Hydatids - the basics

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Animal Biosecurity and Welfare, NSW DPI

Note
This Primefact provides an overview of hydatids. For more detailed information, see Hydatids – they are still out there.

Introduction
In Australia, hydatid disease is caused by the hydatid tapeworm, which infects dogs, dingoes and foxes. Humans can also be intermediate hosts, with serious health consequences.

Losses from hydatid disease in livestock arise from the downgrading of edible meat by-products because of hydatid cysts.

Control is by preventing or eliminating hydatid tapeworm infections in the final hosts – dogs, foxes and dingoes. Controlling hydatids will also help to control sheep measles, caused by a tapeworm with a similar lifecycle.

Hydatid lifecycle
The E. granulosus tapeworm consists of 3-4 segments and is up to 6 mm long. Thousands of these small tapeworms can inhabit the intestines of a dog without ill effect. Tapeworm segments containing eggs are periodically shed in the faeces. The eggs, which are resistant to weathering, are scattered by wind and water.

Susceptible intermediate hosts swallow the eggs. Such hosts include sheep, pigs, goats, camels, deer, cattle, horses, kangaroos and wallabies, and humans.

Swallowed eggs – for example, from pasture or, for humans, unwashed hands or vegetables – yield embryos which traverse the gut wall and are transported to various tissues, usually the liver or lungs, but sometimes the brain. Hydatid cysts (fluid filled sacs) then develop. The next generation of tapeworm heads develop within these cysts.

The cycle is completed when final hosts (dogs, dingoes, foxes) consume tissues with hydatid cysts or contaminated with cyst fluid.

The sylvatic (wildlife) life cycle may involve dingoes, dogs and foxes as final hosts and kangaroos and wallabies as intermediate hosts.

Controlling hydatids
- Worm your dogs (working dogs and pets) monthly with a de-worming product that states on the label it is effective against Hydatids.
- Never feed raw offal (liver/lungs/hearts/kidneys) from sheep, goats, cattle or any species of wildlife to dogs. Freeze it for at least 14 days at -10° to -15°C or cook it thoroughly.
- Secure dogs at night and when not working so they do not wander and scavenge on carcasses.
- Put all offal in a dog-proof pit, and where possible dispose of the bodies of stock that have died in the paddock.
Engage in good personal hygiene; always ensure you and your family wash your hands after handling dogs and especially before you eat.

**Eliminate infections**
The only suitable tape wormer for treating dogs is praziquantel. This active ingredient is found in many dog wormers (check the label).

When treating potentially infected dogs, take great care in disposing (by deep burial, or burning) of droppings for three days after treatment.

Dogs at on-going risk of infection will need to be treated with praziquantel every 6 weeks.

**Hygiene**
As with many zoonoses (diseases transmissible between animals and humans), attention to hygiene can markedly reduce the risk of infection.

Always thoroughly wash your hands before putting your hands near your mouth (for eating, cigarette smoking, etc.), especially after handling dogs or being in potentially contaminated areas such as around kennels. Wash vegetables and fruit before eating or cooking them. Teach your children to do the same, by instruction and by example.

**More information**
- Hydatids - A Disease of Dogs that Affects People
- Tel: 1800 680 244, Animal Biosecurity and Welfare
- Department of Primary Industries at biosecurity@dpi.nsw.gov.au,
- Local Land Services, Tel: 1300 795 299