

Highlighting One Health EJP Project Outcomes and Impact

ONE HEALTH EJP: GENERAL

Impact on OH expertise

- Building a network of experts (at different levels)
- Contributing to training of the next generation of scientists

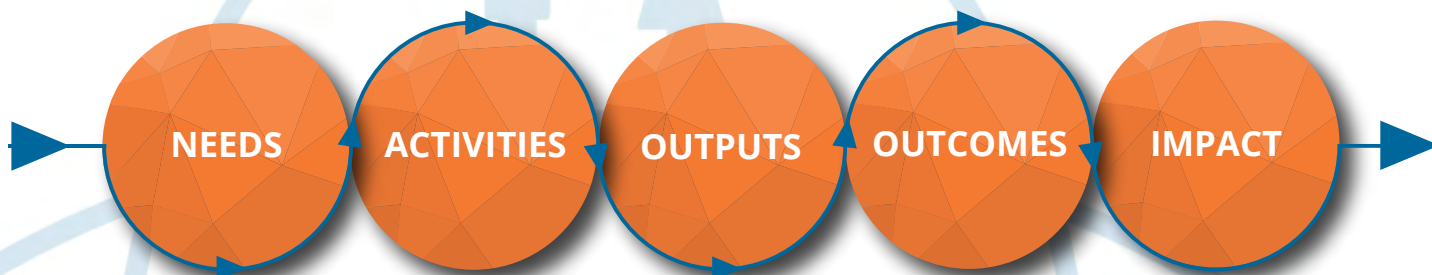
OHEJP - Impact

- Involved in setting up PREZODE
- Asked to participate as speakers/panellists in stakeholders events (e.g. Parma Summer School, RARA, ONE2022)
- Involved in ECDC fellowship module (EUPHEM/EPIET) cohorts 2019, 2020, 2021
- Invited by OIE/WHO-Euro to support the Regional One Health Coordination Mechanism by joining the Partner Platform
- Influenced EU and international decisions by taking part in a number of stakeholders' consultations (HERA, EU4Health, EU4Health annual plan 2022, EFSA 2027, One Health Expert Panel ToR)
- Involved in SISOT pilot in the European region, that includes many OHEJP outcomes

OHEJP cited in stakeholders documents, for example

- In the One Health Zoonoses report 2019,
- In a recent paper authored by Director Bernhard Url,
- In EFSA newsletters

Publications resulting from work in OHEJP projects cited in Scientific Opinions and Risk Assessments.



ONE HEALTH EJP ORION - onehealthjep.eu/jip-orion/

ORION focuses on the semantic and technical interoperability between the sectors, with focus on surveillance information.

Scientific impact	Potential policy impact
Transferred knowledge to EURL network: improved pipelines in EURL and at EFSA, e.g. for WGS analysis of <i>L. monocytogenes</i>	Improved intersectoral collaboration
Improved surveillance, data sharing, analysis: changed protocols for <i>Campylobacter</i> almost around the whole of European labs, improved <i>Campylobacter</i> outbreak detection	Improved implementation of legislation
Tools added to Tripartite's Surveillance and Information sharing Operational Tool (SISOT)	Improved reporting
Potential societal impact	
Increased safety through improvement of cross-sectoral understanding leading to improved OH coordination	
More efficient outbreak response	
Improved prevention	

ONE HEALTH EJP METASTAVA - onehealthjep.eu/jrp-metastava/

METASTAVA aims to evaluate the potential use of metagenomic analysis to the public health reference laboratory by targeted collection of reference data and reference materials, by generating focused validation data, and by proposing criteria and tools for a robust quality assurance (QA) of metagenomic workflows from sample selection to interpretation of result.

