of this survey being delivered verbally instead of visually is the liberal inclusion of question "preambles".

   Preambles are used to introduce a new topic, define a referenced period, announce the structure of the task being asked of them, define response dimensions, or list the available response options.

2. Another example of the response options being incorporated into the question text.

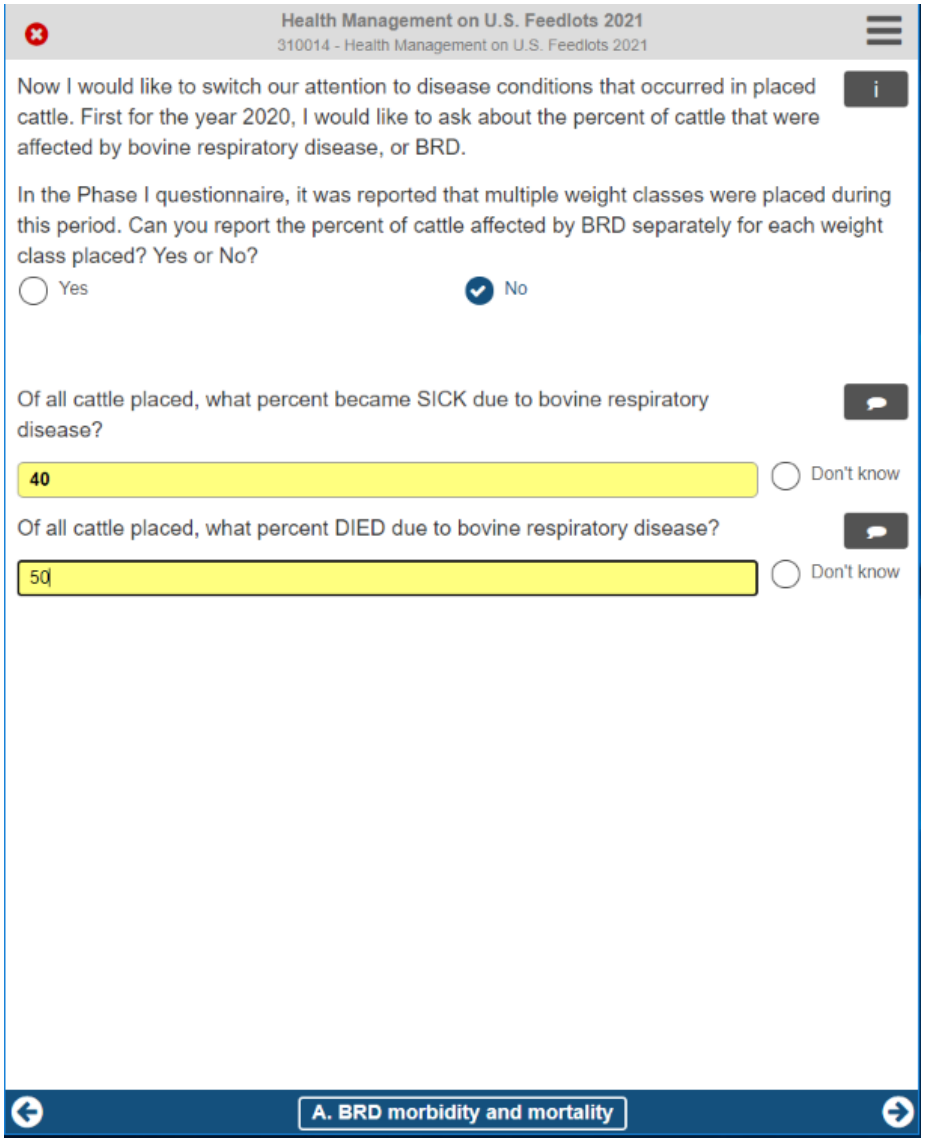
3. Not all questions have simple multiple choice options. Some questions ask for a numeric response, e.g. what percentage of animals. Enter the number in the data field.

   Only valid numbers can be entered. A range of numbers is not valid and will trigger an error message. Decimal points are acceptable.

4. If the respondent does not know the answer then select the "Don't know" response option.

   NOTE: Both response options (percent that dies and "don't know" cannot be selected. If numeric values have been entered into the response box and then the DK box is selected, this will result in the numeric box being cleared out.

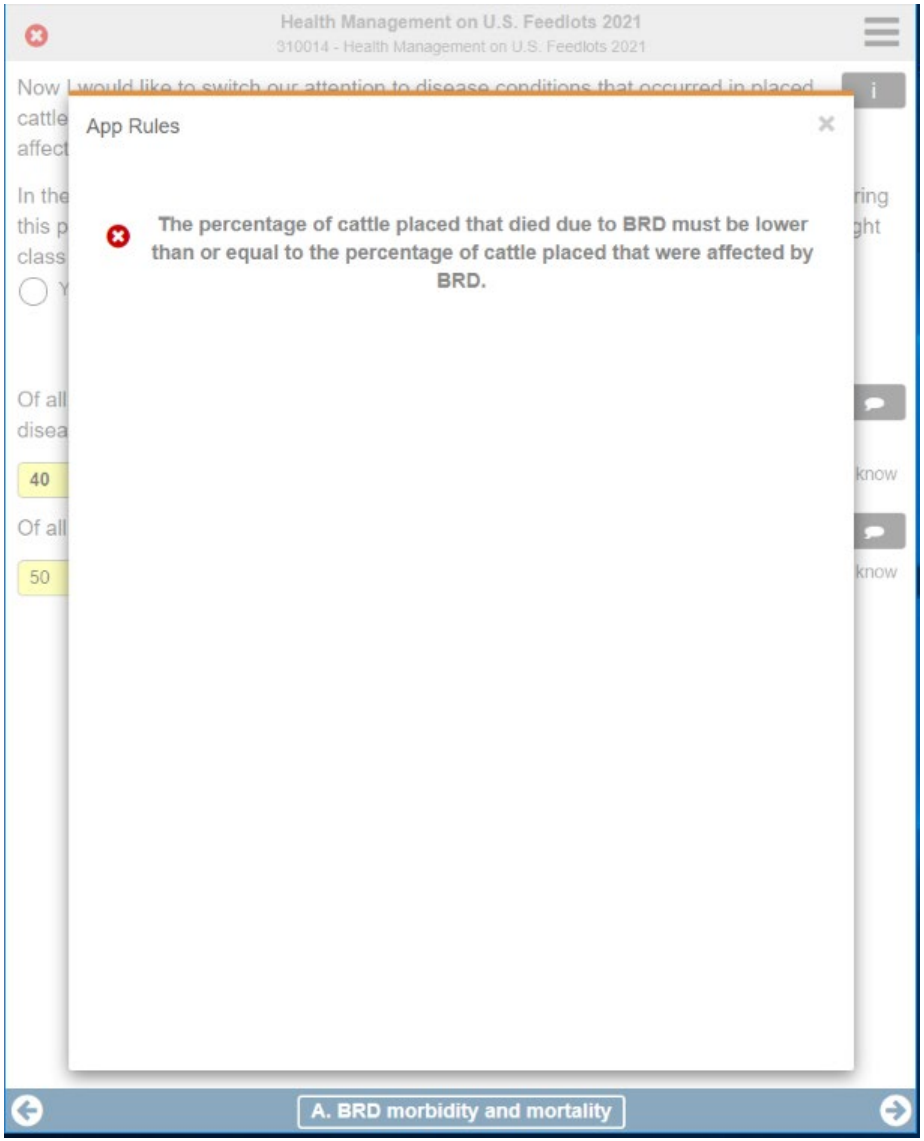
ENTERING NUMERIC RESPONSES, CONTINUED



When numeric data fields contain invalid responses, they will be highlighted yellow. This is in addition to the survey validation status icon turning red.

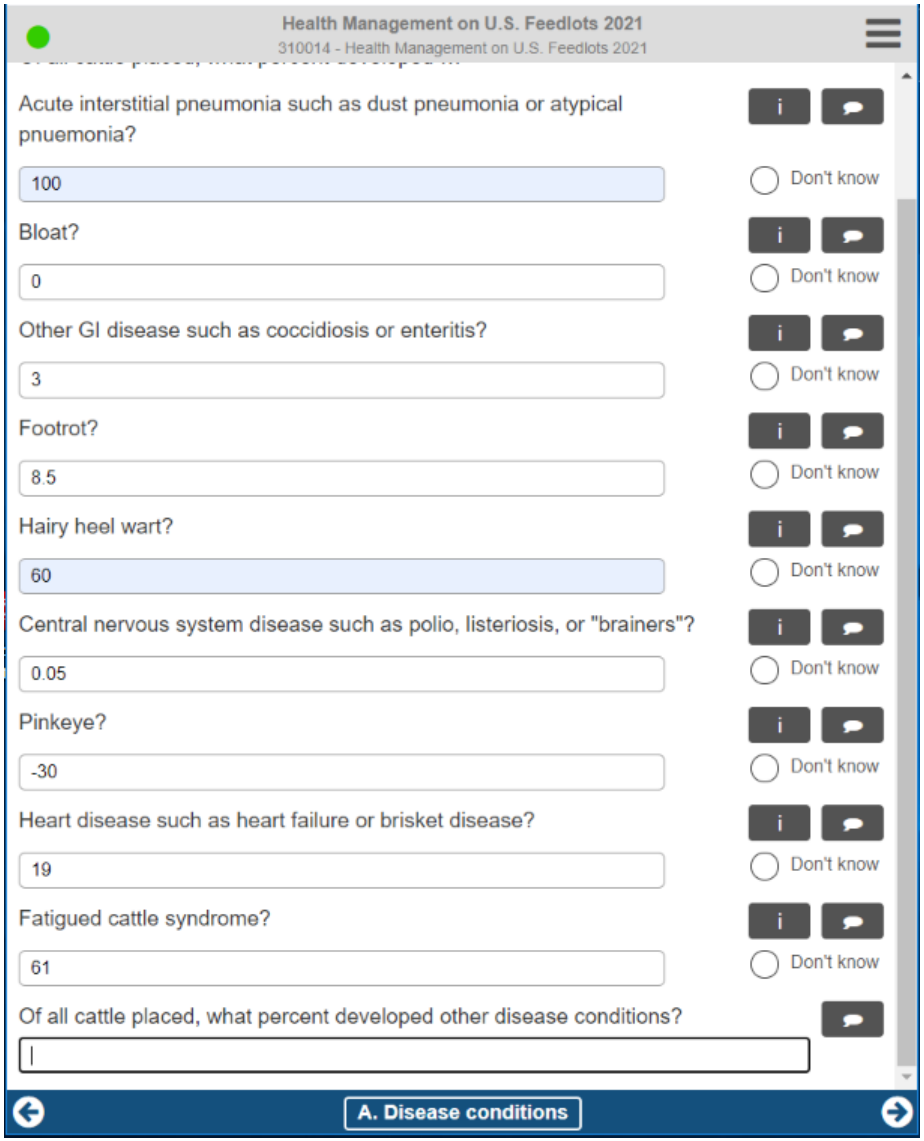
In this case, since the denominator for percent of cattle sick and percent of cattle died is the same (i.e. cattle placed), the percent that died cannot be greater than the percent sick. Cattle that died should be counted with the cattle that were sick.

SURVEY VALIDATION ERROR MESSAGE



If you select the survey validation status icon that is red, the error message box will display.

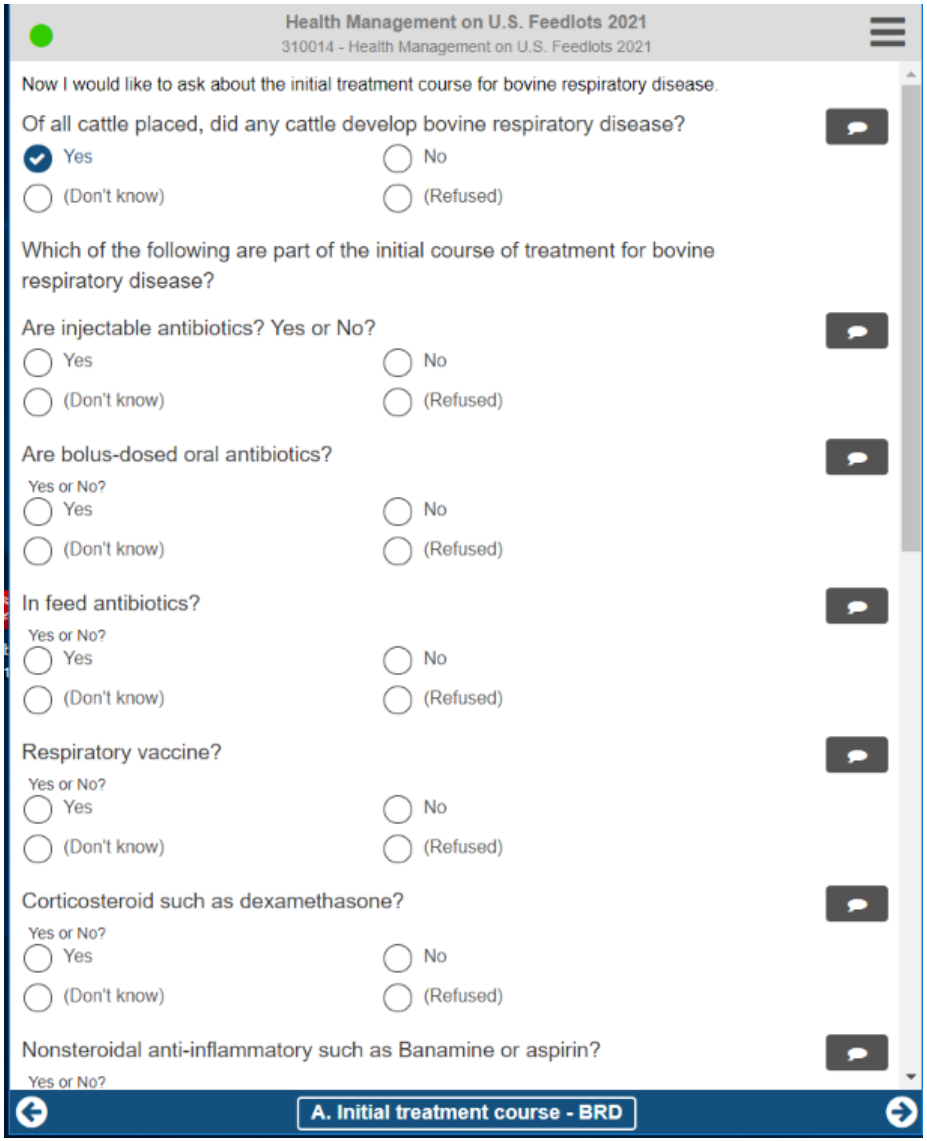
RANGE OF VALID NUMERIC RESPONSES



This screen illustrates various values that can be entered into numeric fields.

