



# One Health Approach: A Strategic Enabler for VBD Risk Management & Control

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World  
Organisation  
for Animal  
Health

Organisation  
mondiale  
de la santé  
animale

Organización  
Mundial  
de Sanidad  
Animal

**Regional Seminar on VBDs –  
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# What is One Health

## One Health Definition developed by the OHHLEP



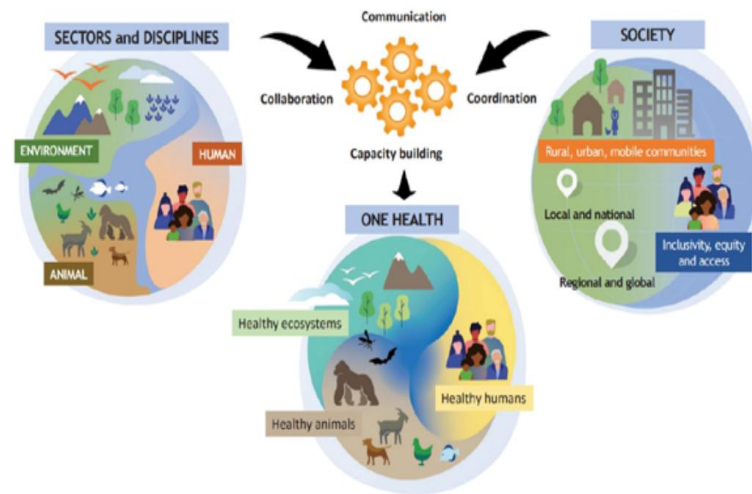
*“One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.*



*It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.*



*The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development”.*



**Goal:** Achieve optimal health outcomes through collaborative efforts across multiple sectors and disciplines



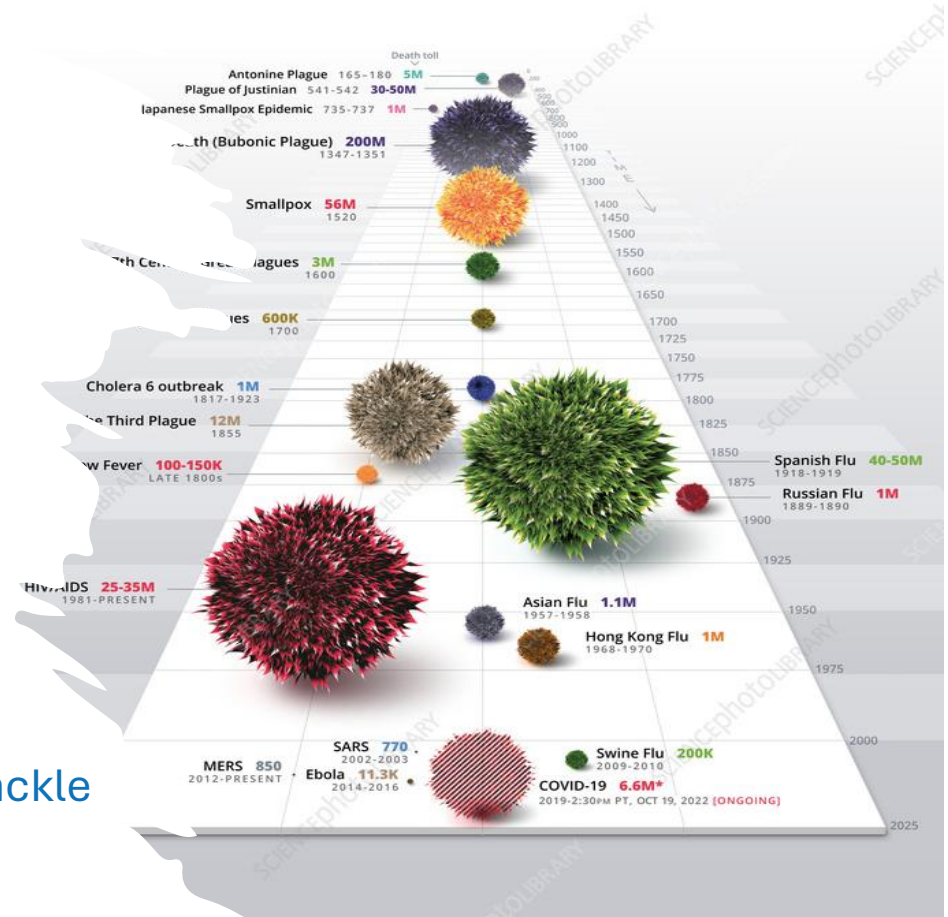
# Why One Health is Important

## Increasing risk of pandemics

The probability of a pandemic with a similar impact to COVID-19 is about 2% in any year.

