



**PMAC** | PRINCE MAHIDOL  
AWARD CONFERENCE **2018**



## **PARALLEL SESSION 4.5**

**BRINGING SOLUTIONS INTO FOCUS: HARNESSING THE POWER OF AN  
ECONOMIC LENS**



## | BACKGROUND

Beyond the tragic loss of human life, the economic impact attributable to epidemics and pandemics can be catastrophic. SARS, \$30 billion; Pandemic H1N1: \$40 billion; Ebola: \$2.8 billion in the three West African economies alone. Recent estimates place the inclusive costs from a moderately severe influenza pandemic at \$570 billion annually, within the range projected for the annual cost associated with global climate change. And, without intervention, the cumulative economic impact from anti-microbial resistance (AMR) through 2050 is projected to exceed \$100 trillion (two-thirds of which is in low- and middle-income countries), substantially more than current annual global economic output.

Despite a repeated pattern of costly response, the economic case for investing in proactive, preventive measures targeting a reduction in the pressures that facilitate disease emergence has not been widely adopted. A yearly investment of \$1.9-3.4 billion to strengthen animal and human public health systems would yield a global public benefit estimated at over \$30 billion annually through avoided economic damages associated with pandemics. High return on investment is expected even if only a portion of pandemics are prevented, and strengthened One Health capacity in countries may confer additional benefits via improved prevention and control of endemic disease and AMR. However, challenges in mobilizing capital; an anemic evidence base and difficulty in translating evidence into policy advocacy with budget decision-makers; competing priorities for scarce health systems funding; and inequitable distribution of costs and benefits across sectors and stakeholders are all amongst the impediments to adopting the economic case for investing in preventive approaches.

Recent efforts designed to address these challenges have employed a range of approaches. Structures prioritizing risk avoidance and transference are being developed (e.g. multi-sectoral health security planning and capacity investments; epidemic/pandemic insurance structures). Also underway are new models capturing the economic impact of disease emergence as a function of land use, which will enable the disease regulatory role of ecosystems to be fairly valued and incorporated into payment for environmental services frameworks. And global financing structures promoting targeted, multi-sectoral systems strengthening and incentivizing investments in preparedness are being established.

## | OBJECTIVES

- Highlight successful practices and approaches that have demonstrated promise in fostering decision making informed by economic analyses;
- Profile structures with proven utility in transcending the identified challenges, including resource prioritization and inequitable sectoral cost and benefit distribution;
- Discuss approaches that strengthen the economic evidence base for investments in proactive, preventive disease mitigation approaches; and
- Review policy and regulatory options, such as tax and incentive structures, that can contribute to a favorable investment environment for more wide scale adoption of risk mitigation approaches



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Panelist / Moderator

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Catherine Machalaba serves as Policy Advisor at EcoHealth Alliance. As part of the USAID Emerging Pandemic Threats PREDICT-2 project she analyzes the effectiveness of One Health policies and practices, and is a researcher on a study of the epidemiology and ecology of Rift Valley Fever virus in South Africa. She works closely with partners at the World Bank, WHO, Convention on Biological Diversity and the Towards a Safer World network to advance environment, health and sustainable development synergies, and is a lead author of the World Bank Operational Framework for Strengthening Human, Animal and Environmental Public Health Systems at their Interface. Catherine chairs the American Public Health Association's Veterinary Public Health group and is program officer for the IUCN Species Survival Commission Wildlife Health Specialist Group. She holds a degree in Biology and a Masters in Public Health. Prior to joining EcoHealth Alliance in 2010 she conducted vector-borne disease surveillance and outreach at a district health office and completed a fellowship in healthcare systems redesign.