

## Akabane

### What is Akabane and what causes it?

Akabane (Ah-ka-bayne) is a viral disease spread by biting insects which affects ruminants, such as cattle, goats and sheep. The virus causes reproductive losses (abortions, stillbirths) and deformities of the offspring. Akabane occurs in parts of Australia and other tropical and subtropical areas. Outbreaks have occurred in Africa, Asia, and the Middle East.

### What animals get Akabane?

Akabane virus can infect all ruminants, including cattle, sheep, and goats. Wild ruminants can also be affected, but abnormalities of the offspring in these species have not been reported.

### How can my animal get Akabane?

Akabane virus is transmitted by biting insects (**vector**). The true vector has not yet been identified, but mosquitoes and biting midges are the most likely suspects. Pregnant ruminants get the virus from the bite of infected insect; the virus is then spread to the offspring through the shared blood circulation.

### How does Akabane affect my animal?

The Akabane virus causes severe reproductive problems in infected ruminants. Adult animals do not show any signs of illness, but those that are pregnant may have abortions, stillbirths, premature births, or problems delivering their young.

Deformities of the offspring are very common with this disease. The effects depending on when virus exposure occurred.

Calves infected with the virus early in the pregnancy are termed “dummy calves”. These animals can usually stand and walk, but have behavioral abnormalities such as slow or absent suckle reflex, depression, dullness, periodic hyperexcitability, deafness, incoordination, or blindness.

Calves infected during the second trimester usually have fixed, rigid joints and cannot stand. The muscles are usually underdeveloped and twisting of the spine can occur.

Calves infected with the virus in the last trimester of pregnancy are generally bright and alert, but cannot stand. They may be incoordinated, paralyzed in one or more limbs, have bulging eyes, excessive tearing or abnormal vocalization.

Most infected calves die soon after birth or must be euthanized due to severe abnormalities.

### Can I get Akabane?

No. Human infections by Akabane virus have not been reported.

### Who should I contact if I suspect Akabane?

**Contact your veterinarian immediately.** Akabane is not currently found in the United States; suspicion of the disease requires immediate attention.

### How can I protect my animals from Akabane?

Akabane virus does not appear to be transmitted between animals except by biting insects, such as mosquitoes and gnats. Care should be taken to protect animals from the bites of these insects by using insect repellents and keeping animals indoors between dusk and dawn, when these insects are most active.

### For More Information

CFSPH Technical Fact Sheets. African horse sickness at <http://www.cfsph.iastate.edu/DiseaseInfo/>

The Merck Veterinary Manual at <http://www.merckvetmanual.com/mvm/index.jsp>

World Organization for Animal Health (OIE) at <http://www.oie.int>

United States Animal Health Association. Foreign Animal Diseases at [http://www.aphis.usda.gov/emergency\\_response/downloads/nahems/fad.pdf](http://www.aphis.usda.gov/emergency_response/downloads/nahems/fad.pdf)

**Akabane** is a severe viral disease of ruminants that causes abortions and congenital deformities.



Newborn calf with deformities. Courtesy of Dr. P. Mansell, University of Melbourne; biting midge from U.S. Department of Agriculture