

## Research program IZS VE 03/13

**Circulation of tick-borne pathogens in symptomatic and asymptomatic dogs of north-eastern Italy**

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In north-eastern Italy (NEI) several tick-borne pathogens (TBPs) have been isolated from the main vector ticks *Ixodes ricinus* and *Rhipicephalus sanguineus* (i.e., *Borrelia burgdorferi* complex, tick-borne encephalitis, *Anaplasma phagocytophilum*, *Rickettsia* spp., *Babesia* spp., *Cand. Neoehrlichia mikurensis*, *Bartonella* spp.) but few studies have focused on the impact of these TBPs in the canine population. Clinical cases are reported in the area for *Ehrlichia canis*, *A. phagocytophilum* and *B. canis*.

The objectives of this project are:

- to evaluate the impact of TBPs in dogs in terms of prevalence and clinical relevance through microscopic, serological and molecular screening of clinically healthy (asymptomatic) and sick (symptomatic) dogs
- to improve our diagnostic capability for relevant TBPs through the validation of accurate and rapid diagnostic tools

The knowledge of the prevalence of TBPs in symptomatic and asymptomatic dogs can contribute to address the diagnostic offer to public and private laboratories, veterinarians, dog owners and to improve the safety of blood canine donation. The data collected can also contribute to evaluate the risk for humans to contact zoonotic agents.