

Directions: This template has been developed to assist with the basic procedures for a herd health program. It is the responsibility of the farmer to complete this form in accordance to their dairy operation. It should be reviewed on an annual basis to address any changes that have occurred with individual practices.

Farm Name: _____

Herd veterinarian: _____

Date last reviewed: _____ Individual responsible for this process: _____

*****Attach current vaccination schedule, including the attending veterinarian's name and contact information.***

*****Attach any special or temporary treatment and care protocols beyond those already listed.***

Biosecurity Procedures

Objective: To reduce the chances of infectious diseases being carried onto the farm by people and animals, and to reduce the spread of these diseases if they are present on the farm.

IF A CARETAKER SEES AN UNUSUAL DISEASE OR INJURY, CONTACT YOUR SUPERVISOR AS SOON AS POSSIBLE.

Prevent the Introduction of Infected Animals

1. As possible, avoid co-mingling purchased animals with animals on farm.
2. As possible, test all incoming animals for infectious diseases (i.e. BVD, BLV, and Johnes) before introducing them to the herd. Dairy management will determine the diseases for which tests should be performed
3. When possible, transport purchased animals in farm trailers.
4. For hired transporters, ensure that they start out with a clean truck. Outside truck cleaning is only allowed on farm premises in designated areas.

Prevent the Introduction of Infectious Diseases

1. All visitors must check in at the main office.
2. Visitors are not allowed in barns and pens without a caretaker escort.
3. Visitors should wear clean boots and coveralls when entering farm.

Increase the Resistance of Animals to Infectious Diseases

1. Regularly administer vaccinations and boosters as recommended by the herd veterinarian.

Decrease Exposure to Infectious Diseases

1. Isolate sick animals with unfamiliar symptoms or those that don't respond to standard treatment.
2. Remove dead animals from pens quickly and dispose of them properly (see Dead Animal Disposal Procedures).
3. The owner or manager will determine if birds become a problem. Control methods used are dependent on the severity of the problem as well as the effectiveness of the control measure.
4. Minimize manure contamination of hair coat, feed, and water by keeping pens, feeders, and waterers clean.

Receiving and Administering Animal Health Products Procedures

Objective: To ensure the proper handling, storage, and administration of all cattle health products, and to ensure proper record keeping for all treatments. The primary goal is to keep animals comfortable and to return them to health as soon as possible.

Receiving Health Products

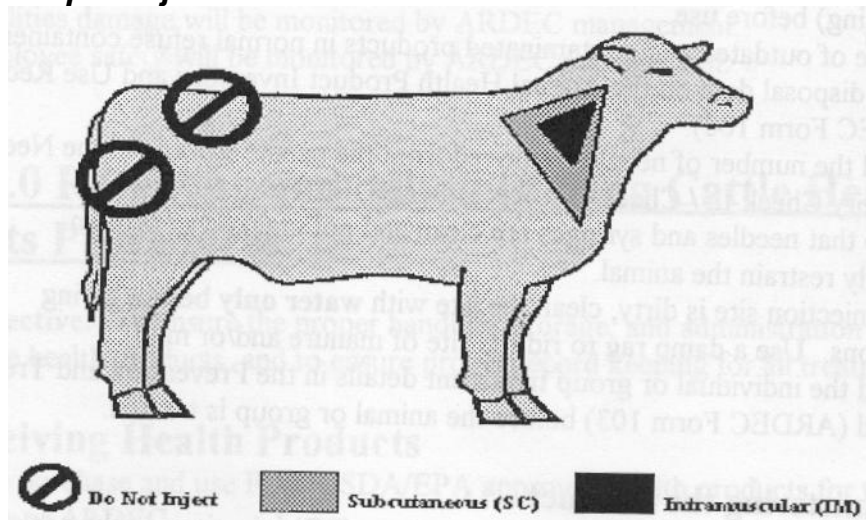
1. Only purchase and use FDA/USDA approved health products for treating animals.
2. Record all purchased health products in the Inventory and Use Records.
3. Store the products according to label directions in the refrigerator or the marked cabinets in the medication room. Do not store food in refrigerators that are used for animal medications.
4. Maintain cool, dry conditions in the medication storage areas.
5. Place all label inserts of all animal health products used at dairy with other labels in the storage area.

