Dairy Heifer-Raiser Study

NOTE: For this study, a heifer raising operation is defined as an operation that raises dairy heifer calves for at least one operation other than its own, such as a custom raiser. If your operation meets the definition of a heifer raiser, please continue with the questionnaire.

General Information

Date: _____   State: _____

County: _____   Zip code: _____

State Use:

Farm ID #: _____   Data collector: _____

GPS coordinates: _____   Declined interview: ☐ Yes

A. General Herd Information

1. For how many years has this operation been a heifer raising operation,
   i.e., raised dairy heifer calves/dairy replacement heifers for at least
   one other operation? ....H101   _____ years

2. How important are each of the following challenges to your operation?
   [Check one number only in each row.]

		Not Important 1	→ 2	Very Important 3
a.	Heifer health—sickness and death........................H102	☐	☐	☐
b.	Feed cost/availability..H103	☐	☐	☐
c.	Labor cost...H104	☐	☐	☐
d.	Labor communication..H105	☐	☐	☐
e.	Labor availability...H106	☐	☐	☐
f.	Source of calves/client relations...........................H107	☐	☐	☐
g.	Environmental regulations.....................................H108	☐	☐	☐
h.	Payments from producers.....................................H109	☐	☐	☐
i.	Other (specify: _____) H110OTH...........H110	☐	☐	☐

3. Are you a member of the Dairy Calf and Heifer Association (DCHA)?..............DCHA $\square_1$ Yes $\square_3$ No

4. How many of the following cattle do you have on the operation today
    and what was the total head raised throughout 2009?

		# Head Today	**Total # Head 2009**
Dairy heifers and cows:			
a.	Preweaned dairy heifers ("wet" calves)......................H111/H124	_____	_____
b.	Weaned but not pregnant dairy heifers (dairy replacements)...H112/H125	+ _____	+ _____
c.	Pregnant dairy heifers...H113/H126	+ _____	+ _____
d.	Lactating and dry dairy cows.....................................H114/H127	+ _____	+ _____
	Total dairy heifers and cows (sum of 4a–4d).........H115/H128	= _____	= _____
Dairy-beef and beef cattle:			
e.	Preweaned dairy bulls/steers.....................................H116/H129	+ _____	+ _____
f.	Weaned dairy bulls/steers up to 1 year old...............H117/H130	+ _____	+ _____
g.	Dairy bulls/steers older than 1 year...........................H118/H131	+ _____	+ _____
h.	Preweaned beef and dairy-beef calves (including heifers, steers, and bulls)..........................H119/H132	+ _____	+ _____
i.	Weaned beef and dairy-beef calves up to 1 year old (including heifers, steers and bulls)......................H120/H133	+ _____	+ _____
j.	Beef and dairy-beef cattle older than 1 year.............H121/H134	+ _____	+ _____
	Total dairy-beef and beef cattle (sum of 4e–4j).....H122/H135	= _____	= _____
Total cattle (sum of 4a–4j)..H123/H136		= _____	= _____

5. Of the cattle on the operation during 2009, how many were of
    Mexican-origin ("M" brand on jaw)?
    [If none, enter 0.]...H137   _____

6. During 2009, how many dairy heifers raised on your
    operation originated from the following sources?
    [*If no calves obtained from a source, enter 0.*]

    a. Your own dairy operation..H138   _____
    b. Other dairy operations..H139   + _____
    c. Auction markets/sale barns...H140   + _____
    d. Other heifer-raising operations..H141   + _____
    e. Private sales not associated with a dairy operation..H142   + _____
    f. Other (specify: _____) H141OTH...............................H143   + _____
        Total number of heifers raised during 2009..H144   = _____

7. During 2009, how many total clients did you raise dairy heifers for?........................H145   _____

8. During 2009, at what age did the majority of dairy heifers generally:
    a. Arrive at this operation?...H146   _____ OR _____ OR _____

2

	days	**weeks**	**months**

b.   Leave this operation?..H147

                                                                          _____

                                                                         months

B. Transportation Methods and Distance Traveled

1. During 2009, for all dairy heifer calves transported **to** your facility and for each source, record the number of calves per shipment, the number of shipments, the average, minimum, and maximum distance transported, and if any shipments crossed State lines.

A shipment is one group of animals moved at once, regardless of the number of vehicles required to move them.

