

A resource for cattle producers and herd veterinarians to discuss at herd health visits.
Resources can be found at www.BQA.org

Recommended Record Keeping Topics and Tools (Not All-Inclusive)

- Veterinarian-Client-Patient Relationship (VCPR) - Essential to establishing and maintaining care for your animals
- Veterinary emergency number in cell phone/tool box/on fridge
- Common disease prevention and treatment protocols (Developed with your herd veterinarian)
- Equipment (Catch pen and functional chute, head catch, halter, sorting stick, pliers, tags, refrigerator, others)
- Calving book (Record breeding dates and due dates with associated sire) or computer program
- BQA Daily Biosecurity Plan for Disease Prevention - Understand what disease risks you can control and improve
- Premises Identification Number (PIN) application for EID tags and USDA Program testing such as for Tuberculosis or Brucellosis (www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin/state-pin)

Basic Medical Supplies

- Thermometer for large animals
- Pen light or Flashlight with batteries
- Stethoscope (for checking heart rate)
- Exam gloves (Latex or nitrile)
- Obstetric (OB) sleeves
- OB lubricant for calving (Talk to your veterinarian about types)
- Isopropyl alcohol (rubbing alcohol)
- Hypodermic needles of various sizes (See BQA Field Guide page 17)
- Syringes (1, 3, 6, 12, 20, 35 mL sizes)
- Bandage scissors (Don't get wimpy ones!)
- Weight tape or scale weight
- Duct tape
- Balling gun - calf size and adult size (Have vet train to give pills or boluses)
- Ear tagger and tags
- Tag pen
- Tag cutter
- Soap for first step in cleaning (such as wounds or vulva for dystocia)
- Disinfectant rinse
 - ◊ Betadine solution: mix 5 mL per liter (20 mL per gallon) water or saline
 - ◊ Chlorhexidine solution: mix 2 oz (60 mL) per gallon water
- Functional refrigerator, fridge thermometer, and dedicated storage for animal health products

Calving

- If a calving cow or heifer has been actively trying to calve and has shown no progress in 30 minutes, you need to call a veterinarian for assistance.
- Tip: If nose and feet are not visible and cow or heifer is straining, call your vet!
- 5 gallon bucket
- Obstetrical chains and handles OR straps
- Clean towels
- Esophageal feeder (at least 2 - one for colostrum, one for sick calves)
 - ◊ Have vet teach you when this is needed and proper technique to prevent injuring the calf!!
- Large trash bags
- Heat lamp
- Calf blanket or Large dog coat
- Waterproof coveralls or apron
- Old T-shirts or sweaters (for rags or drying)
- Navel dip (such as Iodine or Chlorhexidine solution)
- Colostrum **replacement** (contains more than 100 g of immunoglobulins or IgG)
 - ◊ Your veterinarian will guide you on how to use
- Electrolytes - Talk with your veterinarian on specific products
- Pain medication for cattle will be specific to your operation - work with your vet

Bandaging Materials

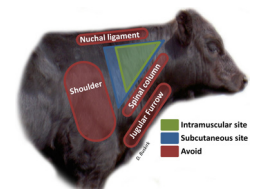
- Roll gauze
- Self-adhesive, flexible wrap (VetWrap or similar)
- Elastic adhesive tape
- White tape
- Ace bandages (3 inch and 6 inch)
- Roll cotton
- Flexible ice packs
- Non-stick wound pads (Telfa or similar)
- Gauze 4x4 pads
- AluSpray (Aerosol bandage)
- Catron Fly Spray

Veterinarian Recommendations

- Work with your veterinarian for your herd's specific needs.
 - The following product recommendations will vary based on region, cattle risk, and cattle age or type: Vaccines, vitamin/mineral supplements, dewormers, pain medication, antibiotics, and performance enhancing products.
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-
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Basic Injection Guidelines

- Give injections in neck, in front of slope of shoulder
- Use proper needle size
- Deliver subcutaneous (SQ) when possible, using less than 15 cc per site or as indicated on label
- Never administer more than 10 cc per IM injection site
- Space injections at least 4" (hands width) apart on neck, utilize other side of neck
- Always follow label instructions including proper dosage, route, and withdrawal times



The information provided is for educational and informational purposes only and is not meant as a substitute for professional advice from a veterinarian. No veterinarian-client-patient relationship is created by using this list. Consult your herd veterinarian for more information.

