

## Zoonotic Disease Risk Handout

This information sheet is being supplied to you to help assist you in understanding risks faced in the conduct of your job at The University of Toledo (UT). It is supplied to personnel identified as having a reasonable occupational exposure risk to the agent described. This information has been developed with the assistance of the UT Division of Laboratory Animal Medicine, Office of Health and Safety and the Office of Occupational Medicine. Questions and concerns should be directed to any of the units.

**Toxoplasmosis:** Toxoplasmosis is a disease that is caused by an organism called *Toxoplasma gondii*. Usually this disease is quite mild and may be mistaken for a simple cold or viral infection. Swollen lymph nodes are common. In addition, it is common to have a mild fever, tiredness and mild headaches. Rarely, a more serious illness can occur that involves the lungs, heart, brain or liver. People acquire this disease by eating meat that is raw or has not been cooked properly or by contact with feces of an infected cat - 1% of cats shed the toxoplasma oocyst in their feces.

There are two situations in which toxoplasmosis can be extremely serious. A person whose immune system is not working properly can contract a very severe form of the disease which would include those with HIV or a positive blood test for the HIV virus, people on medications that suppress their immune systems, and people who have some other serious illness that affects their immune system in the same way. In addition, an infection with toxoplasma can severely damage an unborn child which can occur if the mother is infected during pregnancy. Miscarriages, still births and congenital defects can occur. The disease is more serious if passed on to the fetus early in pregnancy, though it is more common for the illness to be acquired later in pregnancy.

Certain simple precautions will prevent a person from acquiring toxoplasmosis. Obviously, meat should be thoroughly cooked before it is eaten, therefore preventing this form of transmission. Cats acquire the toxoplasma organism by eating raw meat or wild animals that have been infected with the organism. The cat then excretes an egg form in its feces. These do not become infective for approximately two days but after this they can persist for quite some time in the soil. Because of this, it is important that cats be fed only commercial cat food or well-cooked meat. In addition, the litter box of a cat should be changed daily. When a woman is pregnant, she should avoid any contact with cat litter and should avoid any close contact with any cats who have been allowed to roam outdoors. Pregnant women should be cautioned about working with cats in the laboratory setting. Pregnant animal technicians who have been assigned to cat husbandry duties should be reassigned to other jobs during pregnancy unless titers are sufficient. Pregnant women who are exposed

to cats in other ways would be best to avoid this exposure. There is no vaccine to protect humans.

Toxoplasmosis antibody titers are determined on any female employee of childbearing capacity who is occupationally exposed to cats or their feces. A negative IgM test and an IgG antibody of 6-200 IU/ml indicates immunity is present. Females of childbearing capacity who lack immunity and plan to work with cats are informed of their susceptibility and provided additional educational information on toxoplasmosis. Her supervisor will be advised (if requested by the employee) to consider arranging a temporary job reassignment while a susceptible employee is pregnant. When this is not possible, consultation with the OMS will be encouraged to identify alternative methods of employee protection.

When ill, it is important to discuss your possible occupational exposures with your attending physician as this information can be instrumental in timely diagnosis and treatment.