

Animal health

Healthy animals for healthy people



Livestock diseases pose a serious threat to animal and human health and reduce productivity. This Results Pack showcases 12 EU-funded projects that are fighting infectious diseases through improved disease prevention, detection and response.

The [World Organisation for Animal Health](#) (WOAH) has estimated that globally, animal production losses as a result of infectious diseases can be as high as 20 %. Outbreaks of epidemic diseases such as African swine fever, or avian influenza, and endemic diseases like bovine tuberculosis can cause trade disruptions that affect the global economy.

More serious still, certain pathogens may be transmitted between animals and humans, so-called zoonoses. According to WOAH, 75 % of emerging animal diseases can be transmitted to humans.

Used appropriately, antimicrobials are very effective in controlling disease. However, they are a squandered resource. Problems with antimicrobial resistance (AMR) have arisen due to persistent overuse or misuse of antibiotics. An [ECDC study](#) has estimated that 33 000 deaths per year in the EU alone can be attributed to antibiotic resistance, adding to the EU health bill by EUR 1.5 billion annually.

12 EU-funded research initiatives

To curb the rising tide of drug-resistant pathogens, EU research projects are developing in situ, accurate testing for diseases before therapeutics are prescribed. Accurate and rapid disease detection must be available for the sustainable protection of animal health.

SWINOSTICS

Swine diseases field diagnostics toolbox
Coordinated in Cyprus

SWINOSTICS developed a cutting-edge diagnostic system that limits disease spread in modern animal production systems using photonics biosensors.



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VIVALDI

Veterinary Validation of Point-of-Care Detection Instrument
Coordinated in Denmark

VIVALDI developed a platform for on-site detection of pathogens particularly important for food safety and animal health.



© VIVALDI

RAID

Veterinary Decision Support System by Rapid Bacterial Infection Detection
Coordinated in Hungary

RAID addressed the unmet need for detection of bacterial infections in chicken as existing methods are either unreliable, expensive or slow.



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DISARM

Disseminating Innovative Solutions for Antibiotic Resistance Management
Coordinated in Belgium

DISARM helped the European livestock industry reduce its use of antibiotics by focusing on animal health and disease management.



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HealthyLivestock

Tackling Antimicrobial Resistance through improved livestock Health and Welfare
Coordinated in the Netherlands

HealthyLivestock aimed to reduce the use of antimicrobials in the pig and broiler industry in Europe and China, as well as the subsequent residues in the food chain and environment.



© Experimental Poultry Centre

PIGSs

Program for Innovative Global Prevention of *Streptococcus suis*
Coordinated in the Netherlands

PIGSs enhanced understanding of how the *Streptococcus suis* bacterial pathogen affects young pigs, enabling development of vital vaccines and surveillance tools.



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PHAGOVET

A cost-effective solution for controlling *Salmonella* and *Escherichia coli* in poultry production
Coordinated in Portugal

PHAGOVET tested alternatives to antibiotics to control cases of *Escherichia coli* and *Salmonella* in the poultry rearing industry.



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DIGDEEP

Digging deeper into genes to track infectious disease outbreaks
Coordinated in Switzerland

DIGDEEP aimed to unravel the transmission dynamics of avian influenza by using an original combination of epidemiological and phylodynamic approaches.



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DELTA-FLU

Dynamics of avian influenza in a changing world
Coordinated in Germany

DELTA-FLU elucidated the dynamics of highly pathogenic avian influenza viruses and ongoing disease outbreaks urgently required to develop effective prevention and control approaches.



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VetBioNet

Veterinary Biocontained facility Network for excellence in animal infectiology research and experimentation
Coordinated in France

VetBioNet established a multidisciplinary network to reinforce cooperation among Europe's leading high-containment animal facilities, enhance technical capacities and services and offer free-of-charge access.



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SIRCAH

Secretariat for the International Research Consortium on Animal Health
Coordinated in the United Kingdom

Coordinating a global research effort, SIRCAH is helping the STAR-IDAZ International Research Consortium on Animal Health reach new heights.



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HONOURS

Host switching pathogens, infectious outbreaks and zoonosis; a Marie Skłodowska-Curie Training Network
Coordinated in the Netherlands

HONOURS provided cross-disciplinary and supra-sectorial training to 15 early-stage researchers on different aspects of emerging viral infections and the threat of zoonotic viruses.



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Research and innovation

Research and innovation for better prevention and control of animal diseases contributes massively to sustainable animal farming and food security.

The initiatives in this Results Pack address a range of elements of EU policies.

Notable is the [European Green Deal and its 'Farm to Fork' strategy](#) aiming to position the EU as a sustainable producer of high quality and safe food products. The [EU One Health Action Plan against AMR](#) will strategically reinforce the research agenda on AMR and enable the EU to actively promote global action and play a leading role in the fight against AMR.

Another leading objective of the EU One Health Action Plan is to make the EU a best practice region. Moving away from antibiotics is challenging and must be accompanied by changes in animal husbandry and new therapies.

In other words, a totally new mindset has to be applied to farm practices and raising animals for food. The result will be a farming system that protects the health of both animal and human, offers consumers high quality products, and delivers a more sustainable approach to food production.

Learn more about

The EU's Farm to Fork strategy: europea.eu/!3D4qwB

Horizon 2020: europea.eu/!bymQHx

Horizon Europe: europea.eu/!Xf47NRP

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