

Dairy 2007 VS Second Visit (May 1-July 31, 2007)



National Animal Health
Monitoring System

2150 Centre Ave Bldg B
Fort Collins, CO 80526

Form Approved
OMB Number 0579-0205
Approval expires:
4/30/2010

State FIPS:	Operation #:	Interviewer:	Date:
2 digits	4 digits	Initials	(mm/dd/yy)

Section A—Reproduction

1. In the last 12 months, how many days after calving were cows declared eligible to be bred (elective or voluntary waiting period)? S001 _____ days
2. Which of the following were used to detect heat (estrus) in the last 12 months?
 - a. Visual observation..... S002 ₁ Yes ₃ No
 - b. Tail chalk/paint S003 ₁ Yes ₃ No**
 - c. Pedometers..... S004 ₁ Yes ₃ No
 - d. Pressure devices (Kamar™)..... S005 ₁ Yes ₃ No**
 - e. HeatWatch® Estrus Detection System S006 ₁ Yes ₃ No
 - f. Bulls (natural service)..... S007 ₁ Yes ₃ No**
 - g. Other (specify: _____) S008OTH..... S008 ₁ Yes ₃ No

If Item 2a = NO, SKIP to Item 6.

3. Is there a designated person(s) who is specifically responsible for visually observing heats (estrus)? S009 ₁ Yes ₃ No
4. Does this operation have a set number of times per day and duration for observing heats? S010 ₁ Yes ₃ No

If Item 4 = NO, SKIP to Item 6.

5. On average, how many times per day and for how long each time were cows visually observed for heat?S011/012

Times/day	Duration each time (minutes)
-----------	------------------------------------

According to the Paperwork Reduction Act of 1995, no persons are 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 0579-0205. The time required to complete this information collection is estimated to average 1.25 hours per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.

**NAHMS-194
JAN 2007**

6. Which of the following categories best describes **first service** breeding practices for the majority of heifers and cows in the last 12 months? (*Choose one code for heifers and one code for cows.*)

Codes:

- 1 = Natural service (bull-bred)
- 2 = AI to natural estrus (no injections given to induce estrus)
- 3 = AI to induced estrus (prostaglandin injections only)
- 4 = AI to induced estrus after Ovsynch program (prostaglandin and GnRH injections)
- 5 = Timed AI after Ovsynch program (prostaglandin and GnRH injections)
- 6 = AI to estrus after Presynch/Ovsynch
- 7 = Timed AI after Presynch/Ovsynch
- 8 = Other (specify: _____)S013OTH..... S013/014

Heifers Cows

7. Which of the following categories best describes **second or greater service** breeding practices for the majority of heifers and cows in the last 12 months? (*Chose one code for heifers and one code for cows.*)

Codes:

- 1 = Natural service (bull-bred)
- 2 = AI to natural estrus (no injections given to induce estrus)
- 3 = AI to induced estrus (prostaglandin injections only)
- 4 = AI to induced estrus after Ovsynch program (prostaglandin and GnRH injections)
- 5 = Timed AI after Ovsynch program (prostaglandin and GnRH injections)
- 6 = AI to induced estrus after Resynch (Ovsynch's 1st GnRH started 1 week prior to, or at, pregnancy diagnosis)
- 7 = Timed AI to Resynch (Ovsynch's 1st GnRH started 1 week prior to, or at, pregnancy diagnosis)
- 8 = Other (specify: _____)S015OTH S015/016

Heifers Cows

8. In the last 12 months, were timed-AI programs used to manage reproduction in any:

- a. Heifers? S017 ₁ Yes ₃ No
- b. Cows? S018 ₁ Yes ₃ No**

If Items 8a and 8b = NO, SKIP to Item 11.

9. How many years have timed-AI programs (e.g., Ovsynch) been used?..... S019 _____

10. Which best describes why timed-AI programs are being used to manage reproduction? (*Check one only.*)

- ₁ To control all 1st and subsequent services
- ₂ To control only 2nd and greater services
- ₃ Only occasionally to catch up on nonpregnant cows
- ₄ Other (specify: _____)S020OTH

S020

11. Did this operation use a controlled internal drug release (CIDR) insert in the last 12 months?S021 ₁ Yes ₃ No
- If YES, were they used:
- a. As part of a herd synchronization program?S022 ₁ Yes ₃ No
- b. Specifically for animals identified as anestrus (acyclic)?S023 ₁ Yes ₃ No**
- c. Specifically for animals identified as cystic?S024 ₁ Yes ₃ No
- d. Postbreeding?S025 ₁ Yes ₃ No**
- e. Other? (specify: _____)S026OTH.....S026 ₁ Yes ₃ No

12. Which of the following best describes who administered the **majority** of reproductive injections in the last 12 months? (Check one only.)

