



## *Colorado Department of Agriculture* General Scrapie Information

Scrapie is a difficult and devastating disease of sheep and goats that is classified as a transmissible spongiform encephalopathy (TSE), which affects the central nervous system of sheep and goats and is always fatal. Scrapie is estimated to cost the U.S. sheep industry over \$20 million a year and can potentially affect your flock, as well.

### **Cause and transmission**

Scrapie is a condition in which sponge-like holes develop in the sheep and goat brain. Most scientists believe that scrapie is caused by prions – an abnormal form of a normal cell protein. It appears to spread most commonly from an infected, often normal looking ewe to her offspring and other lambs that come in contact with the placenta and placental fluids. The environment can become contaminated and remain so for years, serving as a source of infection to susceptible animals long after these materials have been removed. Although infection likely occurs at or shortly after birth, scrapie is a degenerative disease and signs usually develop 2 to 5 years later. Animals may live 6 months or longer after onset of signs, but there is no treatment, and death follows a progressive course of disease.

Susceptibility in sheep is linked to genetics, and genetic testing is available to aid in management of this disease. Genetic susceptibility in goats is not well understood, therefore all goats are considered susceptible when evaluating exposure risks for this species.

There is no evidence of a human health risk.

### **Clinical signs:**

- Early signs include subtle changes in behavior or temperament
- Scratching or rubbing against fixed objects to relieve itching
- Loss of coordination
- Weight loss despite displaying a “normal” appetite
- Biting at feet and legs
- Lip smacking
- Gait abnormalities such as high stepping of forelegs, hopping like a rabbit and swaying of the back end; or
- May appear normal at rest, but if stimulated with sudden noises or excessive movement, the animal may tremble or fall down in convulsion

### **National Scrapie Eradication Program**

The United States Department of Agriculture’s (USDA) Scrapie Eradication Program goal is to eradicate scrapie and have the United States declared scrapie-free by the World Organization for Animal Health by 2017. Achieving this goal will boost producers’ economic viability by increasing opportunities for exports, increasing value of animals, and decreasing production costs. Although there is no evidence to suggest scrapie is a human health concern, eradication can increase consumer confidence in a healthy food supply. The main tools in the program are animal identification to facilitate rapid identification of exposed animals and premises, surveillance testing among live animals and post-slaughter, and genetic-based flock cleanup plans.

### **Additional Resources:**

<http://www.eradicatescrapie.org>

<http://www.aphis.usda.gov>

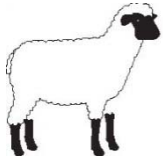


# Scrapie Surveillance: Tagging Sheep and Goats

In an effort to eradicate scrapie in the United States, USDA requires sheep and goats to have flock identification ear tags that list their flock of origin. Enforcement of these rules is now in effect as the tags are readily available to producers.

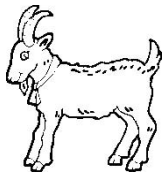
Animals required to have flock ID tags:

## Sheep



- All sheep sexually intact regardless of age and wethers 18 months of age and older upon change of ownership or cull animals 18 mo. or older moving to slaughter.
- All sheep sexually intact regardless of age and wethers 18 months of age and older for show or exhibition.
- All breeding sheep regardless of age

## Goats



- All goats sexually intact regardless of age and wethers 18 months of age and older upon change of ownership or cull animals moving to slaughter.
- All goats sexually intact regardless of age and wethers 18 months of age and older for show or exhibition and do not have a registration tattoo with registration or the tattoo is illegible.
- Due to scrapie found in goats in Colorado, all commercial goats sexually intact regardless of age and wethers 18 months of age and older not in slaughter channels.

\*\*Registered meat and dairy goats may use tattoos that are legible with Breed Registration Numbers until they are sent to slaughter when a flock ID tag will be required.

Cull breeding sheep and goats destined for slaughter will be tested for scrapie. During the scrapie surveillance program, the ID tags will be collected to accompany the test sample and used to trace an animal that tests positive for scrapie back to its infected flock. Flocks/herds will be counseled individually to help owners work through scrapie toward eradication. All exposed goats are at risk. All exposed genetically susceptible sheep are at risk.

## **Keeping Records**

Records on purchases must be maintained for five years for disease investigation purposes. When selling sheep and goats at the livestock market, owners should have flock ID numbers recorded on the market check-in document.

## Buyers

Sheep and goat buyers should maintain records on the number of animals acquired; the date of acquisition; the name, address and phone number of the person from whom they were purchased; and their flock of origin ID numbers. Livestock barns tagging sheep and goats with their flock ID tags are required to comply.

## Sellers

Individuals who sell or dispose of sheep and goats should maintain records of the number of animals sold and disposed; the date of sale; the name, address and phone number of the buyer or person who acquired the animals; and the flocks of origin ID numbers and their individual numbers.

To obtain tags, owners must contact the **APHIS Area Veterinary Services at (866)-USDA-TAG** for a flock identification number. APHIS will also assist owners in ordering the tags, which are provided at no cost. Sale barns will also be assigned a flock ID number and will be supplied with white or blue metal tags to identify sheep.

## **Contacts:**

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Colorado Department of Agriculture  
303-869-9130

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APHIS Area Veterinary Services  
303-231-5385