



Wild Tiger Health Centre Information Sheet

Disease threat:

Toxoplasma gondii

Hazard description: A coccidian parasite with an indirect life cycle.

Host species: Felids are the final host. Its intermediate hosts are mammals (including man) or birds, which are often felid prey species. Felids can also act as an intermediate host (Taylor et al. 2007).

Pathogenesis: Intermediate hosts acquire infection from ingestion of oocysts in faeces or from tissue cysts in meat. Final host stages are intestinal; intermediate host stages are extra-intestinal. The nature of the disease in the intermediate host depends on the site of parasite replication; in pregnant females congenital disease or abortion may be a feature (Taylor et al. 2007). Extra-intestinal stages may be also associated with disease in intermediate hosts, including felids, although felid disease appears not to be common. Disease has been reported in wild felids, but seems to be rare (Dorny & Franssen 1989; Ocholi et al. 1989; Sinski et al. 2003). Pallas' cats seem to be especially susceptible (Brown et al. 2005). Immunity is rapidly acquired.

Diagnosis: Oocysts in faeces. Serology: IgM indicates recent exposure or reactivated infection; and IgG simply indicates exposure and not necessarily active infection, although high titres may be considered suspicious.

Vaccination: None.

Free-ranging tiger occurrence: No reports of disease were found. However, widespread exposure is suggested by seropositivity detected in 62% of 42 free-ranging Amur tigers (Goodrich, Quigley, et al. 2012), and 10 / 11 free-ranging tigers in Chitwan National Park, Nepal (McCauley et al, 2018).

Distribution: Worldwide.

Assumptions: None.

Limitations: None.

(Updated 27-Mar-19)