- ₁ Owner/operator
- ₂ Herdsman
- ₃ General employee
- ₄ Veterinarian
- ₅ AI service/technician
- ₆ No reproductive injections administered
- ₇ Other (specify: _____)S027OTH S027

13. Did any heifers or cows have embryos transplanted into them in the last 12 months?S028 ₁ Yes ₃ No

If YES, how many heifers and how many cows received:

- | | | |
|---|----------------|-------------|
| a. Fresh embryos?S029/030 | _____ | _____ |
| | Heifers | Cows |
| b. Frozen embryos?S031/032 | _____ | _____ |
| | Heifers | Cows |

14. In the last 12 months, what percentage of pregnancies was conceived through:
- a. Natural service (bull bred)?S033 _____ %
- b. AI after detected estrus (natural or induced)?S034 _____ %**
- c. Timed AI without detected estrus?.....S035 _____ %
- d. Embryo Transfer (ET) using superovulated embryo?S036 _____ %**
- e. Embryo Transfer (ET) using in vitro produced embryo?S037 _____ %
- Total (should equal 100%)..... 100%**

If Items 14b and 14c = 0, SKIP to Item 19.

15. Which of the following best describes who was responsible for the majority of AI services in the last 12 months? (Check one only.)

- ₁ Owner/operator
- ₂ Herdsman
- ₃ General employee
- ₄ Veterinarian
- ₅ AI service/technician
- ₆ Other (specify: _____)S038OTH S038

16. Has this person who is responsible for the majority of AI services (Item 15) been formally trained (lecture and lab) in performing AI?S039 ₁ Yes ₃ No

17. How many heifers and how many cows were inseminated with sexed semen in the last 12 months?

a. Heifers S040 _____

b. Cows S041 _____

18. For cows in which AI was unsuccessful, what was the typical maximum number of times AI was attempted before these cows were designated for a different strategy (e.g., moved to a bull pen, sold, etc.)? S042 _____

19. Which of the following best describes how frequently pregnancy exams (herd or preg checks) were performed in the last 12 months?

(Check one only.)

₁ Weekly

₂ Every 2 weeks

₃ Monthly

₄ Every other month

₅ No pregnancy exams performed

₆ Other (specify: _____)S043OTH S043

If Item 19 = 5 (No pregnancy exams performed), SKIP to Item 27.

20. Which of the following best describes who performed the majority of pregnancy exams on this operation in the last 12 months?

(Check one only.)

₁ Private veterinarian

₂ Veterinary technician

₃ Employee veterinarian

₄ Employee (nonveterinarian)

₅ Owner / operator

₆ Other (specify: _____)S044OTH S044

21. How many days postbreeding was the earliest pregnancy diagnosis usually made in the last 12 months?.....S045 _____ days

22. In the last 12 months, was pregnancy status routinely determined on this operation using:

a. Rectal palpation?S046 ₁ Yes ₃ No

b. Ultrasound?.....S047 ₁ Yes ₃ No

c. Blood test?S048 ₁ Yes ₃ No

d. Milk progesterone?.....S049 ₁ Yes ₃ No

e. Other? (specify: _____)S050OTHS050 ₁ Yes ₃ No

If Item 22b = NO, SKIP to Item 26.

23. In what year was routine ultrasound diagnosis of pregnancy first performed on this operation?.....S051 _____ year

State/Operation # _____

24. Who owned the ultrasound equipment used for the majority of pregnancy diagnoses in the last 12 months?
(Check only one.)

- ₁ Veterinarian
- ₂ Dairy operation
- ₃ Other (specify: _____)S052OTH

S052

25. In addition to pregnancy diagnosis, which of the following information was collected/evaluated during ultrasound exams in the last 12 months?

- a. Twin pregnancies S053 ₁ Yes ₃ No
- b. Assessment of fetal viability S054 ₁ Yes ₃ No**
- c. Noncycling (no heat) cows S055 ₁ Yes ₃ No
- d. Ovarian cysts S056 ₁ Yes ₃ No**
- e. Fetal sexing S057 ₁ Yes ₃ No
- f. Other (specify: _____)S058OTH S058 ₁ Yes ₃ No**

26. What was the primary method used most often to restrain cows for pregnancy diagnosis?
(Check only one.)

- ₁ Head locks at the feed bunk
- ₂ Palpation rail
- ₃ Tie stall/stanchion
- ₄ Chute
- ₅ Parlor
- ₆ Loose in free stalls
- ₇ Other (specify: _____)S059OTH

S059

27. Please indicate the level of importance of the following reproductive parameters to you in evaluating reproductive performance in your herd:

