Wild Tiger Health Centre Information Sheet

Disease threat: Leishmania spp.

Hazard description: A protozoon parasite, which is vector-borne by sandflies, (*Phlebotomus* spp. in the Old World, *Lutzomyia spp.* in the New World, Americas). Reports of autochthonous transmission have led to suggestions that other vectors such as ticks or fleas may be involved in transmission. A recent study detecting *Leishmania* by PCR in *Ixodes ricinus* ticks lends support to this hypothesis (Salvatore et al. 2014).

Host species: Domestic dogs, humans, and domestic cats (Pennisi, Hartmann, et al. 2013). *Leishmania* has been isolated from captive wild felids in south America (Dahroug et al. 2010).

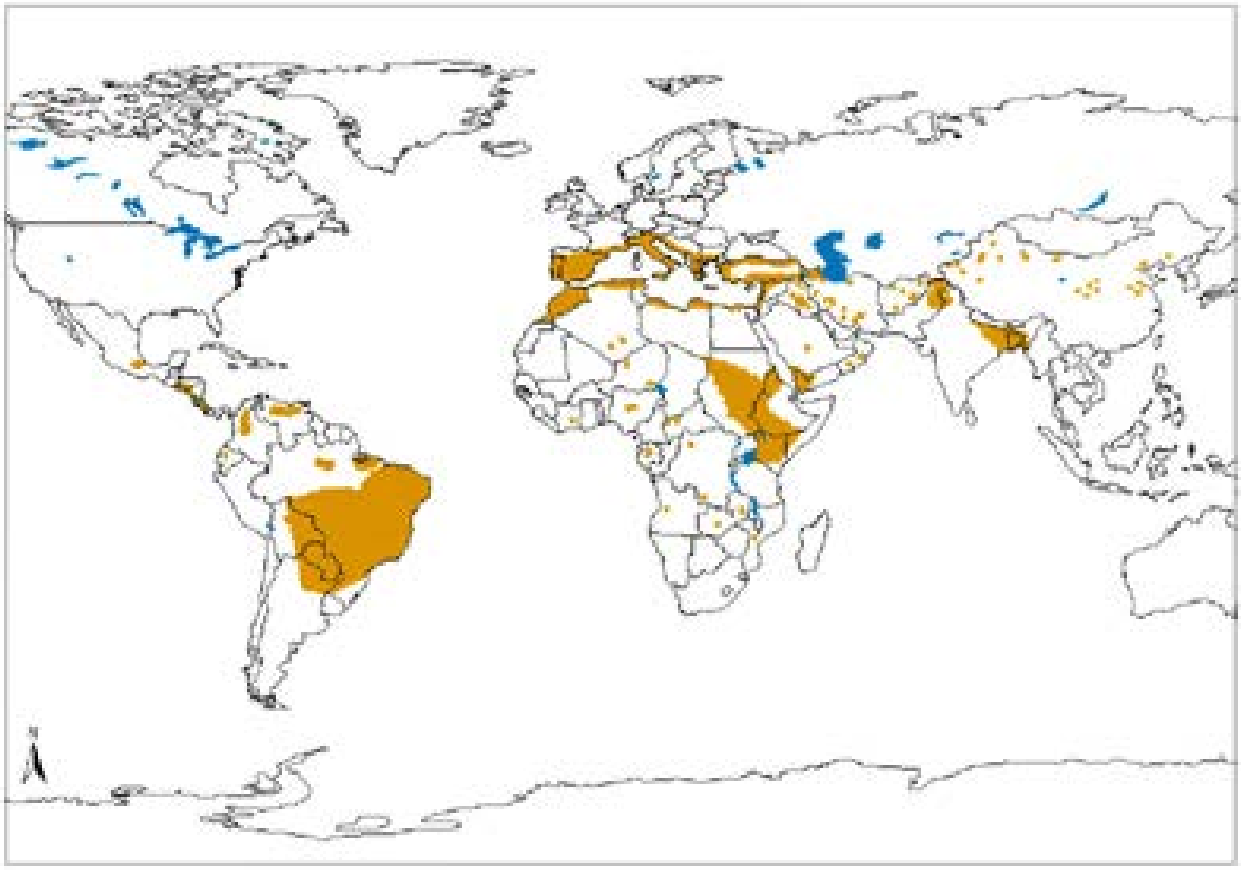
Pathogenesis: Cutaneous and visceral forms of disease have been reported mainly from dogs, but also humans. Infection may be more common than previously thought in domestic cats originating from endemic areas, but disease is less commonly reported than in dogs (Petersen 2009; Pennisi 2014; Pennisi, Hartmann, et al. 2013; Miró et al. 2014). *Leishmania* has been reported as causing disease in captive lion in France (Libert et al. 2012).

Diagnosis: Serology. PCR.

Vaccination: None.

Free-ranging tiger occurrence: No reports found.

Distribution: Widely distributed in tropical and sub-tropical regions. No reports found from RFE/NE China, but assume present in other tiger range states.



Source: http://www.who.int/leishmaniasis/leishmaniasis_maps//en

Assumptions: None.

Limitations: Lack of data.