

Caring for the Future of the Herd: Raising Healthy Calves



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It is all about disease PREVENTION!

Sick calves can become dead calves.

Sick calves cost money:

- time and labor

- drugs

- reduction in future milk production potential!



It is cheaper and easier to prevent disease than it is to treat disease.

Disease Prevention: A Timeline of Basic Needs

- Different key steps can be taken at different stages to drastically reduce disease occurrence in calves.
- Before birth → Birth → On milk/in hutches → Weaning → Co-mingling/group pens
- If basic needs aren't provided, calves will be stressed. Stressed calves become diseased calves.

Before Birth: Close-up vaccines

- Close-up vaccines
 - NOT just for the cow!
 - Improve colostrum quality
 - Higher antibody levels in colostrum help prevent disease in the calf

- J-5
- Rota/Corona
- Clostridial
- Salmonella



Before Birth: Calving environment

- Keep a clean maternity pen
 - A wet, warm environment grows bacteria.
 - If you can feel wet bedding in the maternity pen, it needs to be cleaned
 - If the maternity pen is wet and dirty, a calf's first mouthful will contain fecal material.
- Reduce crowding in the maternity pen
 - It is harder to keep a crowded pen clean.

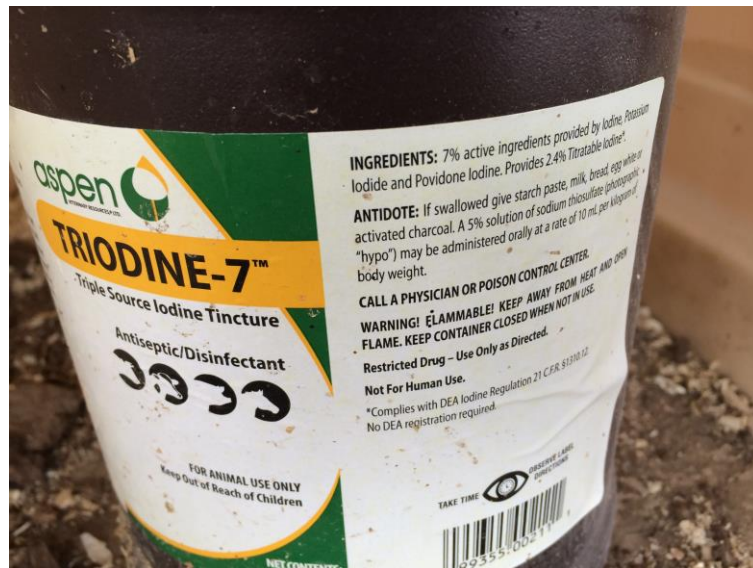


★ At Birth: Navel Dip

- 7% tincture of Iodine **NO!!!**
 - Will not dry the navel enough
 - Over the counter

vs.

- 7% Iodine **YES!!!**
 - Will dry the navel
 - Prescription only



NDC 13985-040-80 1 Gallon

VETone®
Stronger Iodine 7%

Topical

ACTIVE INGREDIENTS: Isopropyl Alcohol (99%) 85% Iodine 7% Potassium Iodide 5% Inert Ingredients: 3% Water	Antiseptic For use as a counterirritant in chronic inflammatory conditions. Keep out of reach of children. For veterinary use only. Restricted Drug (California) - Use Only as Directed	CAUTION: Not for use in body cavities or deep wounds. Do not use on burns. Do not apply under bandage. Irritation may occur if used on tender skin area. Avoid contact with eyes and mucous membranes. In case of deep or puncture wounds or serious burns consult a veterinarian. If redness, irritation, or swelling persists or increases, discontinue use and consult veterinarian. MAY BE FATAL IF SWALLOWED In case of Ingestion, call Poison Control 1-800-222-1222. WARNING! FLAMMABLE! KEEP AWAY FROM HEAT AND OPEN FLAME. KEEP CONTAINER CLOSED WHEN NOT IN USE. STORAGE: Store at 10°-30°C (50°-86°F). Protect from light.
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Rev. 05/14 TAKE TIME DISERVE LABEL DIRECTIONS

3 13985 00262 5 Distributed by: MMI
Boise, ID 83705
(855) 694-4331
www.VetOne.net
MADE IN USA

POISON

V1 502038 Net Contents: 1 Gallon (3.785 L)

Lot#: _____
Exp. Date: _____

At Birth: Colostrum

- Quality:
 - Cows > heifers
 - Measure quality with a colostrometer
- Quantity:
 - Feed 4qts within 1 hour of birth
 - Feed the second feeding within 12 hrs
- Fast:
 - Must feed as soon as possible



