

Brief: Scrapie in Sheep

Scrapie is a degenerative and eventually fatal disease affecting the central nervous system of sheep and goats. It is a member of a class of diseases called transmissible spongiform encephalopathies (TSE's). Scrapie entered the United States in 1947 with sheep imported from England.

Control and Incubation

Its control is complicated because the disease has an extremely long incubation period without clinical signs of the disease.

The incubation period is typically between two and five years for animals exposed at or near birth but is typically longer than five years and may exceed nine years in animals exposed post weaning.

- 91% of animals exposed at birth will die before 54 months of age
- 100% of animals exposed at birth will die by 67 months
- If a ewe shows no abnormalities by the time she is 4½ years old, she is less likely to be infected, provided that the ewe's exposure occurred at or near birth.
- Animals that are incubating the disease (and may be shedding the agent) are rarely identified until the onset of clinical signs.
- The only tissue/fluid that leaves the body of a live animal that has been shown to contain infectious material is the placenta and birth fluids.
- Rams are believed to be of low risk for spreading scrapie because:
 1. they do not lamb;
 2. infectious material has not been found in the male reproductive organs or semen;
 3. under normal management, rams do not come in contact with young lambs.

*For more information on
the Scrapie Eradication
Program:*

<http://www.aphis.usda.gov/oa/pubs/fsscrapg.html>

Symptoms

Weight loss despite retention of appetite (unique to sheep; not goats)

Behavioral abnormalities

Itching

Biting at legs or sides

Motor abnormalities (in coordination)

Bunny-hop movement of rear legs

Increased sensitivity to noise/sudden movements

Tremor

Head pressing

Wool pulling

Lip smacking

High-stepping gate (front legs)

Blindness

Swaying of back end

“Star-gazing”

Recumbence (later stages)

The clinical course of scrapie is usually of significant duration (one to six months).

Treatment: None

Prevention

Approaches to control scrapie:

- flock certification
- restriction of the **interstate** movement of high-risk and affected animals

Note:

The feeding of ruminant animal by-products (i.e. meat & bone meal) to ruminants is strictly prohibited by the FDA.

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