Mud & Manure Scoring

Adapted from Beth E. Doran, 2016, Iowa State University Extension and Outreach.



Mud and Manure Score 1



Mud and Manure Score 2



Mud and Manure Score 3



Mud and Manure Score 4



Mud and Manure Score 5

- 1 - No tag, clean hide (0)
- 2 - Small lumps of mud on hide in limited areas of the legs, side and underbelly (5.7)
- 3 - Small and large lumps of mud in large areas of the legs, side and underbelly (12.8)
- 4 - Small and large lumps of mud in even larger areas along the hindquarter, stomach and front shoulder (N/A)
- 5 - Lumps of manure on hide continuously on the underbelly and side of the animal from front to rear. (23.2)

() is pounds of mud on animal, Ramsey & Allen, 1975

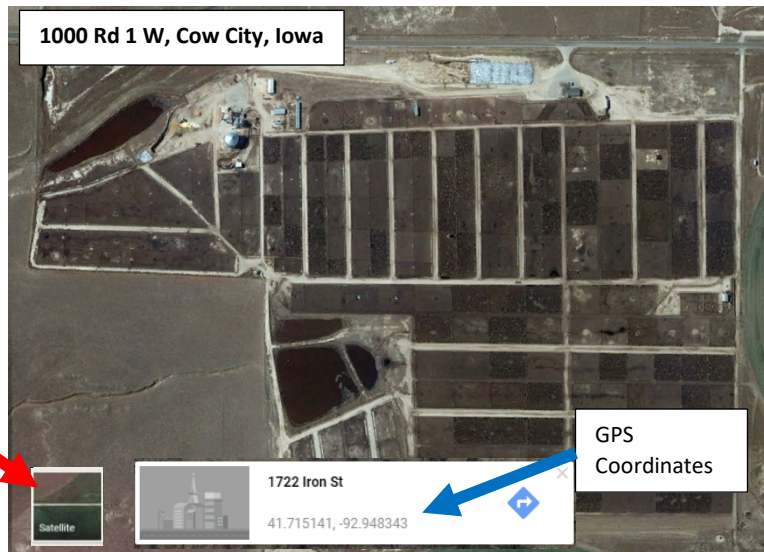
Creating a Premises Map for a Biosecurity Plan

The first step is to get an aerial map of your operation, including all animal areas (dry lots, pastures, buildings, feed, manure storage, carcass disposal/pick-up). The map can then be [labeled by hand](#) or [using a computer](#). All steps are described below. A [5-minute video](#) of these steps is available.










Getting an Aerial View from Google Maps*

*Google Maps is one example of aerial images provided free of charge online. There are others, such as Bing Maps: www.bing.com/maps and Google Earth Pro: <https://www.google.com/earth/about/versions/>. Use what works best for your operation. The steps below pertain to Google Maps.

1. Open an internet browser. Type in the URL: <https://www.google.com/maps>
2. Type in the address of your operation. If no address exists, use the GPS coordinates where the animals are located or entrance to the pasture.
3. Click on the small box in the lower left that says “Satellite”.
4. Zoom in so to see all barns, accessory structures, or pasture boundaries. The entire site should fit on the screen.
5. Find your site location on the map where the animals are located and click. A “pushpin” icon will appear. At the bottom of the screen, you will see the GPS coordinates below the location’s address. Copy this information to include in your premises map. If coordinates don’t appear, right-click on them.