Source of calves	Average number of animals per shipment in 2009	Number of shipments that arrived in 2009	Distance Transported to Your Facility (Miles)			Did any shipments cross State lines (Yes/No)? *
			Average	Min	Max	
Other dairy operations	H201	H206	H211	H216	H221	$\square_1$Y $\square_3$N H226
Auction markets/ sale barns	H202	H207	H212	H217	H222	$\square_1$Y $\square_3$N H227
Other heifer-raising operations	H203	H208	H213	H218	H223	$\square_1$Y $\square_3$N H228
Private sales not associated with a dairy operation	H204	H209	H214	H219	H224	$\square_1$Y $\square_3$N H229
Other (specify: _____) H205OTH	H205	H210	H215	H220	H225	$\square_1$Y $\square_3$N H230

*If any shipments crossed State lines, please list the States: _____ H231

2. During 2009, what percentage of dairy heifer calves were transported **to** your facility by the following?

    a. Picked up by personnel from your operation...H232 _____ %

    b. Delivered by the dairy of origin..H233 + _____ %

    c. Delivered by private/contract hauler...H234 + _____ %

    d. Other (specify: _____) H235OTH......................................H235 + _____ %

    Total **100%**

3. During 2009, were dairy heifers transported **to** your facility by the following?

    a. Stock trailer...H236 $\square_1$ Yes $\square_3$ No

    b. Straight or bobtail truck...H237 $\square_1$ Yes $\square_3$ No

    c. Semi trailer...H238 $\square_1$ Yes $\square_3$ No

    d. Other type of trailer/vehicle (specify: _____) H239OTH.........H239 $\square_1$ Yes $\square_3$ No

4. During 2009, how many times per week, per month, or per year were shipments of dairy heifers transported to your operation? H240 _____ OR _____ OR _____

    week **month** **year**

4

5. During 2009, for all dairy heifer calves that were transported **off** your operation, for each destination, record the number of calves per shipment, the number of shipments, the average, minimum, and maximum distance transported, and if any shipments crossed State lines.

Destination	Average number of animals per shipment in 2009	Number of shipments that left this operation in 2009	Distance Transported from Your Operation (Miles)			Did any shipments cross State lines (Yes/No)? *
			Average	Min	Max	
Dairy of origin	H241	H246	H251	H256	H261	$\square_1$Y $\square_3$N H266
Another dairy operation —not the dairy of origin	H242	H247	H252	H257	H262	$\square_1$Y $\square_3$N H267
Another dairy heifer raising facility	H243	H248	H253	H258	H263	$\square_1$Y $\square_3$N H268
Auction markets/ sale barns	H244	H249	H254	H259	H264	$\square_1$Y $\square_3$N H269
Other (specify: _____) H245OTH	H245	H250	H255	H260	H265	$\square_1$Y $\square_3$N H270

*If any shipments crossed State lines, please list the States: H271

6. During 2009, what percentage of dairy heifer calves were transported **off** your operation by the following?

   a. Delivered to another operation by personnel from your operation...................H272   _____ %

   b. Picked up by the personnel from operation at destination................................H273   + _____ %

   c. Picked up by private/contract hauler...H274   + _____ %

   d. Other (specify: _____) H275OTH.....................................H275   + _____ %

         Total   **100%**

7. During 2009, were dairy heifers transported **off** your operation by the following?

   a. Stock trailer...H276 $\square_1$ Yes $\square_3$ No

   b. Straight or bobtail truck..H277 $\square_1$ Yes $\square_3$ No

   c. Semi trailer..H278 $\square_1$ Yes $\square_3$ No

   d. Other type of trailer/vehicle (specify: _____) H279OTH...........H279 $\square_1$ Yes $\square_3$ No

8. During 2009, how many times per week, per month, or per year were dairy heifers transported **off** your operation? ....H280   _____ OR _____ OR _____

                                                                      week   **month**   **year**

9. Which of the following best describes how frequently heifer transport vehicles owned, leased, or contracted by this operation were washed/rinsed out during 2009?
[Check one only.]   H281

 □₁ Between shipments

 □₂ Daily

 □₃ Weekly

 □₄ Monthly

 □₅ Less than monthly

 □₆ Other (specify: _____)H281OTH

 □₇ Not applicable—this operation's vehicles not used for transport

 □₈ Unknown

 If washed/rinsed out, did this usually include a disinfectant?.............................H282   □₁ Yes   □₃ No

10. During 2009, were transport vehicles used for dairy heifers also used to transport other cattle?..H283   □₁ Yes   □₃ No

11. Did you receive or send dairy heifers to another country?................................H284   □₁ Yes   □₃ No

 If YES, please list the country(ies):   H284OTH

C. Ownership and Identification

1. During 2009, what percentage of dairy heifers raised were raised under the following arrangements:

 a. Originated from your own dairy operation?...H301   _____ %

 b. Owned by dairy of origin—not your operation (retained ownership)?.................H302   + _____ %

 c. Bought by you and then same heifers sold back to the dairy of origin?.............H303   + _____ %

 d. Bought by you and not sold back to the dairy of origin?....................................H304   + _____ %

 e. Purchased from auction market/sale barn?...H305   + _____ %

 f. Other? (specify: _____) H306OTH..................................H306   + _____ %

  Total   **100%**

2. During 2009, did your operation use a heifer record accounting program for management and record keeping purposes (e.g., PCDart for heifers, Dairy Comp 305, Heifer DOT dat, HeiferPRO) ?   H307   □₁ Yes   □₃ No

