VIGILANCE FOR PREVENTION

WHY CARE?

Although Schmallenberg virus has not been identified in North America, it is vital that we maintain a high vigilance to detect the infection as soon as possible, and prevent its establishment.

IF YOU SUSPECT...

Since this is a virus that could have serious economic impact on Canadian agriculture, it is important to alert authorities, such as the CFIA, immediately.

Samples should be sent to Prairie Diagnostic Services at the University of Saskatchewan either frozen or cooled. Avoid repeated freeze-thawing.

Ask your local veterinarian to take the appropriate samples.

Additional Resources:

1. OIE Technical Fact Sheet. *Schmallenberg Virus*. http://www.oie.int/fileadmin/Home/eng/Our_scientific_expertise/docs/pdf/A_Schmallenberg_virus.pdf

2. CFIA: *Protecting Canadian Livestock from Schmallenberg Virus*. http://www.inspection.gc.ca/about-the-cfia/newsroom/news-releases/schmallenberg-virus/eng/1335537952583/1335538638641

3. APHIS Fact Sheet. *European Orthobunyavirus or "Schmallenberg"Virus.* http://www.aphis.usda.gov/publications/animal_health/2012/schmallenberg_virus.pdf

4. Prairie Diagnostic Services , University of Saskatchewan. 306-966-7316 http://www.pdsinc.ca/

5. Western College of Veterinary Medicine, University of Saskatchewan. 306-966-7447 www.usask.ca/wcvm/

Photo Credits:
http://en.wikipedia.org/wiki/Schmallenberg_virus
http://agrinewspk.blogspot.ca/2012/03/abergavenny-farmer-fears-schmallenberg.html
http://ruleof6ix.fieldofscience.com/2012/02/uk-meet-schmallenberg-virus.html
http://www.business-on.de/weser-ems/rind-schafe-schmallenberg-virus-ziegenhaltung-laves-orthobunya-virus-niedersachsen-_id22895.html
http://www.thueringen.de/de/tllv/aktuell/
http://parkerstockfarm.com/

A WCVM Student Project Designed by Lindsay Parker

Protecting Canadian Livestock

Be Aware:

SCHMALLENBERG VIRUS

Schmallenberg Virus is an epidemic across the U.K.

It has been identified in more than 2000 farms across Europe.

IS CANADA NEXT?

How It Is Spread

It is important to note that there is no evidence that Schmallenberg virus is transmissible to humans (i.e. is not zoonotic).

Orthrobunyaviruses may be transmitted through an insect vector, such as a mosquito or biting midge, or across the placenta. It is assumed that the virus is primarily transmitted via insects, although this has yet to be proven.

It is unknown whether the North American mosquito and midge are capable of being competent carriers for the Schmallenberg virus.

Origins of Virus

In 2011, the virus was identified to be a member of the Bunyaviridaw family and *Orthobunyavirus* genus. It was named Schmallenberg after the German town in which it was first discovered.

It appears that the virus afflicts most domestic ruminants, although the majority of farms infected raise sheep. It is unknown whether it can cross into wild ruminants.

The map below indicates the current spread of the infection across Europe. The red zones indicate positive animals, and the green zones indicate countries with positive vectors.

Resultant Disease

Clinical Signs:

- Reduced milk production
- Fever
- Decreased appetite
- Diarrhea
- General sickness
- Increased incidence of abortions
- Increased incidence of birth defects (especially in sheep and goats)

Showing one or more of the above signs could indicate an infection, especially during active insect season. However, only a lab analysis can confirm if the virus is present.

Prevention and Control

Currently, there is no existing preventative vaccine or treatment for Schmallenberg viral infections. However, it seems that Europe has research already under way. The best method of warding off this infection is to implement insect control measures, and to reschedule the breeding season for outside the active vector period.

Please refer to the CFIA's website, www.inspection.gc.ca, for information regarding the importation of semen from the EU. Embryos from the EU were ineligible for importation prior to the arrival of Schmallenberg virus.

"This government is committed to protecting the health and safety of Canadian livestock, and the livelihoods that depend on them."

- Canadian Agricultural Minister Gerry Ritz