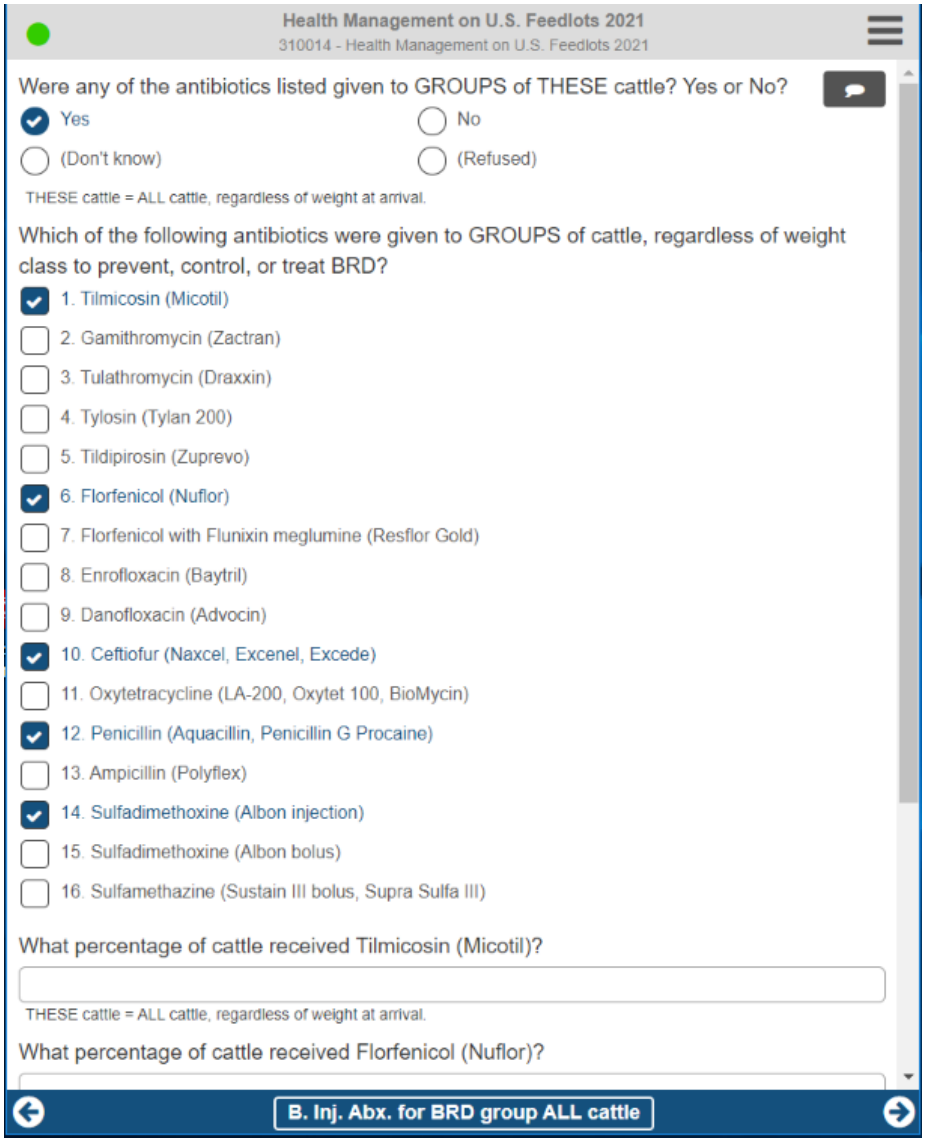
- Any 1, 2, or 3 digit integer
- 0
- Numbers with 1 or 2 decimal places
- Negative numbers (though you shouldn't do so)

PRE-FILLED FIELDS



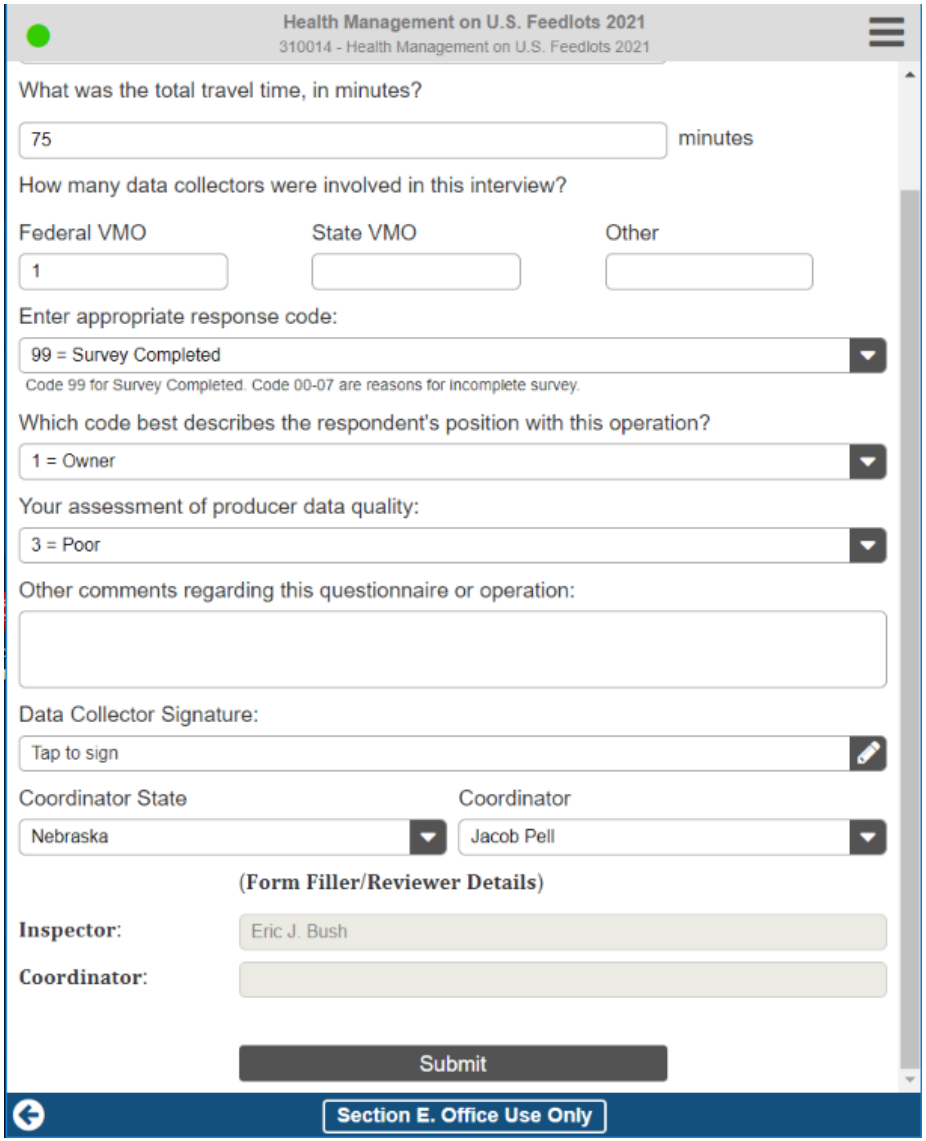
In previous screens there was a question about the percent of cattle that developed bovine respiratory disease. For those cattle, this series of questions asks whether various treatment regimens were employed. A similar series of questions is asked for digestive disorders, footrot, and pinkeye. The first question of the series is pre-filled based on earlier responses to the percent of cattle that developed the condition. These pre-filled responses cannot be changed on this screen.

ANTIBIOTIC SELECTION



Several of the antibiotic use questions ask you to show the respondent a particular reference card. The respondent should indicate which antibiotics they use. When they do so, you can select the antibiotics from the list on the screen. The respective follow-up questions will be displayed at the bottom of the page.

SECTION E – SUBMIT SURVEY



The last section of the survey is the "Office Use only" section for you to complete various administrative fields. The response code is a required field. Once the fields have been completed, select the "Submit" button at the bottom of the page.

Form routing steps:

1. The form will be routed to the Coordinator chosen on this page. That Coordinator will then review the submission.
    a. If they approve it, it will be forwarded to NAHMS Staff for final review.
    b. If they reject it, it will go back into the data collector's queue. The data collector will then have the opportunity to make changes on the form and re-submit to the Coordinator.
2. Once in the NAHMS Staff reviews, they will be able to do either of the following.
    a. If the form is approved, then it is considered "Finished" and the data are finalized and the submission will be logged in the Coordinator dashboard.
    b. If the form is rejected, it will go back to the data collector. The data collector will then have the chance to re-submit through the Coordinator.

SECTION 5. PHASE 2 QUESTIONNAIRE GUIDE

Because the Mi-Co form does not include question numbers, the fields below are denoted by their paper questionnaire question numbers. The guidance below will apply to the Mi-Co questionnaire, and the questions in Mi-Co will appear in roughly the same order and with similar wording to the paper questionnaire.

INITIAL INFORMATION

State FIPS
Enter the 2-digit FIPS code for the state: CA-06, CO-08, IA-19, ID-16, IL-17, IN-18, KS-20, MI-26, MN-27, MO-29, MT-30, ND-38, NE-31, OH-39, OK-40, PA-42, SD-46, TX-48, UT-49, WA-53, WI-55, WY-56

Operation Number
Enter the 4-digit ID number assigned by NASS.

> The 6-digit combination of the State FIPS Code and Operation numbers is referred to as the Farm ID. For example 06 1167 would be a Farm ID for the State of California.

Interviewer's Initials (paper version only)
Enter up to three initials

Date of interview (Date)
Enter the interview date in MM/DD/YY format

Time
Enter the start time of the interview in HH:MM format using military time.

GENERAL INSTRUCTIONS

During the administration of the Phase 2 Questionnaire, read all questions to the Producer and follow instructions carefully. Do not leave any questions blank unless instructed to skip.

> **Review the Confidentiality Pledge with the producer.** A summary of the pledge is included in the Survey Introduction section in Mi-Co. If the producer would like, read or show the full **Confidentiality Pledge** https://www.aphis.usda.gov/animal_health/nahms/feedlot/downloads/feedlotques/feedlothealth2021ques/phase2-confidentiality-pledge-508.pdf

Questions left blank hinder data validation and analysis because it is not known if the question was accidentally missed or if the Producer did not have an answer or refused to answer. We may request that you re-contact the Producer, if necessary, for missing data or clarification.

Producers should provide information about cattle placed from the period between **January 1 and December 31, 2020.** We are interested in information about cattle and calves on feed on this specific feedlot for the slaughter market regardless of ownership. In other words, if there are cattle on the feedlot that are not owned by the Producer, DO provide information for these cattle. If the Producer owns cattle that are being fed on another feedlot, DO NOT provide information about these cattle. We only want information for cattle on the feedlot that will be directly sent to slaughter. If there are cattle on the feedlot that are being "backgrounded" for sale as feeders for later placement on feed on another feedlot or that will be returned to pasture, DO NOT provide information for these cattle. Also, DO NOT provide information for cows or bulls being fed for the slaughter market.

If the response is zero (0), enter the number 0; do not leave the response blank. If it is not possible for the Producer to provide an accurate estimate, choose the (Don't Know) response option. If the Producer declines to answer, choose the (Refused) response option. If the producer provides an atypical response, then provide clarification using the comment boxes in Mi-Co. All of these exceptions can also be noted in the margins or comment field of a paper questionnaire. We would rather have a lengthy explanation for an unusual answer than no explanation at all. If an answer doesn't make sense and has no explanation, we may have to ask your Coordinator to ask you to explain the answer, delaying data processing.

Some questions ask specifically for the percentage of cattle with certain characteristics (e.g., **A. Heifers at arrival (A.14.a-A.14.b)** or **A. Bull Calves Castrated (A.14.c)**). For these questions, the Producer should attempt to provide an accurate estimate of the percentage of cattle that fit the description. In many other questions rating scales are used (e.g., **A. Preconditioning procedures pre arrival (A.6)**). This is intended to reduce burden on the respondent and reflect the fact that the respondent is often only able to provide an approximation without referring to records, which can be time-consuming. The scale is specified in the question.
For None, Some, Most, All Scales:

None corresponds to 0% of the cattle
Some corresponds to 50% or less of the cattle
Most corresponds to 51% or more of the cattle
All corresponds to 100% of the cattle.

SECTION A: CATTLE HEALTH AND HEALTH PRACTICES

Question A1-A6: Preconditioning and Backgrounding

Question A1:

Indicate whether the specific breed and weight class of cattle at arrival (such as beef breeds less than 400 lb at arrival) was placed on the feedlot. If so, then provide the proportion of cattle for which reliable information about preconditioning and backgrounding was known. Reliable information in this context is defined as information that is trusted but not necessarily documented. In other words, information can be defined as reliable without it necessarily being part of a certified preconditioning program. Include cattle purchased by the Producer, cattle the Producer is feeding on the feedlot for others (custom feeding), as well as cattle that the Producer bred and raised themselves.

When we ask about procedures performed by weight class in this questionnaire, we are using weight class as a general proxy for risk of disease, in that younger, lighter cattle will likely be at more risk of disease than more mature, heavier cattle.

"None" indicates that reliable information about preconditioning and backgrounding was available for 0% of the placed cattle, "Some" indicates that reliable information was available for 50% or less of the placed cattle, "Most" indicates that reliable information was available for 51% or more of the placed cattle, and "All" indicates that reliable information was available for 100% of the placed cattle.

Question A2:

Some feedlot Producers also operate a cow-calf operation. Indicate whether the Producer being interviewed bred and raised all cattle placed on feed between January 1 and December 31, 2020. Answer YES, NO, or DON'T KNOW. If ALL cattle placed were bred and raised by the operation, then SKIP to Question A6.

What if….the Producer breeds and raises most of their cattle, but does purchase some cattle from another local cow-calf operation to feed out?

Answer "NO" to Question A2.

What if….the Producer breeds and raises all their own cattle, but their feedlot is in a different physical location than the place where the calves are born?

Answer "YES" to Question A2.

Question A3:

Indicate the level of importance to the Producer of availability of reliable information on preconditioning and backgrounding of purchased cattle: not important, slightly important, moderately important, very important, or extremely important. If it is NOT important to the Producer that reliable information about preconditioning and backgrounding is available, then SKIP to Question A6.

Question A4:

This question will only be asked of Producers that believe it is at least slightly important to have reliable information about backgrounding or preconditioning of purchased cattle. Indicate whether these Producers are able to access all the reliable information that they want. Answer YES or NO. If the answer is YES, they can access all the information they want, then SKIP to Question A6.

Question A5:

Indicate important reasons why the Producer can't access the reliable information about preconditioning and backgrounding that they want. Answer YES or NO to each and write in an answer if there is another unstated reason that is important to the Producer.

Question A6:

For this question, provide information about specific preconditioning or backgrounding practices performed in all cattle placed on the feedlot. Provide information for cattle for which any information about preconditioning and backgrounding is known. Consider all placed cattle, including purchased cattle and cattle bred and raised by the Producer. Provide the proportion of cattle for which the specified preconditioning and backgrounding procedures were performed. For Question A6.g, consider only bull calves. For Question A6.h consider only non-polled cattle, that is cattle breeds that would naturally have horns. Answer "Check if all cattle placed were naturally polled" if only naturally polled cattle (cattle that naturally do not have horns such as Angus) are placed on the feedlot.

Questions A7-A14: Initial Processing and Management at the Feedlot

Question A7:

This question asks about whether cattle are assessed for their risk for bovine respiratory disease (BRD), classified according to their risk level (e.g., as high or low risk for BRD), and then managed differently based on this risk assessment. Answer YES, NO, or Don't Know (DK). If the answer is NO or DK, then SKIP to Question A9.

Question A8:

Answer this question if the answer to Question A7 = YES. This question asks about various characteristics and whether they are important in performing the risk assessment described in Question A7. Answer not important, slightly important, moderately important, very important, or extremely important for A8.a-n. If there is another characteristic that the Producer thinks is important for risk assessment that is not listed, please enter it into Question A8.o and specify its level of importance.

Question A9:

This question asks about the proportion of cattle that were processed as a group within 4 weeks of arrival at this feedlot. Processing is considered to include procedures such as vaccinations, tagging, implants, deworming, mineral or vitamin supplementation, castration, dehorning, and antibiotic administrations. “None” indicates 0% of the placed cattle were processed as a group within 4 weeks of arrival, “Some” indicates 50% or less of the placed cattle were processed as a group within 4 weeks of arrival, “Most” indicates that 51% or more of the placed cattle were processed as a group within 4 weeks of arrival, and “All” indicates that 100% of the placed cattle were processed as a group within 4 weeks of arrival. Question A9a asks whether the proportion of cattle processed as a group in calendar year 2020 was different than the proportion of cattle processed as a group in calendar year 2019 due to COVID-19 or its effects. Answer YES, NO, or DK. If NO or DK, SKIP to question 10. Question A9b asks whether the proportion of cattle processed as a group in calendar year 2020 was more than in 2019 or less than in 2019 due to COVID-19 or its effects.

Even if the response to question A9 = none, questions A9a and A9b should be asked before proceeding to question 15.

Question A10:

This question asks about the time frame when initial processing occurred. Indicate the proportion of cattle that had initial group processing performed at each specific time interval: less than one day after arrival, 24 to 72 hours after arrival, 73 hours to up to 13 days after arrival, 14 to 28 days after arrival, or never (not processed as a group at placement). Do not include instances where cattle were noted to be ill on arrival and pulled out individually for treatment. When answering this question, consider only the cattle initially processed as a group, as indicated in Question A9.

Question A11:

This question asks about specific procedures performed at initial group processing. Indicate the proportion of the cattle initially processed as a group (as indicated in Question A9) that had each specific procedure performed at initial processing. If the Producer doesn’t know the proportion of cattle that had the specific procedure

performed at initial processing, either for all cattle or by weight class at arrival, enter "DK."

See the Reference Card 2 for assistance in matching vaccines with specific disease conditions.

Question A12:

This question asks about changes in group processing procedures in calendar year 2020 when compared with group processing procedures in calendar year 2019 due to COVID-19 or its effects. An example might include fewer workers available to process cattle. For this question, consider only changes in group processing that are related to COVID-19 or its effects. If question 12= No or DK, skip to Question 14.

Question A13:

Please describe changes to group processing procedures in calendar year 2020 due to COVID-19 or its effects in the text box provided. Examples might include accommodations for fewer staff available to process cattle, changes due to larger or smaller groups of cattle, or other changes.

Question A14:

This question asks about processing procedures for specific subgroups of cattle (heifers, bulls and bull calves, and non-polled cattle).