This means that the probability of experiencing it in one's lifetime is about 38%

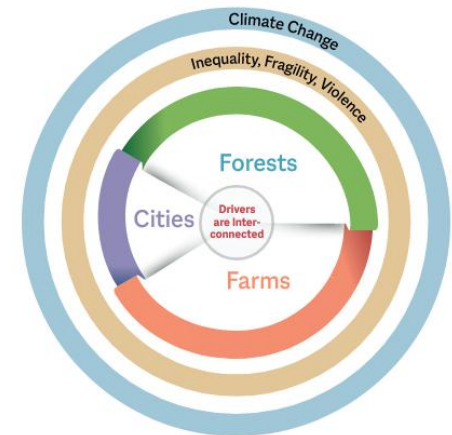
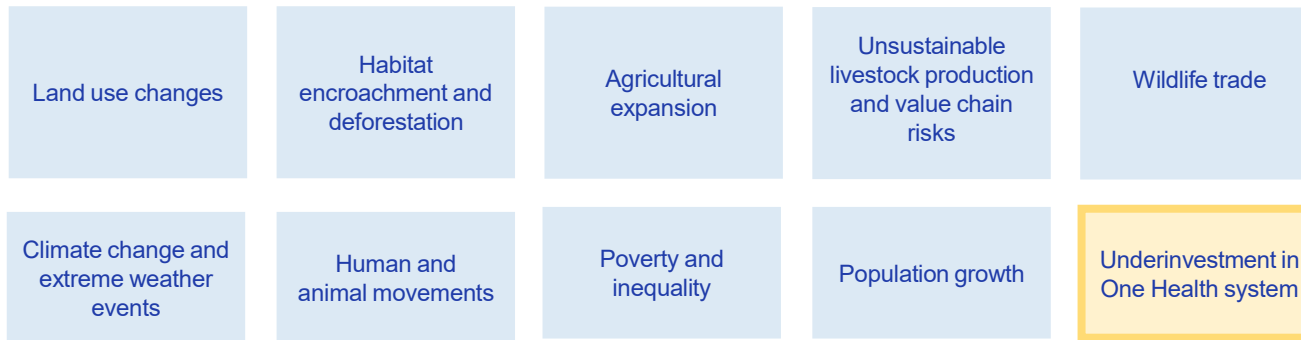
No one sector or one discipline can tackle health threats alone



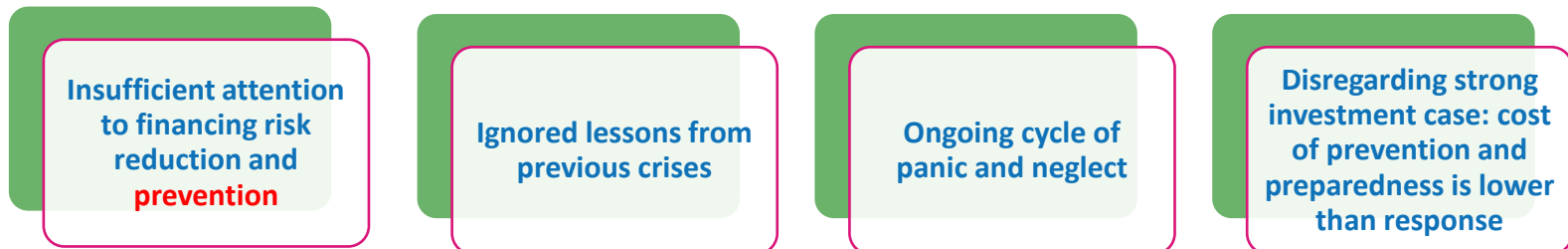


# Drivers of Health Risks

## Human - Animal - Environment interface



Three core domains related to land use, food systems, and urbanization  
influenced by two crosscutting domains—climate change, inequality,  
and fragility



