



KAPPA-FLU: Ecology and biology of highly pathogenic avian influenza H5 viruses

Urgency

The global emergence of highly pathogenic avian influenza (HPAI) viruses and the subsequent adaptation to wild birds has resulted in record mortality of wild birds and poultry and is developing into an enzootic threat for wildlife, poultry and human health worldwide. To deal with this global problem, KAPPA-FLU brings together top experts from Europe, North America and Asia.





KAPPA-FLU objectives

KAPPA-FLU aims to understand the connectivity and dynamics of HPAI H5 viruses in wild birds, poultry and the environment, including the impact of climate change. The ambition of KAPPA-FLU is to improve risk- and knowledge-based surveillance and to identify new and cost-effective prevention and control options (including vaccination) for HPAI in poultry and wildlife that improve human health, animal welfare, wildlife conservation and sustainability of poultry production.

Based on this overall objective and ambition, the specific objectives of KAPPA-FLU are:



Objective 1 and Objective 2 – Disease ecology

Objective 1: Identify viral, host and environmental factors in migratory bird populations critical to long-term maintenance and long-distance virus spread focusing on recent H5 viruses. (WP1)

Objective 2: Unravel sources and routes of HPAI incursions into poultry populations. (WP2)



Objective 3 and Objective 4 – Virology

Objective 3: Detect and define genetic changes in HPAI viruses that impact viral fitness in different avian and mammalian species and the threat of zoonotic infections. (WP3 & 4)

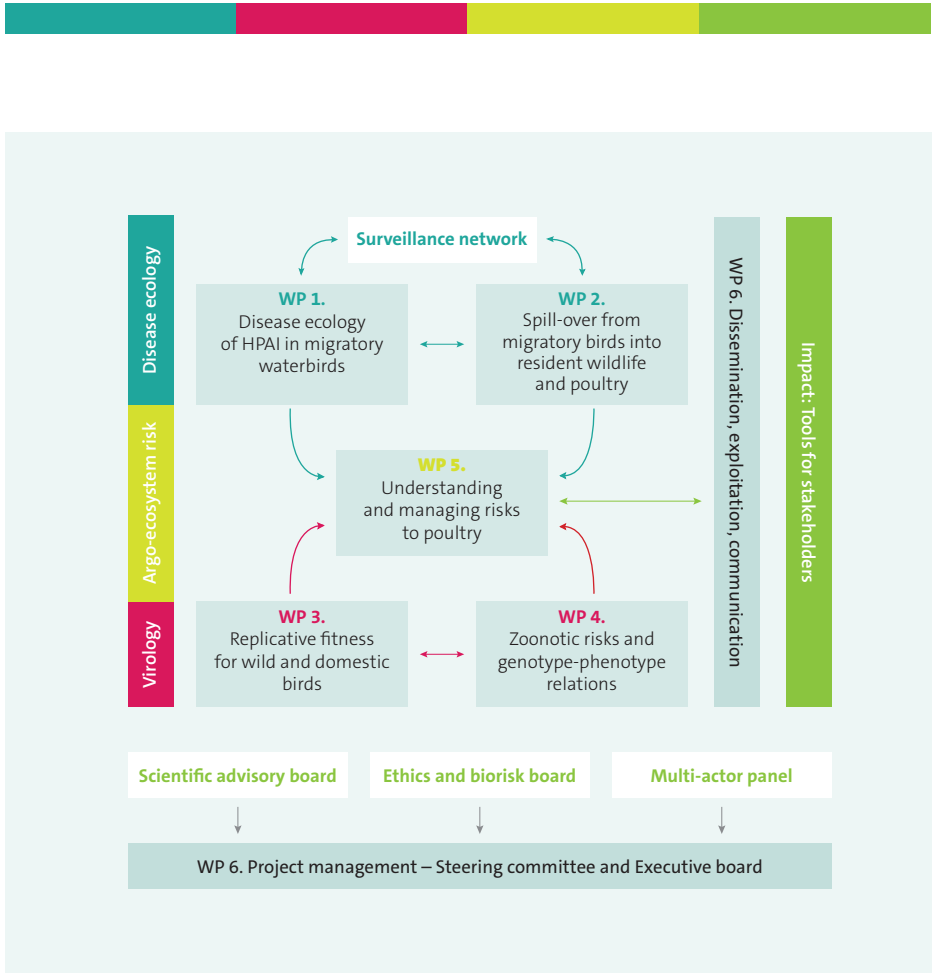
Objective 4: Assess the risk factors for incursion of HPAI viruses into poultry holdings. (WP5)



Objective 5 – Agro-ecosystem risk

Objective 5: Develop new real-time risk assessment tools and determine the economic efficiency (and impact) of improved countermeasures for prevention and control of HPAI in poultry production systems. (WP5)





Impact

KAPPA-Flu will increase the capacity to prevent and reduce the impact of HPAI H5 viruses on poultry, wild birds, wildlife and humans.

Partners



Project coordinator:

FRIEDRICH LOEFFLER INSTITUT
Germany (DE)



Project partners:

ERASMUS UNIVERSITAIR
MEDISCH CENTRUM ROTTERDAM
Netherlands (NL)



LINNEUNIVERSITETET
Sweden (SE)



ISTITUTO ZOOPROFILATTICO
SPERIMENTALE DELLE VENEZIE
Italy (IT)

Associated partners:



SCHWEIZERISCHE
VOGELWARTE SEMPACH
Switzerland (CH)



ANIMAL AND PLANT
HEALTH AGENCY
United Kingdom (UK)



THE ROYAL VETERINARY COLLEGE
United Kingdom (UK)

Collaborative partners:



CANADIAN FOOD
INSPECTION AGENCY
Canada (CA)



THE UNIVERSITY OF HONG KONG
China (CN)

Funding

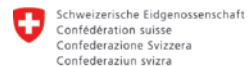


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The Royal Veterinary College has received funding from Innovate UK to support their activities conducted under KAPPA-FLU. This funding will run for 48 months from May 2023 until April 2027.



Swiss Confederation

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