

# ONLY CONNECT

## What COVID-19 can teach us about the governance of systemic environmental risks

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# EMERGING ZOOONOTIC DISEASES (EZDs)



Virus in wildlife species

Transmitted to other animals (wild or domesticated), with possible mutations occurring

Transmitted to humans

Key factors: habitats encroachment and degradation; intensive farming; (illegal) hunting and trading

# THE RISK PROFILE

Globalization risks

Intersystemic systemic risks

Systemic risks which trigger systemic risks in other systems

Fading swans

Combination of mature and developing risks



**111 viral families** have been discovered globally to date.



Of these 111 viral families, the GVP will target **25** containing viruses known to infect (or to have substantial risk of infecting) people.



In these 25 families, an estimated **1.67 million** unknown viruses exist in mammals and birds—hosts that represent 99% of the risk for viral emergence.

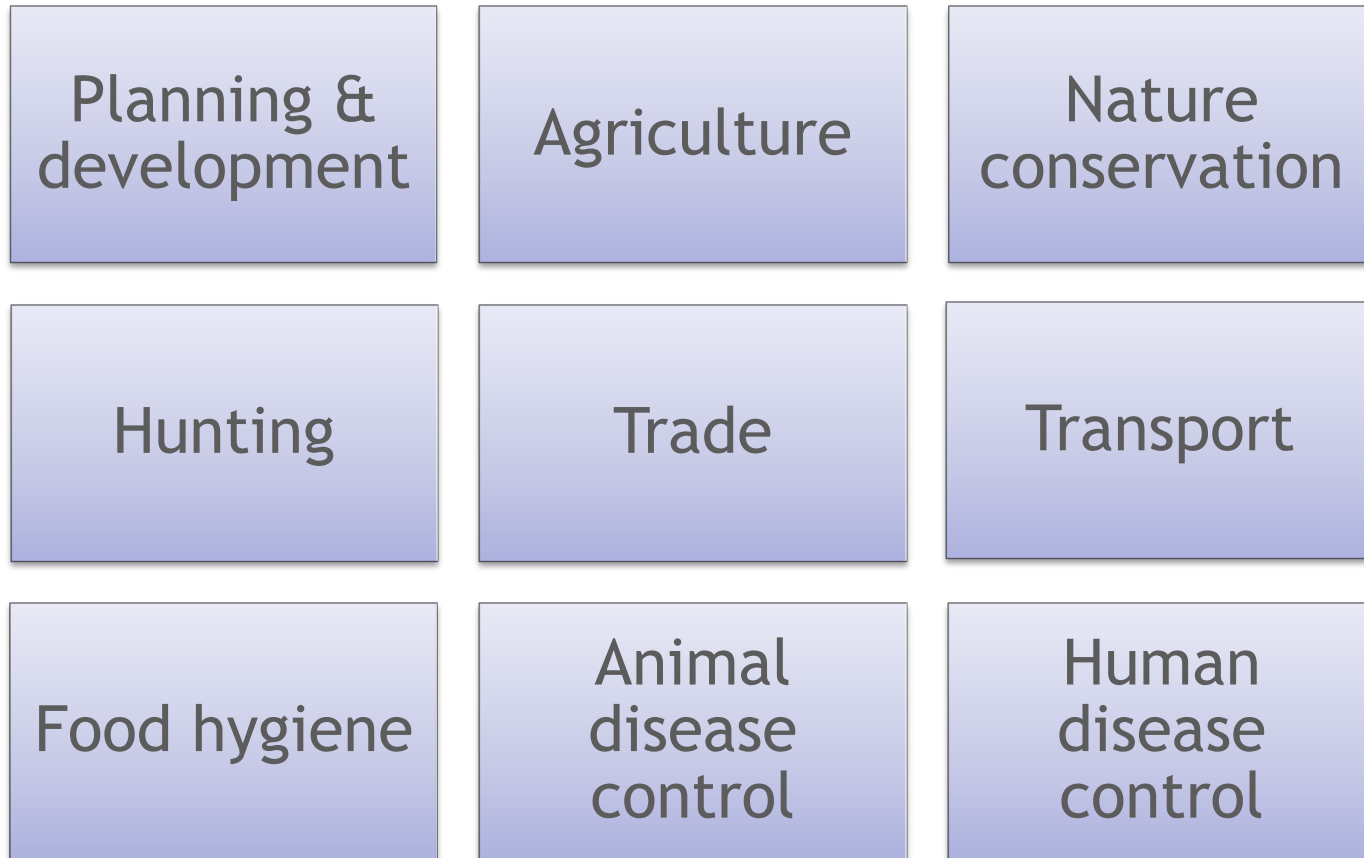


Of these 1.67 million viruses, an estimated **631,000 to 827,000** likely have the capacity to infect people.

