

# *Toxoplasma gondii* seropositive farm animals – a failure in prevention

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The results of seroepidemiological *Toxoplasma gondii* studies of ours and of others have shown that farm animals commonly encounter the parasite.

**Finding *T. gondii* seropositive animals on the farms shows that their biosafety measures have failed.**

Especially herbivorous farm animals likely encounter *T. gondii* through the fecal-oral route, by ingestion of oocysts.

**Finding *T. gondii* seropositive herbivorous animals on the farms illustrates that there is an unhampered fecal-oral infection route – an infection route that is also used by other pathogens.**

*Toxoplasma gondii* oocysts are shed in the feces of the definitive hosts, mainly domestic cats, that have acquired the infection.

**Finding *T. gondii* seropositive herbivorous animals suggest that prevention of *T. gondii* infections in domestic cats or the proper disposal of their feces has failed.**

Sporulated *T. gondii* oocysts are highly resistant to environmental conditions and may remain infective for years.

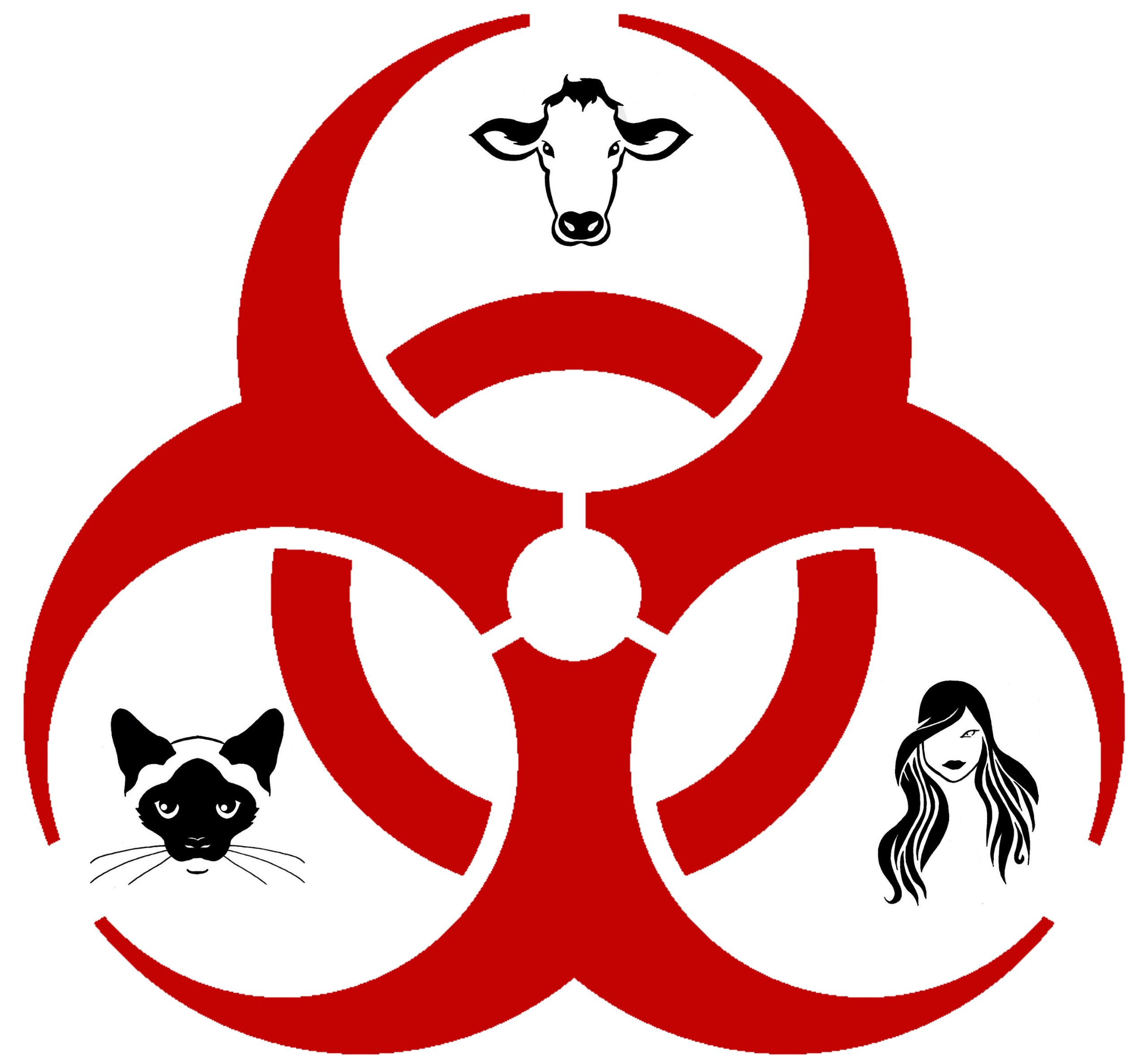
**Finding *T. gondii* seropositive herbivorous farm animals indicates that the farm environment is contaminated with *T. gondii* oocysts. It poses a risk also to other hosts, including humans, that are working or living on the same farm or eating products produced in that environment.**

*Toxoplasma gondii* can cause clinical signs of disease, from fever to abortions and deaths – lower welfare, and higher costs.

**Finding *T. gondii* seropositive farm animals points out that there is a risk of clinical cases.**

In many host species, *T. gondii* seropositivity has been shown to correlate with carrying infective, asexually multiplying forms of the parasite. Undercooked meat and raw milk from infected animals are potential sources of infections to other hosts, including humans.

**Finding *T. gondii* seropositive farm animals means that the foodborne pathogen may be multiplying in the animals that are raised for animal-derived products.**



Agricultural setting offers hosts and suitable environmental conditions for the zoonotic parasite *Toxoplasma gondii*. The life cycle of the parasite is complex and most infections are acquired - there are several possibilities to prevent the infections of new hosts.

**It is evident that the prevention of toxoplasmosis, a costly zoonosis, commonly fails in the first steps of the food chains from farms to fork.**

