

Toxoplasmosis

An infection caused by a parasite *Toxoplasma gondii*. The parasite occurs worldwide and infection is very common.

Toxoplasma infection usually does not cause any symptoms. Occasionally fever and swollen glands can occur. Following recovery from an infection, a few parasites remain in tiny cysts in the muscles, lung, brain or other organs. If the immune system is severely damaged, for example by AIDS, organ transplants, or treatment for some cancers, the parasites in the cyst may reactivate and can cause serious illness.

If a woman becomes newly infected with *Toxoplasma* during pregnancy, the foetus can also become infected and suffer birth defects as a result. Foetal infection occurs when parasites in the infected mother's blood stream cross the placenta and enter the foetus. Reactivation of a previous *Toxoplasma* infection can also occur in pregnancy but the foetus is rarely affected.

The parasite is carried by cats and shed in cat faeces. It is also carried in the muscles of infected rodents (rats, mice etc.), pigs, sheep, kangaroos and other warm blooded animals including birds. Human infection occurs when the parasite is taken in by mouth. This most often results from eating raw or undercooked meat or unwashed salad vegetables, but also if hands become contaminated with cat faeces during gardening or cleaning cat litter trays. Eggs of the parasite may survive in moist soil for over a year.

Diagnosis is made by a series of blood tests, sometimes by PCR tests or by examining tissue with a microscope.

Incubation period

(time between becoming infected and developing symptoms)

5 – 23 days.

Infectious period

(time during which an infected person can infect others)

Person-to-person spread does not occur, apart from transmission of infection from pregnant mothers to their unborn children.

Treatment

Antibiotic treatment is available for significant infections, including treatment during pregnancy if necessary.

Control of spread

- > Avoid eating and handling raw meat. Humans are most likely to be exposed to the organism by eating infected meat, usually from sheep, pigs and kangaroos. Therefore avoiding infection involves cooking all meat thoroughly and washing hands and utensils after handling raw meat. All meat eaten by pregnant women should be cooked 'well done'.
- > Wash all vegetables thoroughly before eating, especially salad vegetables.
- > Since humans can be infected by exposure to eggs shed by cats, use gloves when emptying cat litter trays. Trays can be disinfected with boiling water. Eggs need over 24 hours to become infectious after being passed in the faeces, so clean litter trays daily. Cover sandpits when not in use, to prevent cats from using them as litter.
- > Cats should be fed dry, canned or cooked food. Discourage pet cats from hunting. Since eating rodents and birds infects cats, pet cats that do not hunt will not be exposed and do not pose a risk to their owners. Even if a cat does become exposed, it only sheds infective eggs in its faeces for about 10 days.
- > Wear gloves when gardening. Hands should be washed thoroughly with soap and warm running water after contact with soil.
- > Person-to-person spread does not occur, so exclusion of infected children and adults from school or work is not necessary.

- > PCR
- > Preventing Food Poisoning in the Home