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Shifting the paradigm upstream in outbreak control

Francesca Viliani

@fravili – francesca.viliani@internationalsos.com

WORLDWIDE REACH. HUMAN TOUCH.



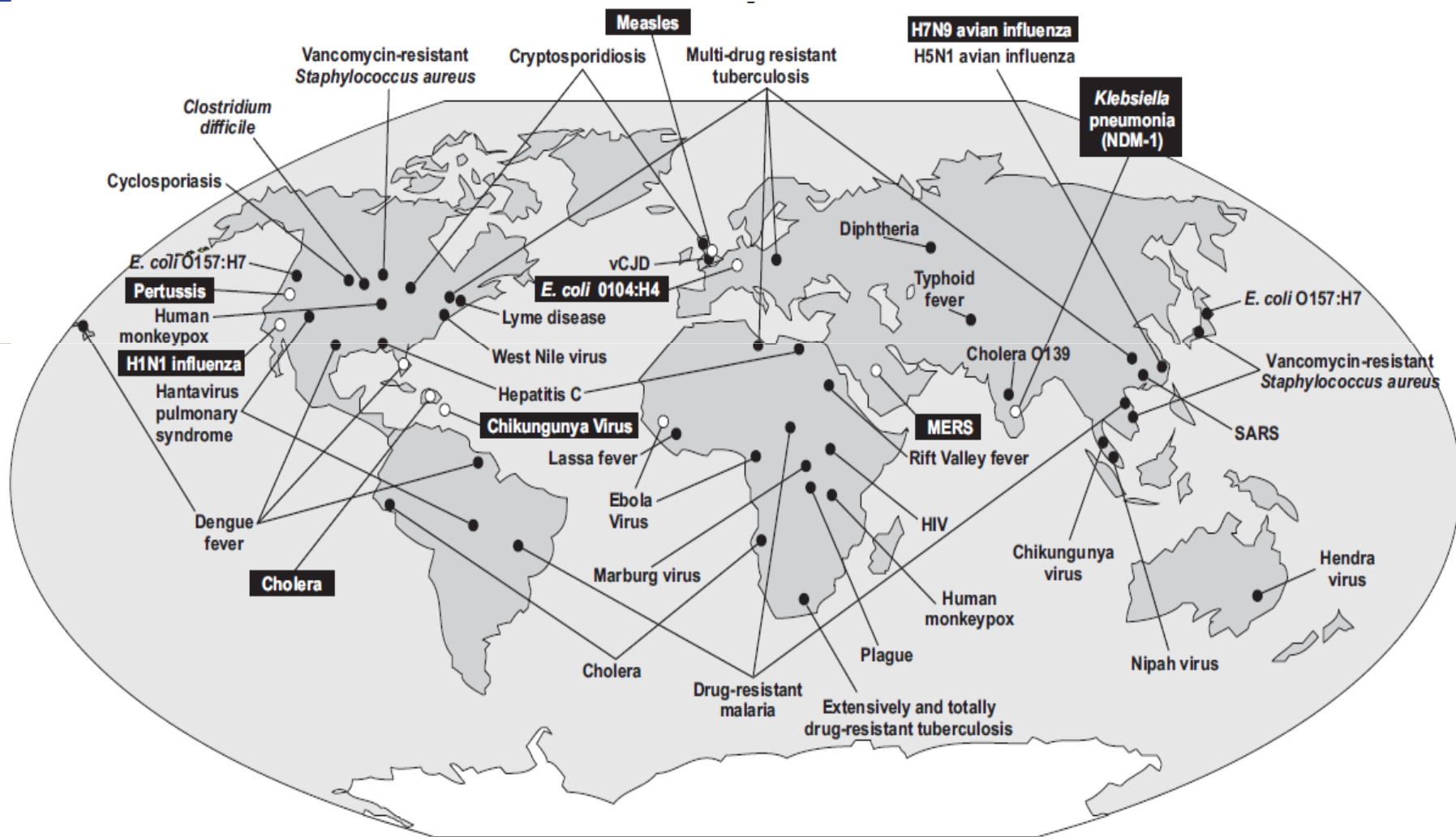
Agenda



- Emerging Infectious Disease
- The consequences of Ebola
- Why Private Sector and infrastructure
- Sendai
- Way forward

