Trichinellosis (trichinosis) is a zoonosis, caused by roundworms of the genus *Trichinella*. Humans, and domestic and wild animals can be infected and become carriers of the parasites. Domestic pigs, wild boars, bears, rodents and horses are reservoir animals. *Trichinella* spp. occur worldwide, most frequently in regions with temperate climates. About 10,000 human infections occur annually worldwide. Cultural factors such as traditional dishes based on raw or undercooked meat or meat-derived products play an important role in the epidemiology of the disease.

People acquire trichinellosis by consuming raw or undercooked meat infected with the *Trichinella* larvae, particularly pork, horses or wild game meat (for example, wildboar meat).

*Trichinella* larvae are encysted in the muscle tissue of domestic or wild animals. *Trichinella* cysts break open in the intestine and release larvae that grow into adult roundworms. The females release larvae that invade the muscle tissues and encyst. This process takes 2 to 8 weeks. Person-to-person transmission does not occur; however, even tasting very small amounts of undercooked meat during preparation or cooking could put a person at risk of infection. Outbreaks occur in settings where multiple people consume the same *Trichinella*-infected meat.

Trichinellosis in humans is treated with antiparasitic medicines and steroids. Albendazole and mebendazole eliminate the adult worms from the intestine (can be used in humans and animals) but have little effect on cysts in muscles. There is no effective treatment for trichinosis once the larvae have invaded the muscles.

1. **Risk communication**
   - Freezing of meat (for most strains)
   - Thorough cooking of meat and meat products from both domestic pigs and wild animals
   - Through cleaning of meat grinders after each use

2. **Prevention and control in animals**
   - Hygienic pig management practices (e.g. stop feeding pigs with meat scraps)
   - Rodent control
   - Proper and quick disposal of dead animals to avoid scavenging
   - Rigorous meat inspection through microscopic examination

In humans: the suspicion of trichinellosis is based on a history of consuming raw or undercooked pork and on clinical symptoms and can be confirmed by specific diagnostic tests including antibody detection and muscle biopsy.

In animals: meat inspection is the only way to detect *Trichinella* cysts in meat. Microscopic examination (trichinelloscopy) and the artificial digestion method should be used in endemic areas.

**Introduction**

**Transmission and risk factors**

**Signs and symptoms**

**Detection and diagnosis**

![Diagram of Trichinellosis life cycle](image-url)