

PORK TAPEWORM (TAENIASIS, CYSTICERCOSIS)

What are taeniasis and cysticercosis?

Taeniasis is an intestinal infection with the adult stage of large tapeworms; cysticercosis is a tissue infection with the larval stage of the pork tapeworm, *Taenia solium*. Other *Taenia* species can occasionally cause cysticercosis as well.

How do you get these infections?

People get pork tapeworm from eating raw or undercooked infected pork. Infected pork may look “measly” because it has larval cysts in the muscle. The larval cysts develop into adult tapeworms in the person’s intestine and produce a large number of eggs. Eggs are passed in the stool and are then spread through food, water, or surfaces contaminated with feces. People develop cysticercosis by swallowing these eggs. The eggs hatch in the small intestine and larvae migrate to various tissues throughout the body, where they form cysts. This is called *cysticercosis*. If the cysts are in the brain, the condition is called *neurocysticercosis*.

Where are these infections found?

Tapeworms are found worldwide; however, infection is more common in countries where pigs roam freely and eat human feces. Pork tapeworm is very rare in Muslim countries. Infection can occur even if you have never traveled outside the United States.

What are the symptoms of infection?

Infections with adult tapeworms are often unnoticed. Occasionally a person may have nervousness, anorexia, weight loss, and abdominal pain. Symptoms of cysticercosis can be severe, depending on where the cysts form in the body.

- *Muscle*: Cysts in muscles usually do not cause symptoms, but lumps may be felt under the skin.
- *Eye*: Cysts may float in the eye and cause blurred vision or a detached retina.
- *Brain, spinal cord*: Neurocysticercosis can cause seizures and headaches, confusion, difficulty with balance, and death.

How soon after infections do symptoms appear?

Persons infected with adult tapeworms will have eggs in their stool 8 to 12 weeks after initial infection. The adult tapeworm can live in the intestine and produce eggs for more than 30 years. Symptoms of cysticercosis may appear from weeks to ten years or more after infection, often when the larval cysts are dying.

How is infection with pork tapeworm diagnosed?

Infections are diagnosed by laboratory tests on stool specimens. Neurocysticercosis may be diagnosed with MRI or CT brain scans.

How do you treat someone with cysticercosis?

Anti-parasitic and anti-inflammatory drugs are most often used. Surgery is necessary for certain types of cysticercosis, but some infections may not require treatment.

How can I prevent pork tapeworm infection?

Prevent infection by never eating raw or undercooked pork and other meats. Always wash your hands with soap and water after using the toilet and before handling food, especially when traveling in developing countries.

Where can I find more information about cysticercosis?

The Centers for Disease Control and Prevention has information available at their website <http://www.cdc.gov/ncidod/dpd/default.htm>.