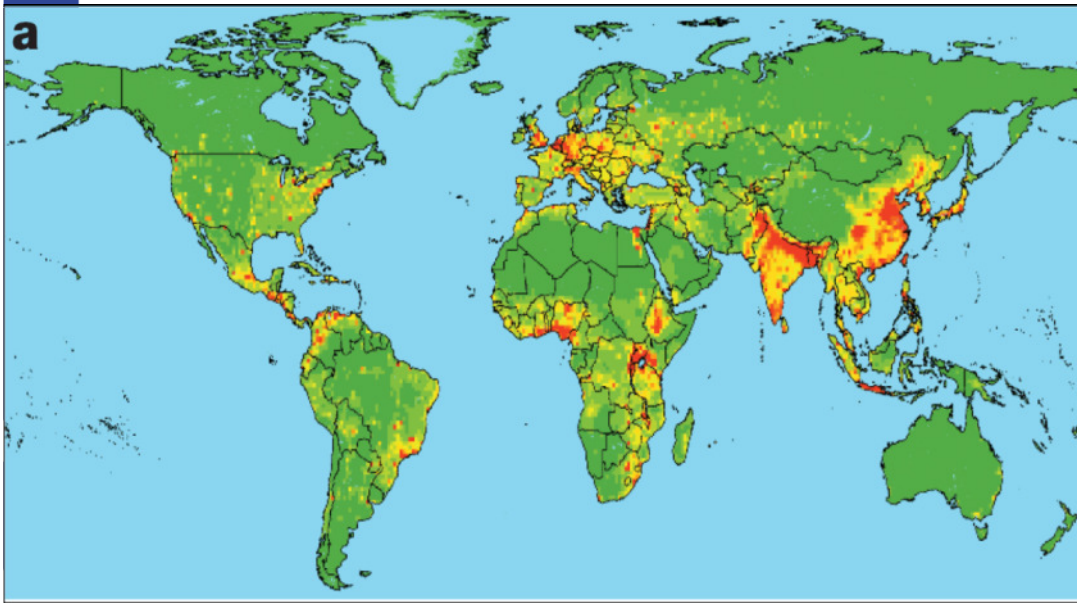
Impacts of the Highly Improbable?

Emerging and re-emerging infectious diseases, 1990-2013



What are EID and what we know?

- 75% of emerging disease threats arise from animal reservoirs (zoonotic) - EID events are increasing in terms of frequency and impact
- The “human-animal-ecosystem interface” is at the center of new disease emergence
- Emergence is closely linked to geographic “hot spots”



Jones et al. “Global trends in emerging infectious diseases” Nature 2008

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Top 10 risks in terms of Impact

- 1 Water crises
- 2 Spread of infectious diseases
- 3 Weapons of mass destruction
- 4 Interstate conflict
- 5 Failure of climate-change adaptation
- 6 Energy price shock
- 7 Critical information infrastructure breakdown
- 8 Fiscal crises
- 9 Unemployment or underemployment
- 10 Biodiversity loss and ecosystem collapse

Existing regulatory framework



Contributing to One World, One Health*

A Strategic Framework for Reducing Risks of
Infectious Diseases at the
Animal–Human–Ecosystems Interface

14 October 2008

Consultation Document

Produced by:

