

Ecosystems in the balance

Supporting future policy and research

Concept note
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About the organisers

Sciensano and the Belgian Biodiversity Platform are both involved in promoting the One Health approach. **Sciensano** ([link](#) One Health) is the Belgian scientific health institute and houses most of the reference centres and laboratories for human and animal infectious diseases, zoonoses and AMR. The institute has developed a One Health programme, which brings together expertise in areas such as AMR, respiratory infections, foodborne diseases, zoonoses, vector-borne diseases, the exposome, climate, and innovative technologies. The institute also has extensive expertise in non-communicable diseases, and monitors health risks, analyses health care, etc. The outcomes of these activities provide the Belgian health authorities with timely and evidence-based advice on health policy. The **Belgian Biodiversity Platform** ([link](#) One Health) supports the One Health approach by promoting the communication between scientists and policy makers from different backgrounds (i.e. human, animal and plant health, natural and social sciences), their multidisciplinary collaboration and capacity building.

About the event's focus

The complementary expertise of these two organisations is an excellent basis for organising a two-day One Health event that will focus on the role of environmental factors influencing possible pathways of infectious disease emergence, and on prevention, early warning mechanisms and effective preparedness solutions.

The overarching topics will be the impacts of Biodiversity loss and Climate Change, the impact of Wildlife trade and risks associated with Invasive Alien Species, and Data and Monitoring approaches. The event will furthermore focus on inter- and transdisciplinary approaches of :

- Known and new infectious agents that can originate from animals (both food-producing and wildlife, terrestrial and aquatic, and including minor animal species) and from the environment, and that may have an extensive impact on the health of human and animal populations,
- The role of biodiversity loss and human intervention in the emergence of infectious disease in human populations or in food-producing animals, and the potential mitigation effect of biodiversity restoration on the emergence and spread of infectious agents,
- The effect of climate change on the spread of infectious agents in humans, animals and the environment (including wildlife) and on the spread of disease,
- The contribution of trade, transport, tourism and other economic activities, as well as illegal ones, to the introduction of invasive alien species (IAS), which can impact human, animal, and ecosystem health,
- Innovative cross-sector monitoring systems for the early detection of new or emerging pathogens or diseases in humans, animals and the environment,
- The generation of accurate data representative for the observations and that must be shared between the sectors to enable joint risk assessments and appropriate action,
- The potential socio-economic contributions in the prevention, detection and monitoring of new pathogens or diseases.

The event is aimed at experts and stakeholders interested in intersectoral cooperation, but also reaches out to administrators and policy makers. Keynote presentations on the areas highlighted above will be followed by discussions in break-out groups. The conclusions of the exchanges between experts and policy makers from different backgrounds will feed into a position paper that the organisers will prepare and publish, as further guidance for policy makers to reinforce cross-sectoral, multidisciplinary collaboration and strengthen prevention and preparedness strategies.

Out of scope

With this infectious diseases-oriented, high-level and inter-/transdisciplinary approach in mind, oral and poster presentations at the workshop should not focus on:

- non-infectious, non-communicable diseases (pollution, cancer, mental health, etc.) even if the relation with environmental risk factors has been proven,
- detailed (molecular) descriptions of pathogens, vectors and infectious diseases, or technologies for their detection or characterisation,
- detailed methodologies for database construction and data sharing, and risk assessment methodologies.