3. During 2009, which of the following unique individual animal identification methods were used for dairy heifers?

    a. Ear tags (nonelectronic) inserted prior to arrival at your operation..............H308   □₁ Yes   □₃ No

    b. Electronic (RFID) ear tags inserted prior to arrival at your operation...........H309   □₁ Yes   □₃ No

    c. Ear tags (nonelectronic) inserted at your operation....................................H310   □₁ Yes   □₃ No

    d. Electronic (RFID) ear tags inserted at your operation................................H311   □₁ Yes   □₃ No

4. During 2009, were any dairy heifer calves branded?..H312   □₁ Yes   □₃ No

    If YES, were dairy heifer calves branded

    a. Prior to arrival at your operation?...H313   □₁ Yes   □₃ No

    b. At your operation?..H314   □₁ Yes   □₃ No

    c. Other (specify: _____) H315OTH...................H315   □₁ Yes   □₃ No

5. During 2009, did this operation require and maintain at least two forms of unique **individual animal identification** for each dairy heifer while on your operation?...H316   □₁ Yes   □₃ No

6. During 2009, did this operation require and maintain at least a single **herd-level identification** (branding) identifying the dairy of origin for each dairy heifer while on your operation?..H317   □₁ Yes   □₃ No

7. During 2009, did this operation track individual dairy heifer inventory for clients on a monthly basis (provide a report back to clients)?......................H318   □₁ Yes   □₃ No

8. During 2009, did this operation provide the following information back to the dairy of origin or buyer of individual dairy heifers?

    a. A report on the health of individual calves (treatment records)....................H319   □₁ Yes   □₃ No

    b. A report on the performance (gain, death loss, etc.)...................................H320   □₁ Yes   □₃ No

    c. A report on breeding history/reproductive records of individual heifers.......H321   □₁ Yes   □₃ No

D. Housing

1. Of the housing types listed below, which was the primary housing type used during 2009 for each of the following heifer classes?

Housing Types

1. Tie stall or stanchion	5. Drylot/multiple animal outside area—**excludes pasture**
2. Freestall	6. Multiple animal inside area/barn/shed
3. Individual hutch/pen	7. Other (specify: _____) H401OTH
4. Pasture	8. Not housed on this operation

Code (1–8 above)

    a. Preweaned dairy heifers ("wet" calves)...H401   _____

    b. Weaned dairy heifers...H402   _____

c. Pregnant dairy heifers..H403   _____

[If you only raise dairy heifers for a single client/operation, SKIP to Section E.]

2. During 2009, were dairy heifer calves from one dairy operation (source):

    a. Commingled (grouped or housed in the same multiple-animal area) with dairy heifers from other operations? ....H404 $\square_1$ Yes $\square_3$ No

    b. Allowed nose-to-nose (fenceline) contact with dairy heifers from other operations?..H405 $\square_1$ Yes $\square_3$ No

    c. Commingled or allowed nose-to-nose (fenceline) contact with beef or dairy-beef cattle?........H406 $\square_1$ Yes $\square_3$ No $\square_9$ NA—no beef cattle

    d. Commingled or allowed nose-to-nose (fenceline) contact with Mexican cattle? ....H407 $\square_1$ Yes $\square_3$ No $\square_9$ NA—no Mexican cattle

3. During 2009, did this operation use a hospital pen for heifer calves?...............H408 $\square_1$ Yes $\square_3$ No

   If YES,

    a. Were dairy heifers from more than one source housed in the hospital pen at the same time?..H409 $\square_1$ Yes $\square_3$ No

    b. Did dairy heifers in the hospital pen have nose-to-nose (fenceline) contact with cattle not in the hospital pen?.................................H410 $\square_1$ Yes $\square_3$ No

E. Passive Transfer and Feeding

NOTE: If no preweaned dairy heifers (wet calves) were housed on this operation during 2009, SKIP to Item 13.

1. During 2009, was colostrum administered to dairy heifers:

    a. At dairy of origin?..H501 $\square_1$ Yes $\square_3$ No

    b. At this heifer raising operation?..H502 $\square_1$ Yes $\square_3$ No

    c. Other? (specify: _____) H503OTH...............H503 $\square_1$ Yes $\square_3$ No

2. During 2009, did this operation routinely monitor serum proteins (as a measure of passive transfer status) of newborn dairy heifer calves prior to or upon arrival at your operation?..H504 $\square_1$ Yes $\square_3$ No

   If YES, which of the following actions were taken for calves that were considered to have failure of passive transfer?

    a. Calves were refused at your operation ....H505 $\square_1$ Yes $\square_3$ No

    b. Calves were purchased or accepted, but with conditions (lower purchase price or charge more to raise, not liable for death, etc.)...............H506 $\square_1$ Yes $\square_3$ No

    c. Other (specify: _____) H507OTH...........H507 $\square_1$ Yes $\square_3$ No

3. During 2009, what percentage of preweaned dairy heifer calves
received the following liquid diets prior to weaning?

   a. Nonmedicated milk replacer..H508 _____ %

   b. Medicated milk replacer..H509 + _____ %

   c. Unpasteurized nonsaleable (waste) milk...H510 + _____ %

   d. Pasteurized nonsaleable (waste) milk..H511 + _____ %

   e. Other (specify: _____) H512OTH..............H512 + _____ %

   Total **100%**

[If Items 3a and 3b BOTH equal 0, SKIP to Item 6.]