Administering Products

1. Farm managers must authorize administration of any product.
2. Read label directions before a medication is used to ensure the proper use, dosage, route of administration, frequency and timing of administration, withdrawal periods, and negative side effects. Behaviors or adverse reactions that may be associated with drug administration should be recorded and reported to the herd's veterinarian.
3. The herd veterinarian must authorize any extra label use of a product and set appropriate withdrawal times.
4. Give all intramuscular (IM) and subcutaneous (SQ) injections as directed by the herd veterinarian.
5. CHECK EXPIRATION DATES ON ALL PRODUCTS PERIODICALLY AND BEFORE USE. DISCARD EXPIRED PRODUCTS IN APPROPRIATE CONTAINERS.
6. Drugs should be used in a manner that reduces likelihood of drugs becoming outdated. All drugs requiring refrigeration are to be evaluated that they have been received in proper containers, maintained at appropriate temperatures during the shipping process, and are stored properly. Labels could be designed to capture this information for the sake of documenting these details.

7. Dispose of outdated and contaminated products in normal refuse containers and record disposal date on the Animal Health Product Inventory and Use Record.
8. Ensure that needles and syringes are clean and not cracked or broken.
9. Record the individual or group treatment details before the animal or group is treated.
10. Use separate, labeled syringes for different products.
11. Never put an injection needle back into a drug bottle.
12. Clean syringes after use and before using a different drug in the same syringe. Do not use disinfectants to clean syringes for modified-live viral vaccine.
13. Change needles frequently (every 10-15 uses), or when bent, dull, burred, or dirty. FWIW, BLV and Anaplasmosis may be transmitted by use of the same needle (maybe the herd's veterinarian and owner should determine if they are willing to accept this risk).
14. When treating sick cattle, change needles after every animal is treated.
15. For breeding livestock, change needles after every animal is treated.
16. If a needle breaks in the animal during injection, immediately identify the animal and contact a veterinarian to remove the needle. If the needle cannot be retrieved, make a note on the individual animal's Treatment Record. If the animal is going to be shipped for slaughter, inform the packer of the needle and send the animal to slaughter as a "suspect."
17. Use only zero day withdrawal products in the last 50 days before slaughter.
18. When products requiring refrigeration are used over long periods in field conditions, persons responsible for administering these products should maintain these products in cool conditions (cooler with ice or ice packs).

Proper Injection Sites:



After Administering the Product

1. Return all remaining products back to their proper storage location.

2. Update the Animal Health Product Inventory and Use Record after use of each product.
3. Return any unused needles back to the needle storage container.
4. Dispose of used sharps (needles and scalpel blades) in the container marked SHARPS and not in the regular garbage.
5. Clean the area.

Bolusing

1. Select the appropriate bolus gun and bolus gun head per bolus to be administered. Also, take into account the size of the animal when selecting the size of the bolus.
2. Open the animal's mouth by placing the arm nearest the animal over and around the animal's head and put your hand in their mouth. Press up with fingers on their hard palate while gently working the bolus gun head over the tongue and into the back of their mouth.
3. Insert the bolus gun into the animal's open mouth, along the side of the mouth and tongue to the base of the tongue.
4. Gently push the gun back into the animal's mouth.
5. Depress the plunger to dispense the bolus and remove the gun from the animal's mouth.
6. Ensure that the animal does not spit the bolus out. If so, repeat the above steps.

IV Injections

1. All intravenous (IV) injections should be administered by the dairy veterinarian, dairy manager, or their designees (employees or hospital crew or other person properly trained to do IV injections), and the treatment should be recorded.

Dairy Cattle Health and Care Procedures

Daily Standard Operating Procedures

Objective: To provide upkeep of the dairy herd through daily and weekly procedures.

Daily Procedures

1. Check all cows and calves for health problems (including foot and leg problems), and general appearance. Problems to look for include uneven or labored respiration, abdominal distension, swollen joints, lameness, diarrhea, unusual discharges from eyes, nose, or reproductive tract, ears down, and listlessness.
2. Monitor feed intake, health, and water intake or cleanliness in confinement groups.

