

TRICHINOSIS

(Trichiniasis, Trichinellosis)

REPORTING INFORMATION

- Class A(3)
- Report by end of work week
- [Confidential Case Report Card](#) (3812.11 rev. 12/81), [lab report](#) (3833.11), or telephone
- Requires completion of CDC [Trichinosis Surveillance Case Report](#) (form CDC 54.7 rev. 2-90). Form to be sent by the local health department to ODH, Bureau of Infectious Disease Control, 246 N. High Street, PO Box 118, Columbus, OH 43266-0118.

AGENT

Larvae of *Trichinella spiralis*, a small filiform nematode.

CASE DEFINITION

Clinical description

A disease caused by ingestion of *Trichinella* larvae. The disease has variable clinical manifestations. Common signs and symptoms among symptomatic persons include eosinophilia, fever, myalgia, and periorbital edema.

Laboratory criteria for diagnosis

- Demonstration of *Trichinella* larvae in tissue obtained by muscle biopsy, or
- Positive serologic test for *Trichinella*

Case classification

Confirmed: a clinically compatible illness that is laboratory confirmed.

Comment

In an outbreak setting, at least one case must be laboratory confirmed. Associated cases should be reported as confirmed if the patient shared an epidemiologically implicated meal or ate an epidemiologically implicated meat product and has either a positive serologic test for trichinosis or a clinically compatible illness.

SIGNS AND SYMPTOMS

Many infections are asymptomatic. Symptomatic cases result from the ingestion of a large number of larvae. Three phases are recognized: intestinal, larval migration, and convalescence.

Intestinal: nonspecific gastroenteritis, with anorexia, nausea, vomiting, abdominal pain, and diarrhea

Larval Migration: Occurs 7-11 days after ingestion. Signs of muscular invasion begin, with edema of the upper eyelids, myalgia, headache, fever, sweating, chills, weakness, and marked eosinophilia. Usually lasts 10-30 days.

Convalescence: Muscular pain can sometimes persist for several months.

DIAGNOSIS

The most specific diagnostic test is a muscle biopsy of the deltoid, biceps, or gastrocnemius muscle. The ODHL will facilitate the handling of muscle and serum specimens for examination by the CDC or other appropriate reference lab.

EPIDEMIOLOGY

Source

Many domestic and wild animal species harbor the parasite. Swine are the primary source of infection in humans and human infection is usually the result of eating inadequately cooked pork or wild game, especially bear meat.

Occurrence

Worldwide, but is most common in areas where raw or undercooked pork or wild game meat is eaten.

Mode of transmission

Humans are infected from eating raw or undercooked meat from infected animals, primarily pork products.

Incubation period

Incubation period is usually 10-14 days, with a range of 1-45 days, and seems to be related to the number of larvae ingested.

PUBLIC HEALTH MANAGEMENT

Case

Treatment

Medications are available that are safe and effective.

Isolation

None.

Contact

Investigation is directed toward determining the source of uncooked meat and identifying other exposed persons.

Prevention And Control

Public education of the need to cook all pork products and meat of wild animals at a sufficient temperature (170°F or 77°C or until meat changes from pink to grey allows a good margin of safety). Freezing might not kill all worms in the case of game meats.