Wild Tiger Health Centre Information Sheet

Disease threat: Dirofilaria repens

Hazard description: A nematode of the integumentary system in the Superfamily Filaroidea, also known as cutaneous dirofilariosis.

Host species: Carnivore species (domestic dogs and cats). Has been detected in wolf and fox in the central Balkans (Ćirović et al. 2014) and a single fox in Italy (Magi et al. 2009). The life cycle is indirect: mosquitos of *Aedes*, *Anopheles* and *Culex* spp. are intermediate hosts (Taylor et al. 2007), and the incubation period in the final host is 6-10 months(Tarello 2011).
N.B. Zoonotic, but adult worms cannot complete their development in humans (Simón et al. 2009)

Pathogenesis: Adult nematodes are found in the skin. In domestic dogs, infection ranges from asymptomatic to chronic pruritus; nodules may contain adult nematodes. In domestic cats, skin lesions have been associated with co-infection with *Mycoplasma haemofelis* (Tarello 2011).

Diagnosis: Morphologically similar to *D. immitis*, molecular techniques required to differentiate.

Free-ranging tiger occurrence: No reports found.

Distribution: Limited to the Old World, historically Mediterranean and Eastern Europe, but appears to be spreading into northern and central Europe (Ćirović et al. 2014). Human cases reported from Europe, Asia, Africa and Russia (Härtwig et al. 2016), therefore likely to be present in all tiger range states.

Assumptions: Assume relatively non-pathogenic in wild felids.

Limitations: None.