4. What was the protein:fat formulation of the milk replacer that was fed
to the majority of calves in 2009?.............................…...…........H513/H514 _____ and _____

   % protein **% fat**

   OR

   What was the total solids concentration of the combination of milk
   replacer and milk that was fed to the majority of calves in 2009? H515 _____ total solids

[If NO medicated milk replacer fed, SKIP to Item 6.]

5. During 2009, was milk replacer medicated with:

   a. Chlortetracycline (CTC)?...H516 ☐1 Yes ☐3 No

   b. Oxytetracycline (OTC)?..H517 ☐1 Yes ☐3 No

   c. Oxytetracycline in combination with neomycin (Oxy/NEO)?.......................H518 ☐1 Yes ☐3 No

   d. Decoquinate?...H519 ☐1 Yes ☐3 No

   e. Lasalocid?...H520 ☐1 Yes ☐3 No

   f. Other? (specify: _____) H521OTH.............H521 ☐1 Yes ☐3 No

[If ONLY milk replacer was fed, SKIP to Item 7.]

6. During 2009, which of the following sources of milk were fed?

   a. A single dairy operation...H522 ☐1 Yes ☐3 No

   b. Pooled milk from multiple sources/dairies...H523 ☐1 Yes ☐3 No

   c. Rejected milk from processing plant..H524 ☐1 Yes ☐3 No

   d. Other (specify: _____) H525OTH...........H525 ☐1 Yes ☐3 No

7. During 2009, how many times per day was milk or milk replacer fed to calves?
   [Check one only.] H526

   ☐1 Once daily

   ☐2 Twice daily

   ☐3 Three times daily

   ☐4 Other (specify: _____) H526OTH

8. During 2009, how much milk or milk replacer (in quarts)
   was fed to each calf at each feeding?...H527   _____ quarts

   If volume fed changes with age, please describe the amounts given at the different ages:
   _____
   H527OTH

9. Which equipment do you use primarily for feeding milk to dairy heifer calves?
   [Check one only.]   H528

   $\square_1$ Bottle

   $\square_2$ Bucket

   $\square_3$ Other (specify: _____) H528OTH

10. Which best describes how the milk feeding equipment chosen above
    was managed during 2009?
    [Check one only.]   H529

    $\square_1$ Rinsed with water between each feeding (2 or 3 times per day)

    $\square_2$ Rinsed with water only daily

    $\square_3$ Cleaned and disinfected between each feeding (2 or 3 times per day)

    $\square_4$ Cleaned and disinfected daily

    $\square_5$ Cleaned and disinfected less often than daily

    $\square_6$ Cleaned and disinfected after dairy heifers were moved from milk feeding area

    $\square_7$ Other (specify: _____) H529OTH

11. During 2009, what was the average age (in days) of dairy heifers when
    they were first offered:

    a. Water?... H530   _____ days

    b. Starter grain or other concentrates?..H531   _____ days

    c. Hay or other roughages?..H532   _____ days

12. During 2009, what was the average age (in weeks) at weaning
    for dairy heifers? .... H533   _____ weeks

13. During 2009, did this operation use antibiotics (including ionophores)
    in rations for weaned or pregnant dairy heifers to prevent disease or
    promote growth? ....H534 $\square_1$ Yes $\square_3$ No

    If YES, which of the following antibiotics were used?

		Weaned Heifers		Pregnant Heifers	
a.	Ionophores H535/H546	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No
b.	Bacitracin methylene disalicylate..............H536/H547	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No
c.	Bambermycin..H537/H548	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No
d.	Chlortetracycline compounds....................H538/H549	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No
e.	Neomycin-oxytetracycline.........................H539/H550	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No
f.	Neomycin sulfate......................................H540/H551	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No
g.	Oxytetracycline compounds.......................H541/H552	$\square_1$ Yes	$\square_3$ No	$\square_1$ Yes	$\square_3$ No

h.	Sulfamethazine................................H542/H553	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No

(continued next page)

		Weaned Heifers	**Pregnant Heifers**
i	Tylosin sulfate............................H543/H554	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No
j.	Virginiamycin.............................H544/H555	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No
k.	Other (specify: _____) H545OTH....H545/H556	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No

F. Biosecurity Practices

1. In addition to dairy heifers, which of the following animals were on this operation or on adjacent operations during 2009?