Calving Management Standard Operating Procedures

Objective: To support the birth of live, healthy calves and to transition cows into lactation.

Calving

1. To determine if intervention is required, consult the dairy manager first. If the manager can't be contacted, call the dairy vet.
2. If the calf must be delivered by forced extraction techniques, the animal should be walked or transported to the hospital or calving area.
 - a. In the event that the cow is non-ambulatory or cannot be moved, offer the following assistance in the current pen.
3. Follow the calf delivery procedures listed posted by the herd veterinarian in the maternity area.
4. Process calf as described in "Newborn Calves" outline below; heifers are to be ear tagged within four hours of birth.
5. Do not leave the calf in the calving barn for an extended period of time. Warming the calf in the barn under heat lamps is recommended when delivery has been difficult or the temperature is below 32 degrees F.

Newborn Calves

1. Before initial processing, update the calving record; record the birth date, ID #, and vaccinations on the calf log.
2. Spray the umbilical cord with iodine.
3. Administer any health products as designated by the herd manager or veterinarian.
4. Heifers will be ear tagged with the next number on the calf list.
5. All calves are to receive colostrum within 4-6 hours.
6. Move the calf to the clean, designated area.
7. During periods of cold weather, newborn calves should be maintained under heat lamps, fitted with jackets, heavily bedded, or otherwise offered supplemental heat to maintain body temperature.

Calving Facility Cleaning Procedures

1. The calving facility must be cleaned every (three) days or as needed.
2. The calving equipment should be cleaned and disinfected after each use.

Cattle Receiving, Handling and Selling Procedures

Objective: To ensure that all cattle received are healthy and source verified, and to ensure that all cattle sold have met withdrawal dates and are shipped with complete health records.

Cattle Receiving

1. All incoming animals must be individually identified.
2. Animals are to be re-tagged per dairy system.
3. Inspect and record the health and condition of all incoming cattle.

Handling Sick Cattle

1. Cattle should be monitored and all sick animals moved to the sick pen.
2. Consult the dairy manager regarding proper treatment.
3. Treated animals should be identified (i.e. for example, by application of a leg band).
4. Record all treatments in the individual animal treatment record.

Cattle Selling

1. Before animals are shipped to slaughter, check the Individual animal treatment records to assure that if the animal(s) have been treated, they have met or exceeded label and prescription withdrawal times for all products that have been administered.
2. If the animal still has a red band on its leg, double check its health records to ensure that all withdrawal times have been met.
3. Only dairy managers can decide to remove the leg bands. Record the animal's identification number and the date that the tag was removed. This is a little prescriptive – in many operations this might be authorized by other people.
4. Do not ship animals to slaughter if withdrawal times have not been met.
5. For animals destined for slaughter, the dairy manager (or other authorized person) must verify that withdrawal times have been met.
6. The dairy manager must sign a release slip ensuring that cattle are safe for slaughter.
7. For animals destined for a breeding program, inform the purchaser if the cattle have not met withdrawal times.
8. Provide the purchaser copies of all processing records, feeding records, and health records for all cattle that are sold.

Cattle Culling

1. All culling decisions are made by dairy management.
2. Culling records are maintained by dairy management.

Sick Cow Treatment Procedures

Objective: To provide treatment and supportive care to assist the recovery or rehabilitation of animals suffering from injury or illness.

Important Note: *When treating an animal with an antibiotic with a milk or meat withholding, put red leg band on one leg, move to hospital string, and record all actions. Violation of this procedure may jeopardize the Grade A status with the USDA.*

Mastitis

Determine whether the mastitis is toxic or not. Do this by performing the following actions:

1. Take temperature (normal is 101.5° F).
2. Check for a hard quarter.
3. Check the milk secretion from each quarter.
4. Check to see if the ears are cold.
5. Observe the consistency of the manure (i.e. diarrhea, etc.)
6. Observe if cow is down or weak
7. Observed is the cow shows evidence of dehydration (eyes sunken)
8. Evaluate the cow's attitude (i.e. is it depressed, alert, responsive, etc.)
9. Other...

