

## Trichinosis Fact Sheet

### What is trichinosis?

Trichinosis (also known as trichinellosis) is a parasitic disease caused by eating raw or undercooked animal meat that contains cysts of *Trichinella spiralis*, a microscopic worm.

### How do people get trichinosis?

In the United States, people get trichinosis from eating raw or undercooked game meat, mainly wild boar or bear meat. You cannot get the disease by person-to-person contact.

### What are the signs and symptoms of trichinosis?

There are two phases to the disease. In the first phase, one to two days after consuming contaminated meat, *Trichinella* worms emerge from the cysts and burrow into the lining of the intestine. Infected persons experience nausea, vomiting, abdominal pain, and diarrhea.

In the second phase, one to eight weeks later, eggs laid by the female worm hatch and the immature worms migrate from the intestines into the muscles. Infected persons experience muscle pain, swelling (particularly of the eyelids), and sometimes weakness and incoordination.

Other symptoms during this phase can involve the heart, central nervous system, and lungs where immature worms can also migrate. Untreated cases can be fatal, especially if severe symptoms are present. The severity, distribution, and duration of symptoms are often related to the number of worms present.

### How is trichinosis diagnosed?

A diagnosis of trichinosis can sometimes be suspected when several persons who ate under-cooked meat from the same animal develop similar symptoms such as muscle pain. Blood tests are available, but a sample (biopsy) of muscle tissue is often needed to confirm the diagnosis.

### How is trichinosis treated?

In some patients, symptoms may be mild enough that no treatment is needed. Your doctor may prescribe an anti-worm medication or medication for muscle aches and inflammation.

### How common is trichinosis?

In the United States, trichinosis is rare and most often occurs as outbreaks involving a few to dozens of persons who consumed portions of contaminated meat from the same animal, usually a wild boar or a bear. Historically, eating undercooked commercial pork was a risk. However, because of strict regulations on pig farming, *Trichinella* has

become uncommon in commercial pork products in this country. During 2007-2011, California reported a total of 37 trichinosis case-patients, all of whom consumed wild boar or bear meat.

Worldwide, over 10,000 cases of trichinosis are estimated to occur each year, mostly due to eating raw or undercooked pork. The countries with the highest number of human cases are China, Thailand, Mexico, Argentina, Bolivia, the former Soviet Union, and other parts of Central Europe.

### **What can a person do to prevent trichinosis?**

- Avoid eating undercooked meat, particularly wild game. Use a food thermometer to ensure that all meat is cooked to an internal temperature of 160 °F or greater.
- Use separate knives and grinders when processing meats. Thoroughly clean all utensils, equipment, and surfaces before preparing other foods.
- If you travel to foreign countries where trichinosis is common, exercise caution and do not eat raw or insufficiently cooked meats, especially pork.

While freezing at 5 °F for at least 20 days can be effective for killing *Trichinella* in infested pork, freezing wild game meat may not reliably kill the worms because the type of *Trichinella* found in wildlife is often more resistant to cold.

### **What is the California Department of Public Health doing about trichinosis?**

Health care providers are required to notify the California Department of Public Health (CDPH) and local health departments if they suspect or diagnose a case of trichinosis. If many cases are reported in a short span of time, CDPH and local health departments investigate to determine if an outbreak has occurred. CDPH and local health departments will collaborate to identify the source of infection, trace and remove any remaining uneaten meat, and ensure that all potentially exposed persons are notified and provided appropriate information for their medical care.

### **Where can I get more information on trichinosis?**

To get other information regarding trichinosis, use the following websites.

<http://www.cdc.gov/parasites/trichinellosis/>

California Department of Public Health  
Veterinary Public Health Section  
1616 Capitol Avenue, MS 7308  
Sacramento CA 95814  
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