		<u>Very</u>		<u>Somewhat</u>	<u>Not</u>
		<u>important</u>	<u>Important</u>	<u>important</u>	<u>important</u>
a. Pregnancy rate (conception rate x heat detection rate) S060	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	
b. Conception rate S061	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	
c. Heat detection rate (animals bred + all eligible animals) S062	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	
d. Days open S063	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	
e. Percentage of herd pregnant S064	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	
f. Calving interval S065	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	
g. Other (specify: _____)S066OTH S066	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	

Section B—Calving Interventions

28. Does your operation have general guidelines (e.g., standard operating procedures or established protocols) on when to intervene during calving for:
- a. Heifers? S067 ₁ Yes ₃ No
- b. Cows? S068 ₁ Yes ₃ No**
- If YES for both, are different guidelines used for heifers compared to cows? S069 ₁ Yes ₃ No
29. How many people have any work duties in the calving area? S070 _____
30. Which of the following training methods in calving intervention are used for owners/employees of this operation?
- a. Video training S071 ₁ Yes ₃ No
- b. Discussion/lecture S072 ₁ Yes ₃ No**
- c. On-the-job training S073 ₁ Yes ₃ No
- d. Other training (specify: _____) S074OTH S074 ₁ Yes ₃ No**
31. Does your operation have a system for scoring calving difficulty? S075 ₁ Yes ₃ No
- If Item 31 = NO, SKIP to Item 33.**
32. Does this operation routinely record the calving difficulty score for each birth? . S076 ₁ Yes ₃ No
33. On average, how many hours pass between observation periods of animals close to calving:
- a. During the day? S077 _____ hours
- b. During the night? S078 _____ hours**
34. When calving is imminent and heifers and cows are restless/off feed, how long (in **hours**) do you wait before examining or assisting the animal if straining is not observed?
[Use nearest quarter hour if less than 1 hour.] S079/080
- | | | |
|--|----------------|-------------|
| | _____ | _____ |
| | Heifers | Cows |
35. Once straining is observed in heifers and cows, how long (in **hours**) do you wait before examining or assisting the animal if delivery of the calf is not progressing?
[Use nearest quarter hour if less than 1 hour.] S081/082
- | | | |
|--|----------------|-------------|
| | _____ | _____ |
| | Heifers | Cows |
36. Once the water bag appears at the vulva in heifers and cows, how long do you wait (in **hours**) before examining or assisting the animal?
[Use nearest quarter hour if less than 1 hour.] S083/084
- | | | |
|--|----------------|-------------|
| | _____ | _____ |
| | Heifers | Cows |

37. Once a decision is made to intervene, which of the following practices are **generally** implemented? (Answer all questions.)

- a. Call veterinarian to assist S085 ₁ Yes ₃ No
- b. Move the cow to an individual maternity pen S086 ₁ Yes ₃ No
- c. Restrain the cow in a head catch or similar equipment S087 ₁ Yes ₃ No
- d. Tie back or hold the cow's tail out of the way S088 ₁ Yes ₃ No
- e. Wash the perineum area with soap and water S089 ₁ Yes ₃ No
- f. Wear obstetrical gloves..... S090 ₁ Yes ₃ No
- g. Clean and disinfect chains or other equipment prior to use in the vagina or uterus S091 ₁ Yes ₃ No
- h. Use a lubricant S092 ₁ Yes ₃ No
- i. Other (specify: _____)S093OTH..... S093 ₁ Yes ₃ No

If Item 37h = NO, SKIP to Item 39.

38. Do you use the following lubricants during calving intervention?

- a. Mineral oil..... S094 ₁ Yes ₃ No
- b. Soap S095 ₁ Yes ₃ No
- c. Water..... S096 ₁ Yes ₃ No
- d. Commercial obstetrical lubricant (e.g., J-Lube) S097 ₁ Yes ₃ No
- e. Shortening (e.g., Crisco) S098 ₁ Yes ₃ No
- f. Other (specify: _____)S099OTH..... S099 ₁ Yes ₃ No

39. Do you use the following for pulling calves (direct contact with calf)?

- a. Stainless-steel OB chains S100 ₁ Yes ₃ No
- b. Twine..... S101 ₁ Yes ₃ No
- c. Rope..... S102 ₁ Yes ₃ No
- d. Other (specify: _____)S103OTH..... S103 ₁ Yes ₃ No

40. Which of the following methods is most commonly used to apply traction to remove the calf? (Check one only.)

- ₁ One or two people pulling on the chains/rope/twine
- ₂ Ropes tied to posts, etc.
- ₃ Block and tackle
- ₄ Winch/come along
- ₅ Calf jack
- ₆ Other (specify: _____)S104OTH S104

41. During calving intervention, is traction **generally** applied: (Check one only.)

- ₁ In conjunction with the cow straining?
- ₂ Continuously? S105

42. Does this operation ever seek veterinary assistance for difficult deliveries? .. S106 ₁ Yes ₃ No

If Item 42 = NO, SKIP to Item 45.

