

Development of a surveillance system adopting an ecological approach for the monitoring of (re)emerging zoonoses and those at risk of introduction

What it is

It is a national project, co-funded by the European Union under the EU4Health program, aimed at developing innovative integrated surveillance approaches for certain (re)emerging zoonoses and those at risk of introduction.

Activities

The proposed surveillance actions are strategically designed to generate relevant and essential data for the identification of appropriate early warning indicators and to support comprehensive risk assessment regarding the introduction or (re)emergence of specific zoonotic agents in Italy.

Zoonoses

Zoonoses are infectious diseases that can be transmitted from animals to humans. This project focuses on the following zoonotic diseases:

Ruminants

Rift Valley Fever
Crimean-Congo Hemorrhagic Fever
Q Fever





Migratory Birds

West Nile Fever
Avian Influenza

Swine

Hepatitis E

Swine Influenza





Other Species

Echinococcosis

Lyme Disease
Tick-borne Viral Encephalitis

The Ecological Approach

This approach takes into account the full spectrum of animal species within the ecosystem that may contribute to the maintenance, persistence, and/or transmission of zoonotic diseases to humans.

By adopting this perspective, the project promotes innovative surveillance and diagnostic strategies.

Vectors

Surveillance Targets

Reservoir Hosts / Bridge Species

Surveillance Components

Animal Hosts

- Domestic Animals
- Wildlife
- Synanthropic Species

Public Health

Humans

Environment

- Δhintic Factors
- Biotic Factors

Mosquitoes / Ticks / Other Arthropods

Hosts / Bridge Species Birds / Ruminants / Swine / Other Mammals

Wastewater Urban / Livestock (Zootechnical)







