



SPONGIFORM ENCEPHALOPATHY

Scrapie in Sheep and Goats

Scrapie is a fatal and degenerative disease that primarily affects the central nervous system of sheep and goats. It falls under the category of transmissible spongiform encephalopathies (TSEs). Unfortunately, there is currently no cure for scrapie. While scrapie is not a health concern for humans, it is classified as a reportable disease in accordance with the Texas Administrative Code. The exact transmission mechanism of scrapie remains not entirely understood, and apparently healthy sheep infected with the disease can still spread it to others. Typically, sheep and goats contract scrapie during their young lamb or kid stages, although adult animals can also become infected.

CAUSES OF SCRAPIE

Prions, known as proteinaceous infectious particles, cause scrapie. They are abnormal versions of cellular proteins found in high concentrations in lymph and nervous tissues. Once the abnormal form appears, it triggers nearby normal proteins to change, leading to the spread of infection in an animal. Prions are highly resistant to destruction by various methods. Animals must have genetic susceptibility and exposure to prions to develop scrapie.

PREVENTION OF SCRAPIE

Producers can limit infection risk by:
Limit outside exposure: Minimize contact with non-farm personnel and disinfect livestock trailers after transporting animals. Manage lambing/kidding: Promptly clean birthing areas between lambings/kiddings. Control flock/herd additions: Maintain a closed flock, select genotyped ewes, or buy from certified flocks. Use genotyping for breeding stock: Opt for RR rams to reduce offspring vulnerability.

SYMPTOMS OF SCRAPIE

Scrapie signs in sheep and goats appear slowly, usually between two to five years after infection. Affected animals may show:

- Altered behavior
- Lack of coordination
- Abnormal gait (hopping or high-stepping)
- Weight loss despite normal appetite
- Trembling or falling due to stimuli
- Pulling wool or "scraping" against objects.

TREATMENT OF SCRAPIE

There is no definite way to prevent scrapie on a farm except to maintain a totally closed flock/herd and completely prevent any contact with other sheep or goats.



This is a Reportable disease

Sources
Scrapie - Osu Extension. (n.d.-f). <https://extension.okstate.edu/fact-sheets/print-publications/vtmd/scrapie-vtmd-9135.pdf>

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The Idaho Sheep & Goat Health Board

