## OPPORTUNISTIC PARASITE: TOXOPLASMA GONDII

## **Gunita Deksne**

Pārtikas drošības, dzīvnieku veselības un vides zinātniskais institūts "BIOR" Institute of Food Safety, Animal Health and Environment "BIOR" gunita.deksne@bior.gov.lv

**INTRODUCTION**: Toxoplasmosis is a common and cosmopolitan infection in animals and humans. It is caused by an obligate intracellular protozoan parasite, *Toxoplasma gondii*. Antibodies against *T. gondii* have been detected at different species of animals – insectivorous, bats, birds, rodents, predators etc. The parasite, however, only matures in cats and felids which are the definitive hosts.

Case-control studies conducted in several European countries have shown that primary infection in strongly associated with eating raw or undercooked meat and more weakly associated with soil or with vegetables contaminated with soil. Direct contact with cats has not been identified as a risk factor.

In humans, the majority of infections is asymptomatic or cause mild flu-like symptoms. However, toxoplasmosis can be life threatening especially for immunocompromised individuals. If acquired during pregnancy, toxoplasmosis can cause abortion or congenital malformation affecting the brain, eyes or other organs of the foetus.

In animals, *T. gondii* is an important cause of abortion in sheep and goats. Among meat-producing animals, sheep and pigs are the most frequent carriers. Also the parasite is frequently reported in cats, dogs, wild carnivores, wild boars etc.

The association of *T. gondii* with food-born and waterborn transmission has resulted in its classification as a B priority agent. Also, toxoplasmosis is on zoonoses that should me monitored according to the epidemiological situation (Directive 2003/99/EC). Considering that there are only fragmentary studies according *T. gondii* distribution in human and animals which doesn't display real epidemiological situation. Correspondingly there is no regular monitoring in Latvia.