

SCRAPIE: ERADICATE IT

The sheep industry's scrapie eradication efforts.



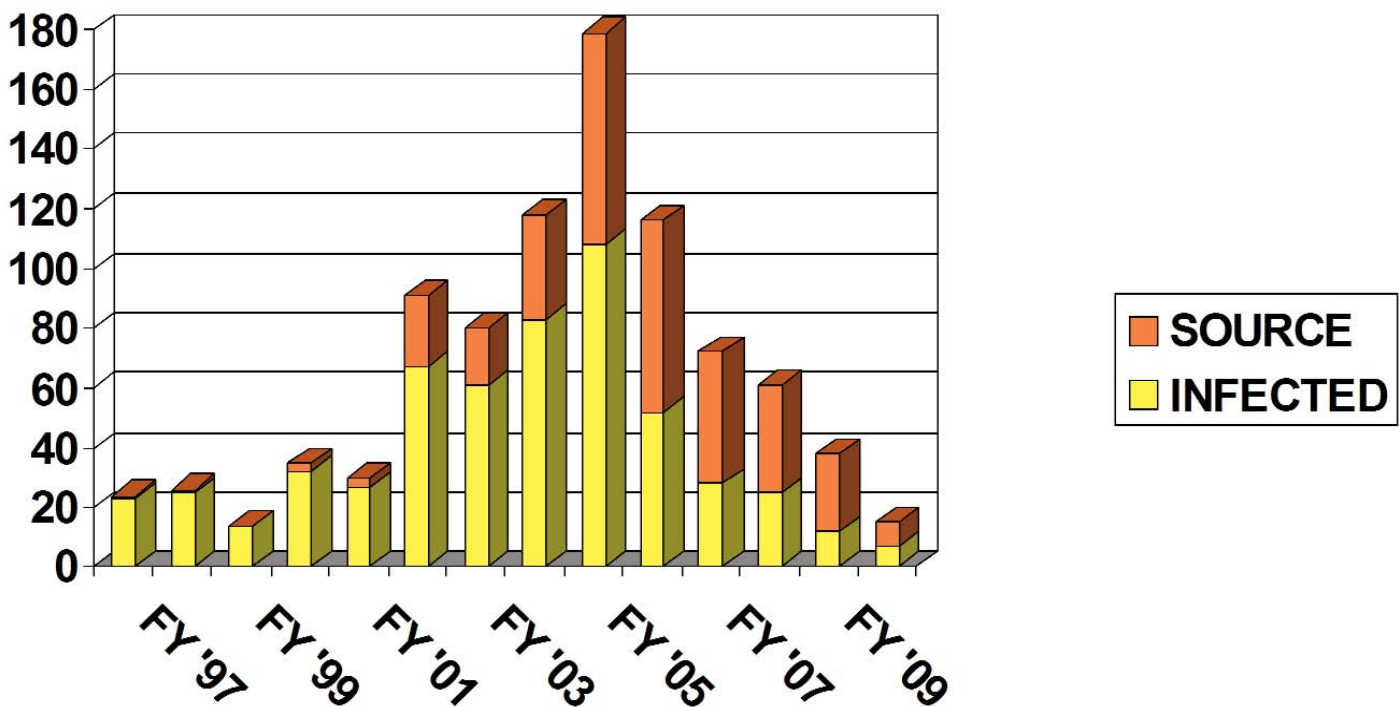
June 2010

The goal of the American Sheep Industry Association (ASI) and the U.S. sheep industry is to eradicate scrapie from our borders. In addition, it is the objective to have the World Organization for Animal Health, OIE, declare the United States scrapie free by 2017. This quarterly publication is created specifically for those of you in the field who are also working to achieve this goal.

This newsletter brings together, into one spot, current information from all 50 states, as well as from the U.S. Department of Agriculture and any other organization providing scrapie news, and reports it back to the field.

If you have first-hand accounts that you believe would be relevant for others to read or have information that you would like included in this newsletter, please let us know at becky@sheepusa.org.