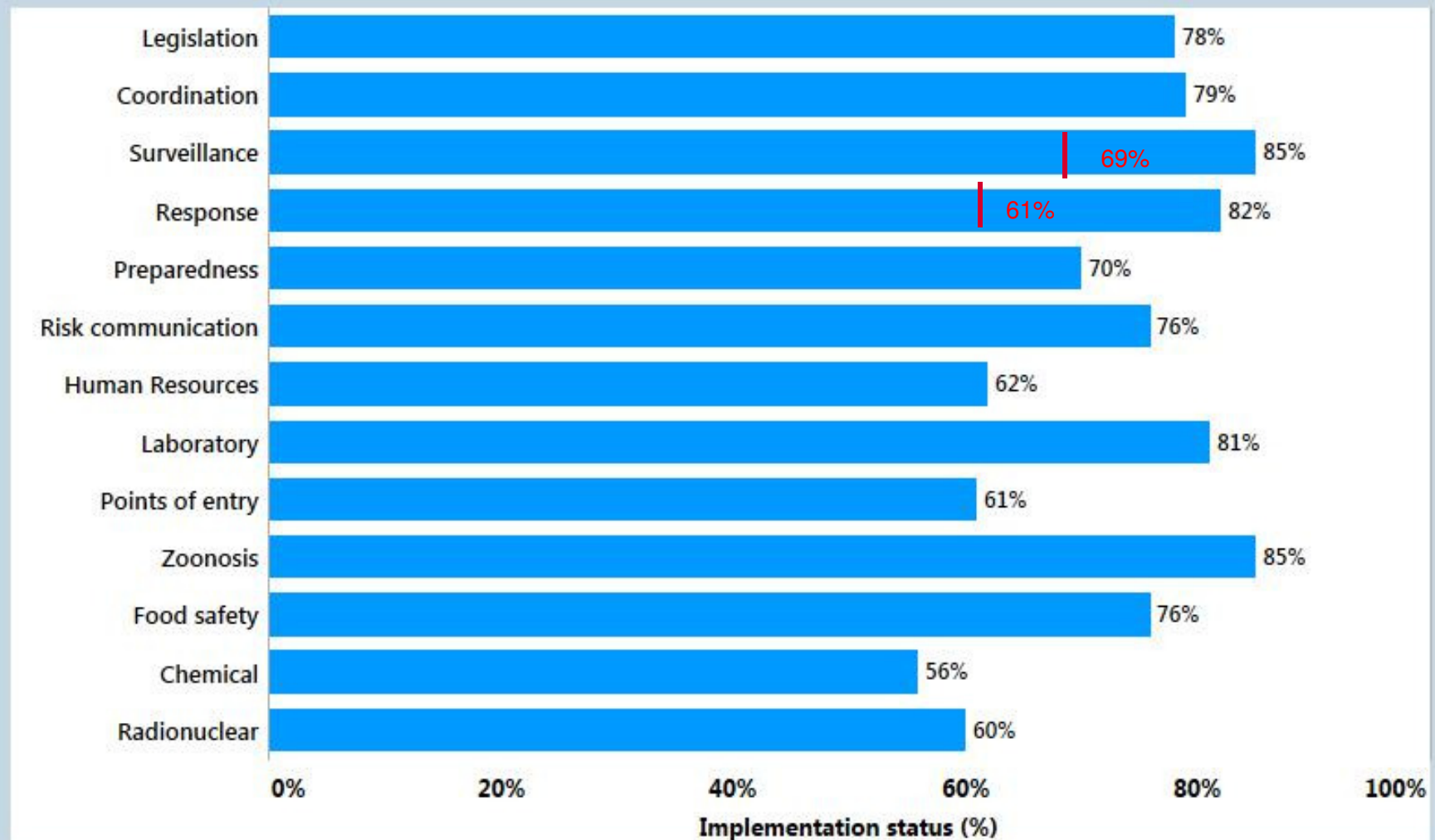


World Health
Organization



Global Level of Preparedness

IHR core capacities implementation status, 2014
(160 reporting countries)



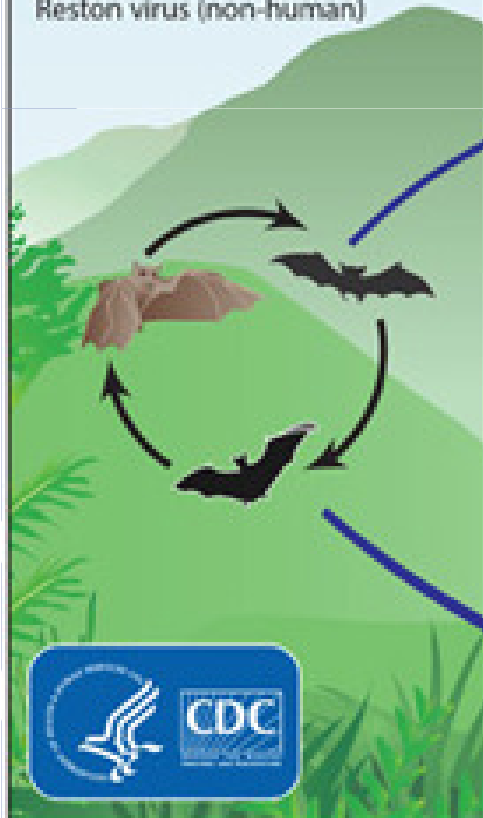
Ebolavirus Ecology

Enzootic Cycle

New evidence strongly implicates bats as the reservoir hosts for ebolaviruses, though the means of local enzootic maintenance and transmission of the virus within bat populations remain unknown.