6. You can label a screenshot of your map in Microsoft Word, OneNote, many iPad apps, and directly on Google Earth Pro. To do this in Word, click on “Insert” in the toolbar; click “screenshot;” click “screen clipping.” The internet browser will move to the front and be frosted. You can use the mouse to select the map area you want to copy.
7. Label your map with the items listed below. Include a legend. Add building and area labels to visualize where animals are housed, where people enter, and where feed is stored. The biosecurity plan template also has an area to list the Premises Identification Number (PIN) and address on the Labeled Premises Map page. Include as many labeled maps that apply to your operation.

	Public road
	Line of Separation (LOS)
	LOS Access Point
	Vehicle cleaning and disinfection (C&D) station(s)
	Designated parking area
	Loading site
	Carcass disposal/pickup location
	Carcass removal pathways
	Deliveries (non-essential to the operation)

Labeling Map By Hand

Use colored pencils or pens to draw the lines, arrows, and shapes listed above on your map.

Here is an example of a completed feedlot map with legend by hand

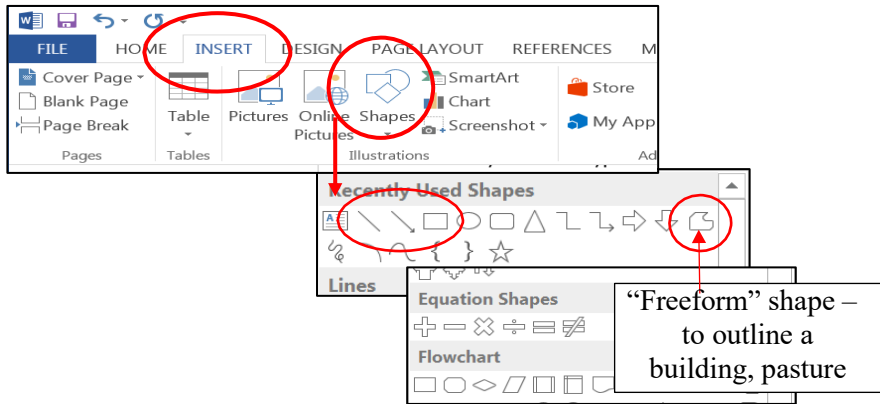


Here is an example of a completed pasture map with legend by hand

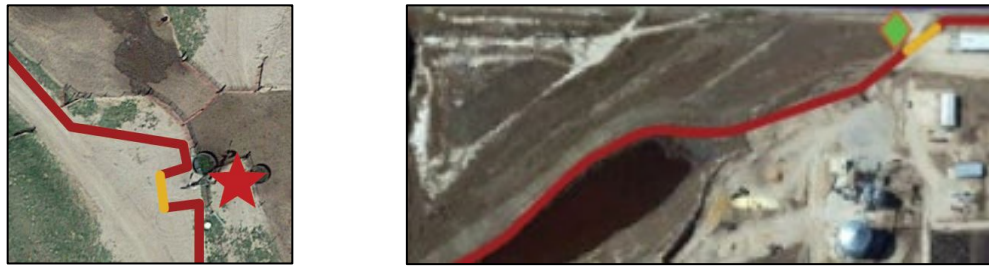


Labeling Map Using Computer and Microsoft Word

1. Use the **Insert: Shapes** from the control panel to place the various shapes and lines

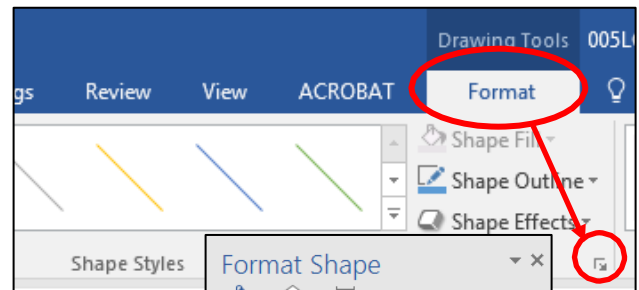


2. Use the "Line" tool to make the LOS surrounding the farm. This allows for editing individual areas if the LOS were to change. The "Freeform" tool is helpful to use in smaller, more complicated areas of the LOS (*examples below*), but will make it difficult to edit later and should only be used in stationary areas of your LOS.

