

# PREVENTION OF ZOOONOTIC SPILLOVER

FROM RELYING ON  
RESPONSE TO REDUCING  
THE RISK AT SOURCE

OHHLEP whitepaper/Opinion piece

*Shifting the infectious disease control paradigm from reactive to proactive(Primary prevention)*

*Prevention includes addressing the drivers of disease emergence, namely ecological, meteorological and anthropogenic factors and activities that increase spill over risk, in order to reduce the risk of human infection.*

*It is informed by, amongst other actions , biosurveillance in natural hosts, people and the environment, understanding pathogen infection dynamics and implementing intervention activities.*

# SCOPE OF PREVENTION OF SPILLOVER

Spillover of pathogens from a natural source only occurs at risky exposure interfaces between humans, animals and the environment, such as direct or indirect contact between the pathogen and people. Animals and biodiversity do not present an inherent risk per se; risk is created by human behavior that places humans and other species in risky contact that increase chances for spillover

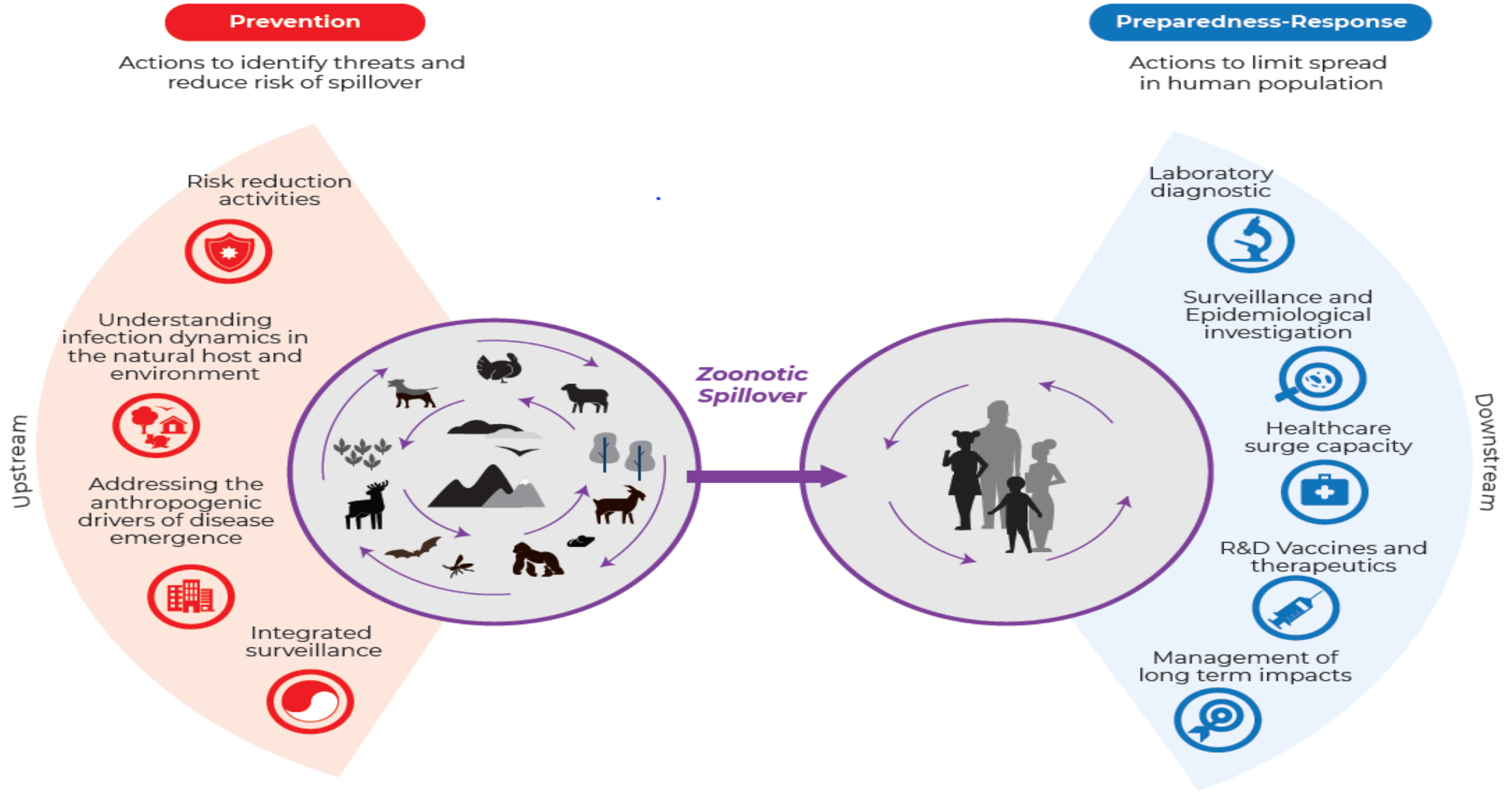
Understanding the presence, diversity, evolution and characteristics, distribution, and infection dynamics of pathogens in the natural host using a One Health approach can assist in identifying risk factors for spillover, and hence opportunities /critical control points for spillover prevention.