43. Would you seek veterinary assistance in the following situations?

- a. Unable to correctly position the calf for delivery S107 ₁ Yes ₃ No
- b. Traction for a specific amount of time without progress S108 ₁ Yes ₃ No**

44. From the time you begin intervening during calving for both heifers and cows, how long (in **minutes**) on average, do you work on delivering the calf before calling for veterinary assistance? S109/110

 Heifers **Cows**

45. In the last 12 months, how many heifers and cows:

- | | Heifers | Cows |
|---|-------------------|-------------------|
| a. Calved? (= b + c)..... S111/117 | <u> </u> | <u> </u> |
| b. Calved without assistance? S112/118 | <u> </u> | <u> </u> |
| c. Calved with assistance? (= i + ii + iii) S113/119 | <u> </u> | <u> </u> |
| i. Severe dystocia? (surgical or mechanical extraction)..... S114/120 | <u> </u> | <u> </u> |
| ii. Mild dystocia? S115/121 | <u> </u> | <u> </u> |
| iii. No dystocia, but assisted anyway S116/122 | <u> </u> | <u> </u> |

46. How many of the calves born in the last 12 months were stillborn? (Include those born alive but died prior to 48 hours.) S123

Of the total number of calves that were stillborn, how many were:

- a. Born dead (DOA)? S124
- b. Born alive, but died prior to 48 hours? S125**

47. For calves that experienced a difficult (assisted) birth, which of the following are generally done within 1 hour after the calf is delivered? (Check all that apply.)

- a. Resuscitate calf with assisted breathing S126 ₁ Yes ₃ No
- b. Stimulate breathing with nostril stimulus..... S127 ₁ Yes ₃ No**
- c. Stimulate breathing with drugs (Dopram, etc.) S128 ₁ Yes ₃ No
- d. Provide supplemental oxygen..... S129 ₁ Yes ₃ No**
- e. Hang the calf upside down..... S130 ₁ Yes ₃ No
- f. Position the calf on its sternum S131 ₁ Yes ₃ No**
- g. Place the calf in separate area away from the dam..... S132 ₁ Yes ₃ No
- h. Use a warming box, heat lamp or other source of heat during cold weather..... S133 ₁ Yes ₃ No**
- i. Dry calf manually with towels, hair dryer, etc..... S134 ₁ Yes ₃ No
- j. Try to elicit a suckle response..... S135 ₁ Yes ₃ No**
- k. Provide calf coats, calf jackets after calf is dry S136 ₁ Yes ₃ No
- l. Other (specify: _____)S137OTH..... S137 ₁ Yes ₃ No**

Section C—Dehorning Questions

48. In the last 12 months, were heifer calves routinely dehorned while on this operation? S138 ₁ Yes ₃ No

If Item 48 = NO, SKIP to Item 52.

49. In the last 12 months, what percentage of heifer calves were dehorned by the following methods? What was the average age of calves (in **weeks**) and were analgesics or anesthetics used?

	<u>% Heifer Calves</u>	<u>Age (weeks)</u>	<u>Analgesics/Anesthetics</u>
a. Hot iron (Buddex, electric, Portasol) S139/144/148	_____	_____	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No
b. Caustic paste S140/145/149	_____	_____	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No
c. Tube, spoon, or gouge S141/146/150	_____	_____	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No
d. Saws, wire, or Barnes S142/147/151	_____	_____	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No
Total (<i>should be ≤100%</i>) S143	_____		

50. Is surgical dehorning equipment that causes bleeding chemically disinfected between **each** animal? S152 ₁ Yes ₂ N/A ₃ No

51. Who dehornes the majority of heifer calves on this operation? (*Check one only.*)

- ₁ Owner/operator
- ₂ Employee
- ₃ Veterinarian
- ₄ Other (specify: _____) S153OTH

S153

Section D—Extra Teat Removal

52. In the last 12 months, were extra teats routinely removed from heifer calves? . S154 ₁ Yes ₃ No

If Item 52 = NO, SKIP to Item 55.

53. In general, at what age (in **weeks**) were extra teats removed? S155 _____ weeks

54. When extra teats were removed, were analgesics or anesthesia routinely used? S156 ₁ Yes ₃ No

Section E—Tail Docking

55. What percentage of dairy cows on this operation have docked tails? S157 _____ %

If Item 55 = 0, SKIP to Item 59.

