



# Eradicating Scrapie from the U.S. Flock

## *Regulatory Scrapie Slaughter Surveillance Program*

### **What is Scrapie?**

Scrapie is a fatal, degenerative disease that affects the central nervous system of sheep and goats. It belongs to a group of diseases called transmissible spongiform encephalopathies, or TSEs, which also include chronic wasting disease in elk, deer and moose and bovine spongiform encephalopathy in cattle.

Scrapie is characterized by the accumulation of an abnormal protein in the cells of the brain, resulting in the loss of nervous system function in the animal.

Since its discovery in 1947, scrapie has been diagnosed in more than 1,000 flocks throughout the United States. No breed is known to be immune, though the disease does have a higher occurrence in black-face meat breeds, such as the Suffolk.

### **The Cost of Scrapie**

It is estimated that the U.S. sheep industry loses approximately \$10 million to \$20 million annually due to the presence of scrapie in the country.

Scrapie-infected flocks are quarantined and susceptible exposed animals are permanently restricted or destroyed, causing an economic loss. Disposing of sheep offal and dead sheep are costly for both producers and packers.

The presence of scrapie in the United States also prevents the export of breeding stock, semen and embryos to many other countries. Some countries have even indicated that they may prohibit or restrict certain ruminant products from the United States because of its scrapie status.

### **National Scrapie Eradication Program (NSEP)**

Because of the cost to the industry, the U.S. Department of Agriculture (USDA) initiated the NSEP in 2001. The goal of the program is to eradicate scrapie from the United States by the end of 2010 and to have the World Health Organization for Animal Health declare the United States scrapie-free by the end of 2017, thereby allowing expanded international trade.

### **Regulatory Scrapie Slaughter Surveillance Program**

As part of the NSEP, the USDA's Animal and Plant Health Inspection Service (APHIS)/Veterinary Services (VS) conducts intensive slaughter surveillance for scrapie in mature sheep and goats (older than 14 months of age), which is known as Regulatory Scrapie Slaughter Surveillance (RSSS).

RSSS is a targeted surveillance program that has been conducted primarily in federally inspected slaughter plants with the goal to test 48,000 animals each year. Mature sheep and goats that meet specific selection criteria are targeted for testing in this program.

Briefly, the targeted sampling includes sheep or goats that are scrapie suspects, display nonspecific clinical signs that are associated with scrapie or have been exposed to scrapie. The majority of samples, however, come from sheep targeted based on face color so that as many samples as possible are collected from mature black-faced sheep, regardless of traceability, and mature brown-, red- or mottled-faced sheep that are traceable to their flock.

When scrapie-positive animals are identified as a result of RSSS testing, traceback investigations are conducted to identify other animals and flocks that may have been exposed to the infected animal. By identifying previously unrecognized infected and source flocks through the slaughter surveillance activities, eradication of this disease in the United States gets closer.

### Expanding the RSSS

Historically, RSSS collection efforts have focused on facilities that slaughter relatively large numbers of mature sheep and goats, especially those that are black or mottled faced.

However, in an effort to ensure continued progress toward the eradication goal, APHIS/VS is currently expanding RSSS activities to include additional federally inspected, state-inspected, and custom slaughter plants that slaughter lower numbers of mature sheep and goats.

APHIS/VS is initiating a Blanket Purchase Agreement (BPA) that will allow these slaughter facilities to collect and submit samples for RSSS directly with minimal involvement required by VS and/or state personnel. The intent of this BPA is to include federally inspected, state-inspected and custom slaughter establishments **not** currently participating in RSSS. The solicitation may be viewed on the web at <http://www.fbo.gov/spg/USDA/APHIS/Contracting/AG%2D6395%2DS%2D07%2D0065/listing.html>.

Enhancing this surveillance activity will increase the ability to detect scrapie-infected flocks, reduce the spread of scrapie, decrease the number of producers impacted by the disease, decrease the overall cost of this disease and, ultimately, eradicate scrapie from the U.S. sheep and goat population.

### For More Information

To learn more about how federally inspected, state-inspected and custom slaughter plants that slaughter lower numbers of mature sheep and goats can participate in RSSS, please contact the local area veterinary services office at 1-866-873-2824.

To learn more about the scrapie eradication program and associated surveillance activities, please visit [http://www.aphis.usda.gov/animal\\_health/animal\\_diseases/scrapie/](http://www.aphis.usda.gov/animal_health/animal_diseases/scrapie/).



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