Animal Type	On This Operation	On Adjacent Operation(s)	
Beef cattle	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H601/H613
Chickens or other poultry	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H602/H614
Horses, donkeys, mules, etc.	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H603/H615
Pigs (domestic)	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H604/H616
Sheep	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H605/H617
Goats	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H606/H618
Dogs	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H607/H619
Cats	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H608/H620
Captive deer or elk	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H609/H621
Llamas, alpacas	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H610/H622
Exotic hoofstock—bison, etc.	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H611/H623
Other (specify: _____) H612OTH	☐₁ Yes ☐₃ No	☐₁ Yes ☐₃ No	H612/H624

2. During 2009, how frequently were the following wild animals and/or signs of wild animals (scat, tracks, etc.) observed on this operation?

   a. Deer, elk, moose....................................H625 ☐₁ Never ☐₂ Less than monthly ☐₃ Monthly

   b. Coyotes, foxes, raccoons.......................H626 ☐₁ Never ☐₂ Less than monthly ☐₃ Monthly

   c. Other wild animals
   (specify: _____) H627OTH...H627 ☐₁ Never ☐₂ Less than monthly ☐₃ Monthly

   If Item 2a = monthly or less often than monthly, how frequently were deer observed in the heifer calf housing areas, pastures, or lots?..................H628 ☐₁ Never ☐₂ Monthly ☐₃ Less often than monthly

3. During 2009, were dairy heifers tested for any diseases prior to or after arrival at your operation?..H629 ☐₁ Yes ☐₃ No

   If YES, which of the following diseases were tested for:

   a. Bovine viral diarrhea—persistently infected animals (BVD-PI)?..................H630 ☐₁ Yes ☐₃ No

   b. Brucellosis?..H631 ☐₁ Yes ☐₃ No

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c. Tuberculosis?..H632 $\square_1$ Yes $\square_3$ No

d. Other? (specify: _____) H633OTH..................H633 $\square_1$ Yes $\square_3$ No

4. During 2009, how many of this operation's personnel (unpaid and
paid labor) had duties that included feeding or care of dairy heifer calves? ....H634 _____

5. During 2009, how many personnel had direct contact with cattle
on another operation (including personnel that own cattle housed at
another location)?..H635 _____

[If NO preweaned dairy heifer calves on the operation, SKIP to Item 9.]

6. During 2009, were latex or nitrile gloves usually worn when
handling/feeding preweaned dairy heifers?..H636 $\square_1$ Yes $\square_3$ No

[If dairy heifer calves raised for only ONE source/client/operation, SKIP to Item 10.]

7. During 2009, was different feeding equipment used for preweaned
dairy heifers based on the source of the heifers?..H637 $\square_1$ Yes $\square_3$ No

8. During 2009, was the feeding equipment used for preweaned
dairy heifers from one source cleaned before using it for
heifers from another source?..H638 $\square_1$ Yes $\square_3$ No

9. During 2009, were footbaths used by personnel when moving
between dairy heifers originating from different sources?..................................H639 $\square_1$ Yes $\square_3$ No

10. During 2009, were personnel required to be tested for
tuberculosis (TB) at any time during employment?..H640 $\square_1$ Yes $\square_3$ No

11. During 2009, did this operation work with or consult a:

a. Veterinarian on a routine basis (e.g., weekly or monthly)?..........................H641 $\square_1$ Yes $\square_3$ No

b. Nutritionist on a routine basis (e.g., weekly or monthly)?............................H642 $\square_1$ Yes $\square_3$ No

c. University/extension personnel?..H643 $\square_1$ Yes $\square_3$ No

d. State animal health official?..H644 $\square_1$ Yes $\square_3$ No

12. If Item 11a = YES, how frequently was a veterinarian allowed in
dairy heifer housing areas?
[Check one only.] H645

$\square_1$ Daily

$\square_2$ Weekly

$\square_3$ Monthly

$\square_4$ Less than monthly

$\square_5$ Never

[If Item 12 = NEVER, SKIP to Item 14.]

13. Which of the following biosecurity practices were used for veterinarians?

a. Footbath...H646 $\square_1$ Yes $\square_3$ No

b. Disposable boots..H647 $\square_1$ Yes $\square_3$ No

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c. Clean coveralls/boots...H648 $\square_1$ Yes $\square_3$ No

d. Other (specify: _____) H649OTH........................H649 $\square_1$ Yes $\square_3$ No

14. During 2009, were visitors (anyone that was not an employee of the operation or a veterinarian, including, nutritionists, tour groups, etc.) allowed in areas where dairy heifers were housed? ....H650 $\square_1$ Yes $\square_3$ No

If YES, how frequently were visitors allowed in dairy heifer housing areas?
[Check one only.]   H651

$\square_1$ Daily

$\square_2$ Weekly

$\square_3$ Monthly

$\square_4$ Less than monthly

$\square_5$ Never

[If Item 14 = NEVER, SKIP to Item 16.]