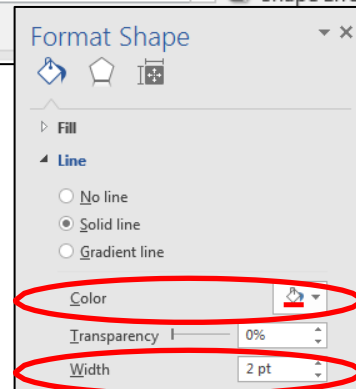


3. After inserting your first line, click the "Format" tab at the top. Click the expander button in the "Shape Styles" section to expand your formatting pane to the right side of the page.

- Use the "Format Shape" panel on the right to adjust the color and width of your lines, arrows, and shapes.



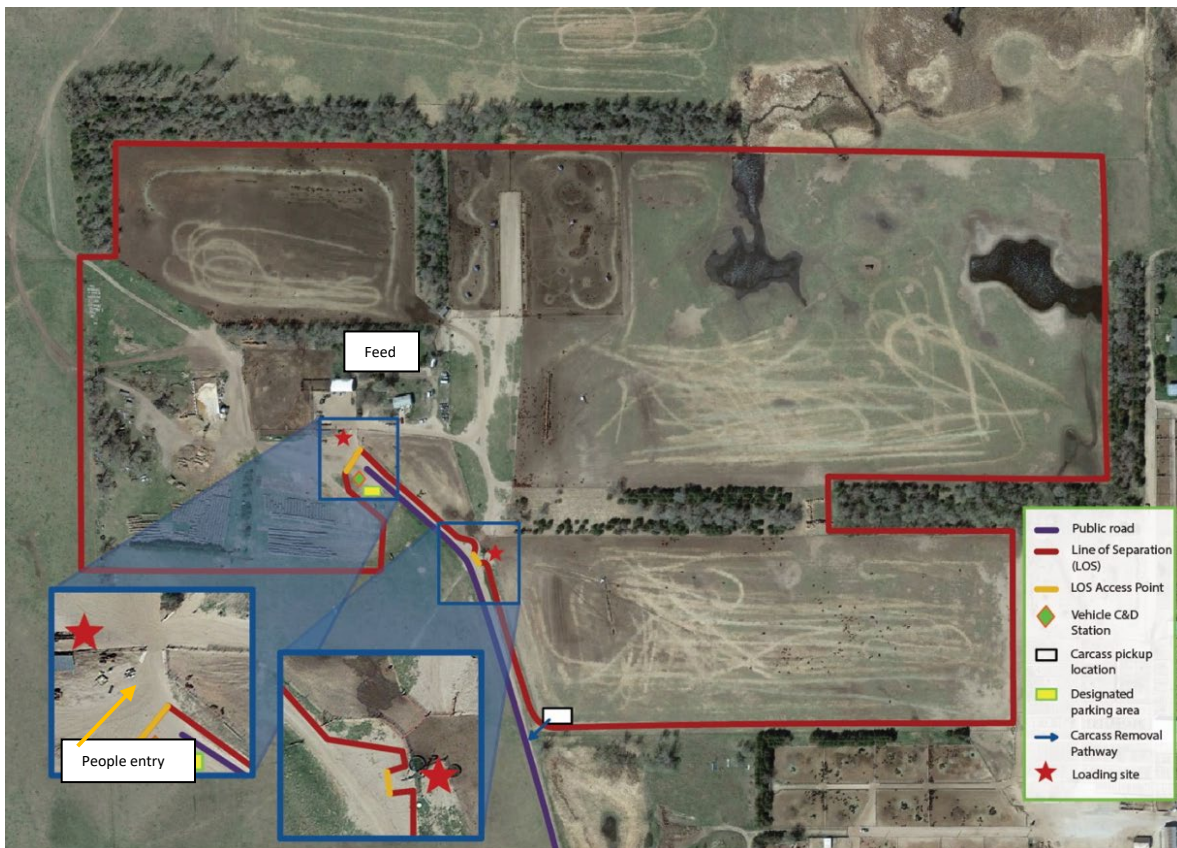
4. Copy the formatted line by selecting it and hitting "Ctrl + C" on your keyboard. Paste a new line ("Ctrl + V"), already formatted next to the first one you created. Drag the ends of the lines to connect them at the appropriate locations.
5. If it is hard to see where to connect the separate lines, use the zoom option at the bottom right of the Word document.



