



## CSBA Position on Scrapie

March 7, 2013

### Overview of Scrapie and CSBA involvement

Scrapie is a fatal, degenerative disease that affects the nervous system of sheep and goats. It is one of several transmissible spongiform encephalitis (TSEs) diseases, which are related to bovine spongiform encephalopathy (BSE or "mad cow disease").

Scrapie is found in countries all over the world. Diagnosed for the first time in sheep in 1938, it was made a reportable disease under Canada's Health of Animals Act in 1945 and there has been a control program in place since that time. Any suspect scrapie case must be reported to a CFIA veterinarian immediately. Incidents of scrapie are reported annually to the Office international des épizooties (World Organization for Animal Health), referred to as OIE.

Sheep infected with scrapie are humanely destroyed, and their carcasses are burned or buried under CFIA supervision. All animals that were exposed to the same birthing environment, and deemed at risk to developing the disease, are ordered destroyed. Producers are compensated for the loss of their animals.

In May of 2005, the Canadian Sheep Breeder's Association, Canadian Sheep Federation, and the Ontario Sheep Marketing Agency undertook the Voluntary Scrapie Flock Certification Pilot Project and The National Survey of Scrapie Genetics in Canadian Purebred Sheep with financial agreements made with [Agriculture and Agri-Food Canada](#). Additionally, a 2 year Scrapie Prevalence Study was initiated in 2010 to determine the occurrence of scrapie in the national sheep and goat population.

### Voluntary Scrapie Flock Certification Program

Overview: Participation in the Voluntary Scrapie Flock Certification Program (VSFCP) is optional. The program is designed to give producers a means of detecting and controlling scrapie within their flock, resulting in recognition that the risk of their animals being infected with scrapie diminishes to negligible with progressive participation in the program. A sheep producer can join the VSFCP provided that the producer agrees to adhere to the program rules. The program certifies flocks with respect to classical scrapie only, and does not cover "atypical" scrapie. Atypical scrapie is clinically, pathologically, biochemically and epidemiologically unrelated to classical scrapie. Atypical scrapie may, in fact, be a non-contagious, spontaneous degenerative condition of older sheep.

The CSBA:

- Views the VSFCP as an excellent means of reducing the risk of scrapie on individual farms
- Recommends that producers wishing to import animals from the USA enrol in the program to increase their chance of meeting import requirements

- Recognizes that although enrolment in the VSFCP is not attainable for all producers, individual principles and processes borrowed from the VSCFP can assist in reducing risk of scrapie infection on their own farm
- Requests that export health charts do not require enrolment in the VSCFP as it limits animal availability
- Understands that export access to the USA is highly political and may or may not be dependent on Canada's scrapie status
- Advocates that the goat industry's lack of a national tagging program and its' lagging level of scrapie program participation should not impede the sheep industry's access to markets.

### **Genotyping**

A genotype is the genetic makeup of an individual. Sheep DNA can be analyzed to determine a genetic resistance to scrapie infection, which is called a "scrapie genotype". The National Survey of Scrapie Genetics in Canadian Purebred Sheep, which was completed in March 31, 2009, genotyped 18,966 sheep from 496 farms. A scrapie genotype allows producers to predict their animal's risk of contracting scrapie, if it is exposed to the disease.

The CSBA:

- Acknowledges that scrapie susceptibility/resistance is not fully understood at this time
- Supports the use of scrapie genotyped rams and ewes to lower the incidence level of scrapie within Canadian flocks.
- Recognizes that scrapie genotypes may vary by breed
- Recommends that accredited labs be used to genotype sheep, but is aware that non-accredited labs can also perform the service
- Requires that genotype testing must be kept affordable
- Recommends that accredited labs and methods by one national government should be similarly recognized by other national governments
- Understands that a scrapie genotype is one piece of information and encourages its members to consider its use in conjunction with conformation, performance evaluation, overall health, etc., when making selection decisions
- Supports the CFIA in its use of genotyping in flock eradication and encourages transparency and national education about the process

### **Scrapie Eradication**

**Eradicating scrapie from the Canadian sheep population will be a long and expensive process that requires government, academia, animal health professionals and industry working in consultation and cooperation with one another.**

The CSBA:

- Is supportive of programs that aim to eradicate the incidence of scrapie in sheep in order to improve both the health of the domestic flock and the level of market access for Canadian sheep genetics.
- Believes that eradication programs developed must be user friendly, based on sound science and have combined government and industry support.