

Scrapie, Embryos, and Why Country of Origin Matters

Scrapie is one of those livestock terms that sounds alarming, is often misunderstood, and becomes especially important when international genetics are involved. If you are considering imported embryos, understanding scrapie and how different countries manage it helps explain why embryos from some regions are easier to import and carry less regulatory complexity than others.

What Is Scrapie?

Scrapie is a fatal, degenerative neurological disease that affects sheep and goats. It belongs to a group of diseases called transmissible spongiform encephalopathies, or TSEs. These diseases are caused by prions, which are abnormal proteins that damage brain tissue over time.

Scrapie has a very long incubation period. Animals can appear completely healthy for years before showing signs, which may include itching, weight loss, changes in behavior, and coordination problems. Once clinical signs appear, the disease is always fatal.

Importantly, scrapie is not known to infect humans, but it has major implications for animal health, breeding programs, and international trade.

How Scrapie Is Transmitted

Scrapie is primarily transmitted through exposure to infected placental tissues and fluids at lambing, environmental contamination where prions persist for years, and genetic susceptibility where some sheep genotypes are more vulnerable than others.

Why Scrapie Matters in Embryo Importation

Embryo transfer is considered one of the safest ways to move genetics internationally. Properly collected and washed embryos do not transmit scrapie. However, regulators also evaluate the scrapie status of the donor flock and the exporting country.

New Zealand: A Scrapie-Free Country

New Zealand is internationally recognized as scrapie-free, with no recorded cases of classical scrapie. This status results in fewer regulatory hurdles and the lowest scrapie risk category for imported embryos.

The United Kingdom: Managed but Not Scrapie-Free

The United Kingdom has a long history of sheep production and scrapie management. While robust surveillance and breeding programs exist, historical presence of scrapie adds regulatory complexity to embryo imports.

The Bottom Line

While embryo transfer itself is safe, the disease history of the exporting country matters. New Zealand offers the lowest risk profile, while the UK requires additional oversight. Understanding these distinctions allows breeders to make informed, strategic decisions.