For Question A14.a and b, consider only heifers when answering. These 2 sub-questions ask for the proportion of heifers that had a pregnancy check at arrival, and for the proportion of heifers that were administered an abortifacient at arrival. Pregnancy checking refers to individual palpation by rectum or ultrasound to evaluate for pregnancy, while an abortifacient is a drug that induces an abortion in a pregnant animal. Prostaglandin is commonly used as an abortifacient on feedlots.

For Question A14.c, consider only bulls when answering. This sub-question asks for the proportion of bulls that arrived at the feedlot uncastrated.

For Question A14.d, e, and f, consider only non-polled cattle when answering. Non-polled cattle in this context refers to breeds of cattle that naturally have horns, and polled cattle refers to cattle that naturally do NOT have horns through selective breeding (e.g. Angus breeds), not cattle that have been previously disbudded or dehorned. Question A14.d asks for the proportion of cattle that arrived at the feedlot with horns. For these cattle, Question A14.e and f then ask what proportion are either dehorned or tipped at the feedlot. Dehorning refers to the complete removal of

attached horns by methods such as gouging, hand saws, or wires. Tipping refers to cutting only a portion of the horn off and not completely removing it.

Question A15:

This question asks about the frequency of pen-riding or walking occurring on the feedlot, in cattle that have been at the feedlot for less than 15 days, cattle that have been at the feedlot for 15 to 29 days, and cattle that have been at the feedlot for 30 days or more. Pen-riding or walking refers to the practice of the Producer or an employee closely observing cattle to identify sick or injured animals for treatment. Answer 1 for Once a day, 2 for Twice a day, 3 for More than twice a day, 4 for Less than once a day, and 5 for No standard procedure.

Question A16:

This question asks about interventions used by the feedlot to mitigate weather-related stress. Building mounds refers to the practice of constructing small sloping hills in feedlot pens to provide a comfortable, dry resting place for cattle in muddy conditions. Wind breaks are fences, trees, or shrubs constructed or planted to block prevailing winds. Answer YES, NO, or DON'T KNOW (DK) for each intervention. If an intervention is used on the feedlot that is not listed, please write it in the Other space (Question A16.f) and check YES.

Questions A17-A31: Disease Conditions

Question A17:

This question asks about the percent of cattle that were affected by and the percent of cattle that died due to bovine respiratory disease (BRD). BRD is a general term referring to disease of the upper or lower respiratory tracts of cattle that is related to a number or different factors, including bacteria, viruses, host characteristics such as stress and immune status, and environmental risks such as poor ventilation, dust, and crowding. BRD is most prevalent within the first few weeks of arrival to the feedlot, which is why it is called shipping fever. Common signs of BRD include fever, breathing difficulties, coughing, nasal discharge, depression, and lack of appetite. Exclude cattle affected by acute interstitial pneumonia, as that will be covered in Question A20.

Provide the percentage of placed cattle affected by BRD, and the percentage of placed cattle that died due to BRD. The percentage of placed cattle affected by BRD will include the cattle that ultimately died due to the disease. Answer separately by weight class at arrival in Question A17 a, b, and c (less than 400 lb, 400 to 699 lb, and 700 lb or greater). If it is not possible to provide estimates by weight class, answer for all placed cattle in Question A17.d and leave A17 a, b, and c blank. If it is not possible to provide an estimate of cattle that were affected by and died of BRD, then answer Don't Know in Question A17.d.

What if….a steer is found dead and the death is considered to be due to BRD?

Count this steer in the column of cattle affected by BRD AND the column of cattle that died due to BRD.

Question A18:

This question asks whether the percentage of cattle on this feedlot that were affected with BRD in calendar year 2020 differed from the percentage of cattle affected with BRD in calendar year 2019 due to COVID-19 or its effects. Consider the percentage of cattle that were affected with BRD in each year, and changes in practices associated with COVID-19 in 2020, such as those associated with supply chain changes or changes in cattle processing practices, and whether they were also associated with a change in percentage of cattle affected with BRD. If it is not possible for the Producer to determine, then indicate Don't Know (DK). If Question 18 = No or DK, skip to Question 20.

Question A19:

This question asks whether the percentage of cattle on this feedlot that were affected with BRD in calendar year 2020 was higher or lower than the percentage of cattle that were affected with BRD in calendar year 2019 due to COVID-19 or its effects. The Producer can provide written reasons why they think this may be the case at the end of the questionnaire just prior to Section E.

Question A20:

This question asks about the percentage of cattle that developed various disease conditions, excluding BRD, between January 1, 2020 and December 31, 2020. The disease conditions asked about are acute interstitial pneumonia, bloat, other digestive disorders excluding bloat (coccidiosis, diarrhea), footrot, hairy heel wart, central nervous system disease, ocular disease, cardiovascular disease, and fatigued cattle syndrome. Definitions of these disease conditions are provided below. Provide an estimate of the percentage of placed cattle that developed the condition, or check "Don't Know" (DK) if the Producer is not familiar with the condition or does not feel that they can provide an accurate estimate. If there is another disease condition that is not listed that the Producer feels is a significant contributor to disease burden on this feedlot, please fill it in the Question A20.j (Other) and provide the percentage of placed cattle affected.

Definitions of disease conditions in feedlot cattle:

Acute interstitial pneumonia: A suddenly occurring respiratory distress syndrome that affects cattle late in the feeding period and may be related to dust, heat, previous respiratory disease, and toxins. A post-mortem examination is required to definitively diagnose this disease. Lungs are heavy, full of fluid, and fail to collapse normally.

Bloat: Excessive accumulation of gases in the rumen due to interruption of the normal elimination of gas via eructation or belching. Bloat in cattle in confinement (not on pasture) usually occurs secondary to acidosis and/or rumenitis. Cattle are distended on the left side, uncomfortable, and can suddenly collapse and die.

Coccidiosis: A parasitic infection of the intestine caused by *Eimeria* species. Disease is typically seen in young cattle, and clinical signs can vary from reduced weight gain, to watery feces and discomfort, to severe bloody diarrhea, straining to defecate, and death. Calves that survive severe illness may be permanently stunted. Drugs used for the prevention and/or treatment of coccidiosis include amprolium, decoquinate, and ionophores.

Diarrhea: Diarrhea in cattle can be caused by many conditions, including bacterial, viral, or parasitic infections, type of feed and feed changes, and indigestion.

Footrot (infectious pododermatitis): A contagious bacterial disease of the interdigital (between the toes) skin and deeper tissues of ruminants associated with wet and muddy seasons and environmental conditions that lead to skin damage. Clinical signs include lameness, reddening and swelling of the interdigital tissue, and foul-smelling open ulcers.

Hairy heel wart (papillomatous digital dermatitis): A contagious bacterial infection of the foot characterized by raised red sores or erosions over the heel area. It can be confused with footrot but is caused by a different type of bacteria and therefore does not respond to the typical treatments for footrot.

Central nervous system (CNS) disease (polio, listeriosis, "brainers"): Brain disease in cattle can result from many causes, including nutritional imbalances, infections, and toxicities. Clinical signs can include incoordination, weakness, convulsions, depression, fever, and circling. Treatment is by intravenous injection of thiamine and glucose.

Pinkeye (infectious bovine keratoconjunctivitis): A contagious disease of the eyes of cattle characterized by tearing, light sensitivity, squinting, swelling of the conjunctiva, and ulceration of the cornea. This can progress to further cloudiness of the

cornea followed by a pink then yellow color of the eye. Permanent blindness can ultimately result. It is transmitted by face flies.

Cardiovascular disease (e.g., heart failure, brisket disease): Heart disease in cattle can result from right-sided heart failure due to pulmonary hypertension (high altitude disease), hardware disease (foreign body such as a wire in the reticulum piercing the heart lining), or infectious inflammations of the heart muscle or valves. High altitude disease or brisket disease is a complicated problem caused by narrowing of the blood vessels in the lungs due to chronic low levels of oxygen. This increased resistance to blood flow in the lungs, or pulmonary hypertension, ultimately causes right heart failure. Pulmonary hypertension is multifactorial, involving genetic predisposition, exposure to altitude, and potentially high growth rates. Clinical signs of right heart failure include lethargy, swelling of the limbs, belly, and brisket (brisket disease) due to fluid accumulation, distension and pulsation of the jugular veins, diarrhea, and bulging eyes.

Fatigued cattle syndrome: A recently recognized syndrome in feedlot cattle characterized by exhaustion of energy storage within the muscle. It appears to be associated with increased outweights, heat stress, and aggressive handling. Clinical signs of fatigued cattle syndrome include reluctance to move, muscle tremors, and a stiff gait.

Question A21:

This question asks about whether the percentage of cattle that developed disease conditions differed between calendar year 2020 and calendar year 2019 due to COVID-19 or its effects. The disease conditions included in this question are the same as those listed in Question A20. Answer YES if the percentage of placed cattle that developed the condition differed from year to year due to COVID-19 or its effects, NO if the percentage stayed the same or otherwise changed due to factors that can't be attributed to COVID-19 or its effects, or check "Don't Know" (DK) if the Producer is not familiar with the condition or does not feel that they can determine a difference due to COVID-19 or its effects.

For this question, we are only interested in changes in disease occurrence from 2020 to 2019 due to COVID-19 or its effects. COVID likely had no influence on conditions such as footrot or pinkeye. More late-fed and very heavy cattle than normal were present in feedlots during 2020 due to lack of ability to ship cattle due to slaughter plant closures due to COVID-19. Since more late-fed and very heavy cattle (e.g., over 1400 lb) than normal were present, there was greater opportunity for these cattle to be affected by conditions affecting these types of cattle. AIP and fatigued cattle syndrome occur most commonly in late-fed cattle. Cardiovascular disease (heart failure) can be more common in heavy cattle, and fatigued cattle syndrome is also associated with heavy cattle. Bloat

may have been more common in 2020 because sometimes when heavy cattle are lying down, they can get "over center" and cannot get back up—if they don't get assistance, they can die from respiratory distress or bloat.

Question A22:

This question asks about the proportion of cattle that died that had a post-mortem or necropsy performed.

Question A23:

This question asks about the initial course of treatment given to cattle sick with bovine respiratory disease, digestive disorders other than bloat (e.g., coccidiosis, diarrhea), lameness (e.g., footrot), and ocular disease (e.g., pinkeye). Indicate YES, NO, or DON"T KNOW (DK) for each condition as to whether injectable antibiotics, bolus-dosed oral antibiotics, in-feed antibiotics, topical antibiotics, respiratory vaccines, corticosteroids, non-steroidal anti-inflammatory drugs, antihistamines, vitamin B injections, vitamin C injections, immunostimulants (e.g., Zelnate™), injectable mineral supplements (e.g., MultiMin®), probiotic paste, or another treatment (fill in Other for Question A23.n) were used.

Question A24:

This question asks about whether there were separate pens (hospital pens) to house sick cattle. Answer YES, NO, or DON'T KNOW (DK). If the answer is NO or DK, SKIP to Question A26.

Question A25:

Answer this question if Question A24 = YES. This question asks about whether specific resources (wind breaks, shade, sprinklers/misters, additional bedding compared to home pen, additional hay to eat compared to home pen, increased waterer and bunk space per animal compared to home pen, increased observation/surveillance, dust control, or other) were provided to cattle in the hospital pen. Answer NONE OF THE TIME, SOME OF THE TIME (AS NEEDED), ALL OF THE TIME, or DON'T KNOW (DK).

Question A26:

This question asks about whether information is received from slaughter facilities about the percentage of cattle from this feedlot affected with liver abscesses that resulted in liver condemnation. Answer YES, NO, or DON'T KNOW (DK). If the answer is NO or DON'T KNOW, SKIP to Question A28.

Question A27:

Answer this question if Question A26 = YES. This question asks about the percentage of cattle that had liver condemnations due to liver abscesses, by breed type (beef or dairy/dairy cross) and whether the cattle received in-feed antibiotics while on the feedlot. The most common in-feed antibiotic used to control liver abscesses is tylosin (e.g., Tylan, Tylovet). First, it is asked whether cattle of the type of interest (beef breed cattle given in-feed antibiotics, dairy or dairy cross-breed cattle given in-feed antibiotics, beef breed cattle NOT given in-feed antibiotics, and dairy or dairy cross-breed cattle NOT given in-feed antibiotics) were placed on the feedlot. If YES, then provide the percentage of this type of cattle that were reported to have condemned livers at slaughter. If this percentage is not known, check DON'T KNOW (DK).

Question A28:

This question asks about whether the Producer has observed a change in the rate of death loss in late-fed cattle (i.e., cattle fed 100 days or more) on this feedlot in calendar year 2020 as compared with calendar year 2019 due to COVID-19 or its effects. Answer YES, NO, or DON'T KNOW (DK). If the answer is NO or DON'T KNOW, SKIP to Question A30.

Question A29:

This question asks whether the rate of death loss in late-fed cattle on this feedlot in calendar year 2020 was higher or LOWER than in calendar year 2019 due to COVID-19 or its effects. Answer HIGHER than 2019 or LOWER than 2019.

Question A30:

This question asks about whether the Producer has observed an increase in death loss in late-fed cattle on this feedlot over the past 5 years. Answer YES, NO, or DON'T KNOW (DK). If the answer is NO or DON'T KNOW, SKIP to Section B.

What if….a Producer has been in business for less than 5 years?

Answer whether the Producer has observed an increase in death loss in late-fed cattle since the business started.

Question A31:

Answer this question only if Question A30 = YES. This question lists several disease conditions and asks whether in the Producer's opinion any of these are related to the increased death loss in late-fed cattle. Answer YES, NO, or DON'T KNOW (DK). If there is another disease condition that is not in the list that the Producer feels is related to late-fed cattle death loss, then fill it in the Other space and check YES for that item.

SECTION B: ANTIBIOTIC USE

Question B1:

This question asks about whether ANY antibiotics, of any form (injectable, bolus-dosed, drenched, in-feed, and/or in-water), were used in cattle on this feedlot from January 1, 2020 to December 31, 2020. This refers to ALL antibiotics regardless of whether they require prescriptions OR are available over the counter, and to in-feed antibiotics whether or not they require a veterinary feed directive (VFD). The most common in-feed antibiotics used on feedlots that DO NOT require a VFD are ionophores such as monensin (Rumensin), lasalocid (Bovatec), and laidlomycin (Cattlyst). Bambermycin (Gainpro) and bacitracin (BMD) also do not require a VFD, but these are not likely to be used on feedlots. In-feed antibiotics that DO require a VFD include macrolides (such as Tylan) and tetracyclines (such as Aureomycin). "Bolus" refers to a large antibiotic tablet that is administered orally and then remains in the rumen to release medication over time. "Drench" refers to liquid antibiotics given orally via a large syringe, dosing gun, or stomach tube. Answer YES, NO, or DON'T KNOW (DK). If the answer to this question is NO or DON'T KNOW, SKIP this section and move to Section C.

Question B2:

Answer this question only if the answer to Question B1 = YES. This question asks about whether any injectable or bolus-dosed antibiotics were used on the feedlot from January 1, 2020 to December 31, 2020. Answer YES, NO, or DON'T KNOW (DK). If the answer to this question is NO or DON'T KNOW, SKIP to Question B11.a.

Question B3:

Answer this question only if the answer to Question B2 = YES. This question asks about the importance of several factors in decisions that the Producer makes about the selection of specific injectable and/or bolus-dosed antibiotics. Answer NOT IMPORTANT, SLIGHTLY IMPORTANT, MODERATELY IMPORTANT, VERY IMPORTANT, and EXTREMELY IMPORTANT for each of the listed factors. If there is another factor that was important to the Producer in the selection of injectable and/or bolus-dosed antibiotics that is not listed, enter it into the Other line (Question B3.k) and specify its degree of importance.

Question B4:

This question asks about whether injectable or bolus-dosed antibiotics were administered on the feedlot for the individual treatment of animals sick with bovine respiratory disease (BRD) from January 1, 2020 to December 31, 2020. In other words,

were cattle individually examined and identified to be sick with BRD and then administered injectable or bolus-dosed antibiotics for treatment of BRD? Answer YES, NO, or DON'T KNOW (DK). If answer to Question B4 is NO or DON'T KNOW then skip to Question B7.

Question B5:

Answer this question only if the answer to Question B4 = YES. This question asks about specific injectable and/or bolus-dosed antibiotics used to **individually treat** cattle **FOR BRD**. When answering this question, the producer should consider the cattle that the Producer identified in Question A17 to be affected with and treated for BRD. Provide the percentage of **these sick cattle** that were treated with each of the antibiotics listed for BRD from January 1, 2020 to December 31, 2020. If any of these estimates are unknown, enter "DK.".

Example: The Producer reported in Question A17 that 3% of cattle in all arrival weight classes were affected with BRD. The Producer treated 80% of the cattle that were sick with BRD at arrival with Enrofloxacin and 20% of the cattle that were sick with BRD with Gamithromycin.