# The Need for Change

Recent events underscore the critical connection between human, animal, and environment health and the consequences of neglecting it

75% of emerging infectious human diseases have an animal origin

Human actions have severely altered 75% of terrestrial environments and 66% of marine ecosystems

Close contact between people and wild and domestic animals leads to more opportunity for disease spillover

- Growing urgency to **prevent health risks** as pathogens & resistance genes cross all boundaries
- Requires **systems, policies and procedures** to be put in place
- Need **multisectoral & multidisciplinary action**
- Joint use of diverse knowledge & technical innovations

# One Health Economic Benefits

One Health investment framework to reduce pandemic risk

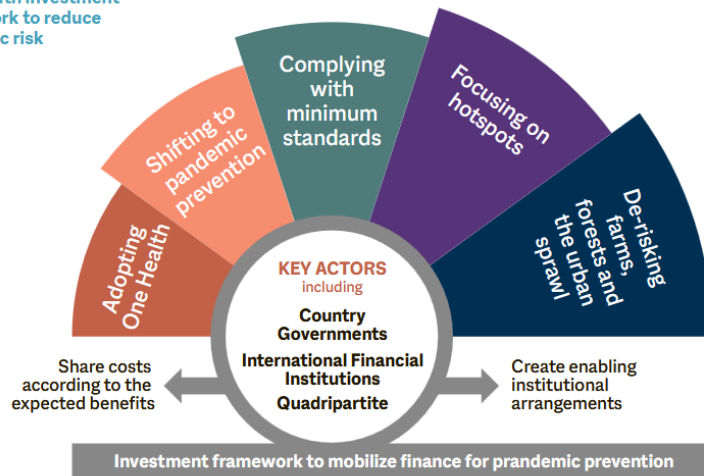
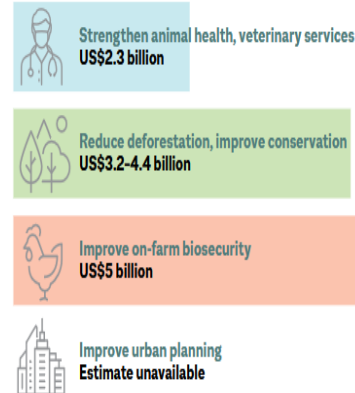


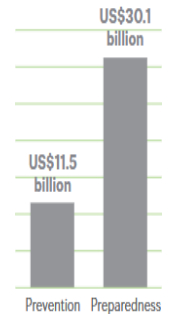
FIGURE 4.

Cost of prevention estimated for animal health services, farm biosecurity, reduction of deforestation, and improved conservation

Annual cost of prevention



Prevention compared to Preparedness



## Global evidence :

**Every \$1 invested in One Health yields \$5 or more in savings on outbreak response and recovery.**

The World Bank's flagship report lays out the economic case for One Health—highlighting that a comparatively modest annual investment of **\$10–11.5 billion** could help prevent pandemics and potentially save **up to \$30 billion per year** in response costs, plus generate high returns (up to 86%) in saved lives and avoided economic damage.

source: <https://hdl.handle.net/10986/38200>

# Benefits of the One Health approach

- **VBD outbreaks impose massive economic costs:**
- *Bluetongue Virus (2006–2009)*: Estimated **€1 billion** losses in Europe in direct and indirect costs
- **One Health reduces long-term costs by:**
- Enabling **early detection**, avoiding widespread epidemics.
- Supporting **coordinated interventions**, reducing redundant or conflicting measures.
- Promoting **sustainable vector control**, cutting repetitive pesticide and treatment costs.