Ebolaviruses:

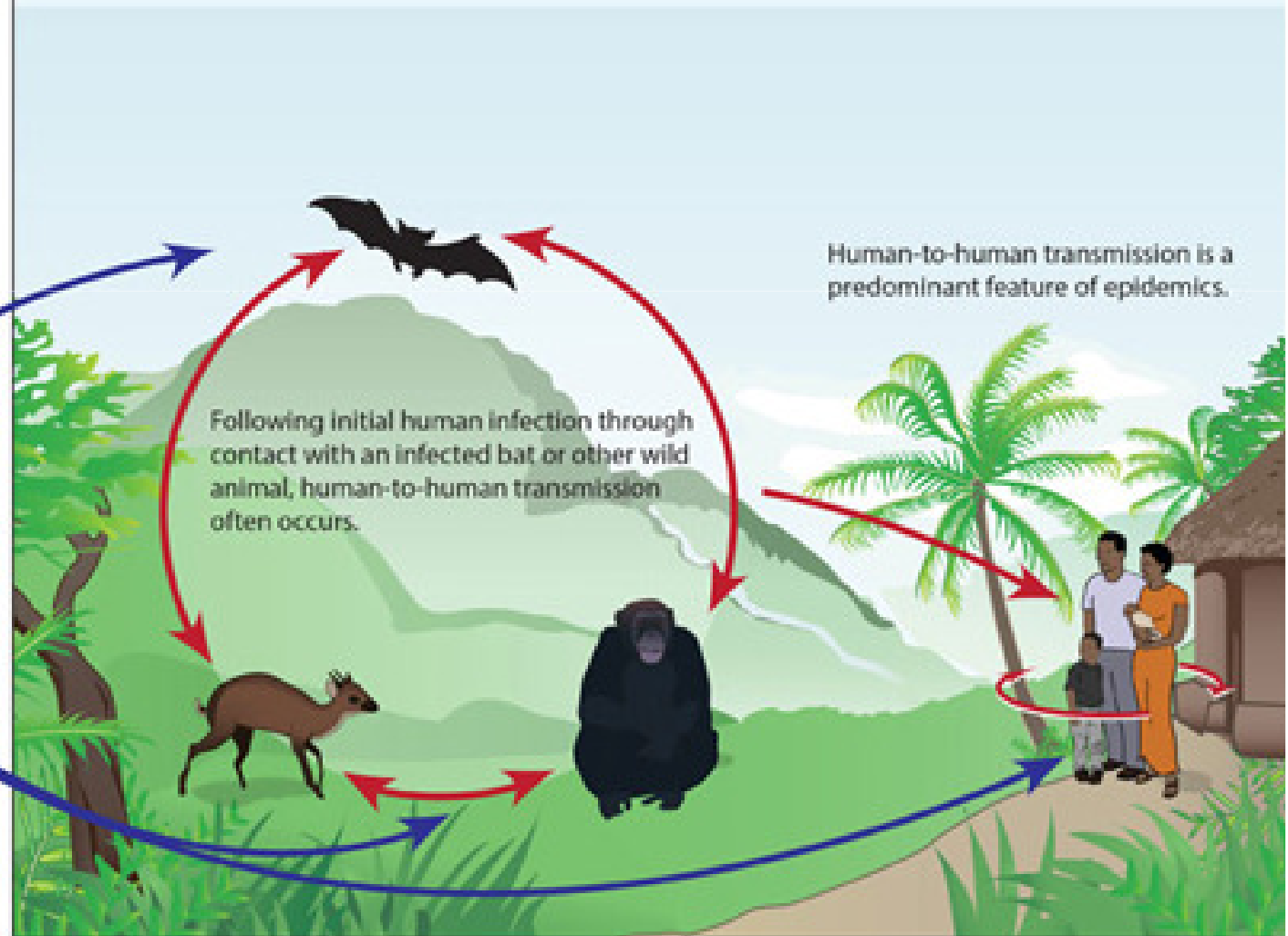
- Ebola virus (formerly Zaire virus)
- Sudan virus
- Tai Forest virus
- Bundibugyo virus
- Reston virus (non-human)