Infected and Source Flocks New Statuses by Year FY 1997 – 2010*



*Through May 31, 2010

APHIS Changes NOR98-like Scrapie Policy

Since 1998, Nor98-like scrapie, first found in Norway, has been recognized in various countries including a majority of European countries, the Falkland Islands, New Zealand, Australia, Canada and the United States, with the first cases detected here in 2007.

The disease is different than classical scrapie. Because of this, in 2009, the World Organization for Animal Health (OIE) recognized Nor98-like scrapie as a separate disease from classical scrapie due to differences in laboratory findings, transmissibility and distribution. This means that unlike classical scrapie, Nor98-like scrapie is not a reportable disease to the OIE and should be of no trade concern.

Classical Scrapie Versus Nor98-like Scrapie

The most important distinction between the two diseases is that unlike classical scrapie, Nor98-like scrapie is either not transmitted or very poorly transmitted under natural conditions. The generally accepted scientific view is that Nor98-like scrapie is a spontaneous degenerative brain condition that naturally occurs in a small proportion of older sheep and goats.

Laboratory findings readily distinguish Nor98-like scrapie from classical scrapie.

Nor98-like scrapie has been found in all countries with active surveillance programs in place; classical scrapie has not been found in some of these countries. In addition, while classical scrapie tends to appear in clusters and usually infects more than one animal within a flock, Nor98-like scrapie is evenly distributed in the sheep and goat population and is rarely found in more than one animal in a flock.

"Nor98-like scrapie does not have the same genetic risk factors as classical scrapie. Nor98-like scrapie has shown up in RR sheep," says Jim Logan, DVM, chair of the American Sheep Industry Association's Animal Health Committee. "However, it is important to remember that Nor98-like scrapie appears to be spontaneous or sporadic, not infectious."

Sheep that are resistant to classical scrapie (RR or QR at codon 171) are susceptible to Nor98-like scrapie. The genotypes at highest risk for Nor98-like scrapie are those that have H at codon 154 or F at codon 141 (i.e. AHQ or AFRQ alleles).

"As near as I can tell, some of them (Nor98-like scrapie-infected sheep) show clinical signs, but it's not the norm," Logan relates. "It has mostly been diagnosed at slaughter. The majority do not show clinical signs, and most have been over five years of age. Sheep or goats with classical scrapie are more likely to show clinical signs and the signs are seen at younger ages, typically three to four years."

When Nor98-like scrapie-infected sheep show signs, they usually manifest the same as classical scrapie: loss of coordination, gait abnormalities, collapse while running, tremors, loss of condition, leg biting, nibble response and/or behavior changes. However, the intense rubbing often associated with classical scrapie has not been reported in animals diagnosed with Nor98-like scrapie.

"Number one, we know that Nor98-like scrapie is out there. I think it is more a spontaneous thing. It's probably been around for a long time and only recently been identified by newer tests. Since you can't tell it apart clinically from classical scrapie, if something shows up with symptoms, tissues should be submitted to a lab for diagnosis," says Logan.

What Does this Mean for Producers?

Based on scientific studies that indicate that Nor98-like scrapie is unlikely to be transmitted under natural conditions and the recognition by OIE that Nor98-like scrapie is a separate disease from classical scrapie, the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) will no longer require depopulation or movement restriction of Nor98-exposed sheep and goats. The agency plans to propose changes to the Code of Federal Regulation this year to allow the APHIS administrator to eliminate or reduce post-exposure requirements for scrapie types, such as Nor98-like scrapie, that are deemed to pose minimal risk of animal-to-animal transmission in natural settings.

Until the changes to the regulation are finalized, APHIS will conduct a Nor98-like scrapie pilot project, which will allow those with animals exposed to the disease to retain, sell, exhibit or move them.

Under the project, if a producer has a Nor98-like scrapie case on the operation or one is traced back to his or her flock, a federal or state veterinarian will make a visit to confirm identification of the animal, provide information about the disease and determine if the animal was born in or gave birth in the flock.