Scientific impact	Potential policy impact
Improved understanding for: outbreak investigation, source attribution, risk assessment of foodborne microorganisms	New tasks and improved capacities of EURLs and NRLs
Better understanding of AMR selection in animal or environmental microbiomes	Strengthened requirements for applying metagenomics, data sharing, providing input for risk assessment and risk management
Improved prediction of emerging hazards / risks	Appropriate action / intervention to lower these risks
Capacity building based on harmonized, quality controlled operational systems	
Interoperable data	
Potential societal impact	Potential economic impact
Reduced exposure to foodborne hazards	Targeted methods / new technologies
Reduced burden of disease	Less restrictions, aiming towards restriction for 'true sources' only
Reduced treatment failure due to AMR	Strengthened consumer confidence into European policy

ONE HEALTH EJP NOVA - onehealthjep.eu/jrp-nova/

The NOVA project strives to develop new surveillance tools and methods and to harmonise and optimise the use of existing surveillance system data.

Scientific impact	Potential policy impact
Optimisation of surveillance through: deployment of new (and old) data sources, new approaches to combine and analyse data from different sources (animal-food-human)	Improved EU surveillance systems by: evaluation of best data sources (incl. new data sources like consumer purchase data), highlighting gaps and barriers in data access, providing models and tools for cost-effective surveillance that can be adapted to different hazards and populations
Surveillance strategies: measurement of the performance, assessment of the cost-effectiveness	
Potential societal impact	Potential economic impact
Increased (food) safety thanks to earlier detection	Improved cost-efficiency of surveillance based on knowledge gained from methods that measure and compare the performance of different surveillance strategies
Reduced exposure and sequelae thanks to improved understanding of transmission pathways	

ONE HEALTH EJP IMPART - onehealthjep.eu/jrp-impart/

IMPART consists of four topics related to the development and harmonization of phenotypic methods for detection of antimicrobial resistance.

Ongoing scientific impact

ECDC: Rapid Risk Assessment, Increase in OXA-244-producing *Escherichia coli* in the EU/EEA and the UK since 2013 – first update

- Urgent inquiry in ECDC's AMR-HAI: health-care associated outbreak
- National public health reference laboratories were invited to submit whole genome sequencing (WGS) data collected since previous report
- The source and route of transmission is currently unclear

Contacts within OHEJP among veterinary NRLs: no such strain detected in livestock and food sources (despite regular monitoring of CPEs and ongoing research).

Scientific impact	Potential policy impact
Improved methods for EURL-AR network	Improved implementation of directive 2003/99/EC (zoonosis directive): Commission Implementing regulation (EU) 2020/1279 (monitoring antimicrobial resistance)
Improved surveillance, reporting and understanding of AMR	Implementation of regulation (EU) 2019/6 on veterinary medicinal products and delegated/implementing acts
Improved detection of carbapenem resistant Enterobacteriaceae	Implementation of Animal Health Law (regulation (EU) 2016/429)
Standardised interpretation of data from resistance testing	
Science-base for tackling some infectious diseases and AMR	
Potential societal impact	Potential economic impact
(Science based) action to limit emergence and spread of resistance genes towards critically important antimicrobials	Benefits deriving from efficient treatment of diseases
Reduced risk of exposure to carbapenem resistant bacteria	Improved production performance

ONE HEALTH EJP TOXDETECT - onehealthjep.eu/jrp-tox-detect/

The TOXdetect project aims to contribute to an increased consumer health protection by filling the critical gaps of lacking methodologies to detect bacterial toxins and characterizing foodborne toxigenic bacteria.

Scientific impact	Potential policy impact
Transferred knowledge to EURL network	Improved implementation of directive 2003/99/EC (zoonosis directive)
Improved detection of (bacterial) toxins causing foodborne outbreaks and vehicles involved in exposure	Adjusted requirements in regulation (EC) 2073/2005 (microbiological criteria)
Improved understanding of factors contributing to foodborne intoxications	
Improved reporting	
Potential societal impact	
Increased safety concerning toxigenic bacteria, responsible for a large number of foodborne outbreaks	