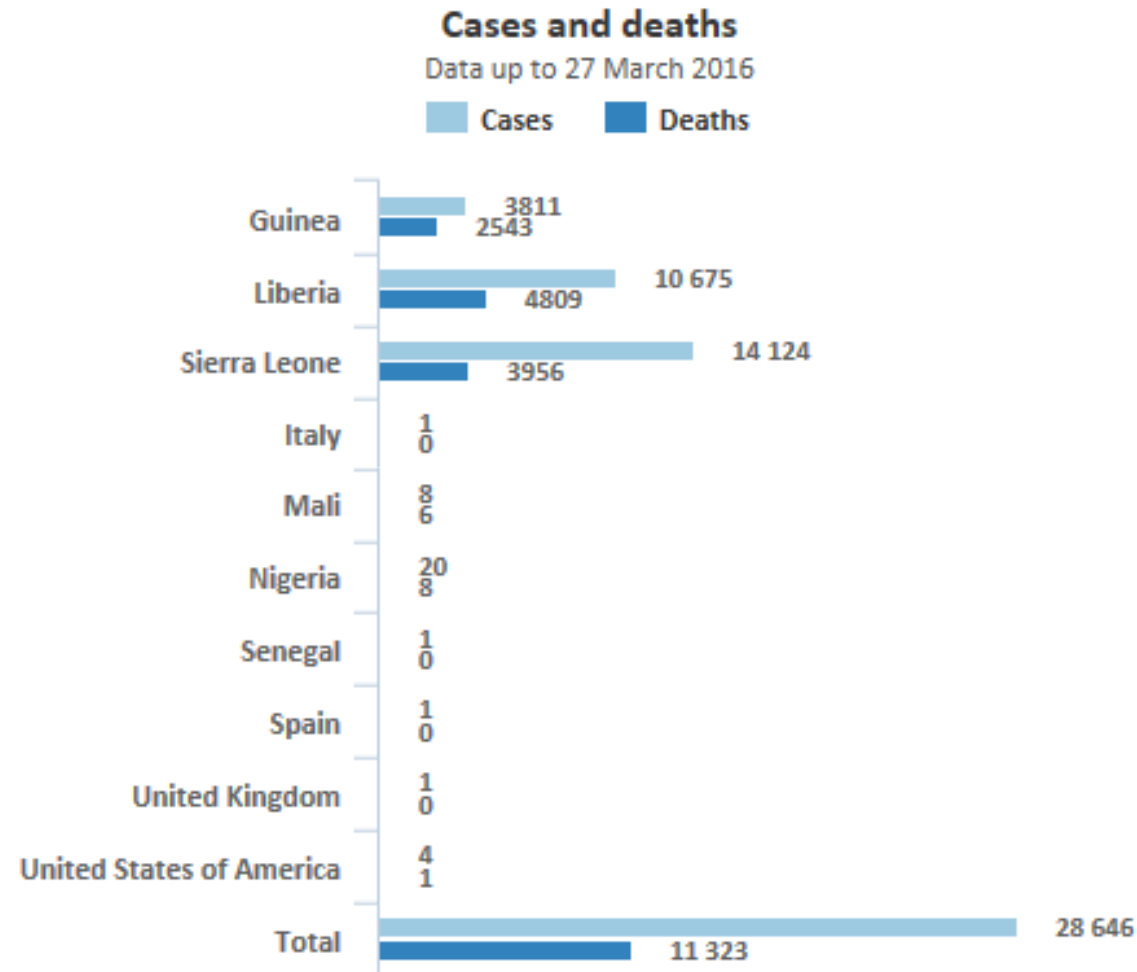
Epizootic Cycle

Epizootics caused by ebolaviruses appear sporadically, producing high mortality among non-human primates and duikers and may precede human outbreaks. Epidemics caused by ebolaviruses produce acute disease among

humans, with the exception of Reston virus which does not produce detectable disease in humans. Little is known about how the virus first passes to humans, triggering waves of human-to-human transmission, and an epidemic.



Ebola human toll



Social impacts

- Fewer people seek medical care for fear of stigma
- Weakened health system -> increase of morbidity
- High mortality among health care workers
- Food insecurity
- Lack of education due to school closure
- Commercial closure & increase of unemployment
- Diminished trust in governments
- Increase of ethnic divisions & altered cultural norm
- Further increased poverty & reduced resilience
- STIGMA