# Similarities with climate change

- Intersystemic
- Globalization
- Fading swans
- Mature and developing

# EMERGING ZOOONOTIC DISEASES (EZDs): THE REGULATORY LANDSCAPE



# Regulatory frameworks

## Planning & development

- No provisions

## Farming

- OIE codes
- Domestic: Animal welfare act
- Animal welfare codes of practice

## Nature conservation

- CBD
- Ramsar
- CMS
- OIE
- Domestic regulation

# Regulatory frameworks

## Hunting

- ICRW
- CITES
- Domestic regulation

## Trade

- GATT (Art XX)
- SPS
- CITES
- OIE codes

## Transport

- OIE codes
- Domestic: Council Reg 1/2005 on protection of animals during transport

# Regulatory frameworks

## Food hygiene

- CAC
- Domestic: EU Food Safety Regulation & Food Hygiene Regulation

## Animal disease control

- OIE (TAHC)
- Domestic (e.g. culling regulation)

## Human disease control

- OIE
- Pandemic influenza Preparedness Framework
- Domestic



# Regulatory frameworks

LEAST DEVELOPED

## Planning & development

- No provisions

## Farming

- OIE codes
- Domestic: Animal welfare act
- Animal welfare codes of practice

## Nature conservation

- CBD
- Ramsar
- CMS
- OIE
- Domestic regulation

# Regulatory frameworks

IMPLEMENTATION  
AND  
ENFORCEMENT  
CHALLENGES

## Hunting

- ICRW
- CITES
- Domestic regulation

## Trade

- GATT (Art XX)
- SPS
- CITES
- OIE codes

## Transport

- OIE codes
- Domestic:  
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# Regulatory frameworks

SOFT  
TRANSNATIONAL  
LAYER

## Food hygiene

- CAC
- Domestic: EU Food Safety Regulation & Food Hygiene Regulation

## Animal disease control

- OIE (TAHC)
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# Regulatory challenges and opportunities

Is there a need to shift the focus towards preventative regulation?

Legal perspective: prevention principle *but* ilo proportionality

Regulatory perspective:

Shavell's prevent - act - harm intervention model

# Prevent-act-harm

## FACTORS

- Uncertainty
- Likelihood that a harm will have been prevented
- Individual information
- Opportunity costs & enforcement costs
- Level of sanctions

Closing the parks

Patrolling the parks and enforcing social distancing

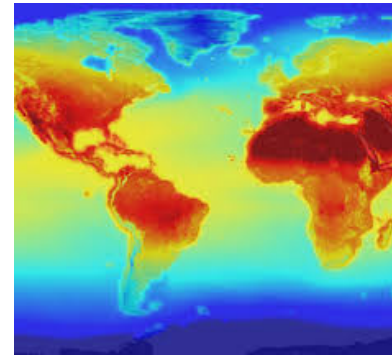
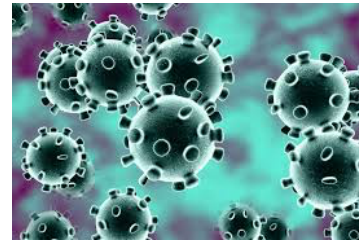
Stocking up on ventilators

# Considerations regarding EZDs

- Growing body of information about hotspots, triggers and transmission pathways
- Greater variation in impact (harm phase)
- Low level of individual information
- Growing likelihood that harm will have been prevented (fading swans)
- Effectiveness challenges in regulating act & harm impairs effectiveness of sanctions

# Adding the intersystemic systemic risk dimension

## Scope for multi-purpose preventive action





# Enforcement challenges





# Messages for the private sector

Need for contributions across the regulatory chain, from land use to enforcement

INTERSYSTEMIC  
SYSTEMIC RISK  
MANAGEMENT  
REQUIRES:

MITIGATION  
STRATEGIES

RESILIENCE  
STRATEGIES

GOVERNANCE  
STRATEGIES