Answer "20%" to Question B5.b (Gamithromycin) for "% all sick cattle"
Answer "80%" to Question B5.h (Enrofloxacin) for "% all sick cattle"

Active ingredient name (Trade name examples)	**% all sick cattle**
a. Tilmicosin (Micotil®)	
b. Gamithromycin (Zactran®)	20
c. Tulathromycin (Draxxin®)	
d. Tylosin (Tylan® 200)	
e. Tildipirosin (Zuprevo®)	
f. Florfenicol (Nuflor®)	
g. Florfenicol w/ flunixin meglumine (Resflor Gold®)	
h. Enrofloxacin (Baytril®)	80
i. Danofloxacin (Advocin™)	
j. Ceftiofur (Naxcel®, Excenel®, Excede®)	
k. Oxytetracycline (LA-200®, BioMycin®)	
l. Penicillin (Aquacillin™, Penicillin G Procaine)	
m. Ampicillin (Polyflex®)	
n. Sulfadimethoxine (Albon® Injection)	
o. Sulfadimethoxine (Albon® Bolus)	
p. Sulfamethazine (Sustain III® Bolus, Supra Sulfa® III)	

Question B6:

This question asks about the percentage of sick cattle initially treated with antibiotics for BRD (reported in Question B5) that a. Responded and recovered, b. Died or were euthanized, c. Were considered chronics and marketed early, or d. Did not respond and were re-treated. "Considered chronics and marketed early" in question B6.c refers to cattle that did not recover fully from BRD and were shipped to slaughter prior to reaching normal slaughter weight.

Question B7:

This question asks about whether injectable or bolus-dosed antibiotics were administered on the feedlot to groups of cattle (i.e., the majority of the pen was administered the antibiotic) for either the prevention, control, or treatment (i.e., therapy) of BRD from January 1, 2020 to December 31, 2020. Typically, this would mean that >90% of the pen was administered the antibiotic. If lesser numbers in the pen were given the antibiotic, it would generally mean that this should be counted as individual treatment (see Question B4) because animals would be individually identified as sick before treatment. Answer YES, NO, or DON'T KNOW (DK). If answer to the question is NO or DON'T KNOW then skip to Question B9.

Question B8:

Answer this question only if the answer to Question B7 = YES. This question asks about injectable, and/or bolus-dosed antibiotics given to cattle AS A GROUP for the prevention, control, or treatment of BRD from January 1, 2020 to December 31, 2020. Provide the percentages of each arrival weight class of cattle that were given each individual antibiotic as a group. If the Producer is unable to provide this estimate, enter "DK."

Example 1: The Producer gives about 40% of the cattle <400 lb at arrival Tulathromycin as a group. About 20% of the cattle 400-699 lb at arrival are given Oxytetracycline as a group, and about 20% of the cattle 700 lb or greater at arrival are given Oxytetracycline as a group.

Answer "40%" to Question 8.c for "% cattle arrival weight <400 lb"
Answer "20%" to Question 8.k for "% cattle arrival weight 400-699 lb"
Answer "20% to Question 8.k for "% cattle arrival weight 700 lb or greater

Example 2: The Producer only places cattle <400 lb at arrival on their feedlot. About 15% of the cattle are given Tulathromycin as a group and 15% of the cattle are given Gamithromycin as a group.

Answer "15%" to Question 8.b for "% cattle arrival weight <400 lb"
Answer "15%" to Question 8.c for "% cattle arrival weight <400 lb"

Question B9:

This question asks about whether injectable or bolus-dosed antibiotics were administered on the feedlot from January 1, 2020 to December 31, 2020, for the individual treatment of animals sick with conditions other than BRD that were asked about in Question A20: 1. Acute interstitial pneumonia 2. Bloat 3. Other digestive disorders excluding bloat (e.g., coccidiosis, diarrhea) 4. Footrot 5. Hairy heel wart 6. Central nervous system disease 7. Pinkeye 8. Cardiovascular disease 9. Fatigued cattle syndrome 10. Other disease specified by the Producer. In other words, were cattle individually examined and identified to be sick with any of these conditions and then administered injectable or bolus-dosed antibiotics for treatment of these conditions? Answer YES, NO, or DON'T KNOW (DK). If answer to Question B9 is NO or DON'T KNOW, SKIP to Question B12.

Question B10:

Answer this question only if the answer to Question B9 = YES. This question asks about injectable and/or bolus-dosed antibiotics used to **individually treat** cattle with **disease conditions other than BRD** from January 1 to December 31, 2020**.** When answering this question, the producer should consider the use of antibiotics in cattle that the Producer identified in Question A20 to be affected with the listed conditions other than BRD, or a condition that the Producer filled in on the OTHER line (Question A20.j). First, identify injectable or bolus-dosed antibiotics in the list that were used for treating any of the conditions reported in Question A20. Then, enter the code corresponding to the most common reason (primary reason) that the antibiotic was used. Note that the only disease conditions in the "Reason codes for Question 10" for which antibiotics are effective are other digestive disorders, footrot, hairy heel warts, and pinkeye.

Example: The Producer reported in Question A20.d that 10% of the placed cattle developed footrot from January 1 to December 31, 2020, and 20% of the placed cattle developed pinkeye. The Producer used oxytetracline to treat all of the cattle affected with footrot and pinkeye. Therefore, the answer for Question B10.i is Reason Code 7 (Pinkeye).

Question B11:

This question asks whether ANY antibiotics were administered IN FEED on this feedlot from January 1 to December 31, 2020. Question 11.a refers to antibiotics that DO NOT require a VFD (ionophores, bambermycin, bacitracin), and question 11.b refers to those which DO require a VFD (e.g., tylosin, chlortetracycline). Answer YES, NO, or DON'T KNOW (DK). If answer to both B11.a and B11.b is NO or DON'T KNOW then skip to Question B16. If B11.a is NO or DON'T KNOW but B11.b is YES, SKIP to Question B13.

Otherwise, if B11.a is YES but B11.b is NO or DON'T KNOW then answer Question B12 and then SKIP to Question B16.

The most common in-feed antibiotics used on feedlots that DO NOT require a VFD are ionophores, which include monensin (Rumensin), lasalocid (Bovatec), and laidlomycin (Cattlyst). Bambermycin (Gainpro) and bacitracin (BMD, baciferm) also do not require a VFD, but these are not likely to be used on feedlots. The most common antibiotics used on feedlots that DO require a VFD are tylosin (Tylan, Tylovet) and chlortetracycline (Aureomycin).

Question B12:

Answer this question only if the answer to Question B11.a = YES. This question asks whether antibiotics that DO NOT require a VFD were given to cattle (ionophores, bambermycin, and bacitracin) from January 1 to December 31, 2020. Provide the percentage of cattle that received each type of antibiotic overall, the most common reason that the antibiotic was used (enter one of the reason codes from the box or fill in the Other space if none of the reason codes apply), and the percentage of cattle overall that received it for that reason. Space is also provided for providing the second most common reason that the antibiotic was used and the percentage of cattle on the feedlot that received it for that reason. If an antibiotic is used and the Producer is unable to provide an estimate of the percentage of cattle, enter "DK" in the space given for the percentage of cattle. Note: all percentages of cattle in this table are percentages of all cattle placed.

As previously mentioned, the antibiotics used in-feed that do not require a VFD are ionophores. Monensin, lasalocid, and laidlomycin are the three ionophores approved for use in cattle. All three are approved for improving feed efficiency. Monensin and lasalocid are also approved for prevention and control of coccidiosis. Bambermycin and bacitracin are approved for use in cattle feed, but they are not commonly used these days on U.S. feedlots. Bambermycin is approved in cattle feed for increased rate of weight gain and improved feed efficiency. Bacitracin is approved in cattle feed for reduction in the number of liver condemnations due to abscesses.

Example 1: The Producer reported that they use Rumensin® *in 40% of the cattle they place. They report that the primary reason they feed* Rumensin® *is to prevent and control coccidiosis and that applies to all the cattle for which they feed* Rumensin®*.*

*In this case, 12a would have 40% of cattle overall that received "*Any ionophore (e.g., Rumensin®, Bovatec®)*". For Reason Code I, "1" would be entered to indicate the primary reason was to address coccidiosis. And, because all cattle fed* Rumensin® *were fed so to address coccidiosis, the percent cattle for Reason Code I would be 40% as well.*

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®)	40	1	40		
b. Bambermycin (Gainpro® 10)					
c. Bacitracin (BMD®, Baciferm®)					

Example 2: In a similar situation, a Producer reported that they use Rumensin® *in 60% of the cattle they place. They report that the primary reason they feed* Rumensin® *is for growth promotion and that applies to all the cattle for which they feed* Rumensin®*. They also report that, for a third of the cattle that receive* Rumensin®*, a secondary reason is for the prevention and control of coccidiosis.*

*In this case, 12a would have 60% of cattle overall that received "*Any ionophore (e.g., Rumensin®, Bovatec®)*". For Reason Code I, "2" would be entered to indicate the primary reason was for growth promotion. Because all cattle fed* Rumensin® *were fed for growth promotion, the percent cattle for Reason Code I would be 60% as well.*

For Reason Code II, "1" would be entered to indicate the secondary reason was to for addressing coccidiosis. Because a third of the cattle fed Rumensin® *was fed for coccidiosis, then (1 / 3) * 0.60 = 0.20, so 20% should be entered for the percent of cattle for Reason Code II.*

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®)	60	2	60	1	20
b. Bambermycin (Gainpro® 10)					
c. Bacitracin (BMD®, Baciferm®)					

Question B13:

Answer this question only if the answer to Question B11.b = YES. This question asks about antibiotics that DO require a VFD (e.g., tylosin and chlortetracycline) given to cattle from January 1 to December 31, 2020 that were LESS THAN 700 LB AT ARRIVAL. Provide the percentage of these cattle that received each type of antibiotic, the most common reason that the antibiotic was used (enter one of the reason codes from the box or fill in the Other space if none of the reason codes apply), and the percentage of cattle that received it for that reason. Using antibiotics in a manner not specified on the product label is called extra-label use, which has been prohibited in livestock feed since the 1990s. The most common antibiotics used in cattle feed will be tylosin (e.g., Tylan) for reduction in the incidence of liver abscesses, and chlortetracycline (e.g., Aureomycin), oxytetracycline (e.g., Terramycin), or chlortetracycine/sulfamethazine (e.g., AS700) for control and prevention of respiratory disease. Space is also provided for providing the second most common reason that the antibiotic was used and the percentage of cattle on the feedlot that received it for that reason. It is unlikely that antibiotics that require a VFD are used for a secondary reason. For example, tylosin is only approved in cattle feed for reduction of the incidence of liver abscesses, and if a producer says they are using it for another reason, they are using it in an extra-label fashion, which is prohibited by FDA regulations. If an antibiotic is used and the Producer is unable to provide an estimate of the percentage of cattle, enter "DK" in the space given for the percentage of cattle. Note: all percentages of cattle in this table are percentages of all cattle placed that were LESS THAN 700 LB AT ARRIVAL.

Question B14:

Answer this question only if the answer to Question B11.b = YES. This question asks about antibiotics that DO require a VFD (e.g., tylosin and chlortetracycline) given to cattle from January 1 to December 31, 2020 that were 700 LB OR GREATER AT ARRIVAL. Provide the percentage of these cattle that received each type of antibiotic, the most common reason that the antibiotic was used (enter one of the reason codes from the box or fill in the Other space if none of the reason codes apply), and the percentage of cattle that received it for that reason. Using antibiotics in a manner not specified on the product label is called extra-label use, which has been prohibited in livestock feed since the 1990s. The most common antibiotics used in cattle feed will be tylosin (e.g., Tylan) for reduction in the incidence of liver abscesses, and chlortetracycline (e.g., Aureomycin), oxytetracycline (e.g., Terramycin), or chlortetracycine/sulfamethazine (e.g., AS700) for control and prevention of respiratory disease. Space is also provided for providing the second most common reason that the antibiotic was used and the percentage of cattle on the feedlot that received it for that reason. It is unlikely that antibiotics that require a VFD are used for a secondary reason. For example, tylosin is only approved in cattle feed for reduction of the incidence of liver abscesses, and if a producer says they are using it for another reason, they are using it in an extra-label

fashion, which is prohibited by FDA regulations. Chlortetracycline and oxytetracycline are both approved for respiratory disease and gastrointestinal disease, so these antibiotics may have both a primary and secondary reason for use. If an antibiotic is used and the Producer is unable to provide an estimate of the percentage of cattle, enter "DK" in the space given for the percentage of cattle. Note: all percentages of cattle in this table are percentages of all cattle placed that were 700 LB OR GREATER AT ARRIVAL.

Question B15:

Answer this question only if the answer to Question B11.b = YES, and Question B13.a and/or B14.a were greater than 0% with a reason code of 2 (respiratory disease)—in other words if chlortetracycline was used in feed on this feedlot for the TREATMENT of respiratory disease. This question only applies if the producer is using chlortetracycline at the 10 mg/lb/day dose. Chlortetracycline at this dose is approved for use in cattle feed for 5 days to treat respiratory disease. This is referred to as a "pulse" treatment with chlortetracycline. If cattle do not respond to the first pulse treatment, producers have the option to obtain a second VFD for a second pulse. This question asks about the proportion of pen groups treated with chlortetracycline in-feed for respiratory disease that required more than one pulse treatment and therefore an additional VFD for this purpose. Provide the proportion of treated pen groups that required more than one pulse treatment. Answer None (0%), Some (50% or less), Most (More than 50%), or All (100%).

Example 1: The Producer reported in Question B13.a that 15% of pen groups less than 700 lb at arrival received chlortetracycline for reason code 2, respiratory disease. They did not use chlortetracycline for reason code 2 in cattle greater than 700 lb at arrival. If cattle do not respond to the first pulse of chlortetracycline, the Producer then gives the cattle a treatment of injectable antibiotics (they never use a second pulse of in-feed chlortetracycline for the treatment of respiratory disease). Therefore, the answer to Question B15 in this context is "None."

Example 2: If the Producer obtains a second VFD from their veterinarian for some (50% or less) of the pen groups for a second pulse of chlortetracycline because the cattle did not respond to the first pulse, then the answer to Question B15 would be "Some."

Question B16:

This question asks whether ANY antibiotics were administered IN WATER on this feedlot from January 1 to December 31, 2020. Answer YES, NO, or DON'T KNOW (DK). If answer to Question B16 is NO or DON'T KNOW then skip to Section C. Antibiotic use in drinking water on feedlots in the U.S. is uncommon—fewer than 10 percent of operations will likely answer "yes" to this question.

Question B17:

Answer this question only if the answer to Question B16 = YES. This question asks about antibiotics given to cattle in drinking water from January 1 to December 31, 2020. Provide the percentage of these cattle that received each type of antibiotic overall, the most common reason that the antibiotic was used (enter one of the reason codes from the box or fill in the Other space if none of the reason codes apply), and the percentage of cattle that received it for that reason. Space is also provided for providing the second most common reason that the antibiotic was used and the percentage of cattle on the feedlot that received it for that reason. Antibiotics are not commonly used in water for feedlot cattle. If an antibiotic is used and the Producer is unable to provide an estimate of the percentage of cattle, enter “DK” in the space given for the percentage of cattle. Note: all percentages of cattle in this table are percentages of all cattle placed.

SECTION C: NUTRITION

Question C1:

This question asks about the percentage of cattle administered specific feed additives during the feeding period.

Question C1a asks about the use of a coccidiostat (other than an ionophores), including amprolium (e.g., Corid®) or decoquinate (e.g., Deccox®). Record the percent of cattle on this feedlot administered a coccidiostat other than an ionophore. If no coccidiostats other than ionophores are used on the feedlot, record 0% for question C1a.

Question C1b asks about the use of a beta-agonist, such as ractopamine (Optaflexx). Record the percent of cattle on this feedlot administered a beta-agonist. For either C1a or C1b, select DON'T KNOW (DK) as appropriate. Beta-agonists are used for increased rate of weight gain, improved feed efficiency and increased carcass leanness in cattle during the last 28 to 42 days on feed.

Question C.1.c and C.1.d ask about changes in the use of ractopamine in 2020 compared with 2019 due to COVID-19 or its effects. Because beta-agonists are fed shortly before slaughter, it is likely the use of these drugs decreased in 2020 compared with 2019. Producers might not have been sure when they could market cattle due to slaughter plant closures, so ractopamine might not have been fed as much in 2020.

Question C2:

This question asks about the use of the services of a nutritionist on this feedlot. Select YES, NO, or DON'T KNOW (DK) as appropriate. If the feedlot has a nutritionist on staff or utilizes the services of a consulting nutritionist, select YES.

