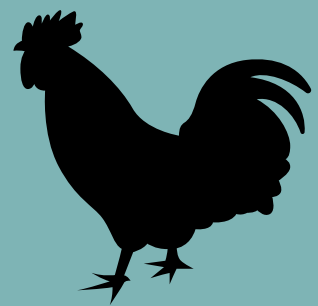


# ENVIRE: Interventions to control the dynamics of antimicrobial resistance from chickens through the environment



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## Introduction



Use of antibiotics in broiler chicken production results in the increase of antimicrobial resistance.



The overall objective of the ENVIRE project is to contribute to the reduction of the selection and the spread of antimicrobial resistance bacteria in broilers and from chicken farms to the environment, and ultimately to humans.



Focus will be laid on ESBL *Escherichia coli* and Enterobacteriaceae, on resistance against fluoroquinolones as well as colistin

## WP1 - Intervention studies

Different intervention studies will investigate the potential of various on-farm measures:



Antibiotic free chickens raising



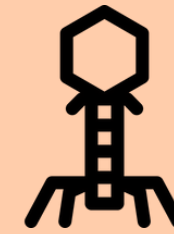
Treatment or storage of manure



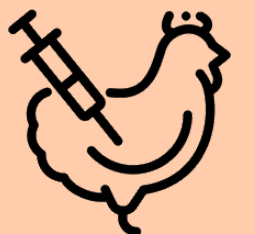
Depollution of farm effluents



Phytotherapy as alternative for antibiotics



Application of bacteriophages



*E. coli* vaccination

## Project structure

WP1  
Interventions  
study

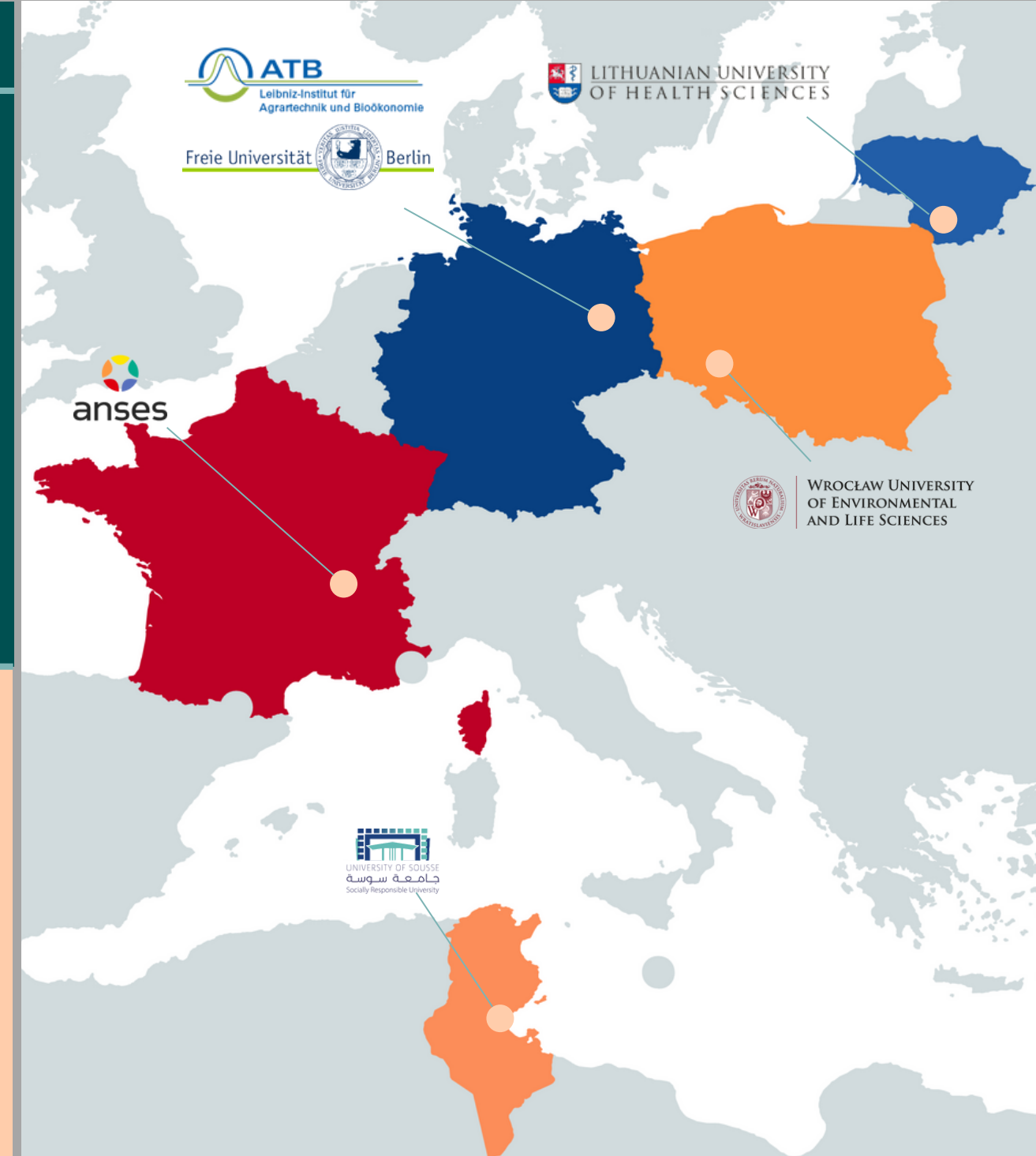
WP3  
Risk  
assessment  
modeling

WP2  
Existing  
knowledge  
synthesis

WP4  
Knowledge transfer and dissemination

## Project partners

- Germany:
  - Freie Universität Berlin<sup>1</sup>
  - Leibniz Institute for Agricultural Engineering and Bioeconomy e.V.<sup>2</sup>
- France: French Agency for Food, Environmental and Occupational Health & Safety (ANSES)<sup>3</sup>
- Lithuania: Lithuanian University of Health Sciences<sup>4</sup>
- Poland: Wrocław University of Environmental and Life Sciences<sup>5</sup>
- Tunisia: University of Sousse<sup>6</sup>



## WP3 - Quantitative microbial risk assessment model



Foodborne pathway

Occupational pathway

Environmental pathway

WP2  
Existing knowledge  
synthesis



Systematic review

WP3  
Knowledge transfer and  
dissemination



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