One Health
(an international perspective)

Keith Hamilton
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75% of the **new diseases** that have **affected humans** over the **past 10 years** have been caused by pathogens originating from an animal or from products of **animal origin**.

Each outbreak is a **global threat**.
Figure 3

The cost of various infectious diseases in the past decades. The size of the circles represents the estimated cost in US dollars (billion). The events are:

- **Plague (India), 1994**
- **Nipah virus (Malaysia), 1998**
- **BSE (UK), 1986**
- **BSE (USA), 1986**
- **SARS (Asia, Canada, rest of the world), 2002**
- **HPAI (Asia), 2004**
- **HPAI (Europe), 2005**
- **RVF (Kenya, Somalia, Tanzania), 2006**
- **WNV, 1999**

The cost data is from various sources and the exact figures may vary.
Advancing collaboration at the Human-Animal Interface

• Diseases that are not shared between humans and animals e.g. rinderpest and smallpox

• Shared diseases which impact on both humans and agriculture e.g. avian influenza H5N1, brucellosis, antimicrobial resistance

• **Shared diseases which impact on humans but minimally on animals** e.g. MERS, rabies, Rift Valley fever
One Health is a public good

DETECT AND CONTROL ZOONOTIC DISEASE IN THE ANIMAL SOURCE

• Interventions targeted at the animal source (such as surveillance and control and/or vaccination) are often cheaper and more effective than dealing with zoonotic disease in humans (after spill-over)

• Interventions must be sustainable (social, behavioural, economical) and may require additional investment

• Investments in health services have positive impacts across borders and generations
Interventions at the human-animal interface save lives and are cost effective

Coordinate R and D towards agreed priorities

Mechanisms to allow immediate R and D when needed (emerging diseases)

Incentivize research and development (for ltd. markets)

• Vaccines to tackle zoonoses in the animal source can protect human health
• Surveillance (approaches and diagnostics) in animals to identify at-risk communities
• Vaccines for some animal infectious diseases may reduce dependence on antimicrobials
One Health Successes

• WHO (human health), OIE (animal health), FAO (food) are working together
• Mechanisms established for data sharing and taking action
• WHO engaging the OIE on R and D blueprint
• Frameworks for strengthening health services
  – WHO International Health Regulations (human)
  – OIE Performance of Veterinary Services (animal)
WHO-OIE Operational Framework on good governance of animal and human health services

• Shared responsibilities
• Legal framework (IHR/OIE standards)
• Tools
  – Assessment
  – Monitoring
  – Costing

National WHO-OIE workshops in Azerabijan, Thailand (2014), Costa Rica (2015); Vietnam, Philippines, Indonesia (tbc); GHSA countries?
Key messages

• Global **public health security** is not possible without animal health security

• It is more cost effective to **invest in preparedness** than to react to disasters

• **Further investment needed** to advance One Health

• Build on what has been done, **use existing capacity building frameworks** which have been agreed by all countries