#### What is our project about?

 Identify parasites in your state, specifically looking at *Echinococcus* spp. and the potential risk to humans and dogs.

#### Here's how you can help us!

 During the trapping season, instead of <u>discarding</u> your specimen, <u>save</u> them for us!

> PLEASE FOLLOW ALL STATE TRAPPING REGULATIONS AND GUIDELINES!

#### How to preserve the carcass:

- 1. Double bag and securely tie to prevent leakage of fluid
- 2. Place a specimen tag on the outside
- 3. Place the specimen and specimen tag in freezer
- 4. Visit our website, www.HerrinLab.org, for submission details!

#### **Everyone can participate!**

- This is a **statewide** parasite study!
- Licensed trappers from all over the state are encouraged to participate!
- This is an <u>ongoing project</u> that will take several years to complete.
- So, if you're not able to participate this year, there will be <u>another</u> <u>opportunity next year</u> as well.

### Contact Us!

Facebook: @HerrinLab Email: herrinlab@vet.k-state.edu Phone: (785) 532-4430 http://www.herrinlab.org/

If you have any questions or comments, please don't hesitate to contact us!



Thank you for helping us complete this study!

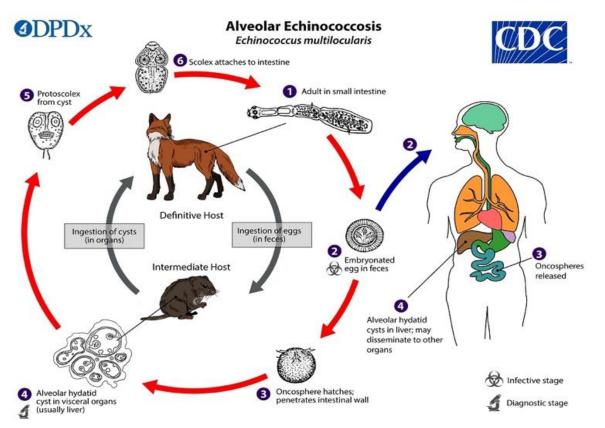
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# *Echinococcus*Study



Parasitology Department Dr. Brian Herrin Dr. Kamilyah Miller

In partnership with your state Department of Conservation and Natural Resources.



#### What parasites do coyotes carry?

- Internal parasites such as heartworms, roundworms, and tapeworms
- External parasites such as ticks, fleas, and mites

#### What is Echinococcus multilocularis?

- A small tapeworm that infects red foxes, coyotes, wolves, raccoon dogs, and domestic dogs and cats
- Hard to see with the naked eye, it infects the small intestine of the definitive host
- Adult worms produce eggs in the feces of infected animals

#### How do animals become infected?

- Predation by eating infected rodents
- Ingesting the infected eggs from the environment

## How is the infection diagnosed in dogs?

- Physical exam at local veterinarian
- Fecal flotation confirmed through molecular testing

## Does *Echinococcus multilocularis* infect humans?

- Yes, a disease is called Alveolar echinococcosis develops
- The larvae develop alveolar cysts in the liver and lung slowly overtime
- Humans cannot infect other humans; therefore, we are considered dead-end hosts
- Treatment unsuccessful and disease is potentially fatal

## How can you protect yourself from contracting this tapeworm and disease?

- ALWAYS wear gloves when handling animal specimens
- Wash hands thoroughly after handling animal specimens.
- Always wear gloves or use a plastic bag to pick up animal feces

## Where are *Echinococcus* spp. found in North America?