Here is an example of a completed feedlot map with a legend



Here is an example of a completed pasture map with legend.



SPECIALTY PEN OBSERVATIONS

Number of each specialty pens with cattle the feedyard has: _____

_____ x .5 = _____

Number of each specialty pen type (receiving, hospital, buller, railers, etc.) the feedyard has with cattle *Number of each specialty pen type (receiving, hospital, buller, railers, etc.) with cattle to evaluate*

**If the feedyard has < 3 of each specialty pen type (receiving, hospital, buller), evaluate all specialty pens of each type.*

***Ensure that pens being evaluated are from areas reflective of the different topography across the feedyard.*

PEN OBSERVATION GUIDANCE	
FB Feed Bunks	Feed bunks should be accessible for cattle and they should be clean and free of manure and foreign objects as well as spoiled, moldy, sour, packed, or unpalatable feed. Evaluate the feed bunks of the predetermined "pens to evaluate." ✓ - Clean Bunk X - Dirty Bunk
WT Water Tanks	Fresh, clean, and clear water should be readily available at all time to animals. Water tanks should be easily accessible and free of manure, excessive buildup of algae, or other foreign material. Evaluate the water tanks of the predetermined "pens to evaluate". ✓ - Clean Water Tank X - Dirty Water Tank
SR Stocking Rate	Space should be available for all cattle to stand up, lie down, move freely and allow for feedyard environmental management at any given time. Evaluate the stocking density of the predetermined "pens to evaluate". ✓ - Good Stocking Density X - Crowded Stocking Density
PF Pen Facilities	Pen facilities should be in good working order, with no broken fencing, gates or other equipment, and no sharp protrusions. Evaluate the pen facilities condition of the predetermined "pens to evaluate". If ≥ 70% evaluated home pens that contain cattle are in good working order, with no broken fencing, gates or other equipment, and no sharp protrusions, that is considered satisfactory. If 51% - 69% evaluated home pens that contain cattle are in working order with minor issues in fencing, gates or other equipment, that will not cause harm or injury to cattle, appropriate pen improvements should be considered. If ≥ 50% evaluated home pens that contain cattle are not well maintained and have major issues including broken fencing, gates, or other equipment, or protrusions that could cause injury to cattle, immediate action to improve these conditions and issues should be taken. ✓ = Pen facilities in good condition ½ = Pen facilities have issues, but none that would cause harm to animals X = Pen facilities in poor condition

Specialty Pen Observation (Receiving, Hospital, Buller, Railer, etc.)					
	Pen #	FB	WT	SR	PF
1					
2					
3					
4					
5					
6					
7					
8					
9					
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29					
30					

	A	B		
Observation	# counted	Total # of pens observed	Column A ÷ Column B x 100 = % observed	Target
FB Feed Bunks (Dirty)				≤ 30%
WT Water Tanks (Dirty)				≤ 30%
SR Stocking Rate (Crowded)				≤ 30%
PF Pen Facilities	x =			If ≥ 50% of pen facilities are in poor condition (X), this is unsatisfactory and needs immediate action.
	½ =			If 51-69% of pen facilities are in good condition, this needs improvement.
	✓ =			If ≥ 70% of pen facilities are in good condition, this is considered satisfactory.