

Designação do projeto | ADONIS - Assessing Determinants Of the Nondecreasing Incidence of *Salmonella*

Código do projeto | 773830-Adonis

Objetivo principal |

The ADONIS project will identify determinants underlying the stagnation/reversal of the decreasing trend in *Salmonella* Enteritidis incidence in humans and poultry in the EU.

Região de intervenção |

Entidade beneficiária | Instituto Nacional de Investigação Agrária e Veterinária, I.P.

Data da aprovação | 2019/09/19

Data de início | 2020/01/02

Data de conclusão | 2022-12-31

Custo total elegível | 114 463,75€

Apoio financeiro da União Europeia | 50 364,05€

Objetivos, atividades e resultados esperados

This project will address three objectives, with a focus on *Salmonella* Enteritidis in humans and in the laying hen sector:

- With a multidisciplinary approach, we will identify possible determinants from different angles: primary production (particularly control measures on farm), epidemiology in humans and poultry using surveillance and exposure (food consumption) data, and genomics. By means of a multiple-criteria decision analysis (MCDA), we aim at ranking the different determinants according to their relative importance in explaining the stagnation on the decreasing trend in human salmonellosis.
- We will make an analysis of national public health surveillance systems according to a set of pre-defined criteria to be determined at the start of the project. We will closely interact with the EJP ORION project, which aims harmonizing surveillance across EU member states. The ORION project will conduct a one health pilot study on *Salmonella*, which will serve as input and basis for this proposed proposal.
- We will establish a robust data set of *Salmonella* Enteritidis sequences from across Europe and perform various genomic analyses in order to investigate whether there have been changes in the genomic epidemiology of this pathogen that could (partly) explain the reversal of the decreasing trend in humans and poultry.

These specific evaluations at different levels provide valuable scientific insights in possibly changed veterinary and public health microbiology, ecology and epidemiology of



Salmonella in laying hens. The cumulative results of this project will deliver stakeholders and policy makers with **anchor points to at least prevent a continued stagnation or even an re-establish a decreasing trend in *Salmonella* incidence in humans and poultry.**