<http://www.africa.undp.org/content/dam/rba/docs/Reports/ebola-west-africa.pdf>

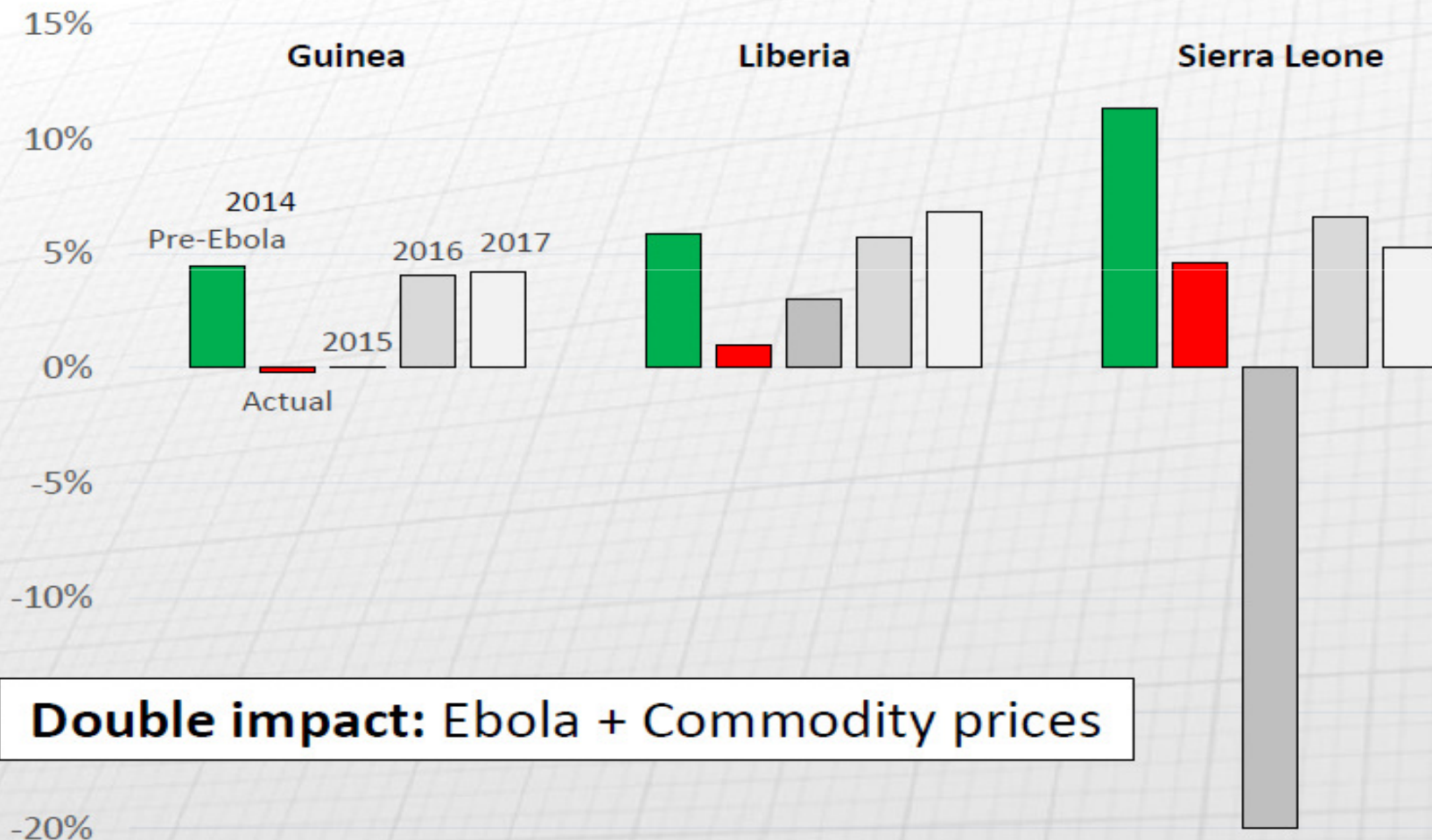
http://www.uneca.org/sites/default/files/PublicationFiles/eca_ebola_report_final_eng_0.pdf

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The Economic Impacts of 2014-2015 Ebola outbreak - World Bank (2015)

