WHAT IS SCRAPIE
What is Scrapie?

Scrapie is a TSE (transmissible spongiform encephalopathy) Prion Disease, similar to BSE or “Mad Cow Disease.”
TSEs are a group of progressive, fatal conditions that affect the brain and nervous system of many animals, including goats, sheep, cattle and humans.
What is Scrapie?

There are two types of scrapie: classical and nonclassical (also referred to as atypical Nor98, or Nor98-like scrapie.)
What is Scrapie?

Nor98-like scrapie is either poorly transmissible or not transmissible under natural conditions. It appears to only occur sporadically in sheep and goats.
What is Scrapie?

Classical scrapie was first recognized as a disease in sheep over 250 years ago, and has been reported throughout the world. The first case of scrapie in the United States occurred in 1947 in a sheep flock in Michigan.
What is Scrapie?

The scrapie agent is extremely resistant to heat and normal sterilization processes. It is thought to be spread from the goat to her kids and other kids through contact with the placenta and placental fluids and through milk and colostrum.
What is Scrapie?

THERE IS NO CURE OR TREATMENT.
What Does Scrapie Look Like?

At first, infected goats appear normal. Signs usually appear 2 to 5 years after the goat is infected, but may take longer.
What Does Scrapie Look Like?

Signs vary widely among individual goats and can appear similar to those of other diseases. Early signs include subtle changes in behavior or temperament.

As the result of nerve cell damage, affected goats usually show tremors (especially of the head and neck), pruritus, and loco-motor incoordination.
What Does Scrapie Look Like?

Other signs can be:
1. scratching and rubbing against fixed objects,
2. loss of coordination,
3. weight loss despite a good appetite,
4. biting of feet and limbs, and lip smacking,
5. high-stepping, hopping like a rabbit, and swaying of the back end.
Yes, Goats Do Get Scrapie

Alpine, Angora, Boer, Nubian, Nigerian Dwarf, Saanen, Kiko, Toggenburg, and others have all been infected with scrapie.
Yes, Goats Do Get Scrapie

There were 2 cases of Classical Scrapie in the United States in 2019 in goat herds.
What’s the Big Deal about Scrapie?

Scrapie costs producers $10 to $20 million annually through production losses, increased costs and loss of export revenue.
What’s the Big Deal about Scrapie?

Many countries, including Canada and those in Europe ban imports of goats and sheep from the USA unless they are from farms that are enrolled in the Voluntary Scrapie Certification Program.

This means USA producers lose out on markets for their breeding stock.
Why Goat Producers are the Key to Eradicating Scrapie in the USA
What does “Scrapie Free” Mean?

To be Scrapie Free, there has to be *no* classical scrapie positive animals detected in the USA for 7 years despite vigorous surveillance to find positive animals and outreach to encourage reporting and testing of animals with clinical signs of scrapie.
Information from an ongoing 10 year study by USDA-ARS (Animal Disease Research Unit) into resistance to scrapie in goats has identified two potential alleles (genetic markers) that indicate resistance:

- S146 (serine at amino acid 146)
- K222 (lysine at amino acid 222)
Goats bearing just a single copy of either one of these alleles have been strongly resistant to infection during natural outbreaks as well as direct challenge experiments.
VGL at UC Davis offers genetic testing for these markers, and both the American Boer Goat and American Dairy Goat Associations offer discounts on the tests to their members.

Another laboratory, Neogen, is expected to offer testing in the future.
While, these tests will not be considered official for regulatory purposes until the USDA offers laboratory approval for scrapie resistance testing of goats, the testing is similar to testing that allowed the sheep industry to select for scrapie resistance.

This tool gives goat producers a chance to get a head start on cleaning up their herds.
Remember
THREE important steps
Learn to recognize the clinical signs of scrapie.

Visit the Scrapie Disease Information Page: https://americangoatfederation.org/scrapie-the-program/
Contact your State Veterinarian or the Regional USDA Veterinary Services Office for your state if your goat, older than 12 months, exhibits any signs of scrapie.

Testing suspects is the most cost effective way to find scrapie infected animals.

For more information contact the Designated Scrapie Epidemiologist (DSEs) for your state.

Submit samples or whole heads from goats over 18 months of age that die or are euthanized on your premises.

Visit the scrapie sample submission page for information about how to submit your sample and for information about active scrapie disease testing.

Call 866-USDA-TAG (855-873-2824) to get a premise ID (PIN) and have a Flock ID number assigned to your farm for the Mandatory Scrapie Eradication Program.

In many states Producers can enroll through their State Veterinarian Office.

Producers enrolling for the first time can receive up to 80 plastic Scrapie ID tags at no charge.
Official Plastic Scrapie ID tags that are approved by USDA can be purchased from these vendors

AllFlex USA, Inc (plastic or RFID)  833-727-2743  
www.scrapietags.com

Premier 1 Supplies (plastic)  800-282-6631  
https://www.premier1supplies.com

National Band & Tag Co (metal)  859-261-2035  
http://www.nationalband.com

Shearwell Data USA (plastic or RFID)  320-760-4696  
www.shearwell.com
Official 840 Microchip ID’s that are approved by USDA can be purchased from these vendors

**Alliance ID USA**: 800-434-2843  
https://www.microchipidsystems.com

**Ezid, LLC**: 970-351-7701  
http://www.EZidAvid.com
Goat Producers are the Key to Eradicating Scrapie in the U.S.

By committing to the goal of eradicating scrapie from U.S. goats, and following these guidelines, you will help safeguard our animals and improve our markets.
Organizations that Support The Mission of the National Scrapie Eradication Program

- American Goat Federation
- International Goat Association
- National Institute of Animal Agriculture
- US Animal Health Association
- American Boer Goat Association
- American Dairy Goat Association
- American Kiko Goat Association
- Alabama Sheep and Meat Goat Producers
- Cashmere Goat Association
- Hawaii Sheep & Goat Association
- North American Pack Goat Association
- Texas Sheep & Goat Raisers Association
- American Sheep Industry Association
Update on Goats and the National Scrapie Eradication Program

Presented by Dr. Diane Sutton, who is a senior staff veterinarian with USDA/APHIS Veterinary Services. She has been the National Scrapie Program Coordinator since 1998. She graduated from Virginia-Maryland Regional University and was co-principal investigator at the Scrapie Investigation Center in Mission, Texas from 1989 to 1992.

Genetics of Scrapie in Goats

Presented by Dr. Stephen White, who has been a Research Geneticist with ARS since 2006 and Adjunct Faculty Member in the Department of Veterinary Microbiology and Pathology at Washington State University since 2007. He is working on finding which genes and genetic variants contribute to infectious disease susceptibility, how they work, and how they might be used in selective breeding or other approaches to mitigate infectious disease.

Watch both videos at:
https://americangoatfederation.org/scrapie-the-program/
For more information visit:

https://AmericanGoatFederation.org/scrapie-the-program/


http://www.eradicatescrape.org

If you found this information to be useful, please consider becoming a member of AGF and help the federation continue to make information available to goat producers. https://AmericanGoatFederation.org/join-agf