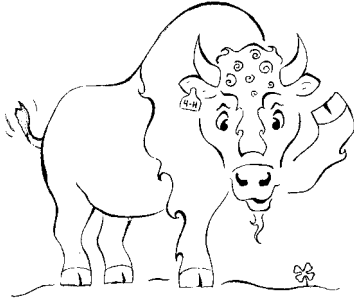


Bison Herd Health



Roll Call:

Name one sign of a bison animal that shows when it is not healthy.

Designing a vaccination program

There are several important factors to keep in mind when designing a vaccination program for bison. There are certain cattle diseases that bison are more susceptible to, and there are others that have not yet to be reported to have an effect on bison. Consultation with your local veterinarian will help you to make informed decisions with regards to selecting a vaccination program for specific to your herd.

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The following is a chart that indicates some of the most common bovine diseases in Alberta and the reported effect on bison.

Name of Disease	Reported Affect on Bison
I BR: Infectious bovine rhinotracheitis	Infections have been reported in bison but disease has not been reported.
PI – 3: Parainfluenza three	Infections have been reported in bison but have not been associated with disease.
BRSV: Bovine respiratory syncytial virus	Has not been reported to cause disease in bison.
BVD: Bovine virus diarrhea	Has been reported to cause disease in bison.
Hemophilosis	Has been reported to cause disease in bison.
E. coli scours	Has not been reported to cause diarrhea in bison calves.
Rota and Corona virus scours	Rotavirus has been reported to be associated with diarrhea in bison calves.
Brucella abortus	Has been reported to cause disease in bison.
Footrot	Occurs occasionally in bison, but the causative agent is unknown.
Pinkeye	Occurs in bison, but the causative agent is unknown.
Leptospirosis	Has been reported to cause disease in bison.
Clostridium Species : blackleg/malignant edema, Redwater, Necrotic enteritis	Some of the clostridial organisms have been reported to cause disease in bison.
Pasteurella hemolyticum	Has been reported to cause disease in bison.

Unfortunately, at this early stage in the development of the bison industry, very little research has been conducted to determine the effects of any of these diseases on bison. Until further information is provided, bison producers will be forced to make specific management decisions based on their own herd and what types of diseases may be prevalent in their area.

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Circle it!

There is a list of common cattle diseases that beef producers commonly vaccinate or take preventative measures to ensure their animals safety. Circle the diseases that have been reported in bison to date.



PI -3

BVD

Hemophilosis

Rota and Corona Virus

Brucella abortus

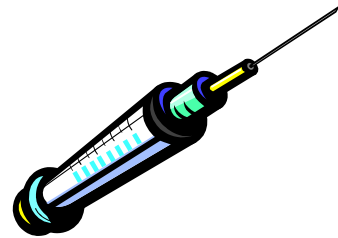
Footrot

Pinkeye

IBR

BRSV

Remember: Some of these may cause infection, but have not been reported to be the cause of disease.



There are many important factors to consider when determining the most appropriate vaccination program for your bison herd.

- Type of vaccine
- Safety
- Dose
- Re-administration times
- Cautions
- Restrictions
- Withdrawals

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A few common concerns

Scours

Scours may lead to the death of an otherwise healthy calf. You will recognize scours by the thin, watery manure. The hindquarters of the animal will be stained and even scalded by the manure. Calf scours usually occur in the first month of life.

Causes

Bacteria virus or protozoa diarrhea
calf becomes more susceptible to dehydration when stressed
sudden changes in diet
nutritional deficiencies
wet environment
over crowding
poor weather

Symptoms

watery diarrhea
weak and depressed
fever
no appetite
diarrhea

Calves with scours can die quickly. If you find scours in your herd:

1. Isolate the sick calves.
2. Avoid carrying infection from sick to healthy calves. Be sure to wash all pails and equipment carefully. Change your coveralls and wash your boots.
3. Feed electrolytes. These will help to hydrate your calf and replace the fluids and minerals lost.
4. Consult your veterinarian as soon as possible.

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Good management is the first step to preventing calf scours. Start your scours prevention before the calf is born. Make sure your pregnant cows get proper treatment.

- Crowding causes stress on cows and calves and increases the contamination on the ground. As a minimum you should provide 65 square meters of calving space per cow.
- Disease resistance of heifers is not as good as that of cows. Winter your cows and heifers separately to avoid exposing heifers.
- Avoid overfeeding or underfeeding calves. Make your changes to the diet gradually.

Foot rot

Foot rot is a real problem that will cause many economic losses in a herd if gone untreated.

Causes:

Bacteria in the soil invade cuts, scratches or injuries in the foot.
Most common in wet areas.

Symptoms:

Infection and/or swelling in soft tissues of the foot
Foul smelling discharge from the foot
Sudden severe lameness

Treatment:

Examine foot to make sure there is no other problem such as an injury.
Use antibiotics.

Prevention:

Provide good drainage of pens.
Provide solid, dry footing around water troughs and feeders.

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Hemophilosis

Hemophilosis is found to occur most frequently when freshly weaned bison calves are contained in large “feedlot” or confinement feeding areas. It rarely occurs in cow calf bison operations that wean small groups of calves.

Causes:

Bacteria that are always present in the intestine produce a toxin that can kill the animal.

Symptoms:

Temperature is lower than normal
Diarrhea
Death

Treatment:

Isolate the sick calves
Ask your veterinarian for advice.

Prevention:

Vaccinate bison before they begin on full feed
Be sure that calves are the appropriate weight for the injection
Follow with a booster injection about 90 days later.

Pink eye

Can be very contagious, therefore it is important to take action against further outbreaks as quickly as possible.

Causes:

Bacteria – although the causative agent has not yet been identified.
Increased susceptibility if stressed
Dust and wind
Irritation from flies
Deficiency of vitamin A
Eye injuries
Stress due to sunlight

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Symptoms:

Tearing, discharge from the eye

Lining of the eye is swollen

Cloudiness or whitening of the cornea or eye surface

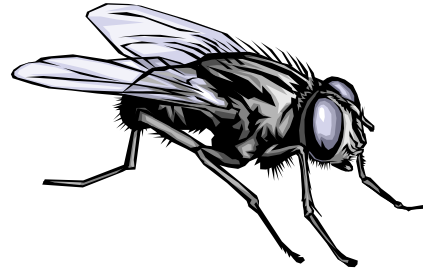
If severe the eyeball could rupture

Treatment:

Very contagious

Mastitis ointment in the eye

Severe - injections in the eye



Prevention:

Control face flies.

Make sure that rations supply adequate vitamin A.

Isolate infected animals in a dust free, dark environment.

Remember: recovered animals may remain disease carriers.