Question C3:

This question asks about water sources used for cattle on this feedlot. For each water source (ground water, surface water, municipal water), answer YES, NO, or DON'T KNOW (DK) as appropriate. Only record YES if the water source is used for watering cattle on this feedlot. For example, if there is a pond on the property, but cattle do not have access to it, select NO.

Question C4:

This question asks about feed additives used on this feedlot. First record if each feed additive was used on this feedlot, YES or NO. If YES, check all of the reasons that apply for why that feed additive was used on the feedlot.

Direct-fed microbial or probiotic
Direct-fed microbials (DFM) are products that contain live microorganisms (bacterial [e.g., *Lactobacillus acidophilus*] and/or yeast [*Saccharomyces cerevisiae*]). DFM can also be called probiotics. DFM can help improve fiber digestion by rumen microbes.

Yeast fermentation products
Contain extracts from cultures of fungi such as Saccharomyces cerevisiae, with no guarantee of containing live organisms. Yeast fermentation products can increase feed intake, which improves performance.

Prebiotics (e.g., mannan-oligosaccharides)
Prebiotics, such as mannan-oligosaccharides, are complex carbohydrate molecules derived from the outer cell wall of yeast products. Prebiotics can stimulate existing rumen microbes to multiply and increase rumen efficiency of digestion.

Vitamin supplements
Vitamin supplements, such as vitamins A, D, and E, are often added to cattle diets.

Organic mineral supplements
Minerals can be combined with an amino acid or protein and fed in the organic form (referred to as complexes, proteinates, or chelates). Minerals that are sometimes fed in the organic form include copper, zinc, cobalt, and manganese with an amino acid or protein. The relative bioavailability of some minerals is higher when in the organic form compared to inorganic sources.

Inorganic mineral supplements
Minerals can be added to the diet in the inorganic form. Macrominerals include calcium, magnesium, phosphorus, potassium, sodium, and sulfur. Microminerals include chromium, cobalt, copper, iodine, iron, manganese, molybdenum, nickel, selenium, and zinc.

Enzymes
Enzymes, such as xylanase and cellulase, are specialized proteins that break down feedstuffs and improve digestability. They are naturally produced by microorganisms in the rumen of cattle but can also be added to the diet.

Essential oils and plant-derived products (e.g., yucca extract)
Examples of essential oils include eugenol, thymol, vanillin, and clove essential oil. Essential oils may improve feed efficiency. Other plant-derived products, such as yucca extract, can also be added to feedlot diets. Yucca extract can improve animal performance and feed efficiency, and they may also stimulate some bacteria and inhibit others – primarily gram positive organisms—in much the same way as ionophores.

Other

If other feed additives are used for any of the listed reasons (improved growth rate and/or feed efficiency, antibiotic alternative, bovine respiratory disease, hoof health, pre-harvest food safety, or reduce liver abscesses), specify what feed additives are being used, and for what reasons.

SECTION D: BIOSECURITY

Question D1:

This question asks about different biosecurity practices being used on this feedlot. Select YES or NO as appropriate for each of the listed biosecurity options. Questions D1a-D1d include a "No Visitor" option. For example, in question D1a, if no visitors were allowed on the premise, then it would not make sense to control access for visitors entering animal areas. Questions D1e and D1f include a "No Vehicles" option, and D1g includes a "No horses" option.

Question D1h ask about changes during 2020 compared with 2019 in biosecurity practices due to COVID-19 or its effects. Question D.1.i is a comment box where these changes can be described.

Question D2:

This question asks about use of specific biosecurity practices to control insects, rodents, birds and about the management of dead cattle.

Question D3:

This question asks if this feedlot has a written or electronic biosecurity plan. This means the feedlot has a written plan with procedures they will use on their feedlot to reduce the risk of infectious disease in their cattle. Some feedlots have posters describing their biosecurity practices while other feedlots have an electronic document; any way of capturing their biosecurity practices in writing would indicate that YES, they do have a written biosecurity plan. Select YES, NO, or DON'T KNOW (DK) as appropriate.

Question D4:

This question asks if this feedlot has a shared fenceline with another operation that has cattle, bison, or other domestic ruminants. A shared fenceline could allow nose-to-nose contact with other cattle, bison, or other ruminants not owned by this operation. Answer YES, NO, or DON'T KNOW (DK) as appropriate. If question D4 = YES, SKIP to question D6. In other words, if this feedlot has a shared fence-line with another

livestock operation, you do not need to report the distance to another livestock operation.

Question D5:

This question asked how close this feedlot is to another operation with cattle, bison, or other ruminants. Record to the nearest ½ mile. Estimate the distance from the center of the operation to the center of the nearest operation as the crow flies.

Question D6:

This question asks about the average number of employees directly involved with the care of cattle on the feedlot from January 1 to December 31, 2020. Provide the average number of employees that directly cared for cattle at any given time during the 12-month period of interest. Include unpaid family members in this count. If question D6 = 0, SKIP to question D8. In other words, do not answer question 7 if there are no employees (paid or unpaid) on this feedlot.

Question D7:

This question asks about contact with cattle, bison, or other ruminants on other operations by any of the employees of the feedlot. Question D7.a asks if any employees have contact with cattle, bison, or other ruminants on other operations, and question D7.b asks if any employees own cattle, bison, or other ruminants at another location. Answer YES, NO, or DON'T KNOW (DK) as appropriate.

Question D8:

This question asks whether cattle stayed in the same pen during the entire feeding period (from placement to slaughter). Exclude cattle that are moved to the hospital pen for a short period and then returned to their home pen. Cattle are sometimes re-sorted based on their weight, feed intake, or for some other reason during the feeding period. Answer YES, NO, or DON'T KNOW (DK). If Question D8 = YES or DK, in other words cattle are NOT re-sorted or the Producer doesn't know, SKIP to Question 10.

Question D9:

For Producers who do re-sort their cattle routinely during the feeding period, this question asks how many times cattle were re-sorted during the feeding period. Provide the average number of times that cattle were re-sorted into different pens during the entire feeding period.

Question D10:

This question asks about the Producer's familiarity with the Secure Beef Supply Plan. The Secure Beef Supply plan is a voluntary program that gives producers the resources needed to create a plan for their feedlot if it is affected by restricted movement due to

a disease outbreak (such as foot-and-mouth disease) but not infected by the disease. Select the most appropriate level of familiarity of the producer with the Secure Beef Supply Plan.

Question D11:

This question should only be asked of producers whose operation is in the State of California. If the operation is not in California, SKIP to Section E. If the operation is in California, ask whether they agree to allow NAHMS to share an AGGREGATE State-level report of producer practices with California Department of Food and Agriculture (CDFA). This will help reduce redundancies in government agency work, as CDFA has mandatory reporting requirements under California Food and Agriculture Codes 14400-14408 to monitor antimicrobial use and management practices. This sharing between government agencies will avoid CDFA needing to carry out another, voluntary, State-level survey on their own to meet their reporting requirements.

Please note: only aggregate information will be shared and no information that can be used to identify a producer will be shared with CDFA. Reference Card 6 has more information regarding this informed consent.

This is the conclusion of the Phase 2 questionnaire. Thank the Producer again for completing the survey. The space provided in the "Comments" space can be used to capture any comments about health management on this feedlot that the producer thinks is relevant, including any information about the impact of COVID-19 on this feedlot.

SECTION E: OFFICE USE ONLY

We must account for all operations turned over by NASS. If a Producer declines to participate or could not be reached, complete the "Office Use Only" section of the questionnaire.

Include the State FIPS, operation number, interviewer's initials, and date in the box at the top of the page.

1. **Interview time**
   Include the time spent reviewing the study, answering any questions from the Producer, completing the Confidentiality Pledge, and completing the questionnaire; report in minutes. Do not include time spent discussing other topics such as the weather. Include the time for everyone who is traveling with you. For example, if an intern is shadowing you, include his/her time at the interview.

2. **Travel time**
   Include the time it took you to travel from your office, home, or other operation, and the time to return back or go to the next operation; report in minutes. Include the time for everyone who is traveling with you. For example, if you bring an intern who is shadowing you, include his/her travel time. If the interview was conducted over the phone, enter "0" for travel time.

3. **Data collector(s)**
   Record the number involved in the interview for each data collector category.

4. **Interview response code**
   Select one response code that best applies to this feedlot. Enter code 99 if the questionnaire is completed. If the Producer decides not to participate, select the response code 00 through 07 that best describes the reason for not participating. If response code 07 Other is selected, explain in the comments section at the bottom of the page.

5. **Respondent's position on this operation**
   Select one response code that best describes the respondent's position on this operation.

6. **Producer data quality**
   Select the response that best describes the data quality. Use of records to complete the questionnaire often improves data quality.

7. **Comments**
   Record any comments about this questionnaire or this operation.

Signature
The VS data collector should sign the appropriate line.

To be completed by Coordinator

8. **Field data quality**
   The Coordinator should record the quality of the data.

Submission

Phone or in-person interview-on Mi-Co	Phone or in-person interview on paper

• Press the "Submit" button.
• The form will be routed to the Coordinator chosen on this page. That Coordinator will then review the submission.
  ○ If they approve it, it will be forwarded to NAHMS Staff for final review.
  ○ If they reject it, it will go back into the data collector's queue. The data collector will then have the opportunity to make changes on the form and re-submit to the Coordinator.
• Once in the NAHMS Staff reviews, they will be able to do either of the following.
  ○ If the form is approved, then it is considered "Finished" and the data are finalized and the submission will be logged in the Coordinator dashboard.
  ○ If the form is rejected, it will go back to the data collector. The data collector will then have the chance to re-submit through the Coordinator.
	• Return the completed questionnaire to your NAHMS coordinator within 3 working days of the visit.
	• You may copy the final page of the questionnaire to complete for non-respondents and send the copy to your NAHMS Coordinator within 3 working days.

SECTION 7. GLOSSARY

Antibiotic: A chemical compound generally produced by molds that inhibits and/or kills certain bacteria. Antibiotics are generally very effective against illnesses caused by bacteria.

Antimicrobial: Any substance of natural, semisynthetic, or synthetic origin that kills or inhibits the growth of microorganisms but causes little or no damage to the host. Technically, all antibiotics are antimicrobials, but not all antimicrobials are antibiotics. For the purposes of this questionnaire, however, the terms "antimicrobial" and "antibiotic" are considered synonymous.

Antimicrobial use definitions (excerpted from American Veterinary Medical Association (AVMA) website - https://www.avma.org/policies/avma-definitions-antimicrobial-use-treatment-control-and-prevention):

> **Antimicrobial prevention of disease (prophylaxis):** On a population basis, prevention is the administration of an antimicrobial to a group of animals, none of which have evidence of disease or infection, when transmission of existing undiagnosed infections, or the introduction of pathogens, is anticipated based on history, clinical judgement, or epidemiological knowledge.
>
> **Antimicrobial control of disease (metaphylaxis):** On a population basis, control is the use of antimicrobials to reduce the incidence of infectious disease in a group of animals that already has some individuals with evidence of infectious disease or evidence of infection.
>
> **Antimicrobial treatment of disease:** Treatment is the administration of an antimicrobial as a remedy for an individual animal with evidence of infectious disease.

Backgrounder operation: Often used interchangeably with a stocker operation, a backgrounder operation is a farm or ranch that raises weaned calves prior to entering a feedlot. Calves that have spent time on backgrounder/stocker operations have recovered from the stress of weaning and tend to adapt more smoothly to a feedlot environment compared with freshly weaned calves. Sometimes, distinctions are made between backgrounder and stocker operations. For example, stocker operations are more likely to keep calves for longer periods than backgrounder operations, which typically keep calves just long enough for them to get over the stress of weaning or leaving the farm or ranch of origin before they enter a feedlot environment. In addition, backgrounder operations typically haul feed to the calves, while stocker operations expect calves to graze on pasture for most of their nutritional needs. In general, a backgrounder or stocker operation is an intermediate step for calves between the farm or ranch of origin and a feedlot.

Beef Quality Assurance (BQA): A national program that raises consumer confidence through offering proper management techniques and a commitment to quality within every segment of the beef industry. Nearly every U.S. State has an active BQA program. The program links all beef producers with livestock production specialists, veterinarians, nutritionists, marketers, and food purveyors interested in maintaining and improving the quality of the beef they produce. BQA principles are based on good management practices designed to meet the need of the Nation's food production system. In addition, BQA programming focuses on educating and training cattle producers, farm advisors, and veterinarians on animal husbandry practices as well as issues regarding food safety and quality.

Bolus: For the purposes of this questionnaire, this is a large antibiotic tablet that is administered orally and then remains in the rumen to release medication over time.

Bovine respiratory disease (BRD): A general term referring to disease of the upper or lower respiratory tracts of cattle that is related to a number or different factors, including bacteria, viruses, host characteristics such as stress and immune status, and environmental risks such as poor ventilation, dust, and crowding. BRD is most prevalent within the first few weeks of arrival to the feedlot, which is why it is called shipping fever. Common signs of BRD include fever, breathing difficulties, coughing, nasal discharge, depression, and lack of appetite.

Cattle on feed: Cattle being fed a high-energy ration consisting of components such as grain, silage, hay, and/or protein supplement before being sent to slaughter. Operations with cattle being "backgrounded only" for later sale as feeders or for placement in another feedlot were excluded from this study. This questionnaire is restricted to steers and heifers that will leave the operation to go directly to slaughter.

Cattle placed/placement: This questionnaire is restricted to steers and heifers placed in a feedlot and fed a ration designed to produce a "select or better" carcass at slaughter. Placement refers to the time that cattle entered the feedlot.

Coordinator: The NAHMS coordinator for the data collector.

Data Collector: Refers to the individual administering (i.e., asking the questions) for the Health Management on U.S. Feedlots 2021 Phase I questionnaire. Throughout this manual, the data collector is often referred to as "you."

Dehorning: Refers to the complete removal of attached horns by methods such as gouging, hand saws, or wires.

Disease conditions in feedlot cattle: Below are examples of disease conditions in feedlot cattle, along with their definitions. These disease conditions are used in Questions A.20, A.21, and B.10.

> **Acute interstitial pneumonia:** A suddenly occurring respiratory distress syndrome that affects cattle late in the feeding period and may be related to dust, heat, previous respiratory disease, and toxins. A post-mortem examination is required to definitively diagnose this disease. Lungs are heavy, full of fluid, and fail to collapse normally.
>
> **Bloat:** Excessive accumulation of gases in the rumen due to interruption of the normal elimination of gas via eructation or belching. Bloat in cattle in confinement (not on pasture) usually occurs secondary to acidosis and/or rumenitis. Cattle are distended on the left side, uncomfortable, and can suddenly collapse and die.
>
> **Coccidiosis:** A parasitic infection of the intestine caused by *Eimeria* species. Disease is typically seen in young cattle, and clinical signs can vary from reduced weight gain, to watery feces and discomfort, to severe bloody diarrhea, straining to defecate, and death. Calves that survive severe illness may be permanently stunted. Drugs used for the prevention and/or treatment of coccidiosis include amprolium, decoquinate, and ionophores.
>
> **Diarrhea:** Diarrhea in cattle can be caused by many conditions, including bacterial, viral, or parasitic infections, type of feed and feed changes, and indigestion.

Footrot (infectious pododermatitis): A contagious bacterial disease of the interdigital (between the toes) skin and deeper tissues of ruminants associated with wet and muddy seasons and environmental conditions that lead to skin damage. Clinical signs include lameness, reddening and swelling of the interdigital tissue, and foul-smelling open ulcers.

Hairy heel wart (papillomatous digital dermatitis): A contagious bacterial infection of the foot characterized by raised red sores or erosions over the heel area. It can be confused with footrot but is caused by a different type of bacteria and therefore does not respond to the typical treatments for footrot.

Central nervous system (CNS) disease (polio, listeriosis, "brainers"): Brain disease in cattle can result from many causes, including nutritional imbalances, infections, and toxicities. Clinical signs can include incoordination, weakness, convulsions, depression, fever, and circling. Treatment is by intravenous injection of thiamine and glucose.

Pinkeye (infectious bovine keratoconjunctivitis): A contagious disease of the eyes of cattle characterized by tearing, light sensitivity, squinting, swelling of the conjunctiva, and ulceration of the cornea. This can progress to further cloudiness of the cornea followed by a pink then yellow color of the eye. Permanent blindness can ultimately result. It is transmitted by face flies.

