Zoonoses

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Tuberculosis in humans and animals: are we a threat to each other?

Rates of TB infection in cattle are increasing rapidly. Tracing the origin of infections is becoming more facile. Risks to Professional Indemnity and product liability exposures should increase.

Tuberculosis (TB) is a potentially fatal but treatable zoonotic disease. In all parts of the world resistance to TB first line treatment is becoming more common. 'Zoonosis' means any disease and/or infection which is naturally transmissible directly or indirectly between animals and humans.

This report states that there were 22 cases of human TB of a kind that could be of cattle origin in the UK in 2004 [another report states 22 human cases in 1999 as well, but 35 in 2005]. In the same year 30,000 cattle were destroyed to reduce the risk of disease in humans. TB can be transmitted in milk, though, pasteurisation should eliminate this risk.

In the past 20 years the number of infected herds has increased from 88 to 5,539 per year. The main reason is probably increased rates of cattle to cattle transmission as animals are increasingly moved from farm to farm. There is a highly effective test of disease status; it should be possible to isolate infected cattle.

Comment
Source of cattle to cattle and cattle to human infection should usually be traceable. Both events have insurable economic consequences e.g. EL and PL, including liability for veterinary advice and laboratory services. Goats and sheep may also act as reservoirs of disease.

Wildlife sources of infection in cattle or humans would be hard to identify. Infection of wildlife by diseased cattle would usually be uninsured. TB is endemic in the wild.

There are reports of airborne transmission from cattle to humans, but the main risk to human health would be through untreated [or incorrectly treated] milk. Pasteurisation is an effective preventative treatment.

HIV patients are especially vulnerable.

TB cases have occurred in countries which declared their cattle herds to be 100% TB free. The regulations allow such a claim even if 1% of herds are infected.