56. What procedure was most commonly used to dock tails?
(Check one only.)

- ₁ Band
- ₂ Surgical removal
- ₃ Hot knife
- ₄ Other (Specify: _____)S158OTH
- ₅ Unknown procedure

S158

57. How old were the majority of animals when tails were docked?
(Check one only.)

- ₁ Less than 2 months
- ₂ 2 months to less than 6 months
- ₃ 6 months to less than 2 years
- ₄ 2 years or older
- ₅ Unknown

S159

58. When tails were docked, were analgesics or anesthesia routinely used? S160

- ₁ Yes ₂ Don't Know ₃ No

Section F—Castration

59. In the last 12 months, were bull calves routinely castrated while on this operation? S161

- ₁ Yes ₃ No

If Item 59 = NO, SKIP to Item 63.

60. What method was most commonly used to castrate bull calves?
(Check one only.)

- ₁ Burdizzo (crushes cord/bloodless)
- ₂ Knife
- ₃ Band
- ₄ Other (specify: _____)S162OTH

S162

61. At what age (in **weeks**) were bull calves routinely castrated? S163

_____ weeks

62. When calves were castrated, were analgesics or anesthesia routinely used? S164

- ₁ Yes ₃ No

Section G—Hoof Health

Note: An animal can be counted as having more than one case of lameness or gait abnormality if the animal recovered completely from one case, but then became lame again for any reason.

63. In the last 12 months, how many cases of lameness (gait abnormality) occurred on this operation in:
- a. Bred heifers? (*Enter N/A if bred heifers are not housed on this operation.*) S165 _____
 - b. Cows? S166 _____**

64. Of the cases of lameness in bred heifers and cows from the previous question, what number of cases were due to digital dermatitis (hairy-heel warts)?
- a. Bred heifers (*Enter N/A if bred heifers are not housed on this operation.*) S167 _____
 - b. Cows S168 _____**

65. Which of the following **best** describes the use of a footbath for cows during the last 12 months?
(*Check one only.*)
- ₁ Footbath used throughout the year
 - ₂ Footbath used seasonally/occasionally
 - ₃ No footbath used
 - ₄ Other (specify: _____) S169OTH S169

If Item 65 = 3, SKIP to Item 67.

66. Which of the following footbath medications was most commonly used?
(*Check one only.*)
- ₁ Copper sulfate
 - ₂ Formalin/formaldehyde
 - ₃ Oxytetracycline
 - ₄ Hydrogen peroxide
 - ₅ Other (list active ingredient: _____) S170OTH S170

67. What percentage of cows had their hooves trimmed at least once in the last 12 months? S171 _____ %

If Item 67 = 0, SKIP to Item 69.

68. Which of the following describes who trimmed the **majority** of the hooves in the last 12 months?
(Check one only.)

- ₁ Professional hoof trimmer (not this operation's personnel)
- ₂ Veterinarian (not this operation's personnel)
- ₃ Owner or this operation's personnel
- ₄ Other (specify: _____)S172OTH

S172

69. In the last 12 months, how many visits, for the purpose of trimming hooves (as part of a routine trimming program) or for evaluation of lame cows, were made by:

- a. A professional hoof trimmer S173 _____
- b. A veterinarian S174 _____**
- c. Other (specify: _____)S175OTH..... S175 _____

Section H—Hemorrhagic Bowel Syndrome

NOTE: Please read this to the Producer in its entirety.

Hemorrhagic bowel syndrome (HBS) is a highly fatal intestinal disease of milking cows. HBS is characterized by sudden onset of bloody feces, with or without intestinal obstruction. Cows with HBS have a high death rate, approaching 70 to 80 percent. Sudden death without prior signs is common. Both medical and surgical treatments have been relatively unsuccessful. A bloody bowel accompanied by a blood clot that obstructs the intestine may be observed at necropsy.

70. How many cows with signs consistent with HBS described above do you think you have had on this operation in the **last 5 years**? S176 _____

If Item 70 = 0, SKIP to Item 76.

71. In what year did the first case of HBS or cow with clinical signs consistent with HBS occur on this operation? S177 _____

72. How many cows with signs consistent with HBS do you think you have had on this operation in the **last 12 months**? S178 _____

73. In the **last 5 years**, has this operation implemented preventive measures specifically to reduce or eliminate HBS? S179 ₁ Yes ₃ No

If Item 73 = NO, SKIP to Item 76.

74. Which of the following preventive measures have been implemented specifically to reduce or eliminate HBS?

- a. Vaccination with a commercial *Clostridium* type A vaccine S180 ₁ Yes ₃ No
- b. Vaccination with an autogenous *Clostridium* type A vaccine..... S181 ₁ Yes ₃ No**
- c. Vaccination with a 7-way clostridial vaccine S182 ₁ Yes ₃ No
- d. Incorporated a feed additive (e.g., Omnigen AF®) S183 ₁ Yes ₃ No**
- e. Changed feed ingredients/composition of ration S184 ₁ Yes ₃ No
- f. Changed forage management (chop size, source, etc.)..... S185 ₁ Yes ₃ No**

75. Which of the following best describes the perceived benefits from using the above preventive measures?
(Check one only.)

