interface, especially in intensive, industry-style smallholder units, functioning on razor thin profit margins. This study was undertaken to understand the health system and farm level factors that influenced the transmission of bovine tuberculosis (bTB).

Methods & Materials: The study was conducted in the peri-urban belts of Ludhiana, Guwahati and Bangalore. A stakeholder mapping was done to identify the key actors in the dairy farming enterprise. In-depth interviews were conducted based on thematic guides developed through an intense review of literature and improved through pretesting. Data collection was continued till the attainment of saturation across key themes. Open coding of responses preceded axial coding to establish relationships between categories. Selective coding to identify core themes was followed by etiological enquiry and generation of a conceptual model.

Results: Veterinarians were consulted as a final effort after home-remedies and quacks had failed. Damage control measures, like selling or abandoning animals, in a setting with limited screening and surveillance, adds to the risk of disease transmission. Although civic authorities believe in the adequacy of a functioning laboratory network, end users are aggrieved at the lack of available, accesible and affordable services. Despite the presence of extension services, knowledge and awareness of the disease is limited in the community, promoting risky behavior. The absence of cogent policies and predominance of cultural beliefs in dealing with bovine tuberculosis are significant barriers. Overall, despite glaring vulnerabilities, bTB is not considered to be a major problem by all stakeholders.

Conclusion: Across the board, the stakeholders did not recognize bTB as a major concern. However, given the lack of epidemiological data on the disease, and inadequate laboratory network to support surveillance, the real situation remains unknown. With multiple factors contributing to the vulnerabilities, both at the individual (farm) and the systems level, it is possible that the problem is underestimated. The current study helps to identify glaring lacunae which need to be addressed through systems and policy research, and interventions to build community awareness.

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19.074

First serological evidence of West Nile virus in horses and dogs from Corsica Island, France

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Purpose: West Nile virus (WNV) is widely distributed over the world, including Europe, Africa, Asia and spread over the last two decades to North and South America. In the South of France, sporadic cases are frequently described and two epidemics occurred in Camargue in 2010 and 2015. Corsica Island is a French island in the Mediterranean Sea close to the South-East French coast, Sardinia and the West Italian coast. To date, no circulation of West Nile Virus (WNV) has been described. The aim of the present study was to identify a possible WNV circulation in Corsica in horses and dogs as sentinel animals for the virus surveillance.

Methods & Materials: In 2014, 386 blood samples were collected from 219 sheep, 96 horses and 71 dogs, in 12 localities in Corsica, in the oriental coast of Corsica. Each sample was systematically tested for WNV immunoglobulin G (IgG) using an in-house enzyme-linked immunosorbent assay (ELISA) with inactivated WNV as antigen. Due to antigenic cross-reactivity among flaviviruses, all positive samples were confirmed as true positive by serum neutralization test

Results: All the sheep sera were negative for the detection of WNV antibodies by ELISA. While, 9 horses over 96 (9.4%) and 6 dogs over 71 (8.4%) presented WNV antibodies. All the positive samples from horses and dogs were confirmed by seroneutralization. Globally, 50% of the WNV positive dogs and 44.4% of the WNV positive horses were native from Corsica, and consequently have been infected in this island.

Conclusion: Migratory birds could have brought the virus to the island during a stopover in Corsica. Although no symptomatic case has been reported to date, this study highlights the necessity to improve WNV surveillance in animals and humans, as well as in blood donors in Corsica.

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19.075

A survey on Trypanosoma cruzi infection of dogs in French Guiana

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Purpose: Clinical cases of Chagas disease, an infection caused by the parasite *Trypanosoma cruzi*, have been recently described in humans and dogs in French Guiana, a French overseas department located in South America. Elsewhere in endemic countries for this disease, cases of asymptomatic infections are described. In this study we carried on a prevalence survey of the infection in dogs in Cayenne and Kourou, the main cities of French Guiana.

Methods & Materials: In 2014 and 2016, blood samples were taken from 153 dogs of Cayenne and Kourou. All the dogs were apparently healthy at the time of sampling. Sex and age of the dogs were recorded as well as the location where they lived. A rapid immunochromatographic test (Chagas Stat-Pak®Assay, Chembio, USA) was used on the sera of the dogs to detect anti-*T. cruzi* antibody. A *T. cruzi* kDNA real-time PCR was also performed on the blood samples of the dogs (EDTA anticlotting); the cutoff for positive samples was set at 35 Ct.

Results: Eight dogs (5.2%) were positive in serology and three (1.9%) in qPCR. One dog was positive for both tests. The rate of infection (positivity for one of the two tests) is 6.5% (10/153). There is no significant difference (X2 test) between Cayenne (5/100) and Kourou (5/53), between males (3/60) and females (7/93) and between 2014 (2/55) and 2016 (8/98).

Conclusion: Canine surveillance is a useful tool for public health risk assessment of Chagas disease. Positive dogs, even asymptomatic, should be treated, as they can serve as a reservoir for the parasite.

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