Cardiovascular disease (e.g., heart failure, brisket disease): Heart disease in cattle can result from right-sided heart failure due to pulmonary hypertension (high altitude disease), hardware disease (foreign body such as a wire in the reticulum piercing the heart lining), or infectious inflammations of the heart muscle or valves. High altitude disease or brisket disease is a complicated problem caused by narrowing of the blood vessels in the lungs due to chronic low levels of oxygen. This increased resistance to blood flow in the lungs, or pulmonary hypertension, ultimately causes right heart failure. Pulmonary hypertension is multifactorial, involving genetic predisposition, exposure to altitude, and potentially high growth rates. Clinical signs of right heart failure include lethargy, swelling of the limbs, belly, and brisket (brisket disease) due to fluid accumulation, distension and pulsation of the jugular veins, diarrhea, and bulging eyes.

Fatigued cattle syndrome: A recently recognized syndrome in feedlot cattle characterized by exhaustion of energy storage within the muscle. It appears to be associated with increased outweights, heat stress, and aggressive handling. Clinical signs of fatigued cattle syndrome include reluctance to move, muscle tremors, and a stiff gait.

Feed additives: Feed additive examples and their definitions are listed below. These are used in Question C.4.

Direct-fed microbial or probiotic: Direct-fed microbials (DFM) are products that contain live microorganisms (bacterial [e.g., *Lactobacillus acidophilus*] and/or yeast [*Saccharomyces cerevisiae*]). DFM can also be called probiotics. DFM can help improve fiber digestion by rumen microbes.

Yeast fermentation products: Contain extracts from cultures of fungi such as Saccharomyces cerevisiae, with no guarantee of containing live organisms. Yeast fermentation products can

increase feed intake, which improves performance.

Prebiotics (e.g., mannan-oligosaccharides): Prebiotics, such as mannan-oligosaccharides, are complex carbohydrate molecules derived from the outer cell wall of yeast products. Prebiotics can stimulate existing rumen microbes to multiply and increase rumen efficiency of digestion.

Vitamin supplements: Vitamin supplements, such as vitamins A, D, and E, are often added to cattle diets.

Organic mineral supplements: Minerals can be combined with an amino acid or protein and fed in the organic form (referred to as complexes, proteinates, or chelates). Minerals that are sometimes fed in the organic form include copper, zinc, cobalt, and manganese with an amino acid or protein. The relative bioavailability of some minerals is higher when in the organic form compared to inorganic sources.

Inorganic mineral supplements: Minerals can be added to the diet in the inorganic form. Macrominerals include calcium, magnesium, phosphorus, potassium, sodium, and sulfur. Microminerals include chromium, cobalt, copper, iodine, iron, manganese, molybdenum, nickel, selenium, and zinc.

Enzymes: Enzymes, such as xylanase and cellulase, are specialized proteins that break down feedstuffs and improve digestability. They are naturally produced by microorganisms in the rumen of cattle but can also be added to the diet.

Essential oils and plant-derived products (e.g., yucca extract): Examples of essential oils include eugenol, thymol, vanillin, and clove essential oil. Essential oils may improve feed efficiency. Other plant-derived products, such as yucca extract, can also be added to feedlot diets. Yucca extract can improve animal performance and feed efficiency, and they may also stimulate some bacteria and inhibit others – primarily gram positive organisms—in much the same way as ionophores.

Other feed additives: If other feed additives are used for any of the listed reasons (improved growth rate and/or feed efficiency, antibiotic alternative, bovine respiratory disease, hoof health, pre-harvest food safety, or reduce liver abscesses), specify what feed additives are being used, and for what reasons.

Feeding period: The time span beginning when cattle enter the feedlot and ending when cattle are marketed (i.e., shipped for slaughter).

Feedlot: An operation that feeds cattle for the slaughter market.

Feedlot capacity: The total number of cattle that could be accommodated in the feedlot at one time. For this study, feedlots were categorized as small or large:

Small: Feedlot capacity of 50 to 999 head.

Large: Feedlot capacity of 1,000 or more head.

Group administration of antibiotics: For purposes of this questionnaire, administration of an injectable antibiotic to cattle on a population basis rather than on an individual animal basis, that is to the majority

of the animals in a pen. Group administration can be for prevention, control, or treatment of disease (see "Antimicrobial Use Definitions"), while individual administration is for treatment only of individual sick animals. In the 2017 Veterinary Services Antibiotic Use Questionnaire for Cattle on Feed, group administration was defined as administration of an injectable antibiotic to at least 90% of cattle in a pen for the prevention, control, or treatment of disease.

Heifer: A young female bovine that has not calved.

Ionophore: A drug administered in feed that promotes the efficient use of feedstuff s by altering the fermentation pattern in the rumen. Monensin, lasalocid, and laidlomycin are the three ionophores approved for use in cattle. All three are approved for improving feed efficiency. Monensin and lasalocid are also approved for prevention and control of coccidiosis. Ionophores are not categorized by the FDA as medically important antimicrobials for humans.

Killed vaccine: A vaccine made by inactivating or killing the pathogen of interest during the process of making the vaccine.

Medically important antimicrobial: Any antimicrobial the FDA deems medically important with respect to the use of that class of antimicrobials for therapeutic use in human medicine. As of January 1, 2017, medically important antimicrobials are no longer approved by the FDA for use in food producing animals for growth promotion purposes, and medically important antimicrobials used in animal feed or water require veterinary oversight (i.e., a veterinary feed directive). Many injectable medically important antimicrobials already require veterinary oversight, although some are available over the counter in many States. All medications formulated for individual bolus dosing to cattle (e.g., sulfamethazine or Supra Sulfa III) are currently available over the counter in most States.

Modified live vaccine: A vaccine containing a version of the living pathogen that has been weakened so that it does not cause disease in animals with normal immune systems. In general, it produces a more robust immune response than a killed vaccine because it is closer to a natural infection.

Preconditioned cattle: Preconditioning refers to a management practice designed to prepare calves to better adapt to a new location. Preconditioned calves are usually held on the operation of origin for a set period (e.g., 45 days of more) after weaning, allowing calves to recover from the stress of weaning before they leave the operation of origin. Practices typically used in a preconditioning program include vaccination, castration, dehorning (if necessary), and introduction to a feed bunk (i.e., training to eat from a feed bunk). Preconditioned calves present a lower risk of disease upon arrival at a feedlot.

Respondent: The individual who answers the questions in the Health Management on U.S. Feedlots 2021 Phase I Questionnaire. Throughout this manual, the Respondent is often referred to as the "Producer."

Steer: A castrated male bovine.

Stocker operation: Often used interchangeably with a backgrounder operation, a stocker operation is a farm or ranch that raises weaned calves prior to entering a feedlot. Calves that have spent time on backgrounder/stocker operations have recovered from the stress of weaning and tend to adapt more smoothly to a feedlot environment compared with freshly weaned calves. Sometimes, distinctions are made between backgrounder and stocker operations. For example, stocker operations are more likely to keep calves for longer periods than backgrounder operations, which typically keep calves just long enough for them to get over the stress of weaning or leaving the farm or ranch of origin before they

enter a feedlot environment. In addition, backgrounder operations typically haul feed to the calves, while stocker operations expect calves to graze on pasture for most of their nutritional needs. In general, a backgrounder or stocker operation is an intermediate step for calves between the farm or ranch of origin and a feedlot.

Tipped: Refers to cutting only a portion of the horn off and not completely removing it.

Veterinary Feed Directive (VFD): A written order (paper or electronic) by a licensed veterinarian approving the use of an antimicrobial in feed, in the context of a valid veterinarian-client-patient relationship. Since the full implementation of FDA Guidance for Industry #213 on January 1, 2017, a VFD is required for use of medically important antimicrobials in feed. The use of medically important antimicrobials for production purposes (e.g., growth promotion) is illegal. Medically important antimicrobials may only legally be used for therapeutic purposes (prevention, control, or treatment of disease).

SECTION 7. REFERENCE CARDS

REFERENCE CARD 1: PAPERWORK REDUCTION ACT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 1 hour per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.	**OMB Approved** 0579-0079 EXP: 04/2023
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**

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).

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, Cattlyst
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, CTC
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

REFERENCE CARD 6: INFORMED CONSENT FOR FEEDLOTS IN THE STATE OF CALIFORNIA

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), the California Department of Food and Agriculture and the State of California, and the Producer hereby enter into this National Animal Health Monitoring System (NAHMS) Health Management on U.S. Feedlots 2021 INFORMED CONSENT, the terms of which are set forth below.

1. The California Department of Food and Agriculture (CDFA) is mandated by California Food and Agricultural Codes 14400-14408 to monitor antimicrobial use and management practices in livestock. The California Law furthermore directs that, when applicable, this information be gathered in coordination with NAHMS. The California Law stipulates that these data are collected in a voluntary manner. The collected data will be used for monitoring and educational, not regulatory, purposes.

2. Since the NAHMS Health Management on U.S. Feedlots 2021 study will include collection of data regarding antimicrobial use and health management in feedlot cattle in California, CDFA has requested that NAHMS share aggregate data collected in the NAHMS Health Management on U.S. Feedlots 2021 study from California cattle feedlots with them for the purposes of fulfilling California Food and Agricultural Codes 14400-14408.

3. Only aggregate (summary) data, not individual data, will be shared with CDFA. The identity of the Producer will be withheld. No individual responses will be shared or published.

SECTION 8. STUDY MATERIALS

Images of the relevant study materials are below for your reference in preparation and training. If you need to use one of these materials when administering a survey, please use the copies that should be provided to you from your NAHMS State Coordinator (or from NAHMS if you are a State Coordinator).

Links to online versions of the same documents are provided below in one place for convenience. The relevant study materials themselves can be found at the first link below.

Document/Site	**Link**
Health Management on U.S. Feedlots study materials page	**https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/monitoring-and-surveillance/nahms/feedlot_questionnaires**
AgLearn CIPSEA Training	https://aglearn.usda.gov/course/view.php?id=38375
NAHMS State Coordinator Data Transfer SharePoint Site	https://usdagcc.sharepoint.com/sites/aphis-vs-stas/ceah/NAHMS/FeedlotHealth2021
Resetting your eAuth account information	https://www.eauth.usda.gov/home/
Updating your contact information (including your supervisor; for Mi-Co access)	http://addressbookupdate
Promotional video	https://youtu.be/Njf3UnNj8kE

NAHMS Health Management on U.S. Feedlots 2021

Study Launch

From March through August 2021, the USDA's National Animal Health Monitoring System (NAHMS), in collaboration with the National Agricultural Statistics Service, will conduct a national study focusing on cattle health and management on U.S. feedlots with at least 50 head. The NAHMS Health Management on U.S. Feedlots, 2021 study is designed to provide a snapshot of current feedlot cattle health management practices. The information collected will also allow for the analysis of trends in specific topics related to cattle health, based on previous NAHMS feedlot studies.

Background

NAHMS collects scientifically accurate data for U.S. livestock, poultry, and aquaculture industries on a rotating basis. NAHMS studies are voluntary and confidential. For this feedlot study, priority issues facing the industry regarding cattle health were identified via responses to a needs assessment questionnaire and from discussions with representatives from various segments of the feedlot industry, including producer associations, feedlot veterinarians, and university and extension experts.

"The National Cattlemen's Beef Association appreciates the efforts of NAHMS to provide accurate and robust data for the U.S. beef cattle industry that can be used to detail trends in health management and antimicrobial use for feedyard cattle."

Mary Ann Kniebel, Vice Chair of NCBA's Cattle Health and Well-Being Committee

"The NAHMS reports for Cow/Calf and Feedlot have for decades provided solid, non-biased information to rancher and feedlot managers to help them understand how their colleagues in the beef industry manage cattle. From my long history as a veterinarian serving beef producers, I ask you to sincerely consider supporting the NAHMS survey efforts."

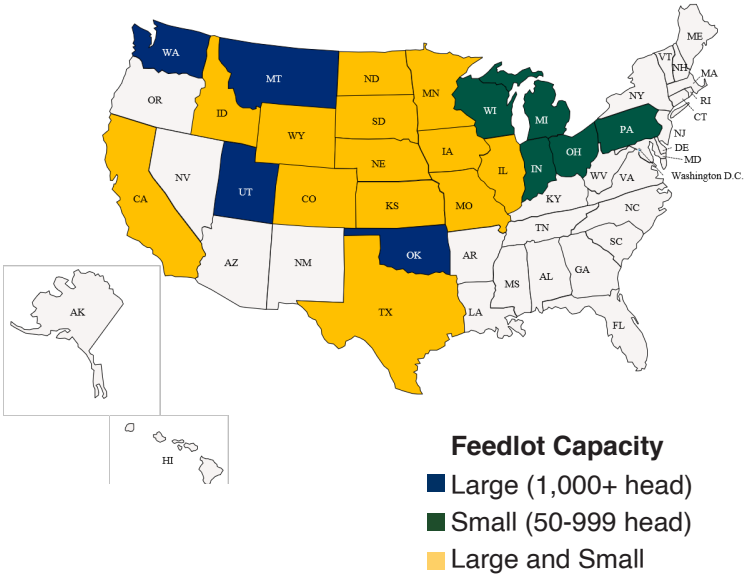
Dee Griffin, DVM, Director, VERO (Veterinary Education, Research & Outreach) Program, Texas A&M University College of Veterinary Medicine

Study Objectives

The NAHMS Health Management on U.S. Feedlots, 2021 study is designed to provide stakeholders with valuable information about the U.S. feedlot industry. This study will

- Describe health management practices on U.S. feedlots with 50 or more head,
- Estimate the prevalence of important feedlot cattle diseases,
- Describe antibiotic use and stewardship practices on U.S feedlots, and
- Describe trends in feedlot cattle health management practices and important feedlot cattle diseases.

Figure 1. States participating in the NAHMS Health Management on U.S. Feedlots, 2021 study, by feedlot capacity



Study Activities

Participating in any NAHMS study is voluntary. If you are selected to participate in the Health Management on U.S. Feedlots, 2021 study and decide to do so, your answers will statistically represent many other producers in your State.

Representatives from NASS will visit participating operations from March through April 2021 to complete a questionnaire. If participants choose to continue in the study, USDA or State veterinary health professionals will visit feedlots from June through August 2021 to complete a second questionnaire.

Benefits to Participating

Reports published from this study will benefit the U.S. feedlot industry by providing current and scientifically valid estimates to

- Aid in understanding disease preparedness strengths and vulnerabilities,
- Help policymakers and industry stakeholders make informed decisions,
- Identify research and development needs on vital issues related to feedlot cattle health,
- Enable economic analyses of the health and productivity of the U.S. feedlot industry,
- Identify educational needs and opportunities related to feedlot cattle health,
- Provide benchmark data on important feedlot cattle health management practices to inform quality assurance programs, and
- Provide transparent, credible, independent information on U.S. feedlot industry practices that is not collected by the industry itself.

NAHMS Feedlot Studies Have Impact!

- The NAHMS Feedlot 1994 and 1999 studies helped pioneer further research into injection sites, branding locations, and cattle handling practices, which led to data benchmarking for beef quality assurance programs.
- The NAHMS Feedlot 1994 study provided the industry's first look into the prevalence of *E. coli* O157:H7 shedding by feedlot cattle.
- The NAHMS Feedlot 2011 study provided data that were used to inform an economic analysis focusing on the market impacts of reducing the prevalence of bovine respiratory disease in feedlot cattle.
- Almost 1,500 scientific and industry publications have referenced NAHMS feedlot data since 1990.

"NAHMS studies provide critical information for animal science, veterinary science, and many other disciplines involving teaching and research in beef feedlot production. These data are used as a component of the Beef Checkoff's National Beef Quality Audit every 5 years, as well as a plethora of other applied research efforts. We should all support and advocate for contributing to this study!"

Keith Belk, Ph.D., Animal Sciences Department Head at Colorado State University

"NAHMS provides us with a snapshot of how our industry partners are operating their business and making decisions, serving as a benchmark and gut-check for us in making decisions on how to run our business. This helps us stay open-minded and current in today's practice of feeding cattle."

Josh Szasz, DVM, Ph.D., Five Rivers Cattle Feeding

Scientific Approach

NAHMS was established to collect accurate and valuable information on animal health and management in the United States. NAHMS studies are national in scope, science based, statistically valid, collaborative, voluntary, and anonymous.

Confidentiality

NAHMS is a recognized statistical unit by the Office of Management and Budget. All information acquired for the NAHMS Health Management on U.S. Feedlots, 2021 study will be used for statistical purposes only and will be treated as confidential in accordance with the Confidential Information Protection and Statistical Efficiency Act (CIPSEA). Only summary estimates based on the inference population will be reported. Data collected under CIPSEA are protected from Freedom of Information requests.

For More Information

USDA–APHIS–VS–CEAH
NRRC Building B, M.S. 2E7
2150 Centre Avenue
Fort Collins, CO 80526-8117
Phone: 970.494.7000
Email: NAHMS@usda.gov
Or visit NAHMS at: http://www.aphis.usda.gov/nahms
#791.1219

OMB Approved
0579-0079
EXP: 04/2023

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 CONFIDENTIALITY PLEDGE

Instructions:
Review this page with the producer, answering any questions. Make sure the producer understands that participation is voluntary. Sign below, give the top copy to the Producer, keep one copy, and send the final copy to your NAHMS Coordinator.