If the case is confirmed, the veterinarian and state animal health officials will ensure no animals are moved until they are properly identified. If not already officially identified, eartags will be applied to those sheep and goats that were exposed. An inventory of all sheep, goats and embryos will be performed, and a Nor98-like scrapie flock plan and five-year monitoring plan will be developed with the producer.

Importantly, all exposed sheep and goats that have been officially identified will be classified as low-risk exposed animals, allowing the owner to move them from the premise for any reason, including sale.

"This new strategy gives us an opportunity to monitor Nor98-like scrapie when it shows up. We shouldn't ignore it, but we need to keep it in perspective," says Logan, adding "I think that the industry itself needs to appreciate the fact that APHIS has handled this issue with logic and common sense."

To learn more about classical scrapie, Nor98-like scrapie and any updates to the scrapie pilot control project, visit www.aphis.usda.gov/animal_health/animal_disease/scrapie/.

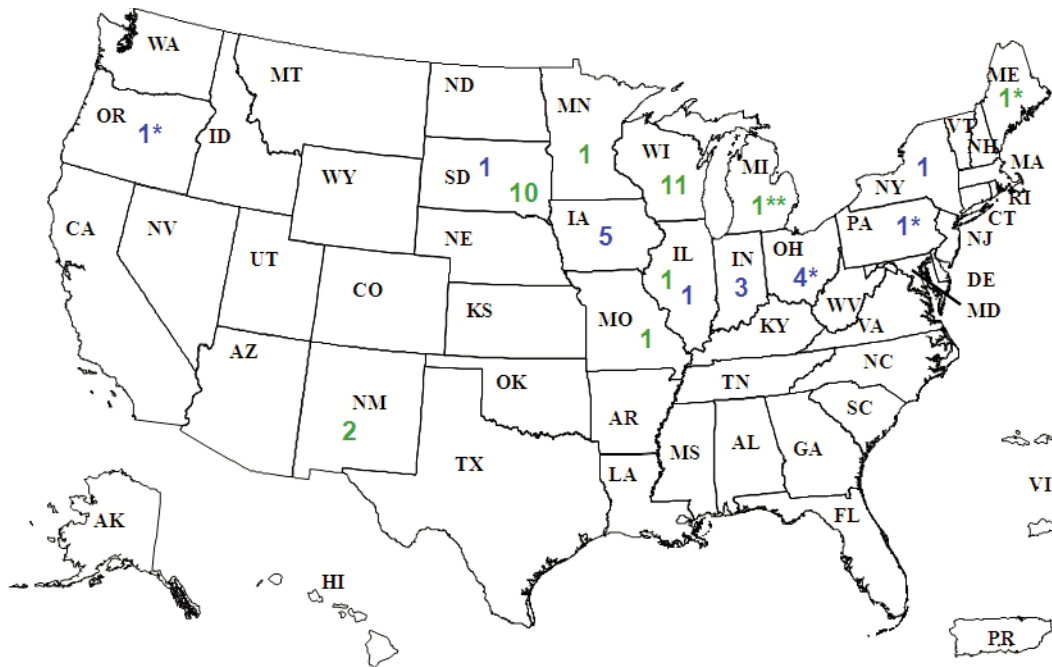
Animals Sampled for Scrapie Testing

Sheep and Goats

As of May 31, 2010

31,401 animals have been sampled for scrapie testing: 30,089 RSSS; 1,139 regulatory field cases; and 173 regulatory live animal biopsies.