15. Which of the following biosecurity practices were used for visitors?

    a. Footbaths..H652 $\square_1$ Yes $\square_3$ No

    b. Disposable boots..H653 $\square_1$ Yes $\square_3$ No

    c. Visitors vehicles not allowed in animal areas.............................H654 $\square_1$ Yes $\square_3$ No

    d. Clean coveralls/boots..H655 $\square_1$ Yes $\square_3$ No

    e. Other (specify: _____) H656OTH............................H656 $\square_1$ Yes $\square_3$ No

16. During 2009, were vehicles other than those of your operation allowed into the animal housing areas?...H657 $\square_1$ Yes $\square_3$ No

If YES, which of the following visitors' vehicles were allowed into the housing areas?

    a. Veterinarian...H658 $\square_1$ Yes $\square_3$ No $\square_4$ NA–did not use

    b. Nutritionist..H659 $\square_1$ Yes $\square_3$ No $\square_4$ NA–did not use

    c. University/extension personnel...............................H660 $\square_1$ Yes $\square_3$ No $\square_4$ NA–did not use

    d. Private/contract hauler...H661 $\square_1$ Yes $\square_3$ No $\square_4$ NA–did not use

    e. Other dairy operations...H662 $\square_1$ Yes $\square_3$ No $\square_4$ NA–did not use

    f. Rendering company..H663 $\square_1$ Yes $\square_3$ No $\square_4$ NA–did not use

    g. Employee vehicles..H664 $\square_1$ Yes $\square_3$ No

    h. Other (specify: _____) H665OTH..............H665 $\square_1$ Yes $\square_3$ No

17. During 2009, how often did this operation use the same equipment to handle manure and feed dairy heifers (using the same loader and changing buckets constitutes using the same equipment)?
[Check one only.]   H666

$\square_1$ Routinely (daily or weekly)

$\square_2$ Rarely (less than once per month)

$\square_3$ Never

[If Item 17 = NEVER, SKIP to Item 19.]

18. During 2009, was the equipment disinfected between uses?...........................H667 $\square_1$ Yes $\square_3$ No

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19. During 2009, did this operation share any equipment with
other livestock operations or use a custom harvester or manure hauler
(e.g., tractors, feeding equipment, manure spreaders, trailers, etc.)?................H668 $\square_1$ Yes $\square_3$ No

If YES, was the equipment disinfected prior to use on this operation?...............H669 $\square_1$ Yes $\square_3$ No

G. Preventive Practices and Vaccination

1. During 2009, which of the following disease prevention practices did this operation
normally use for each class of dairy heifer?
[If heifer class not housed on this operation, draw a line down the appropriate column(s).]

Preventive Practice	Preweaned Heifers	Weaned Heifers	Pregnant Heifers	
Dewormers	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H701/H708/H715
Administer magnets	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H702/H709/H716
Coccidiostats in feed	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H703/H710/H717
Vitamin A-D-E injection/feed additive	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H704/H711/H718
Selenium injection/feed additive	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H705/H712/H719
Probiotics	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H706/H713/H720
Other (specify: _____) H707OTH	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	$\square_1$ Yes $\square_3$ No	H707/H714/H721

2. During 2009, which of the following best describes this operation's
vaccination practices for dairy heifers against **brucellosis**?
[Check one only.]   H722

   $\square_1$ Already vaccinated prior to arrival at this operation

   $\square_2$ Vaccinated while on this operation

   $\square_3$ Appropriate age when on this operation but not vaccinated

   $\square_4$ Heifers too young to vaccinate while on this operation

   $\square_5$ Other (specify: _____) H722OTH

3. List the brand names of the vaccines administered to each heifer class in the table below.

Preweaned Dairy Heifer Calves	Weaned Dairy Heifer Calves	Pregnant Dairy Heifers
H730	H740	H750
H731	H741	H751
H732	H742	H752
H733	H743	H753
H734	H744	H754

4. Who is primarily responsible for determining the vaccination protocol used by your operation on calves owned by others?
   [Check one only.] H760

   ☐₁ This operation's management

   ☐₂ Owner of heifers or their veterinarian

   ☐₃ This operation and owner design program together

   ☐₄ Veterinarian for this operation

   ☐₅ Other (specify: _____) H760OTH

H. Dairy Heifer Health and Treatment

1. During 2009, which of the following procedures did this operation normally use to monitor heifer calf health?

   a. Weigh dairy heifers to determine rate of gain...H801 ☐₁ Yes ☐₃ No

   b. Record the temperature of sick dairy heifers...H802 ☐₁ Yes ☐₃ No

   c. Record the individual treatments administered to sick dairy heifers............H803 ☐₁ Yes ☐₃ No

   d. Keep written records of dairy heifer growth and/or health information.........H804 ☐₁ Yes ☐₃ No

   e. Keep computerized records of dairy heifer growth and/or health information..H805 ☐₁ Yes ☐₃ No

2. Of the dairy heifers raised on this operation during 2009, how many of the following classes of dairy heifers were affected with the following diseases or disorders, how many were treated with **antibiotics**, and how many died?
   [If heifer class not housed on this operation, write NA across table.]