- ₁ Great reduction in HBS cases (75-100% reduction)
- ₂ Moderate reduction in HBS cases (50-74% reduction)
- ₃ Reduction in HBS cases (25-49% reduction)
- ₄ Slight reduction in HBS cases (1-24% reduction)
- ₅ No reduction in HBS cases

S186

Section I—Treatment Practices

76. How many injections did a dairy cow typically receive in the last 12 months? S187 _____

77. Of **all** injections administered on this operation, what percentage were administered by farm personnel? S188 _____ %

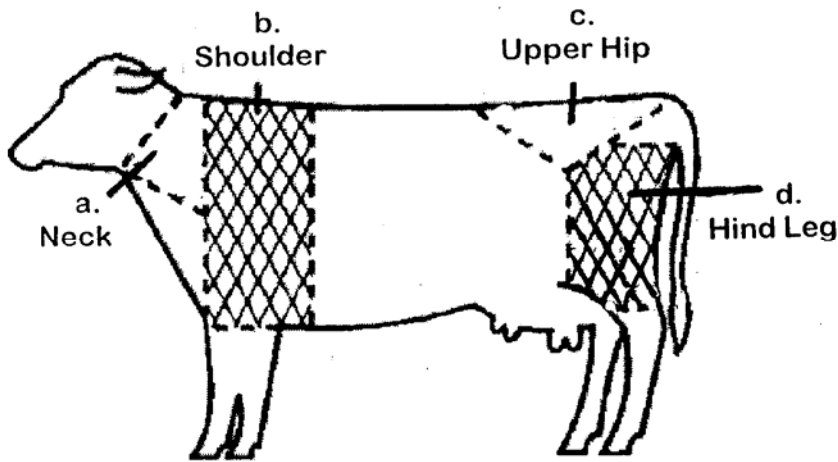
78. Of **all** injections administered on this operation, what percentage were:

- a. Intramuscular (IM)? S189 _____ %
- b. **Subcutaneous (SQ)?** S190 _____ %
- c. Intravenous (IV)? S191 _____ %
- Total (should equal 100%)** 100%

79. What percentage of the intramuscular (IM) injections were administered for each of the following purposes?

- a. Antibiotic injection S192 _____ %
- b. **Reproductive injection** S193 _____ %
- c. Vaccination S194 _____ %
- Total (should equal 100%)** 100%

80. For each purpose of injection (antibiotics, reproductive, and vaccination), what percentage of intramuscular (IM) injections were administered in the following body locations?



	<u>Antibiotics</u>	<u>Reproductive</u>	<u>Vaccination</u>
a. NeckS195/200/205	_____	_____	_____
b. ShoulderS196/201/206	_____	_____	_____
c. Upper hipS197/202/207	_____	_____	_____
d. Hind legS198/203/208	_____	_____	_____
e. OtherS199/204/209	_____	_____	_____
Total (should equal 100%)	100%	100%	100%

81. Which of the following cattle-handling facilities were primarily used for each type of injection for both heifers and cows?

Codes:

- 1 = Stanchion/tie stall
- 2 = Lock-ups
- 3 = Chute/head gate
- 4 = Loose in freestalls
- 5 = Palpation rail
- 6 = Parlor
- 7 = N/A

	<u>Heifers</u>	<u>Cows</u>
a. IMS210/213	_____	_____
b. SQS211/214	_____	_____
c. IVS212/215	_____	_____

State/Operation # _____

82. When **farm personnel** administered injections in the last 12 months, how many injections were **usually** given before changing needles? *(Check one only.)*

- ₁ New needle for every injection
- ₂ 2 to 10 injections per needle
- ₃ 11 to 20 injections per needle
- ₄ 21 to 30 injections per needle
- ₅ More than 30 injections per needle

S216

83. Does this operation keep a written or computerized record for **each** cow that received a treatment that requires a withdrawal time before the cow can be sent to market?..... S217

₁ Yes ₃ No

Section J—Nutrient Management

84. Are the following manure-handling methods used in cow and weaned-heifer housing areas?

		Cow Areas			Weaned-Heifer Areas		
					If heifers not kept on operation, check here and leave column blank: _____		
a.	Manure left on pasture S218/228	<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₂ N/A	<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₂ N/A	<input type="checkbox"/> ₃ No
b.	Dry lot scraped S219/229	<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₂ N/A	<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₂ N/A	<input type="checkbox"/> ₃ No
c.	Gutter cleaner S220/230	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
d.	Alley scraper (mechanical or tractor) S221/231	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
e.	Alley flush with fresh water S222/232	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
f.	Alley flush with recycled water ... S223/233	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
g.	Slotted floor S224/234	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
h.	Bedded pack (manure pack) S225/235	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
i.	Manure vacuum S226/236	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No
j.	Other (specify: _____) S227OTH.. S227/237	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No	<input type="checkbox"/> ₁ Yes		<input type="checkbox"/> ₃ No

If Items 84b-j all checked NO, SKIP to Item 98.