Background
USDA's Animal and Plant Health Inspection Service (APHIS) is collecting information on cattle health and management on feedlots through the National Animal Health Monitoring System (NAHMS). This information will be used to describe current cattle health and management practices, help policymakers and stakeholders make informed decisions, assist researchers and private enterprises in identifying and focusing on vital issues related to cattle health on feedlots, and direct educational programs for producers and veterinarians.

Participation is voluntary and you may decline to participate. Your participation is vital and will help develop national estimates of cattle health and management practices. We ask that you provide accurate information regarding your operation; however, you retain the right to refuse to answer any or all questions.

Confidentiality
The information you provide will be used for statistical purposes only. Your responses will be kept confidential, and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws. For more information on how we protect your information please visit: https://www.aphis.usda.gov/animal_health/nahms/general/downloads/NAHMS_CIPSEA.pdf. Response to this survey is voluntary.

Only authorized APHIS employees or those acting on APHIS's behalf (NAHMS agents) will have access to your individual record data. By law to be an authorized APHIS employee or NAHMS agent, individuals must take an oath which states that no confidential information will be released, and that the individual is subject to a jail term of up to 5 years, a fine of up to $250,000, or both, if he or she discloses ANY identifiable information about you or your operation.

Your data's security is vitally important to APHIS. Every person working for or in cooperation with APHIS on this study has signed a confidentiality form which stipulates the requirements for keeping data confidential, and the penalties individuals are subject to if identifiable information is released. Further, data are protected from cybersecurity threats. Under the Cybersecurity Enhancement Act of 2015, your data will be protected by US Department of Homeland Security (DHS) cybersecurity monitoring. In the event of a cybersecurity incident, and pursuant to any required legal processes, information from these sources may be used to help identify and mitigate the incident.

APHIS may publish, or authorize others to publish, the aggregate (summary) findings acquired from NAHMS for the benefit of the feedlot industry, allied private industries, and other interested groups, but will ensure that the identity of the producer is withheld. APHIS may not publish, or authorize others to publish, individual responses.

Data collected by the Data Collector will not be used for regulatory purposes. Please note that information on a producer's animals revealed from sources unrelated to this study, such as testing and inspection for movement or sale of animals or tracebacks on testing done at slaughter, may cause unrelated regulatory action. In addition, if a federally accredited or federal veterinarian conducting this interview on the Producer's premises observes an animal with signs suspicious of a dangerously contagious, infectious, or exotic disease foreign to the United States (e.g., foot-and-mouth disease), they are obligated to report this disease to appropriate authorities, in which case further investigation and possible action may occur.

The Producer will be invited to complete a brief evaluation of the Health Management on U.S. Feedlots 2021 study when the study is complete, the results of which will be used to assist APHIS in the design and implementation of future NAHMS surveys.

You can obtain these reports and further information from this study by accessing the NAHMS Web site at:
https://www.aphis.usda.gov/nahms

By signing below, the NAHMS Agent is pledging APHIS to protect the confidentiality of the participants information

NAHMS Agent Date

NAHMS ID: _____

OMB Approved
0579-0079
EXP: 04/2023

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

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 for specific percentages. This is done because we recognize that in many cases percentages 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, known as COVID-19, impacted the operation of meatpacking plants and had downstream effects on feedlot operations. New questions were added to this questionnaire so effects of COVID-19 on the health and management of feedlot cattle could be described.

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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	Weight class and breed placed on the feedlot?		Reliable information?				
			None	Some	Most	All	
a. Beef breed cattle (less than 400 lb at arrival)	☐1 Yes ☐3 No F101	If No, SKIP to 1b If Yes →	☐1	☐2	☐3	☐4	F107
b. Beef breed cattle (400-699 lb at arrival)	☐1 Yes ☐3 No F102	If No, SKIP to 1c If Yes →	☐1	☐2	☐3	☐4	F108
c. Beef breed cattle (700 lb or greater at arrival)	☐1 Yes ☐3 No F103	If No, SKIP to 1d If Yes →	☐1	☐2	☐3	☐4	F109
d. Dairy or dairy cross breed cattle (less than 400 lb at arrival)	☐1 Yes ☐3 No F104	If No, SKIP to 1e If Yes →	☐1	☐2	☐3	☐4	F110
e. Dairy or dairy cross breed cattle (less than 400-699 lb at arrival)	☐1 Yes ☐3 No F105	If No, SKIP to 1f If Yes →	☐1	☐2	☐3	☐4	F111
f. Dairy or dairy cross breed cattle (700 lb or greater at arrival)	☐1 Yes ☐3 No F106	If No, SKIP to 2 If Yes →	☐1	☐2	☐3	☐4	F112

2. In 2020, were **all** cattle placed on this feedlot bred and raised by this operation?	☐1 Yes ☐3 No ☐8 DK F113

[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
☐1	☐2	☐3	☐4	☐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	☐1 Yes ☐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	☐1 Yes ☐3 No
b. Cattle are purchased at a sale barn where this information is not available.	F117	☐1 Yes ☐3 No
c. Cattle for which this information is known are too expensive.	F118	☐1 Yes ☐3 No
d. There is no practical mechanism for transfer of this information.	F119	☐1 Yes ☐3 No
e. Other (specify:_____F120_Other)	F120	☐1 Yes ☐3 No

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	☐1	☐2	☐3	☐4	☐8
b. Given respiratory vaccines less than 2 weeks prior to or at weaning	F122	☐1	☐2	☐3	☐4	☐8
c. Given respiratory vaccines more than 2 weeks prior to weaning	F123	☐1	☐2	☐3	☐4	☐8
d. Given modified live, not killed, respiratory vaccines	F124	☐1	☐2	☐3	☐4	☐8
e. Weaned 4-6 weeks before arrival at feedlot	F125	☐1	☐2	☐3	☐4	☐8
f. Weaned more than 6 weeks before arrival at feedlot	F126	☐1	☐2	☐3	☐4	☐8
g. Bull calves and/or bulls castrated at least 3 weeks prior to arrival at feedlot	F127	☐1	☐2	☐3	☐4	☐8
h. Non-polled cattle dehorned at least 3 weeks prior to arrival at feedlot ☐5 Check if all cattle placed were naturally polled	F128	☐1	☐2	☐3	☐4	☐8
i. Treated for external or internal parasites	F129	☐1	☐2	☐3	☐4	☐8
j. Given antibiotics within 4 weeks prior to arrival at feedlot	F130	☐1	☐2	☐3	☐4	☐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	☐1 Yes ☐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	☐1	☐2	☐3	☐4	☐5
b. Arrival weight class	F133	☐1	☐2	☐3	☐4	☐5
c. Appearance of cattle at arrival	F134	☐1	☐2	☐3	☐4	☐5
d. Respiratory disease in cattle previously received from same source	F135	☐1	☐2	☐3	☐4	☐5
e. Presence of respiratory disease in some cattle in group	F136	☐1	☐2	☐3	☐4	☐5

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	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important
f. Whether cattle were commingled with other cattle prior to arrival F137	☐1	☐2	☐3	☐4	☐5
g. Geographic origin of the cattle F138	☐1	☐2	☐3	☐4	☐5
h. Lack of previous respiratory vaccination F139	☐1	☐2	☐3	☐4	☐5
i. Lack of preconditioning/backgrounding F140	☐1	☐2	☐3	☐4	☐5
j. Season of the year F141	☐1	☐2	☐3	☐4	☐5
k. Weather at time of arrival at the feedlot F142	☐1	☐2	☐3	☐4	☐5
l. Experience of receiving crew F143	☐1	☐2	☐3	☐4	☐5
m. Breed of cattle F144	☐1	☐2	☐3	☐4	☐5
n. History of prior antibiotic treatment F145	☐1	☐2	☐3	☐4	☐5
o. Other (specify:_____F146_Other) F146	☐1	☐2	☐3	☐4	☐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	☐1 None ☐2 Some ☐3 Most ☐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	☐1 Yes ☐3 No ☐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	☐1 More than 2019 ☐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	☐1	☐2	☐3	☐4	☐8
b. 1 to 3 day(s) after arrival F149	☐1	☐2	☐3	☐4	☐8
c. 4 to 13 days after arrival F150	☐1	☐2	☐3	☐4	☐8
d. 14 to 28 days after arrival F151	☐1	☐2	☐3	☐4	☐8

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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	☐1	☐2	☐3	☐4	☐8
b. Vaccination against clostridial diseases (e.g., blackleg) F154	☐1	☐2	☐3	☐4	☐8
c. Vaccination against tetanus F155	☐1	☐2	☐3	☐4	☐8
d. Vaccination against *Moraxella* (pinkeye) F156	☐1	☐2	☐3	☐4	☐8
e. Vaccination against any respiratory diseases F157	☐1	☐2	☐3	☐4	☐8
[If Question 11e = none, SKIP to Other Procedures 11i]					
f. Injectable vaccination against viral respiratory disease F158	☐1	☐2	☐3	☐4	☐8
g. Intranasal vaccination against viral respiratory disease F159	☐1	☐2	☐3	☐4	☐8
h. Vaccination against bacterial respiratory disease due to *Mannheimia* and/or *Pasteurella* F160	☐1	☐2	☐3	☐4	☐8
Other procedures					
i. Testing for bovine viral diarrhea (BVD) infection F161	☐1	☐2	☐3	☐4	☐8
j. Implantation F162	☐1	☐2	☐3	☐4	☐8
k. Administration of a parasiticide F163	☐1	☐2	☐3	☐4	☐8
l. Administration of an immunostimulant (e.g., Zelnate™) F164	☐1	☐2	☐3	☐4	☐8
m. Individual weighing of the animal F165	☐1	☐2	☐3	☐4	☐8
n. Taking the temperature of the animal F166	☐1	☐2	☐3	☐4	☐8
o. Listening to lungs with stethoscope F167	☐1	☐2	☐3	☐4	☐8
p. Administration of injectable antibiotic F168	☐1	☐2	☐3	☐4	☐8
q. Administration of vitamin and/or mineral injection F169	☐1	☐2	☐3	☐4	☐8
r. Other procedure F170 (specify:_____ F170_Other)	☐1	☐2	☐3	☐4	☐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 ☐1 Yes ☐3 No ☐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

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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	☐1	☐2	☐3	☐4	☐8	☐7
[If Question 14a = NA, SKIP to Question 14c]						
b. For heifers, what proportion were administered an abortifacient such as prostaglandin at arrival? F172	☐1	☐2	☐3	☐4	☐8	
c. For bulls and bull calves, what proportion arrived at the feedlot uncastrated? F173	☐1	☐2	☐3	☐4	☐8	☐7
d. What proportion of cattle arrived at the feedlot with horns? F174	☐1	☐2	☐3	☐4	☐8	
[If Question 14d = None or NA, SKIP to Question 15]						
e. What proportion of horned cattle were dehorned at the feedlot? F175	☐1	☐2	☐3	☐4	☐8	
f. What proportion of horned cattle were tipped at the feedlot? F176	☐1	☐2	☐3	☐4	☐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	☐1	☐2	☐3	☐4	☐5
b. Animals at feedlot 15 to 29 days? F178	☐1	☐2	☐3	☐4	☐5
c. Animals at feedlot 30 days or more? F179	☐1	☐2	☐3	☐4	☐5

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

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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	%	

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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)	F888/F898	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
b. Bloat	F889/F899	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
c. Other digestive disorders excluding bloat (e.g., coccidiosis, diarrhea)	F890/F900	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
d. Footrot (infectious pododermatitis)	F891/F901	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
e. Hairy heel wart (papillomatous digital dermatitis)	F892/F902	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
f. Central nervous system (CNS) disease (e.g., polio, listeriosis, "brainers")	F893/F903	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
g. Pinkeye	F894/F904	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
h. Cardiovascular disease (e.g., heart failure, brisket disease)	F895/F905	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
i. Fatigued cattle syndrome	F896/F906	☐1 Yes ☐3 No ☐8 DK	☐1 Higher than 2019 ☐3 Lower than 2019
j. Other (specify:_____ F897 Other)	F897/F907	☐1 Yes ☐3 No	☐1 Higher than 2019 ☐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
	☐1	☐2	☐3	☐4	☐8

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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/F226/F239/F252	☐ No BRD	☐ No digestive disorders	☐ No footrot	☐ No pinkeye
a. Injectable antibiotic? F213/F227/F240/F253	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
b. Bolus-dosed oral antibiotic? F214/F228/F241/F254	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
c. In feed antibiotic? F215/F229	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK		
d. Topical antibiotic? F242/F255			☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
e. Respiratory vaccine? F216	☐1 Yes ☐3 No ☐8 DK			
f. Corticosteroid (e.g., Dexium®)? F217/F230/F243/F256	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
g. Nonsteroidal anti-inflammatory (e.g., Banamine®, aspirin)? F218/F231/F244/F257	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
h. Antihistamine? F219/F232/F245/F258	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
i. Vitamin B injection? F220/F233/F246/F259	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
j. Vitamin C injection? F221/F234/F247/F260	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
k. Immunostimulant (e.g., Zelnate™)? F222/F235/F248/F261	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
l. Injectable mineral supplement (e.g., MultiMin®)? F223/F236/F249/F262	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
m. Probiotic paste? F224/F237/F250/F263	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK
n. Other? F225/F238/F251/F264 (specify: _____ F2XX_Other)	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐8 DK	☐1 Yes ☐3 No ☐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]

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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]

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	☐1 Yes ☐3 No	If No, SKIP to 27b If Yes →	%	☐-8 DK	F276/F280
b. Dairy or dairy cross breed cattle given in-feed antibiotics to control liver abscesses	☐1 Yes ☐3 No	If No, SKIP to 27c If Yes →	%	☐-8 DK	F277/F281
c. Beef breed cattle NOT given in-feed antibiotics to control liver abscesses	☐1 Yes ☐3 No	If No, SKIP to 27d If Yes →	%	☐-8 DK	F278/F282
d. Dairy or dairy cross breed cattle NOT given in-feed antibiotics to control liver abscesses	☐1 Yes ☐3 No	If No, SKIP to 28 If Yes →	%	☐-8 DK	F279/F283

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. Acute interstitial pneumonia (i.e., dust pneumonia, atypical pneumonia)	F285	☐1 Yes ☐3 No ☐8 DK
b. Bovine respiratory disease, excluding acute interstitial 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

	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important
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)?** F313	☐1 Yes ☐3 No ☐8 DK

[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 7, 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?** F334	☐1 Yes ☐3 No ☐8 DK

[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		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	**OR**	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

NAHMS ID: _____

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

[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 20; Page 7 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
a. Tilmicosin (Micotil®)	F352	
b. Gamithromycin (Zactran®)	F353	
c. Tulathromycin (Draxxin®)	F354	
d. Tylosin (Tylan® 200)	F355	
e. Tildipirosin (Zuprevo®)	F356	
f. Florfenicol (Nuflor®)	F357	
g. Florfenicol with flunixin meglumine (Resflor Gold®)	F358	
h. Ceftiofur (Naxcel®, Excenel®, Excede®)	F359	
i. Oxytetracycline (LA-200®, BioMycin®)	F360	
j. Penicillin (Aquacillin™, Penicillin G Procaine)	F361	
k. Ampicillin (Polyflex®)	F362	
l. Sulfadimethoxine (Albon® Injection)	F363	
m. Sulfadimethoxine (Albon® Bolus)	F364	
n. Sulfamethazine (Sustain III® Bolus, Supra Sulfa® III)	F365	

Reason Codes for Question 10	
1	Acute Interstitial Pneumonia
2	Bloat
3	Other digestive disorders
4	Footrot
5	Hairy heel warts
6	CNS disease
7	Pinkeye
8	Cardiovascular disease
9	Fatigued cattle syndrome
10	Other (specify:_____ F3XX_Other)

Antibiotic Use in Feed

11.a. Were **any** antibiotics that DO NOT require a veterinary feed directive (VFD) used in **feed** on this feedlot? F366a 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
11.b. Were **any** antibiotics that DO require a VFD used in **feed** on this feedlot? F366b Examples of antibiotics that DO require a VFD include chlortetracycline and tylosin.	☐1 Yes ☐3 No ☐8 DK

[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]

