



CARTOPICTIQ

Cartographier le risque infectieux lié à l'exposition aux piqûres de tiques en France pour améliorer la prévention : apport des données de la recherche participative

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Context — Prevention against tick-borne pathogens is a real health challenge for Western societies because ticks are the main vector of diseases for humans and animals in Europe. In 2017, Labex ARBRE launched the national participatory research program CiTIQUE, which allows citizens to help researchers to better understand the ecology of ticks and tick-borne pathogens, thanks to tick bite signalling and to sending biting ticks to the CiTIQUE tick library.

Objectives — To better assess the risk to human health linked to the presence of ticks in France, it is now essential (i) to determine which are the main species of ticks that bite humans at different scales, but also (ii) to characterize the diversity and variability of pathogens present in ticks biting humans at these different scales.

Approaches — Thanks to the CiTIQUE collection of ticks biting, we will:

- a. Describe the species diversity of ticks biting humans in France at the scale of territories (regions) and ecosystems (forests vs gardens), focusing on spring, which is the season most conducive to tick bites,
- b. Evaluate the proportion of ticks biting humans carrying pathogens, in spring at the level of territories (regions) and ecosystems (forests vs gardens),
- c. Determine the diversity of pathogens present in ticks biting humans in spring, at the level of territories (regions) and ecosystems (forests vs gardens).

Expected results and impacts — *This project will generate an initial map of the infectious risk linked to ticks, essential for the implementation of an effective risk awareness and prevention policy.*