85. Of the manure-handling methods used in the previous question, which one **best** describes how the **majority** of manure is handled?..... S238/239

_____ letter _____ letter
Cow area Weaned-heifer area

(Enter letter that corresponds with response, i.e., "a" for Manure left on pasture, "c" for Gutter cleaner, etc.)

86. Are the following waste-storage or treatment systems used on this operation?

- a. Store in manure spreader (spread on a daily or almost daily basis) S240 ₁ Yes ₃ No
- b. Below-floor slurry or deep pit S241 ₁ Yes ₃ No**
- c. Slurry stored in tank (either above or below ground) S242 ₁ Yes ₃ No
- d. Slurry or liquid manure stored in earthen basin and NOT treated S243 ₁ Yes ₃ No**
- e. Treatment lagoon–Not mechanically aerated S244 ₁ Yes ₃ No
- f. Treatment lagoon–Mechanically aerated..... S245 ₁ Yes ₃ No**
- g. Manure pack (inside barn) S246 ₁ Yes ₃ No
- h. Outside storage for solid manure not in dry lot or pen..... S247 ₁ Yes ₃ No**
- i. Outside storage for solid manure within dry lot or pens..... S248 ₁ Yes ₃ No
- j. Storage of solid manure in a building without cattle access S249 ₁ Yes ₃ No**
- k. Storage of solid manure with picket dam..... S250 ₁ Yes ₃ No
- l. Composted (actively managed to produce a composted material) S251 ₁ Yes ₃ No**
- m. Collection of methane/biogas..... S252 ₁ Yes ₃ No
- n. Solid separator S253 ₁ Yes ₃ No**
- o. Other (specify: _____)S254OTH..... S254 ₁ Yes ₃ No

87. Of the storage or treatment systems used in the previous question, which one **best** describes the storage and treatment of the **majority** of:

- a. Solid manure? S255 _____ letter
- b. Liquid or slurry manure? S256 _____ letter**

(Enter letter that corresponds with response (i.e., “a” for Store in manure spreader, “b” for Below-floor slurry, etc., or put N/A if the manure type is not stored or treated.)

88. Assuming your facility was completely emptied of manure, and it was operating at full animal capacity, how many days could you operate and store manure before manure must be removed from the storage facility?

S257/258/259

_____ **OR** _____ **OR** _____
Days Months Years

89. Does this operation make use of manure by:

- a. Applying manure to land either owned or rented? S260 ₁ Yes ₃ No
- b. Selling it or receiving other compensation? S261 ₁ Yes ₃ No**
- c. Giving it away? S262 ₁ Yes ₃ No
- d. Using composted manure as bedding? S263 ₁ Yes ₃ No**
- e. Other? (specify: _____)S264OTH..... S264 ₁ Yes ₃ No

90. Of the manure uses described in the previous question, which one **best** describes the use of the **majority** of:

- a. Solid manure? S265 _____ letter
- b. Liquid or slurry manure? S266 _____ letter**

(Enter letter that corresponds with response (i.e., “a” for Apply manure to land, “b” for Sell it or receive, etc., or put N/A if that manure type is not used.)

If Item 89a = NO (manure is not applied to land), SKIP to Item 98.

91. Are the following methods used to apply manure to land owned or rented by this operation?

- a. Broadcast/solid spreader S267 ₁ Yes ₃ No
- b. Surface application by tank wagon or tank truck S268 ₁ Yes ₃ No**
- c. Subsurface injection by tank wagon, tank truck, or tractor S269 ₁ Yes ₃ No
- d. Irrigation/sprinkler S270 ₁ Yes ₃ No**
- e. Other (specify: _____) S271OTH S271 ₁ Yes ₃ No

92. Is manure incorporated into the soil within 24 hours after application, including subsurface injection?
(Check one only.)

- ₁ Always or almost always
- ₂ Sometimes
- ₃ Never S272

93. In the last 12 months, has the nutrient content of manure been analyzed for:

- a. Nitrogen? S273 ₁ Yes ₃ No
- b. Phosphorus? S274 ₁ Yes ₃ No**
- c. Potassium? S275 ₁ Yes ₃ No

94. Are the following used to determine how much or how frequently manure is applied to the land?

- a. Crop nitrogen requirement S276 ₁ Yes ₃ No
- b. Crop phosphorus requirement S277 ₁ Yes ₃ No**
- c. Manure volume/acreage available S278 ₁ Yes ₃ No
- d. Soil quality improvement S279 ₁ Yes ₃ No**
- e. Other criteria (specify: _____) S280OTH S280 ₁ Yes ₃ No

95. What is the minimum distance between where manure is ever applied and any surface water such as a lake, pond, stream, or river? S281/282 _____ OR _____
Feet Miles

96. Which of the following best describes how often **liquid** manure is applied to owned or rented land, by season:
(Enter one code only for each season.)

