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# Scrapies in Sheep & Goats

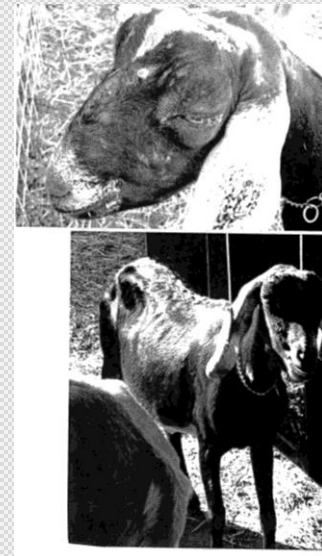
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# What is Scrapies?

- Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. There is no cure and there is no treatment for scrapie.



# Why is scrapie eradication important?

- Packers and producers have had difficulty in disposing of sheep offal and dead sheep causing them to incur significant increases in disposal costs,
- Other countries have expressed concerns and have indicated that they may prohibit or restrict certain ruminant products because the U.S. has scrapie,
- Our domestic and international markets for sheep-derived meat and bone meal, have been adversely affected, and
- The American Sheep Industry Association identified scrapie as a major impediment to the well-being of the U.S. sheep industry

# Is scrapie a costly disease?

- Yes, it is estimated that U.S. producers incur between \$20-25 million annually. Only New Zealand and Australia are recognized as scrapie free, so they are currently the only nations that can freely sell breeding stock to producers in most other countries. Further, their lucrative markets are not available to U.S. producers. Losses can only increase in the future if the disease is allowed to spread.

# How did the disease get its unusual name?

- Individual sheep or goats that have scrapie will often rub on objects and *scrape* off their wool or hair.



# Do infected animals show any other clinical signs?

- One or more of the following clinical signs of scrapie may be present in affected animals:
  - Weight loss despite retention of appetite
  - Behavioral changes
  - Itching and rubbing
  - Wool pulling
  - Biting at legs or side
  - Lip smacking
  - Loss of coordination
  - High-stepping gait of forelimbs
  - Bunny-hop movement of rear legs
  - Swaying of back end
  - Increased sensitivity to noise & movement
  - Tremor
  - Down, unable to stand
  - Weakness, difficulty getting up
  - Death

# How widespread is scrapie in the USA?

- Fortunately, it is relatively uncommon. Since it was first found in the United States in 1947, about 1600 sheep and goats have been diagnosed with the disease. Only seven cases have been found in goats in the last 10 years. It is presumed that some flocks are infected but remain undetected due to the disease's long incubation period (typically two to five years) and difficulty in making a diagnosis, which is usually done with immunohistochemistry on brain tissue. As of August 1, 2001, there were 48 infected or source flocks in the U.S.

# What is the role of genetics in scrapie?

- At present, it is generally accepted that scrapie is an infectious, contagious disease with genetics playing an influential role in susceptibility.
- U.S. sheep diagnosed with clinical scrapie have had a specific gene pattern. This pattern is known as QQ at the specific gene location codon 171.
- There are still many questions that must be answered before the role of genetics in relationship to scrapie susceptibility is fully understood and these are currently being researched.



# Key Requirements of the Program

- That most breeding animals and all sheep 18 months of age and older be officially identified in order to be moved in interstate commerce.
- That states meet minimum standards for state scrapie control in order to move breeding sheep and goats freely, interstate.

# Where does the producer begin?

- The first step is to understand what animals need to be officially identified prior to leaving the premises based on the following criteria:
- All breeding sheep.
- All sheep over 18 months of age.
- All scrapie exposed, suspect, test positive and high-risk animals.
- Breeding goats except low-risk commercial goats.
- Animals for exhibition.

# What is the second step?

- The second step is to request a flock identification number and free ear tags from the local APHIS Veterinary Services Area Office or the State Veterinarian's Office. If you prefer to use a different kind of official tag, they may be purchased through specified, approved tag companies. A list of these approved tag companies will be maintained on the APHIS scrapie web page.

# What will the tags look like?

- There are two different classes of tags:
- USDA tags that are provided free to producers, which will be white metal or white plastic depending on the state. These will have assigned flock/premises identification number and a production number unique to the farm.
- Producers can purchase official tags from approved tag companies. These tags will have an assigned flock/premises identification number, and a production number selected by the producer.

# What are the restrictions on interstate movement of goats?

- Goats that fall into any of the following categories will need to be officially identified to move interstate:
- Sexually intact registered goats and goats used primarily for milk production moving or sold for breeding or exhibition. Note: registration tattoos are acceptable for ID when the goats are accompanied by their registration certificate.

# What are the restrictions on interstate movement of goats?

- Sexually intact goats that have resided on the same premises as sheep.
- Goats that have been exposed to animals that are affected with scrapie.

# Goats that do not have to be identified in interstate commerce:

- Castrated goats that have not been exposed to scrapie.
- Goats moving in slaughter channels that have not been exposed to scrapie.
- Low-risk commercial goats.

# Nebraska contacts

- Dr. Dennis Hughes, SV  
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# Do not need individual identification

- Lambs—ewes, ram lambs and wethers under 18 months of age—moving into slaughter channels, including slaughter only auction markets.
- Goats—wethers, does and bucks of any age—moving into slaughter channels.
- Low-risk commercial goats—those raised for fiber and/or meat; those not registered or exhibited; those they have not been in contact with sheep; those not scrapie positive, not high risk or exposed; those not from an infected or source herd; and those not commingled with other goats at premises that do not meet these criteria.
- Wethers for exhibition.
- Animals moving for grazing when no change of ownership occurs.

# Need an official scrapie USDA-approved eartag

- All breeding sheep and potential breeding sheep regardless of age.
- All sheep 18 months and older.
- All sheep and goats for exhibition except for wethers.
- All scrapie-exposed, suspect, test-positive and high-risk animals.
- Breeding goats except low-risk commercial goats.
- Sheep under 18 months of age in slaughter channels that are females that are pregnant or have aborted or sexually intact animals from a scrapie-infected flock/herd.

# Where To Order Free Official Scrapie Sheep and Goat Ear tags/devices

Call **1-866-USDA-TAG (866-873-2824)** or **402-434-2300** to be connected to your USDA Veterinary Services Office or State Office Veterinarian and request that a premises identification number and Flock ID be assigned to your flock.

If you want to use USDA ear tags that are provided **FREE** to producers, request the number of tags that you will need for a one year period.

# Questions