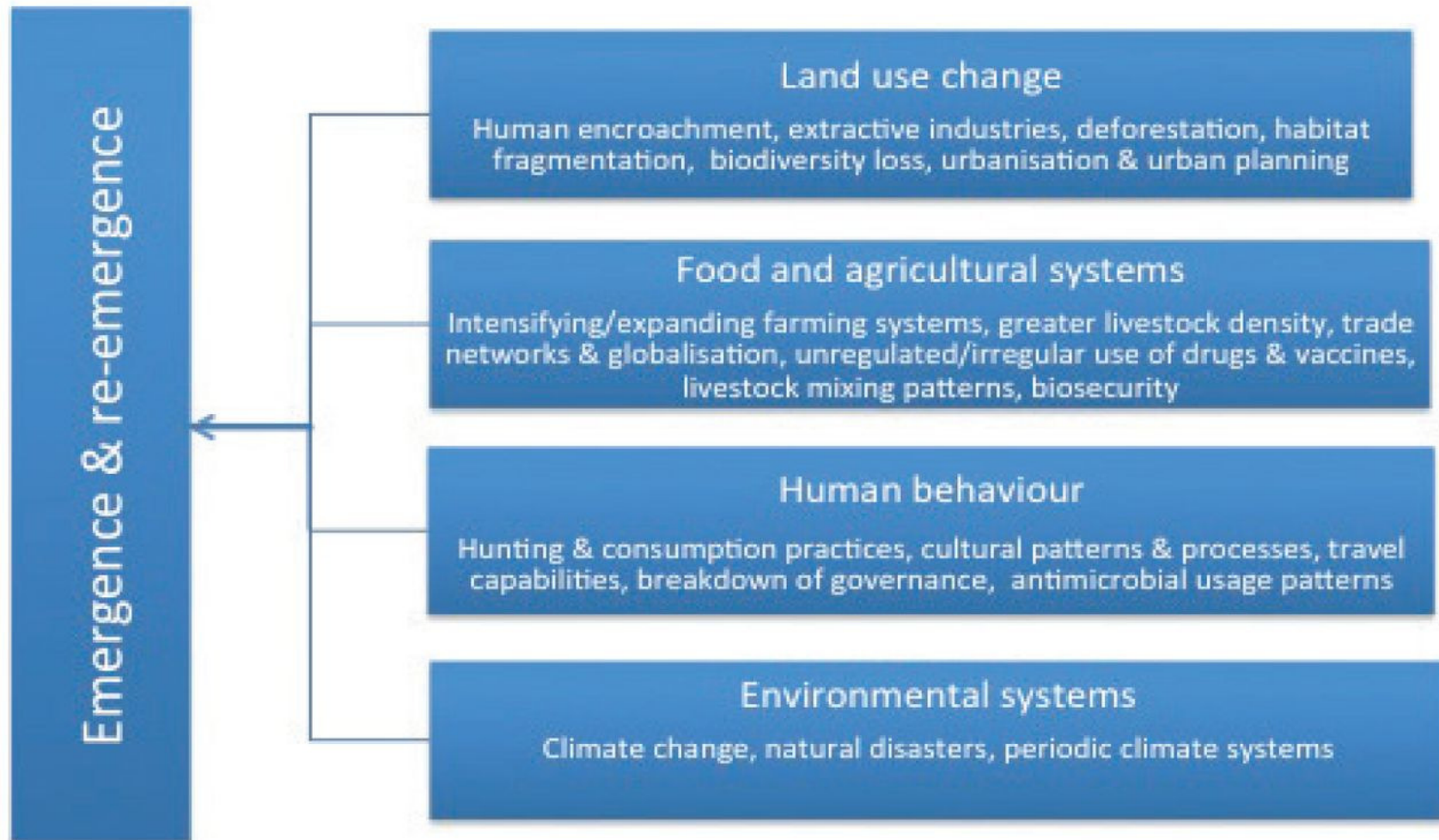
Macro impacts (2014-2017)



Ebola threaten business continuity

- Main challenges faced by all companies operating in West Africa:
 - How to keep operations going and protect their workforce?
- Options:
 - Projects on hold/minimum presence
 - Closure of operations – lead by traditional trigger factors
 - Continuation of operations with implementation of unrealistic mitigation measures
 - Continuation of operations with adapted triggers and implementation of appropriate mitigation measures

Why private sector and infrastructure development?



Ebola lessons learned

- Importance of strengthened health and veterinary systems and the challenges doing so -> **One health**
- Risk management should be **multi sectorial and participative**. Private companies contributed not merely financially but through their core competencies
- **Management of risks start at project design** with a comprehensive impact assessment
- Continuum from prevention, to preparedness, response and restoration