Feeding milk

- Line-milk or hospital milk
 - Needs to be PASTEURIZED to reduce bacteria counts
 - Unpasteurized milk can pass Staph Aureus and Mycoplasma to calves
- Milk Replacer
 - Quality
 - Milk based protein is more digestible than egg or vegetable (soy) protein
 - Medicated additives?
 - Feeding medicated milk replacer masks underlying holes in disease management and prevention
 - Overmedicating calves can lead to gastric ulcers and more disease
 - Consistency
 - Mixing consistency
 - Temperature consistency
 - Product changes



★ Water

- ALL calves should have CLEAN water available at ALL times, from birth on
 - Helps prevent dehydration
 - Dehydrated calves turn into dead calves



Electrolytes

- Any dehydrated calf should be given electrolytes.
- Milk should NEVER be withheld from a sick calf – they need the energy that milk provides to help keep up with the energy they are losing while sick.
- Most electrolytes are now safe to give after milk and some can be mixed with milk.

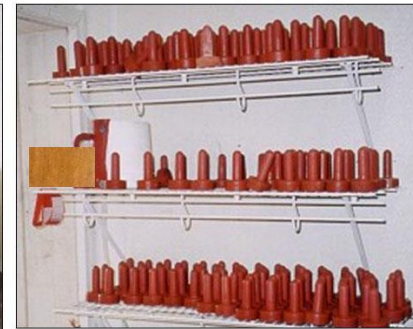


Feeding grain

- Calf grain should be made available in the first week
- Feed buckets should only be filled with what a calf can eat in 1 day
 - Increasing amounts should be fed as calves grow and eat more
 - Buckets should be emptied and grain replaced daily
 - Leftover grain and hay/tmr can get wet and dirty and grow bacteria and lead to disease
 - When eating 1 ½ to 2 lbs of calf grain daily, they calves can be weaned

★ Cleaning and Sanitation

- Dirty hutches, bottles, nipples, buckets, tanks lead to more disease
- 1st: cold water to remove all visible milk and debris
 - (Using hot water cooks on proteins which form a film for bacteria to grow on that is very hard to remove).
- 2nd: warm soapy water and rinse
- 3rd: disinfectant rinse
 - ie. bleach
- Don't forget:
 - Tanks, valves, O-rings!
- Fly Control:
 - Keep hutches/pens clean, fly bait



★ Reducing stress

- Try to limit calves to ONE stress at a time

- Disbudding/dehorning

- Use paste or hot iron at <2weeks old

- Vaccinations

- 2weeks prior to move to group pen

- Weaning

- 1-2weeks prior to move from hutches, not the same day

- Feed changes

- Feed the same feed in buckets in the hutches as in the group pens
 - Ie. TMR



Preventing diarrhea

- Diarrhea is the primary problem we see in calves in hutches.
- Prevent fecal-oral transmission!
 - Cleanliness and sanitation
- Vaccines
 - Ie. E. Coli and Corona, Modified live Rota/Corona
- Reducing stress
 - Minimizing feed changes



Preventing Pneumonia

- Pneumonia is the primary problem we see in group pens.
- Clean housing
 - Wet bedding and no airflow can lead to increased ammonia levels and cause airway irritation
- Vaccination
 - Ie. Modified live intranasal at birth, then modified live 5-way booster booster booster!
- Reducing stress
 - Vaccinate prior to move to group pens.

Sample vaccine schedule

- At birth:
 - Modified live IBR, PI-3, BRSV (Pneumonia)
 - Modified live Rota/Corona (Diarrhea)
 - E. Coli and corona (Diarrhea)
- As needed:
 - Respiratory booster
 - Salmonella vaccine
 - Clostridial vaccine
- 2 weeks prior to move to group pen:
 - Modified live 5-way respiratory
 - Clostridial vaccine
- At 4 months:
 - Brucellosis vaccine
 - Modified live 5-way respiratory booster
- Other vaccines:
- Pinkeye, Pasteurella, Mannheimia Hemolytica

Trouble-shooting with the vet:



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Veterinary Hospital

- Review the basics
- Measure serum protein levels
 - Are the calves getting enough colostrum?
- Swab and culture utensils
 - Is the current cleaning procedure working?
- Send in Diarrhea
 - What is causing the diarrhea outbreak?
- Send in Nasal swabs
 - May identify cause of pneumonia
- Necropsy!!!
 - If we're there, have us open any recently dead calves.
 - We can send in samples for diagnosis.
- Walk calves
 - We can walk through the calves after herd checks, look at overall health, and discuss any problems