Mastitis Treatment

1. If the cow only has flakes and no hardness or related ailments, ...treatment may not be necessary
2. If temperature is over 101.5° F, ...antibiotic therapy and other treatment may be necessary; evaluate the milk secretion from each quarter
3. If quarter is hard, ... antibiotic therapy and other treatment may be necessary, evaluate the milk secretion from each quarter
4. Other....

If ears are cold or the cow is down due to mastitis, calcium therapy and other supportive treatment may be indicated.

Dystocia

If a cow has experienced a difficult calving that may have required assistance, seek the advice of the herd veterinarian for further treatment recommendations.

Milk Fever

In the case of finding a cow that is non-ambulatory, or up but wobbly, use the following actions:

1. Milk fever is rare in first calf heifers, therefore check for calving-related injury if a first calf heifer is non-ambulatory and unable to rise.
2. If fresh in the past 80 hours, check for mastitis.
3. If longer than 80 hours, check for retained placenta or mastitis.

Milk Fever Treatment

1. Administer a product labeled for treatment of hypocalcemia

Notes:

- Make sure to give the calcium slowly and by the route as per label recommendations. **(EXAMPLE ONLY)**.
- If the cow is suffering milk fever-like symptoms, but has a retained placenta or mastitis, treat her ...

Retained Placenta

If the cow's reproductive tract smells terrible or if the cow is looking ill with the placenta still hanging out, perform the following actions:

1. Take her temperature (normal is 101.5° F).
2. Sleeve her to check for fluid by massaging from the horns back (watch out for fluid).

Retained Placenta Treatment

1. If her temperature is up to 103.0 F, systemic antibiotic therapy along with other supportive treatment may be necessary – consult the herd veterinarian or protocols for handling of such conditions.

Notes:

- Be sure to put red band on one leg, move to sick pen, and record on day sheet all information.

Metritis

If you find a cow later in lactation in heat and she has cloudy vaginal discharge, perform the following:

1. Record as in heat, but cloudy
2. Recycle in 12 days

Note:

- Fresh cows with metritis will be treated according to veterinary recommendations.

Foot Rot or Lameness

When there is lameness or swelling around the hoof or leg, examination by a veterinarian is necessary.

REMEMBER: When treating an animal with an antibiotic that requires a milk or meat withholding, put red leg band on one leg, move to hospital string, and record all actions.

FOLLOW ALL WITHHOLDING TIMES FOR MEAT AND MILK.

All withholding times are dependent on the amount and route administered.

All other medications require the action described in the Withholding Chart!!!

A. Non-ambulatory Animal Care Procedures

Objective: To provide comfort and support to animals aiding in their recovery from injury/illness or to humanely euthanize animals that will not recover.

Definition: Any animal that cannot stand or walk. An electric prod can be used to encourage the animal rise, but continual prodding of a non-ambulatory animal is unacceptable. If the animal is unable to rise because of injury, disease or poor footing due to a slippery surface, it is considered to be non-ambulatory.

Moving and Handling

- When a non-ambulatory animal is identified, this information must be conveyed to a person who has been properly trained in methods for the movement of non-ambulatory animals. Non-ambulatory animals should be moved to a hospital or special needs area as soon as humanly possible.
- Ideally, when moving a non-ambulatory animal with a loader or sled, utilize three people: one person operating the loader and two people assisting on the ground. The animal must never be scooped up by the loader, rather it must be gently rolled into the loader bucket by the two people on the ground while the loader operator rolls the bucket back.
- The animal will then be carried gently in the loader bucket to a well-bedded hospital or special needs area designed for housing of non-ambulatory animals. The animal must be gently rolled out of the loader bucket onto a soft surface where it is accessible for nursing and other care (offered water and feed).
- Once the animal is placed into the bedded area, caregivers should assure that the animal is in sternal recumbency (lying on its sternum or chest) and its legs are comfortably positioned so that it has every opportunity to rise if able.

