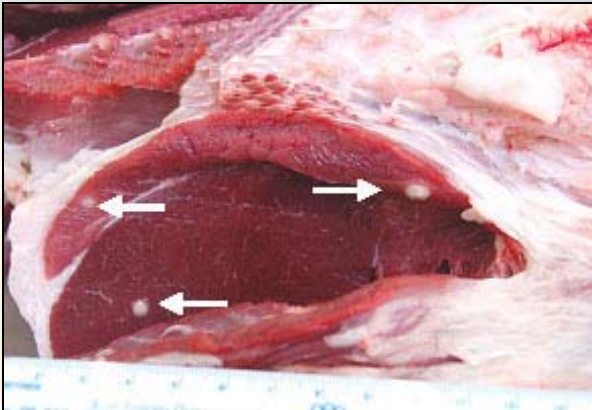




The Problem:

Ovine Cysticercosis is also referred to as “Sheep Measles” because of the appearance of the affected meat. The disease, caused by the parasite *Cysticercus ovis*, appears as clear to white to greenish cysts in the muscle. It is increasingly seen in lamb carcasses in Canadian abattoirs and often results in a condemnation rate in the shipment of 10% or more, making it a serious concern to all Canadian sheep producers.



Cysts in skeletal muscle
From *Animal Health Laboratory, OVC, 2008*

Ovine Cysticercosis

A.K.A

Sheep Measles

Produced by the
Canadian Sheep Federation

With input from and thanks to:
Dr. A. Peregrine, DVM OVC
Dr. P. Menzies, DVM OVC
Dr. K. Parker, DVM ASWC
Dr. J. Jansen, DVM OMAFRA

What is it?

C. ovis is the intermediate larval life stage of the canine adult tapeworm *Taenia ovis*. The intermediate life stage of the parasite infects the muscle of sheep. Infection is not detectable until slaughter, and most often results in condemnation of the entire carcass.

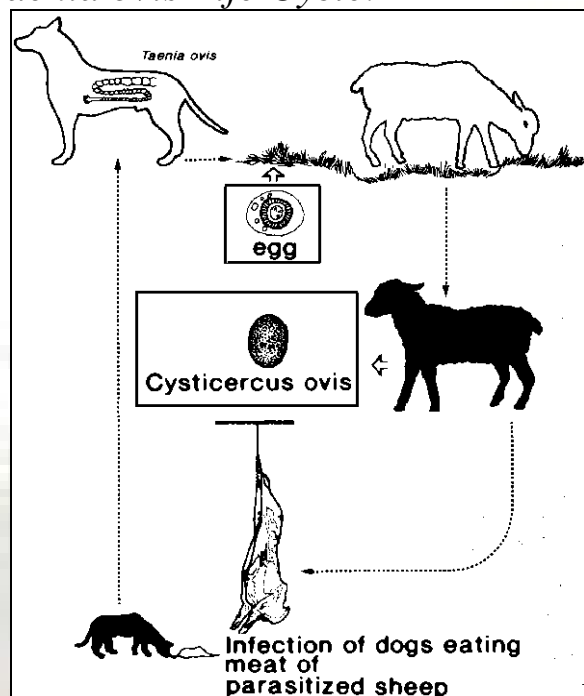
Cysts are typically found in the heart, diaphragm, masseter (cheek) muscle but also commonly occur throughout the meat, making the carcass unacceptable for human consumption.

It can be a very fast acting parasite with lesions showing up in the muscle within 13 days after infection.

Once ingested by a dog the larvae can develop into an adult tapeworm, and begin shedding eggs in dog feces within 6 to 9 weeks.

Eggs can survive 3-5 months on feed or pasture.

Taenia ovis Life Cycle:



Taken from: Hansen & Perry, 1994

Transmission:

Tapeworm eggs are shed by dogs and contaminate feed or pasture.

Sheep ingest these eggs which hatch in the gut. The larvae enter the blood stream and migrate to the muscles where each larva creates a fluid-filled cyst. These remain infective for months, possibly up to one year or even longer. The lifecycle moves from sheep back to dogs when meat infected with *C. ovis* cysts, is consumed by a dog.

Prevention:

Taenia ovis is the adult tapeworm form of *C. ovis*. Any dog or wild canid can be its host. Control of the infection in sheep is done by controlling the infection in your farm dogs and preventing infection of coyotes, wolves and foxes.

Once a sheep is exposed to the tapeworm eggs, there is no available method of preventing development of the cysts – either through medication or vaccination. Control is done by:

- proper deadstock management to prevent scavenging of carcasses by all canids
- routine de-worming of all farm-dogs with medications effective against tapeworms
- assuring that farm dogs are only fed safe forms of dog food



De-wormers:

Talk to your vet about what option is best for your operation, generally all dogs should be de-wormed monthly

- Droncit injectable; (*praziquantel*)
 - available in 56.8 mg/ml injectable formulation
 - effective dosage varies with body size
- Droncit tablets; (*praziquantel*)
 - available as 50 mg tablets
 - effective dosage varies with body size
- Lopatol tablets; (*nitroscanate*)
 - available in 100 & 500 mg tablets
 - dog dosage = 50mg/kg
- Drontal Plus tablets; (*praziquantel* + *pyrantel pamoate* + *febantel*)
 - available in tablets for small, medium and large dogs
 - dose according to body weight
- Cestex tablets; (*epsiprantel*)
 - available in 12.5, 25, 50 & 100 mg tablets
 - dog dosage = 5.5mg/kg

Dog Feeding Options:

There are options if dead stock must be used as feed for farm dogs. Killing the cysts by either freezing or cooking the meat will eliminate the potential infection of the dogs and end the cycle

- Freezing: freeze carcass to -10 degrees Celsius for 7 days OR
- Cooking: cook meat to an internal temperature of 72 degrees Celsius