



## Malignant Catarrhal (ca-tar'-al) Fever (MCF) in Cattle

### Background of the outbreak at Puyallup Fair

Last fall at least 19 cattle died from a Malignant Catarrhal Fever (MCF) virus infection. They apparently caught the virus from lambs while attending a fair in Puyallup, WA. Although there are several strains of the virus that cause MCF, domestic sheep carry the strain usually infecting U.S. cattle. MCF infection in young sheep is widespread but they do not develop signs of disease. Infected lambs between 5 and 9 months old may shed large amounts of virus and may serve as a carrier of infection to susceptible animals like cattle and bison.

The MCF virus attacks organ blood vessels so clinical signs may include; sudden death, high fever, crusty muzzle, opacity (cloudiness) of both eyes, eye and nasal discharge, sores on lips and tongue and/or difficult breathing. Most cattle with clinical signs do not recover and there is no treatment for this viral disease.

The Puyallup Fair outbreak resulted from a set of events that occurred with near perfect timing for spreading this or any other disease. The following factors combined and MCF was a result. There has not been a similar tragedy in over 100 years of fair history.

- All animals were moderately stressed from being at fair,
- Young sheep/lambs and cattle were housed closely together,
- Humidity was high (80 to 100%) during the fair,
- Barn-air circulation patterns moved from sheep or lambs toward cattle,
- Cattle and lamb exhibitors handled each other's animals,
- Cattle and lamb exhibitors exchanged jackets among each other.

### Factors to Consider

Remember, it is not common here. for cattle to develop MCF even the sheep strain, and separation from sheep is not always necessary, especially from adult sheep. However, some caution may still be warranted for housing cattle and lambs very near each other. Separating cattle from lambs (including separate ventilation) may prevent MCF and other diseases as well. A WSU report showed that distance made a difference.

Distance between lambs and bison	5 ft	14 ft	17 ft
Death rate in bison	17.5 %	6.1%	0.4%

Exhibitors moving between cattle and sheep may have contributed to MCF spread at the fair. They may have carried the virus from animal to animal on clothing, hands, boots or equipment.

- **To help prevent MCF keep cattle separated from lambs/sheep**
- **MCF is not transmitted from animal-to animal among cattle**
- **MCF does not affect people**
- **Report any unusual diseases/deaths to your veterinarian or the state veterinarian**