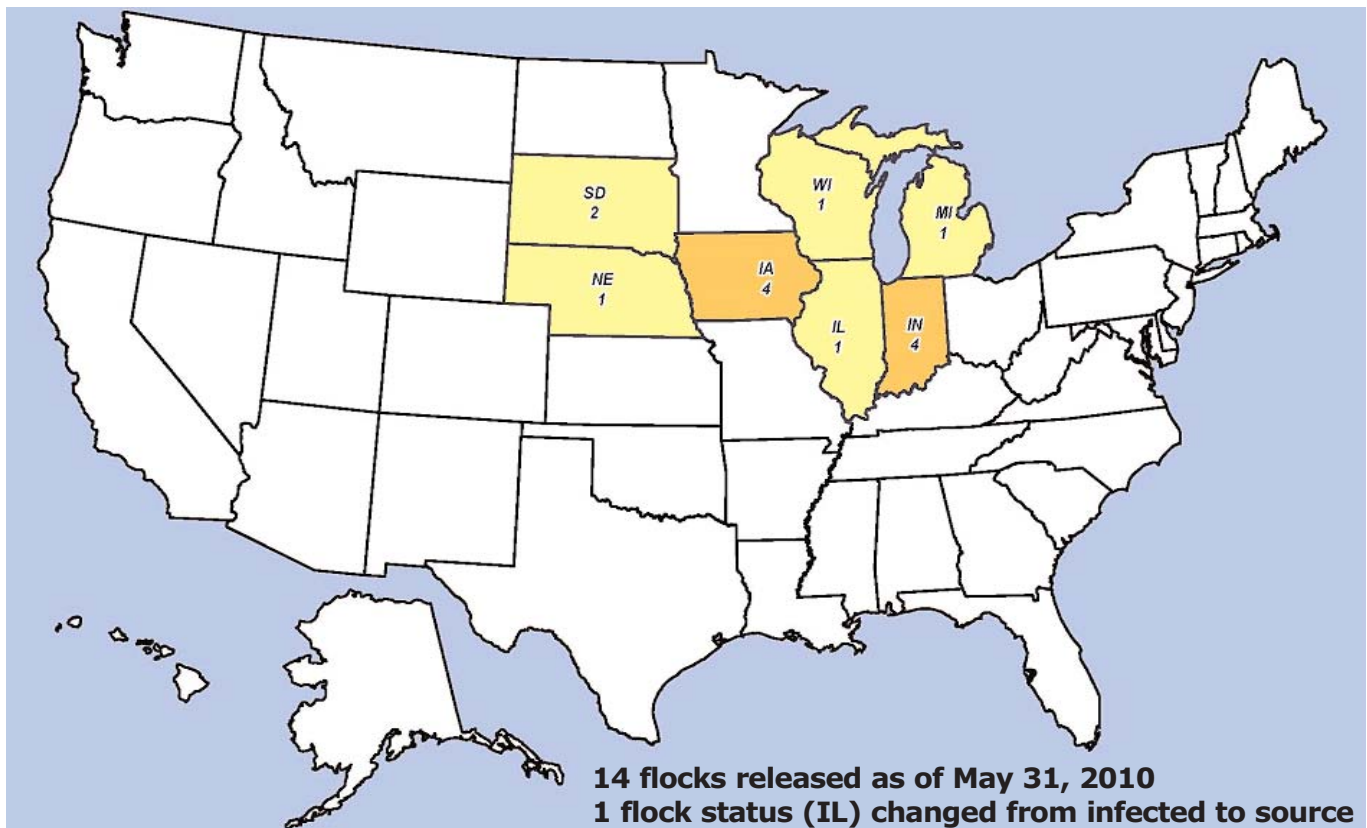
Scrapie Confirmed Cases in FY 2010



Classical Scrapie cases = 42
 NOR98-like Scrapie cases = 4;
 28 field cases;
 18 RSSS cases
 (reported by State of ID tag. Collected FY 2010 and confirmed as of June 14, 2010. State of ID tag for one case unknown).
 Note: Field cases include animals from infected source flocks, so the state totals often include several animals from the same flock.