knowledge of possible exposure routes across the human-animal-environment interface can be used to identify critical control points, and modification of human behaviours can be introduced to reduce human infection risk in a generic, multi-hazard fashion.

Specific factors related to hunting, capturing, farming and slaughter/preparation of wild animals; intensive/high density livestock farming especially linked to inadequate biosecurity; trade in live animals and animal products; deforestation, extractive industries, and encroachment into wildlife habitat; agricultural expansion and intensification; urbanisation and habitat fragmentation are often important in shaping risk

Overarching drivers, such as climate change, food security, basic animal and human health, and animal welfare practices, poverty, and socioeconomic inequalities, should also be considered in the prevention of spillover.

# FIGURE 1. PREVENTION OF ZOOONOTIC SPILLOVER TO HUMANS



Prevention of zoonotic spillover: From relying on response to reducing the risk at source : PLOS Pathogens | <https://doi.org/10.1371/journal.ppat.1011504>  
October 5, 2023:

**Thank You!**

# Wildlife Health Framework

## World Health Organisation for Animal Health (WOAH)

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Dr Chadia Wannous  
One Health Global Coordinator  
World Health Organization for Animal Health (WOAH)

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## The problem

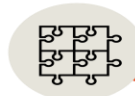
Increased contact between humans, wildlife and livestock and negative impacts on biodiversity from unsustainable human activities, such as habitat loss and land-use change, lead to the emergence of diseases which may threaten human and animal health.

## The solution

Raise awareness and develop advocacy tools



Promote multisectoral coordination and collaboration



Veterinary Services play an essential role in the prevention of disease emergence (including zoonoses) and in ensuring food security and safety.

A political, policy and scientific environment that allows Veterinary Services to implement effective wildlife health monitoring, surveillance and management is key and will be reinforced by the new OIE Wildlife Health Framework that aims to reinforce One Health strategies to manage the risk of disease emergence and protect wildlife health.

## Protecting wildlife health to achieve One Health

Develop and disseminate scientific knowledge



To manage the risk of disease emergence in wildlife and transmission of diseases at the human—animal—ecosystem interface.

To protect wildlife health by improving surveillance systems, early detection, notification and management of wildlife diseases.

Strengthen capacity in wildlife health management



Update and develop relevant international standards and guidelines



## The benefits

Improved animal and public health

Improve reporting and analysis of quality wildlife health data



## The approach

Embrace a holistic systems-based approach to One Health to seek solutions that optimise health outcomes for animals, humans and the environment



Promote multisectoral coordination and collaboration to operationalize the One Health approach



Strengthen capacity in wildlife health management for veterinary services



Improve reporting and analysis of quality wildlife health data to improve global surveillance systems



Update and develop relevant international standards and guidelines related to wildlife health



Dissemination of scientific knowledge to address risks and identify best practices in wildlife health



Awareness and advocacy to integrate wildlife health issues into veterinary services' priorities



# Coming up next!



- E-learning modules on wildlife trade (2) and surveillance (2), Q4 2023
- Guidelines on wildlife trade, Jul. 2023
- Testing of guidelines on wildlife trade – in country
- Testing of VLSP Revised tool – in country
- Review of wildlife diseases threatening wild species population, Q3 2023
- Disease notification system business case, 2023
- Work on definitions of animal health including wildlife health, 2023
- Functional Wildlife Focal Points and Collaborating Centers Networks, 2023



# Challenges



- Lack of long-term funding strategy



- Resistance to change



- Internal processes impacting timely delivery



# Thank you for your attention!

Contact: [wildlife@woah.org](mailto:wildlife@woah.org)

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12, rue de Prony, 75017 Paris, France  
T. +33 (0)1 44 15 19 49  
F. +33 (0)1 42 67 09 87

[woah@woah.int](mailto:woah@woah.int)  
[www.woah.org](http://www.woah.org)

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