Treatment

- The animal should be monitored throughout the day to be sure that it has access to feed and water. General treatment protocols will depend on stage of lactation and diagnosis.
- All non-ambulatory animals will be rolled from side to side every 2-3 hours to try to prevent damage to their muscles that might complicate recovery.
- When a non-ambulatory animal that has been receiving treatment is not making any effort to stand, eat or drink, euthanasia should be considered. Animals that eat and drink and make some effort to stand or move from side to side, may be maintained for longer periods of time assuming the dairy is able and willing to provide the necessary nursing care. If this is not the case, the animal should be euthanized.

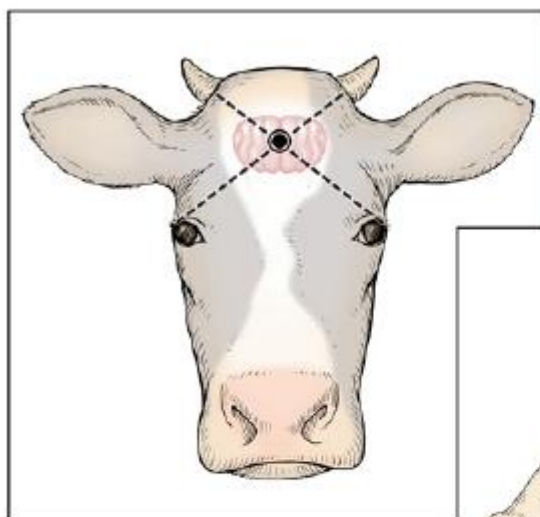
Rehabilitation

- There are several ways that non-ambulatory cows may be assisted. Float tanks and various types of slings or belly band support systems may be used to assist cows to stand. If a sling is used it needs to be wide enough to support the animal's weight over a broad area. Never leave an animal in a sling or float tank unattended. Animals may be allowed to stand in slings or float tanks for as long as they make some attempt to place weight on

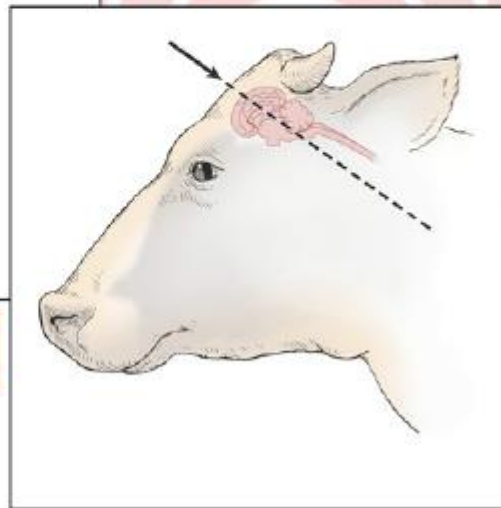
their legs. An animal that makes no attempt to support its weight should not be required to hang in the sling or float in the tank. In general, hip lifts should not be used as they can cause injuries. If they must be used, it must be minimal and with great care.

Euthanasia

- Only herd veterinarians, managers and farm managers who have been trained in the techniques of humane euthanasia are authorized to euthanize animals.
- All euthanasia will be by gunshot or penetrating captive bolt followed by a secondary step to assure death.
- Operators should note that the newer recommendations call for placement of a “free bullet” or bolt from a penetrating captive bolt on the intersection of two lines each drawn from the outside corner of the eye to the base of the opposite horn or where the opposite horn would normally be as shown below. For further training, refer to <http://vetmed.iastate.edu/humaneuthanasia/en/euthanasia-downloads>.



**Not between the eyes! Above
the eyes as illustrated**



B. Feed & Water Quality Assurance Procedures

Objective: To provide feed and water of a quality to sustain healthy livestock.

Feed

- Home-grown feeds or purchased feed ingredients should be checked for nitrates, mycotoxins, or other soil or climate induced problems (*specify other areas*).

Water

- Specify water source and any specific regional testing recommendations
 - 1) If city water/rural water is the supply source for livestock, it does not need additional testing.
 - 2) Yearly testing for coliform by PMO is a start; however additional tests such as nitrates and minerals also need to be evaluated.
 - 3) Well water should be tested periodically for nitrates, pathogens, and minerals.
 - 4) Water source should be tested for inorganics (minerals) prior to first using.
 - 5) Surface water should be tested more often than groundwater.