## Ability to tackle complex health threats head-on by:

- **Sharing resources**
- **Reducing duplication**
- **Providing a framework for collaboration**

**One Health is not only scientifically essential but economically smart—protecting health and economies simultaneously.**

# Key One Health Areas at WOAAH to Prevent Health Risks



**Standards & Policy Development**



**Capacity Building**



**Advocacy and political engagement**



**Raising Awareness**



**Science, Research and Data Sharing**



**Enhancing emergency Preparedness and Response Frameworks**



**Global Collaboration**



**Surveillance and Early Warning Systems**

**WOAH is committed to the One Health approach to confront these complex global challenges**



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## Advancing One Health through the Quadripartite Collaboration

### Strategic Priorities



**Implement  
ation of the  
One Health  
Joint Plan  
of Action  
(JPA)**



**Science and  
Evidence**

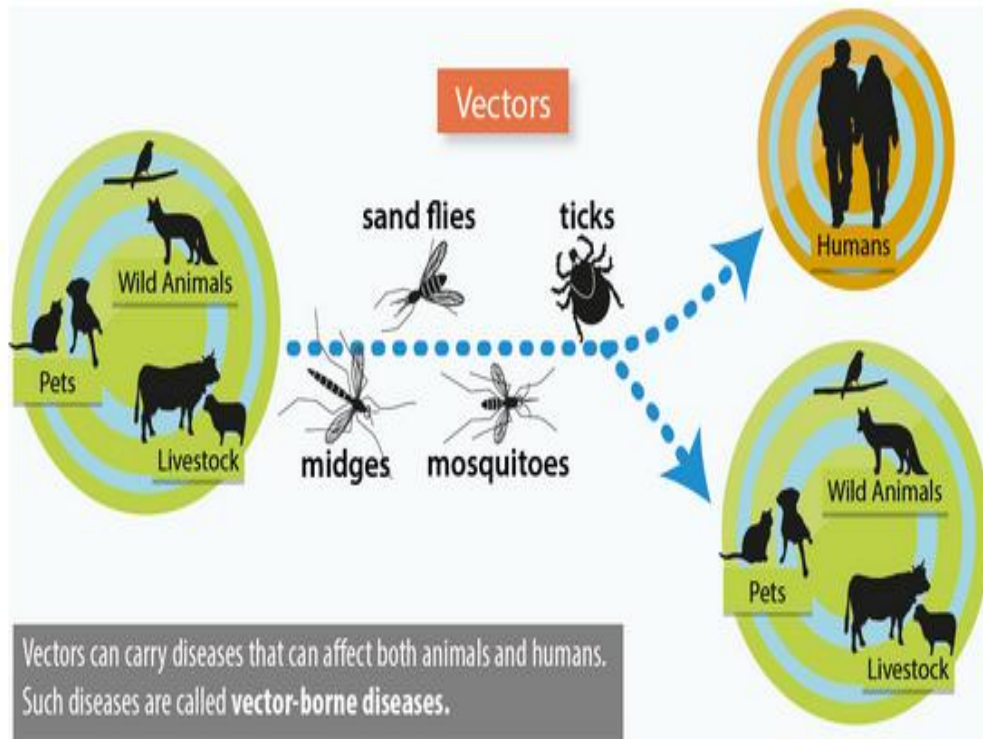


**Political  
Engagement  
and Advocacy**



**Leveraging  
investment for  
OH including  
the QPT  
Secretariat**

# Why One Health for VBD Risk Management?



*Images courtesy of EFSA*

Builds on complexity: VBDs involve animals, humans, vectors, environment

Overcomes sectoral silos seen in past failures

Complements technical tools with cross-sectoral strategy

Enhances coordination, early detection, and response.

# The Unique Value of One Health

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## 1. Integrated Risk Assessment:

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- Combines climate, ecological, veterinary & human health data
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## 2. Shared Surveillance Systems:

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- Early warning across species and sectors
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## 3. Cross-sector Response Planning:

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- Joint contingency plans
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## 4. Coordinated Vector Control:

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- Environmentally safe and sustainable
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## 5. Public Engagement & Education:

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- Risk communication at community level

# Case Study 1: PROVNA Project



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Integrated vector  
surveillance: animals,  
environment, vectors

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Multi-stakeholder  
coordination: public health,  
vets, environmental agencies

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Result: Improved risk-based  
surveillance, early detection  
and targeted interventions

# Case Study 2: One Health Joint Surveillance in West Nile Virus (Europe)

Coordinated surveillance in birds, horses, humans

Data sharing across veterinary and public health sectors

Result: Early alerts triggering preventive measures in high-risk areas



TECHNICAL REPORT

**Surveillance, prevention  
and control of West Nile virus  
and Usutu virus infections  
in the EU/EEA**





## **European Emerging and Vector-borne Diseases Network (EVD-Net)**

The Emerging and Vector-borne Diseases (EVD) team of ECDC communicates, consults and cooperates with EVD-Net on surveillance, response, prevention, control and preparedness aspects of EVDs and vectors, with particular focus on country needs and country support possibilities.