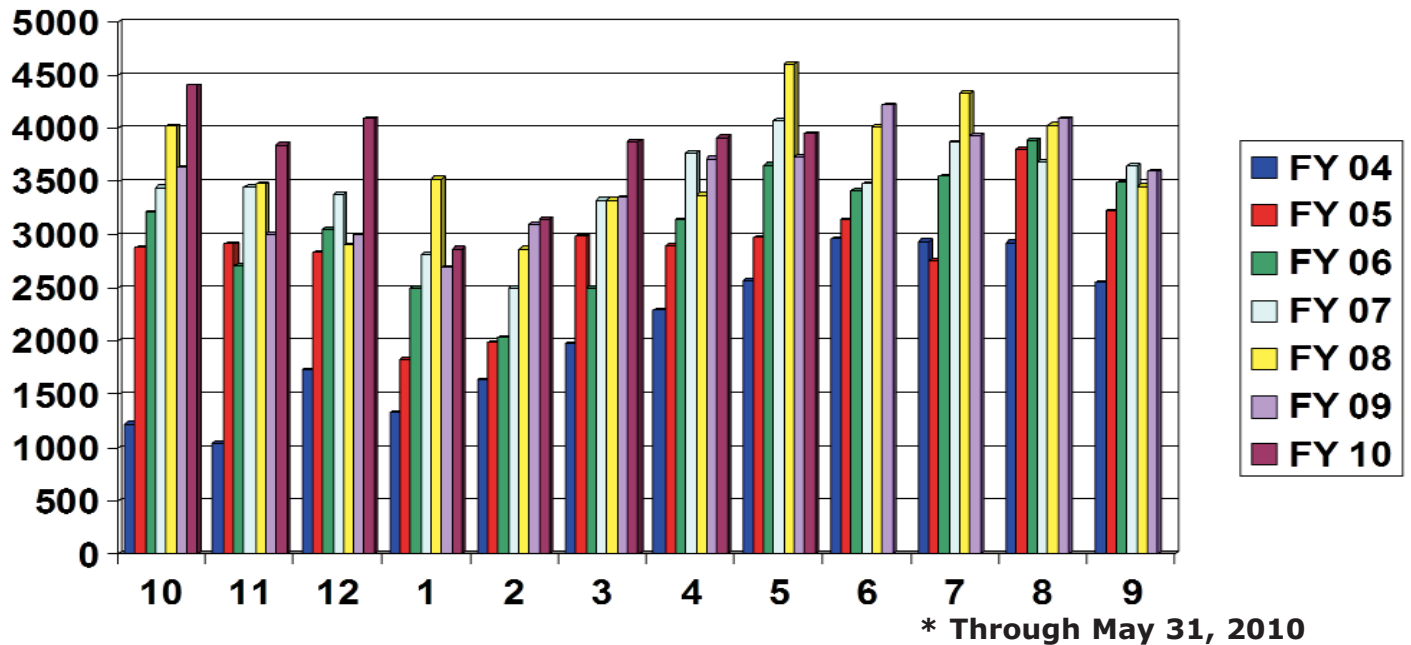
*Nor98-like case
 **Goat case

Released Scrapie Infected and Source Flocks FY 2010



14 flocks released as of May 31, 2010
1 flock status (IL) changed from infected to source

Slaughter Surveillance Samples Collected by Month, FY 2004 to FY 2010*



The Animal and Plant Health Inspection Service's goal is to collect 44,000 slaughter surveillance samples each year from throughout the United States.

Regulatory Scrapie Slaughter Surveillance (RSSS) Statistics through May 31, 2010

Since April 1, 2003:	In FY2010:
261,358 samples collected 439 NVSL* confirmed positives	30,089 samples collected 18 NVSL confirmed positives (3 Nor98-like)

*National Veterinary Services Laboratories

Web Sites Dedicated to the Eradication of Scrapie

Animal and Plant Health Inspection Service
www.aphis.usda.gov/vs/naahps/scrapie

Maryland Small Ruminant Page
www.sheepandgoat.com/scrapie.html

National Institute of Animal Agriculture
<http://www.animalagriculture.org/scrapie/Scrapie.htm>

Scrapie QuickPlace

<https://qp01.aphis.usda.gov/QuickPlace/scrapie/Main.nsf?OpenDatabase>
State and federal employees can access this password-protected site by e-mailing
Earl.T.Thorpe@APHIS.USDA.gov to receive a password.



American Sheep Industry Association
www.sheepusa.org