WHAT TREATMENT IS AVAILABLE FOR AN ANIMAL WITH MCF?

# PREVENTION IS THE KEY!

#### THERE IS NO TREATMENT OR VACCINE FOR MCF.

- Do not graze sheep, particularly lambs 6-9 months old, with bison, deer or elk
- OHV-2 is fragile in the environment, surviving for only a few days depending on the humidity and temperature, so sheep and bison sequential grazing is possible
- Keep sheep flocks as far away from bison herds as possible
- Ensure transport haulers have not recently transported sheep

IF YOU CAN SEE BISON FROM THE SHEEP PASTURE THEN THEY ARE TOO CLOSE!

#### WHERE CAN I GET HELP?

Contact your herd health veterinarian to discuss disease control and prevention strategies, and visit:

#### **BISON PRODUCERS OF ALBERTA**

www.bisoncentre.com Email: info@bisoncentre.com Phone: 780.955.1995

#### ALBERTA LAMB PRODUCERS

www.ablamb.ca Email: info@ablamb.ca Phone: 403.948.8533

This publication is a joint venture between the Alberta Veterinary Medical Association, Bison Producers of Alberta, Alberta Lamb Producers and Growing Forward.



Canada

Government

of Alberta









# MALIGNANT CATARRHAL FEVER

## WHAT IS MALIGNANT CATARRHAL FEVER?

Commonly called MCF, Malignant Catarrhal Fever is an infectious disease affecting certain ruminants, particularly bison and farmed or wild whitetail deer and elk, **caused most commonly by sheep (ovine) herpes virus-2 (OHV-2).** 



#### WHAT IS THE ECONOMIC SIGNIFICANCE OF MALIGNANT CATARRHAL FEVER?

In 2003, an outbreak of MCF on an Idaho bison feedlot resulted in over 800 dead bison and an estimated loss of up to \$1, 000, 000.



TRANSMISSION OVER SEVERAL KILOMETERS HAS BEEN OBSERVED

#### WHAT DOES MCF LOOK LIKE?

The incubation period for MCF varies widely. In bison, it is often a month or more, but is shortened by stress, such as handling.

Signs of disease last 1-7 days and usually result in death. Bison generally die within 2-5 days. Deer often die within 48 hours of the first signs of MCF

#### **HOW IS MCF SPREAD?**

#### AMONG SHEEP

- OHV-2 is found in nasal secretions of most adolescent and adult sheep
- Can be passed by direct contact, thru the air to herdmates or neighboring animals
- Lambs are not generally infected until 2-2 <sup>1</sup>/<sub>2</sub> months.

#### FROM SHEEP TO BISON, DEER AND ELK

- May be passed by direct contact, thru the air or on objects that have been in contact with infected or virus carrying sheep. E.g. transport trucks
- Transmission over several kilometers has been observed, depending on prevailing wind conditions, humidity, temperature, sheep density
- Malignant Catarrhal Fever virus can lie in wait in some animals and become active at times of stress
- A bison infected with MCF will not transmit the disease to other bison; they are a dead end host



SIGNS OF DISEASE ARE OFTEN SUBTLE IN BISON, AS THEY TRY TO MASK THE CILNICAL SIGNS UNTIL NEAR DEATH. TRAUMA CAN RESULT FROM ATTACK BY HERDMATES.

#### **DISEASE IS CHARACTERIZED BY:**

- Fever, depression, weakness, off feed
- Nasal Discharge
- Clouding and or ulceration of the eyes
- Respiratory problems such as coughing, shortness of breath, open mouth breathing
- Erosions in the mouth and upper respiratory tract
- Diarrhea or dysentery (bloody diarrhea), in some cases
- Followed by death of the affected animal



Cloudy Eye

Chronic MCF Calf

#### HOW IS IT DIAGNOSED?

### Your veterinarian may diagnose Malignant Catarrhal Fever either:

- With a blood test to detect the OHV-2 virus; a technique called PCR testing or,
- By examining a recently deceased animal and sending samples for further microscopic evaluation. Samples may include from the intestine, stomach, upper respiratory tract, lymph nodes or oral mucosal tissue.