# Challenges One Health Helps Overcome

Gaps in cross-sector coordination



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graph TD; A[Gaps in cross-sector coordination] --> B[Data silos (veterinary, human, environmental)]; B --> C[Resource inefficiencies]; C --> D[Fragmented response to emerging threats]; D --> E[Lack of community involvement];
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Data silos (veterinary, human, environmental)

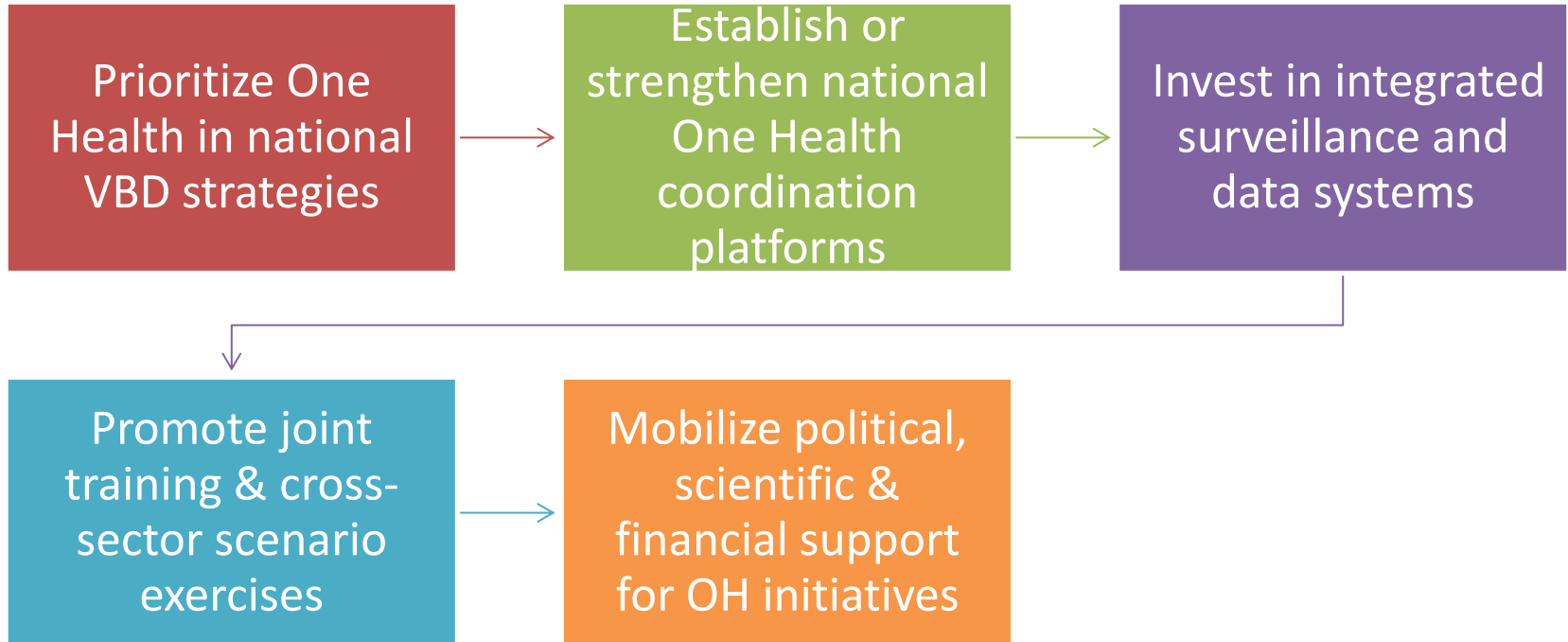
Resource inefficiencies

Fragmented response to emerging threats

Lack of community involvement

# Call to Action

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# Conclusion

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One Health is not an option – it is essential.

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For effective VBD risk management and control

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✓ Break sectoral silos

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✓ Build integrated systems

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✓ Foster collaborative, science-based decision making

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The time to act is now.

# Thank you

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