Disease/Disorder	Number		
	Affected	**Treated**	**Died**
Preweaned heifers			
Diarrhea/digestive	H806	H816	H826
Respiratory	H807	H817	H827
Navel infection	H808	H818	H828
Lameness	H809	H819	H829
Weaned heifers			
Diarrhea/digestive	H810	H820	H830
Respiratory	H811	H821	H831
Lameness	H812	H822	H832
Pregnant heifers			
Diarrhea/digestive	H813	H823	H833
Respiratory	H814	H824	H834
Lameness	H815	H825	H835

3. For the following diseases or disorders, which antibiotics *[select from list at end and enter the numerical response code]* were used to treat the majority of affected heifers during 2009 (maximum of three antibiotics per disease/disorder) for each heifer class?
   [If heifer class not housed on the operation, draw a line down the appropriate column(s).]

Disease / Disorder	Preweaned Heifers	Weaned Heifers	Pregnant Heifers
Diarrhea/digestive	H836	H840	H843
Respiratory	H837	H841	H844
Navel infection	H838		
Lameness	H839	H842	H845

4. What percentage of dairy heifers that died in 2009 were necropsied to determine the cause of death? ....H846 _____ %

5. During 2009, what was the primary method used to dispose of dead dairy heifers?
   [Check one only.] H847

   ☐₁ Render

   ☐₂ Bury

   ☐₃ Compost

   ☐₄ Landfill

   ☐₅ Burn/incinerate

   ☐₆ Other (specify: _____) H847OTH

Response Code	Product Name	Active Ingredient
1	20% SQX Solution	Sulfaquinoxaline
2	Adspec®	Spectinomycin
3	Agri-Cillin™	Penicillin G Procaine
4	Agrimycin™ 100	Oxytetracycline hydrochloride
5	Agrimycin™ 200	Oxytetracycline hydrochloride
6	Albon® Bolus	Sulfadimethoxine
7	Albon® Concentrated Sol.12.5%	Sulfadimethoxine
8	Albon® Injection 40%	Sulfadimethoxine
9	Albon® SR Bolus	Sulfadimethoxine
10	Amoxi-Bol®	Amoxicillin
11	Amoxi-Inject ®	Amoxicillin
12	Amoxi-Mast® Intramammary Infusion	Amoxicillin
13	AmTech Neomycin Oral Solution	Neomycin
14	AmTech Oxytetracycline HCL Solution Powder - 343	Oxytetracycline
15	Aquacillin™	Penicillin G Procaine
16	Aqua-Mast Intramammary Infusion	Penicillin G (procaine)
17	Aureomycin® Soluble Powder	Chlortetracycline hydrochloride
18	Aureomycin® Soluble Powder Concentrate	Chlortetracycline hydrochloride
19	Bio-Mycin® 200	Oxytetracycline
20	Bio-Mycin® C	Oxytetracycline hydrochloride
21	Biosol® Liquid	Neomycin sulfate
22	Cefa-Lak®/Today Intramammary Infusion	Cephapirin (sodium)
23	CLTC 100 MR	Chlortetracycline calcium
24	Combi-Pen™-48	Penicillin G (benzathine)
25	CORID 20% Soluble Powder	Amprolium
26	CORID 9.6% Oral Solution	Amprolium
27	Crysticillin 300 AS Vet.	Penicillin G Procaine
28	Dariclox® Intramammary Infusion	Cloxacillin (sodium)
29	Deccox-M	Decoquinate
30	Di-Methox & 12.5% Oral Solution	Sulfadimethoxine
31	Di-Methox Injection 40%	Sulfadimethoxine
32	Di-Methox Soluble Powder	Sulfadimethoxine
33	Draxxin™	Tulathromycin
34	Duo-Pen®	Penicillin G benzathin; procaine
35	Duramycin-100	Oxytetracycline hydrochloride
36	Duramycin-200	Oxytetracycline hydrochloride
37	Durapen™	Penicillin G benzathin; procaine
38	Excede™ Sterile Suspension	Ceftiofur crystalline free acid
39	Excenel® RTU	Ceftiofur hydrochloride
40	Gallimycin®-100 Injection	Erythromycin
41	Gallimycin®-36 Intramammary Infusion	Erythromycin
42	Hanford's/US Vet Masti-Clear Intramammary Infusion	Penicillin G (procaine)
43	Hanford's/US Vet/Han-Pen G/Ultrapen	Penicillin G Procaine
44	Hanford's/US Vet/Han-Pen-B/Ultrapen B	Penicillin G (benzathine)
45	Hetacin®K Intramammary Infusion	Hetacillin (potassium)

