# Wild Tiger Health Centre Information Sheet

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## Disease threat: Environmental mycobacteria or non-tuberculous mycobacteria (*M.avium complex and others)*

***Hazard description:*** The environmental mycobacteria are ubiquitous and are not obligate pathogens. The main disease causing agents are in the *Mycobacterium avium* complex (MAC) and are *M. avium* and *M. intracellulare*, but there are many species.

***Host species:*** MAC agents are the principal causal agents of tuberculosis in birds (captive and free-ranging). Many mammalian species are however, also susceptible to infection, including humans, in which disease is most commonly seen in association with underlying pulmonary disease and/or immunocompromise. Domestic cats appear to be more susceptible than other domestic mammalian species, especially if they hunt or fight (Gunn-Moore 2014). Disease (MAC) has been reported in domestic cats (Gunn-Moore *et al.* 2011; Drolet 1986; Barry *et al.* 2002; Knippel *et al.* 2004; Baral *et al.* 2006), and a captive Bengal tiger in association with the feeding of infected avian carcases (Cho *et al.* 2006). Immunosuppression would probably increase the likelihood of disease (Thorel *et al.* 2001).

***Pathogenesis:*** Infection in cats is most likely acquired through wound contamination. Disease usually presents in domestic cats as cutaneous or subcutaneous granulomatous nodules, panniculitis or disseminated disease (Gunn-Moore 2014).

***Diagnosis:*** Culture, histopathology, PCR.

***Vaccination*:** None.

***Free-ranging tiger occurrence:*** No reports of infection found. Infection possible through infected prey consumption (less likely) or wound contamination.

***Distribution:*** Globally distributed.

***Assumptions***: Low pathogenicity in immunocompetent felid.