Codes:

- 1 = Daily
- 2 = Weekly
- 3 = 2 to 3 times a month
- 4 = Monthly or less often
- 5 = Not spread during this season

S283/284/285/286

_____ Spring _____ Summer _____ Fall _____ Winter

97. Which of the following best describes how often **solid** manure is applied to owned or rented land, by season:
(Enter one code only from Item 96 for each season.)

S287/288/289/290

_____ Spring _____ Summer _____ Fall _____ Winter

98. Is manure applied to the following actively growing plants:

- a. Pasture or hay crop? S291 ₁ Yes ₃ No
- b. Forage to be ensiled? S292 ₁ Yes ₃ No**
- c. Other forage crops? S293 ₁ Yes ₃ No
- d. Grain or oilseed crops? S294 ₁ Yes ₃ No**
- e. Other crops? (specify: _____) S295OTH..... S295 ₁ Yes ₃ No

99. Does this operation have a **written** plan that addresses nutrient management such as land treatment practices or manure storage structures? S296

₁ Yes ₃ No

If YES, was the plan:

- a. Developed in cooperation with the USDA Natural Resource Conservation Service (NRCS) or a local conservation district?..... S297 ₁ Yes ₃ No
- b. Implemented to help satisfy a state regulatory requirement? S298 ₁ Yes ₃ No**
- c. Part of USDA voluntary cost share program?..... S299 ₁ Yes ₃ No

100. Has this operation consulted with any of the following about waste management during the last 12 months?

- a. University/extension personnel S300 ₁ Yes ₃ No
- b. Private nutrient management consultant S301 ₁ Yes ₃ No**
- c. Natural Resource Conservation Service personnel (NRCS). S302 ₁ Yes ₃ No
- d. State or local department of natural resources personnel S303 ₁ Yes ₃ No**
- e. State or local department of agriculture personnel S304 ₁ Yes ₃ No
- f. Agronomist/crop consultant S305 ₁ Yes ₃ No**
- g. Consulting nutritionist..... S306 ₁ Yes ₃ No
- h. Environmental engineering consultant..... S307 ₁ Yes ₃ No**
- i. Private veterinary practitioner S308 ₁ Yes ₃ No
- j. Other (specify: _____) S309OTH..... S309 ₁ Yes ₃ No**

101. Which of the following best describes how you would classify or how this operation is classified regarding Concentrated Animal Feeding Operations (CAFOs) under current federal EPA guidelines:
(Check one only.)

- ₁ Never heard of CAFO
- ₂ Have heard of CAFO, but unsure how my operation is or will be classified
- ₃ My operation **is not** or will likely **not** be classified as a CAFO
- ₄ My operation is or will likely be classified as a CAFO

S310

Office Use Only

State FIPS: _____ 2-digits	Operation #: _____ 4-digits	Interviewer: _____ Initials	Date: ____/____/____ (mm/dd/yy)
--	---	---	---

1. Total time for interview (include time to discuss the program and complete the questionnaire). If more than one data collector present enter the combined time..... _____ min SITIME

2. Total travel time (round trip). If more than one data collector present, enter the combined time..... _____ min STTIME

3. Data collector(s):
(Enter the number for each category.)
 - _____ Federal VMO
 - _____ Federal AHT
 - _____ State person
 - _____ Other SVMO/SAHT/SST/SOTH

4. Enter response code 99 if questionnaire is completed or enter one code of 0 - 7 that best describes the reason why the owner is not participating..... _____ code SRCO
 - 99 – Survey completed
 - 00 – Producer not contacted by VMO
 - 01 – Poor time of year or no time
 - 02 – Does not want anyone on operation
 - 03 – Bad experience with government veterinarians
 - 04 – Does not want to do another survey or divulge information
 - 05 – Told NASS they did not want to be contacted
 - 06 – Ineligible (no dairy cows)
 - 07 – Other reason (explain below)

5. Producer data quality.....
₁ Good to Excellent ₂ OK ₃ Poor SPDQ

6. Did the Producer use written or computerized records to assist in answering this survey?
₁ Yes ₃ No SREC

Comments regarding this questionnaire or operation:

VMO or AHT signature: _____

TO BE ANSWERED BY THE COORDINATOR:

- Field data quality
₁ Good to Excellent ₂ OK ₃ Poor SFDQ