NAHMS ID: _____

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®, CTC)	F370	Fa370	Fb370	Fc370	Fd370
b. Oxytetracycline (Terramycin®, OTC)	F371	Fa371	Fb371	Fc371	Fd371
c. Chlortetracycline/Sulfamethazine (Aureo S 700®, Aureomix® S 700)	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®, CTC)	F377	Fa377	Fb377	Fc377	Fd377
b. Oxytetracycline (Terramycin®, OTC)	F378	Fa378	Fb378	Fc378	Fd378
c. Chlortetracycline/Sulfamethazine (Aureo S 700®, Aureomix® S 700)	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? Answer None (0%), Some (50% or less), Most (more than 50%), or All (100%). F384	☐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]

NAHMS ID: _____

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)]

	Reason codes for Question 17
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]*

		If used on feedlot, for what reason(s)					
	Used on feedlot?	Improve growth rate and/or feed efficiency	Antibiotic Altern-ative	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	☐1 Yes ☐3 No F412	☐1 Fa412	☐2 Fb412	☐3 Fc412	☐4 Fd412	☐5 Fe412	☐6 Ff412
h. Essential oils and plant-derived products (e.g., yucca extract)	☐1 Yes ☐3 No F413	☐1 Fa413	☐2 Fb413	☐3 Fc413	☐4 Fd413	☐5 Fe413	☐6 Ff413
5. Other (specify:_____) F414_Other	☐1 Yes ☐3 No F414	☐1 Fa414	☐2 Fb414	☐3 Fc414	☐4 Fd414	☐5 Fe414	☐6 Ff414

NAHMS ID: _____

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

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8. Did cattle stay in the same pen during the entire feeding period?	F516	☐1 Yes ☐3 No ☐8

[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

☐1 Very familiar
☐2 Somewhat familiar
☐3 Heard of name only
☐4 Not familiar

[If the operation is in the state of California, continue to Question 11; Otherwise, SKIP to Section E]

11. Do you agree to allow USDA-APHIS-NAHMS staff to share aggregate data collected in the NAHMS Health Management on U.S. Feedlots 2021 study from California cattle feedlots with California Department of Food and Agriculture (CDFA) for the purposes of fulfilling the reporting requirements (see California Food and Agriculture Codes 14400-14408) for the State of California in monitoring antimicrobial use and management practices in livestock? This is one way to efficiently collect information in only one survey and be used for two purposes while maintaining the strong data protections allowed by both USDA-NASS and USDA-APHIS-NAHMS. The purpose of this sharing is for monitoring and educational, not regulatory purposes. Only aggregate (summary) data, not individual data, will be shared with CDFA. The identity of the Producer will be withheld. *[Refer to Reference Card 6 (Informed Consent For Feedlots In The State Of California) for more information]*	☐1 Yes ☐3 No F519

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) _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

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 ..... Time_travel _____min

   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

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 1 hour per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.	**OMB Approved** 0579-0079 EXP: 04/2023
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**

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).

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, Cattlyst
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, CTC
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

REFERENCE CARD 6: Informed Consent For Feedlots In The State Of California

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), the California Department of Food and Agriculture and the State of California, and the Producer hereby enter into this National Animal Health Monitoring System (NAHMS) Health Management on U.S. Feedlots 2021 INFORMED CONSENT, the terms of which are set forth below.

1. The California Department of Food and Agriculture (CDFA) is mandated by California Food and Agricultural Codes 14400-14408 to monitor antimicrobial use and management practices in livestock. The California Law furthermore directs that, when applicable, this information be gathered in coordination with NAHMS. The California Law stipulates that these data are collected in a voluntary manner. The collected data will be used for monitoring and educational, not regulatory, purposes.

2. Since the NAHMS Health Management on U.S. Feedlots 2021 study will include collection of data regarding antimicrobial use and health management in feedlot cattle in California, CDFA has requested that NAHMS share aggregate data collected in the NAHMS Health Management on U.S. Feedlots 2021 study from California cattle feedlots with them for the purposes of fulfilling California Food and Agricultural Codes 14400-14408.

3. Only aggregate (summary) data, not individual data, will be shared with CDFA. The identity of the Producer will be withheld. No individual responses will be shared or published.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 6 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.	**OMB Approved** 0579-0079 EXP: 04/2023

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 INFORMED CONSENT FOR FEEDLOTS IN THE STATE OF CALIFORNIA

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), the California Department of Food and Agriculture and the State of California, and the Producer hereby enter into this National Animal Health Monitoring System (NAHMS) Health Management on U.S. Feedlots 2021 INFORMED CONSENT, the terms of which are set forth below.

1. The California Department of Food and Agriculture (CDFA) is mandated by California Food and Agricultural Codes 14400-14408 to monitor antimicrobial use and management practices in livestock. The California Law furthermore directs that, when applicable, this information be gathered in coordination with NAHMS. The California Law stipulates that these data are collected in a voluntary manner. The collected data will be used for monitoring and educational, not regulatory, purposes.

2. Since the NAHMS Health Management on U.S. Feedlots 2021 study will include collection of data regarding antimicrobial use and health management in feedlot cattle in California, CDFA has requested that NAHMS share aggregate data collected in the NAHMS Health Management on U.S. Feedlots 2021 study from California cattle feedlots with them for the purposes of fulfilling California Food and Agricultural Codes 14400-14408.

3. Only aggregate (summary) data, not individual data, will be shared with CDFA. The identity of the Producer will be withheld. No individual responses will be shared or published.

Signature of U.S. Department of Agriculture or California Department of Food and Agriculture Employee :	Date:
Signature of Producer or authorized representative:	Date:

OMB Approved
0579-0079
EXP: 04/2023

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 STUDY PARTICIPANT SURVEY

Thank you for participating in the National Animal Health Monitoring System (NAHMS) Health Management on U.S. Feedlots 2021 study. The NAHMS staff would like to receive input from you regarding your participation in the study.

Please return this survey in the enclosed business-reply envelope (or to NRRC Building B, 2150 Centre Ave., Fort Collins, CO, 80526-8117) within 10 days. **We value your opinion**, so please take a few minutes to complete this evaluation.

ABOUT THE HEALTH MANAGEMENT ON U.S. FEEDLOTS 2021 STUDY

1. Before your participation in the Health Management on U.S. Feedlots 2021 Study, had you ever heard of the USDA's National Animal Health Monitoring System (NAHMS)?..... ☐1 Yes ☐3 No

2. Had you heard about the NAHMS Health Management on U.S. Feedlots 2021 Study prior to receiving the invitation to participate? *[Check all that apply.]*
   - ☐1 Yes, from a magazine (specify: _____)
   - ☐2 Yes, at a conference (specify: _____)
   - ☐3 Yes, on a website (specify: _____)
   - ☐5 Word of mouth (friend, veterinarian, etc.)
   - ☐6 Radio/TV
   - ☐7 Other (specify: _____)
   - ☐8 Had not heard of this study

3. Why did you participate in the Health Management on U.S. Feedlots 2021 study? *[Check all that apply.]*
   - ☐1 To help the feedlot industry in general
   - ☐2 To be able to compare my responses to national estimates
   - ☐3 Encouraged by industry leaders
   - ☐4 Other (specify: _____)

Please indicate your level of agreement with the following statements:

4. The lengths of the questionnaires were acceptable to me.
   ☐1 Strongly Disagree ☐2 Disagree ☐3 Neither Agree or Disagree ☐4 Agree ☐5 Strongly Agree

5. The questionnaires in my opinion covered information important to the feedlot industry.
   ☐1 Strongly Disagree ☐2 Disagree ☐3 Neither Agree or Disagree ☐4 Agree ☐5 Strongly Agree

6. It was easy and convenient to make an appointment with the NASS representative to complete the Phase I Questionnaire.
   ☐1 Strongly Disagree ☐2 Disagree ☐3 Neither Agree or Disagree ☐4 Agree ☐5 Strongly Agree

7. The NASS representative clearly explained the expectations and benefits of participation in the study and effectively helped me complete the first questionnaire.
   ☐1 Strongly Disagree ☐2 Disagree ☐3 Neither Agree or Disagree ☐4 Agree ☐5 Strongly Agree

8. For the Phase 2 questionnaire, it was easy and convenient to make an appointment with the representative from USDA VS
   ☐1 Strongly Disagree ☐2 Disagree ☐3 Neither Agree or Disagree ☐4 Agree ☐5 Strongly Agree

9. The representative from VS or CDFA effectively helped me complete the second questionnaire.
☐1 Strongly Disagree ☐2 Disagree ☐3 Neither Agree or Disagree ☐4 Agree ☐5 Strongly Agree

10. Were there questions in the questionnaires that you felt were not useful? If so, what topics did they cover?

_____

_____

11. Were there topics not in the questionnaires that you felt should have been included? If so, what topics would you like to see added to future studies?

_____

_____

12. Would you participate in another NAHMS study if asked?..... ☐1 Yes ☐3 No
Why or why not?

_____

_____

13. Are there any incentives to participate that USDA could provide that would increase the likelihood of your participation in future studies? Please list:

_____

_____

_____

ABOUT YOU

1. In what State is your feedlot operation located? _____

2. Indicate the number of cattle currently in your herd:
☐1 50-999
☐2 1000 or more

Please provide any additional comments or suggestions:

_____

_____

_____

To view the results of the Health Management on U.S. Feedlots 2021 study and all past NAHMS studies, please visit the NAHMS website at: https://www.aphis.usda.gov/nahms

Thank you very much for sharing your feedback! It is much appreciated.

USDA NASS
HQ Methodology Division
SEDMB | CDS | Data Lab

ADM-043
USDA-NASS
Revised (04/21)

CERTIFICATION AND RESTRICTIONS ON USE OF UNPUBLISHED DATA

Request No _____

I,_____, understand and agree to the following conditions concerning the use of unpublished data provided by the National Agricultural Statistics Service in response to my request.

The specific data to which this request applies are:

The specific conditions of the agreement are:

a. Any aggregates, summaries, or analysis that have not been published by the National Agricultural Statistics Service (*NASS*) cannot be considered as official estimates.
b. All individual report data are confidential and may not be revealed, copied, or transmitted in any form. All summaries and analysis must not reveal individual reports and must be cleared by authorized staff. Access is authorized via (*check one*):

☐ NASS Data Lab N/A

☐ Data Enclave

☐ Project Collaboration Only

☐ Other:_____

c. These data will be used for *statistical and economic research purposes* only.
d. I will not disseminate or share the data, whether in original form or aggregated, with persons other than those who are directly associated with the project for which the data were obtained and have completed this agreement.
e. All questions regarding access to these data shall be referred to the Chair of Agricultural Statistic Board for appropriate response.

In addition to the above conditions, I have been provided Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35, Section 3572, *Fines and Penalties*, and *Limitations on Use and Disclosure of Data and Information*; 18 U. S. Code 1902, *Disclosure of crop information and speculation thereon*; 18 U. S. Code 1905, *Disclosure of confidential information generally*; 7 U. S. Code 2276, *Confidentiality of information*; and 18 U.S. Code 2072, *False crop reports.*

I certify that I have read the above-mentioned regulations this_____day of_____, 20____, and will abide by them.

_____
Name (Type or Print)

_____
Organization or Agency/Div/Br.

_____
City and State

_____
Signature

Witnessed by: _____
Representative of Chair Agricultural Statistics Board, National Agricultural Statistics Service

Date: _____

Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35, Section 3572. Fines and Penalties.

Whoever, being an officer, employee, or agent of an agency acquiring information for exclusively statistical purposes, having taken and subscribed the oath of office, or having sworn to observe the limitations imposed by Section 3572 (see below), comes into possession of such information by reason of his or her being an officer, employee, or agent and, knowing that the disclosure of the specific information is prohibited under the provisions of this title, willfully discloses the information in any manner to a person or agency not entitled to receive it, shall be guilty of a class E felony and imprisoned for not more than 5 years, or fined not more than $250,000, or both.

Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35, Section 3572. Limitations on Use and Disclosure of Data and Information.

(a) Use of Statistical Data or Information.--Data or information acquired by an agency under a pledge of confidentiality and for exclusively statistical purposes shall be used by officers, employees, or agents of the agency exclusively for statistical purposes.

(b) Disclosure of Statistical Data or Information.-- (1) Data or information acquired by an agency under a pledge of confidentiality for exclusively statistical purposes shall not be disclosed by an agency in identifiable form, for any use other than an exclusively statistical purpose, except with the informed consent of the respondent. (2) A disclosure pursuant to paragraph (1) is authorized only when the head of the agency approves such disclosure and the disclosure is not prohibited by any other law. (3) This section does not restrict or diminish any confidentiality protections in law that otherwise apply to data or information acquired by an agency under a pledge of confidentiality for exclusively statistical purposes.

(c) Rule for Use of Data or Information for Nonstatistical Purposes.--A statistical agency or unit shall clearly distinguish any data or information it collects for nonstatistical purposes (as authorized by law) and provide notice to the public, before the data or information is collected, that the data or information could be used for nonstatistical purposes.

(d) Designation of Agents.--A statistical agency or unit may designate agents, by contract or by entering into a special agreement containing the provisions required under section 3561(2) for treatment as an agent under that section, who may perform exclusively statistical activities, subject to the limitations and penalties described in this title.

Title 18, U.S. Code, Section 1902
Disclosure of crop information and speculation thereon

Whoever, being an officer, employee or person acting for or on behalf of the United States or any department or agency thereof, and having by virtue of his office, employment or position, become possessed of information which might influence or affect the market value of any product of the soil grown within the United States, which information is by law or by the rules of such department or agency required to be withheld from publication until a fixed time, willfully imparts, directly or indirectly, such information, or any part thereof, to any person not entitled under the law or the rules of the department or agency to receive the same, or before such information is made public through regular official channels, directly or indirectly speculated in any such product by buying or selling the same in any quantity, shall be fined... or imprisoned..., or both. <*See Fines and Penalties*> No person shall be deemed guilty of a violation of any such rules, unless prior to such alleged violation he shall have had actual knowledge thereof.

Title 18, U.S. Code, Section 1905
Disclosure of confidential information generally

Whoever, being an officer or employee of the United States or of any department or agency thereof, publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof, which information concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association; or permits any income return or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person except as provided by law; shall be fined . . ., or imprisoned . . ., or both and shall be removed from office or employment. <*See Fines and Penalties*>

Title 7, U.S. Code, Section 2276
Confidentiality of information

(a) In the case of information furnished under a provision of law . . . ., neither the Secretary of Agriculture, any other officer or employee of the Department of Agriculture or agency thereof, nor any other person may:
  (1) use such information for a purpose other than the development or reporting of aggregate data in a manner such that the identity of the person who supplied such information is not discernible and is not material to the intended use of such information; or
  (2) disclose such information to the public, unless such information has been transformed into a statistical or aggregate form that does not allow the identification of the person who supplied particular information.

(b) (1) In carrying out a provision of law . . ., no department, agency, officer, or employee of the Federal Government, other than the Secretary of Agriculture, shall require a person to furnish a copy of statistical information provided to the Department of Agriculture.
  (2) A copy of such information:
    (A) shall be immune from mandatory disclosure of any type, including legal process; and
    (B) shall not, without the consent of such person be admitted as evidence or used for any purpose in any action, suit, or other judicial or administrative proceeding.

(c) Any person who shall publish, cause to be published, or otherwise publicly release information collected pursuant to a provision of law . . ., in any manner or for any purpose prohibited in section (a), shall be fined . . . or imprisoned . . ., or both. <*See Fines and Penalties*>

Title 18, U.S. Code, Section 2072
False crop reports

Whoever, being an officer or employee of the United States or any of its agencies, whose duties require the compilation or report of statistics or information relating to the products of the soil, knowingly compiles for issuance, or issues, any false statistics or information as a report of the United States or any of its agencies, shall be fined under this title or imprisoned not more than five years, or both.

NASS Representative Agreement
For NAHMS

Background:

The Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002 emphasizes the need for government agencies to reduce respondent burden and increase data sharing. The Act authorizes agencies to identify agents who agree in writing to comply with all provisions of law that affect information acquired by agencies for statistical purposes.

This MOU addendum specifies NASS representatives who can witness agent signatures on forms ADM-043.

Duties of the NASS Representative:

1. Be proactive NASS "sworn employee" on all issues related to computer and physical security and data confidentiality. The NASS data confidentiality and security (physical and computer) must be strictly enforced. The NASS representative will witness and compile NASS forms ADM-043, ***Certification and Restrictions on Use of Unpublished Data*** annually.

2. Conducts the confidentiality/security briefing and completes a certification for agents and emails to the NASS Data Lab Manager.

This Representative Agreement is executed by the parties as indicated below and shall become effective upon signing by all parties:

NASS Representative: _____
Signature

Printed Name of Representative:_____

Date:_____Telephone: (____)_____

NAHMS Senior Official: _____
Signature

Printed Name of NAHMS Senior Official: _____

Date: _____Telephone: (____)_____

NASS Senior Official: _____
Signature

Printed Name of NASS Senior Official: _____

Date:_____Telephone: (____)_____