Wild Tiger Health Centre Information Sheet

Disease threat: Sarcocystis spp.

Hazard description: Obligate intracellular coccidian parasite.

Host species: The life-cycle of each species is indirect with prey species acting as intermediate hosts. Final hosts are often predator species, domesticated and wild. Domestic cats may also be intermediate hosts for *S. neurona* (the causative agent of Equine Protozoal Myeloencephalitis or EPM) – seropositivity has been detected in free-ranging jaguar in South America (Onuma *et al.* 2014).

Pathogenesis: Infection in the final predator hosts appears to be non-pathogenic. Muscle cysts have been detected in free-ranging felid species (Greiner *et al.* 1989; Canon-Franco *et al.* 2016; Dubey & Bwangamoi 1994), consistent with felids having an additional role as intermediate hosts. Immune-compromise may result in potential disease (Greiner *et al.* 1989).

Diagnosis: Oocysts in faeces, tissue cysts at post-mortem examination.

Vaccination: None.

Free-ranging tiger occurrence: Sarcocystis sporocysts found in 7/19 tiger scats in the Huai Kwa Wildlife Sanctuary, Thailand (Patton & Rabinowitz, 1994). Reported at post-mortem of tiger from Panna Tiger Reserve, India (Nigam *et al.* 2016).

Distribution: Likely worldwide.

Assumptions: Low pathogenicity in immunocompetent felids.

Limitations: Limited understanding of all species and hosts.

Vaccination: None