46	Linco-Spectin® Sterile Solution	Lincomycin / Spectinomycin
47	Liquamycin® LA-200®	Oxytetracycline
48	Liquid Sul-Q-Nox	Sulfaquinoxaline (sodium)
49	Maxim-200®	Oxytetracycline
50	Maxim™-100	Oxytetracycline hydrochloride
51	Micotil® 300 Injection	Tilmicosin phosphate
52	Microcillin	Penicillin G Procaine
53	Naxcel®	Ceftiofur sodium
54	Neomix Ag® 325 Soluble Powder	Neomycin sulfate
55	Neomix® 325 Soluble Powder	Neomycin sulfate
56	Neomycin 325 Soluble Powder	Neomycin sulfate
57	Neomycin Oral Solution	Neomycin sulfate
58	Neo-Sol 50	Neomycin sulfate
59	Nuflor® Injectable Solution	Florfenicol
60	Oxy 500 and 1000 Calf Bolus	Oxytetracycline hydrochloride
61	Oxybiotic™ 200	Oxytetracycline
62	Oxycure™ 100	Oxytetracycline hydrochloride
63	Oxy-Mycin™ 100	Oxytetracycline hydrochloride
64	Oxy-Mycin™ 200	Oxytetracycline hydrochloride
65	Oxytetracycline HCL Soluble Powder	Oxytetracycline hydrochloride
66	Oxytetracycline HCL Soluble Powder 343	Oxytetracycline hydrochloride
67	Panmycin® 500 Bolus	Tetracycline hydrochloride
68	Pen-G Max™	Penicillin G (procaine)
69	Penicillin G Procaine	Penicillin G Procaine
70	Pennchlor™ 64 Soluble Powder	Chlortetracycline hydrochloride
71	Pennox™ 200 Injectable	Oxytetracycline
72	Pennox™ 343 Soluble Powder	Oxytetracycline hydrochloride
73	PFI-Pen G®	Penicillin G Procaine
74	Pirsue® Intramammary Infusion	Pirlimycin
75	Polyflex®	Ampicillin
76	Polyotic® Soluble Powder	Tetracycline hydrochloride
77	Princillin Bolus	Ampicillin trihydrate
78	Promycin™ 100	Oxytetracycline hydrochloride
79	Pro-Pen-G™ Injection	Penicillin G Procaine
80	SDM Injection	Sulfadimethoxine
81	SDM Injection 40%	Sulfadimethoxine
82	SDM Solution	Sulfadimethoxine
83	Solu/Tet Soluble Powder	Tetracycline hydrochloride
84	Spectramast™ LC Intramammary Infusion	Ceftiofur
85	Strep Sol 25%	Streptomycin sulfate
86	Streptomycin Oral Solution	Streptomycin
87	Sulfadimethoxine Inj. 40%	Sulfadimethoxine
88	Sulfadimethoxine Soluble Powder	Sulfadimethoxine
89	Sulfadimethoxine 12.5% Oral Solution	Sulfadimethoxine
90	Sulfa-Nox Concentrate	Sulfaquinoxaline
91	Sulfa-Nox Liquid	Sulfaquinoxaline (sodium)
92	Sulfaquinoxaline Sodium Solution 20%	Sulfaquinoxaline (sodium)
93	SulfaSure™ SR Cattle/Calf Bolus	Sulfamethazine
94	Sulmet® Drinking Water Solution 12.5%	Sulfamethazine (sodium)
95	Sulmet® Oblets®	Sulfamethazine

96	Sulmet® Soluble Powder	Sulfamethazine (sodium)
97	Sustain III® Cattle Bolus	Sulfamethazine
98	Terramycin® 343 Soluble Powder	Oxytetracycline hydrochloride
99	Terramycin® Scours Tablets	Oxytetracycline hydrochloride
100	Terramycin® Soluble Powder	Oxytetracycline hydrochloride
101	Terra-Vet 100	Oxytetracycline hydrochloride
102	Tet-324	Tetracycline hydrochloride
103	Tetra-Bac 324	Tetracycline hydrochloride
104	Tetracycline HCL Soluble Powder-324	Tetracycline hydrochloride
105	Tetradure™ 300	Oxytetracycline
106	Tetrasol Soluble Powder	Tetracycline hydrochloride
107	Tet-Sol™ 324	Tetracycline hydrochloride
108	ToDAY® Intramammary Infusion	Cephapirin (sodium)
109	Tylan Injection 50/200 Tylosin Injection	Tylosin
110	Vetisulid Injection	Sulfachlorpyridazine (sodium)
111	Vetisulid Powder	Sulfachlorpyridazine (sodium)