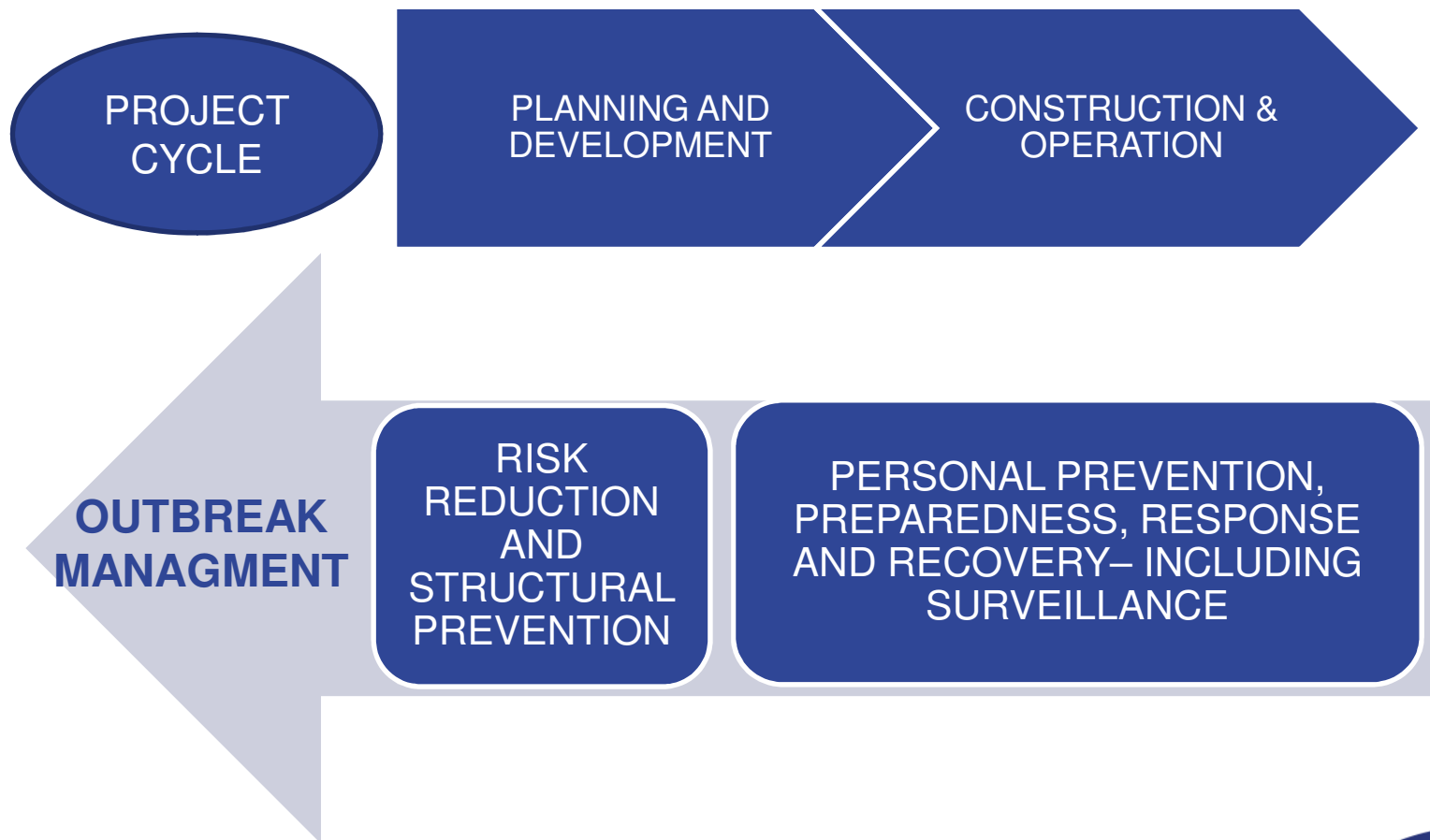


New with Sendai Framework

- Hyogo Framework for Action recognised biological hazards but not epidemic and pandemics within the context of disaster risk reduction.
- Sendai affirms the commitment to work together to promote health centred emergency and disaster risk management, including epidemics and pandemics.
- Shifted focus to risk management, instead of disaster.
- Recognize the need of multidisciplinary approach to detect, prevent and respond (e.g One Health)
- “Enhance cooperation between health authorities and stakeholders to strengthen country capacity for DRM for health, implementation of IHR and building of resilient health systems.
- Call to business to integrate disaster risk in their management practice and to collaboratively invest in risk reduction and prevention



Shifting the paradigm upstream



Acknowledgment and THANK YOU!

- **IDRAM initiative** : lead by **Chatham House Centre on Global Health Security**, implemented by **International SOS**, supported by the **Emerging Pandemic Threat Program of USAID** and its partners.
- Furthermore, **companies and associations** within the extractive industry sector have provided essential input and support to the process.
- Finally, exchanges with **other practitioners and experts** have further contributed to the discussion

