

Research project IZS VE 03/11

Assessment of the presence and prevalence of *Echinococcus multilocularis* in north-eastern Italy

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The *Echinococcus multilocularis* is a re-emerging zoonotic agent in Europe. Italy was considered free until 2002, when two foxes were found infected close to the Austrian border¹, where the infection is endemic. In 2005 a focus was identified in the same area and recent studies corroborated the hypothesis of an autochthonous cycle of *E. multilocularis* in this area².

The project is aimed to:

- assess the maintenance and potential expansion of the previously identified focus;
- detect the presence of the infection in other regions of the alpine areas of north-eastern Italy.

The first phase is based on a screening of fox faecal samples, from selected animals conferred to our Institute (IZSVE) (hunted or found dead) using the method of filtration and isolation to find taeniid eggs. In the second phase biomolecular techniques will be applied to identify taeniid species and to assess intra-specific genetic polymorphism. In a third phase faecal samples will be collected in proximity to the places of finding of positive *E. multilocularis* foxes to better define the risk areas.