

Surveillance and Early Detection: Role of Laboratory Data

SESSION VI PART A - IDENTIFYING SHORT -TERM STRATEGIES TO ENHANCE LABORATORY CAPABILITIES, CAPACITIES, AND COORDINATION: SURVEILLANCE AND EARLY DETECTION

Future of the Nation's Laboratory Systems for Health Emergency Response: A Works
National Academies of Science and Medicine March 24 2023

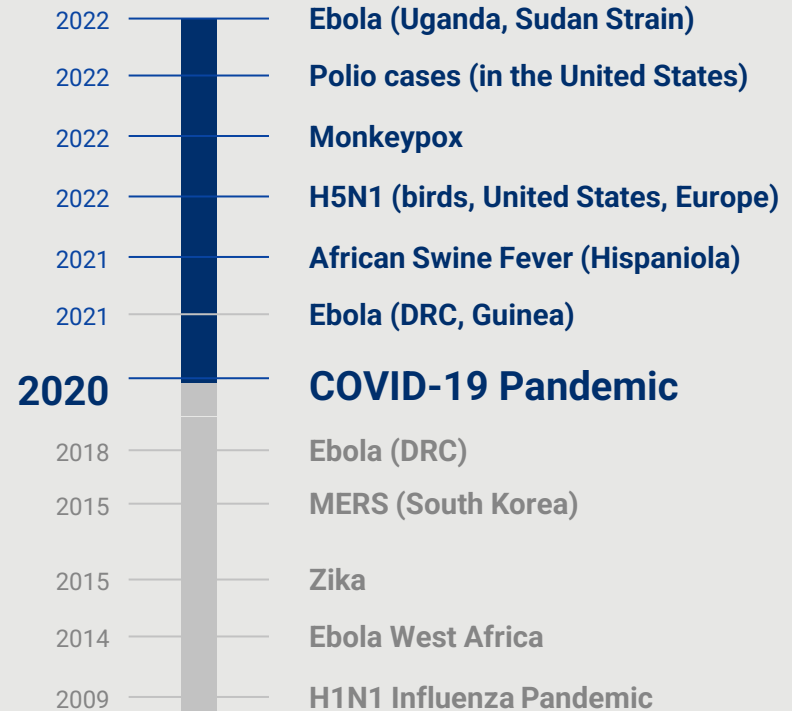
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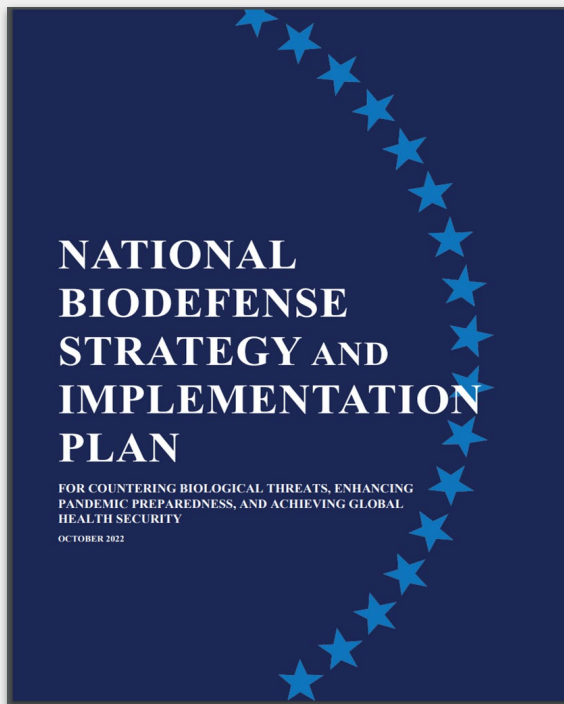
Zoonotic Emerging Infectious Diseases are Increasing

- 75 percent of new or emerging infectious disease outbreaks are zoonotic .
- Outbreaks are becoming more frequent as interactions between humans, animals, and the environment increase.
- Outbreaks impact every sector of society — public health systems, economies, education systems, food security, and democratic governance.
- Every country remains vulnerable to infectious disease threats , and infectious disease outbreaks do not respect national boundaries.



U.S. Government Priority

USAID's GHS programs are rooted in a legacy of Executive Orders and legislation.



- ★ Global Health Security Agenda (2014, Ebola)
- ★ Executive Order 13747 (2016)
- ★ Global Health Security Strategy (2019)
- ★ National Security Memorandum-1 (2021)
- ★ National Security Strategy (2022)
- ★ National Defense Authorization Act (2022)
- ★ **National Biodefense Strategy (2022)**

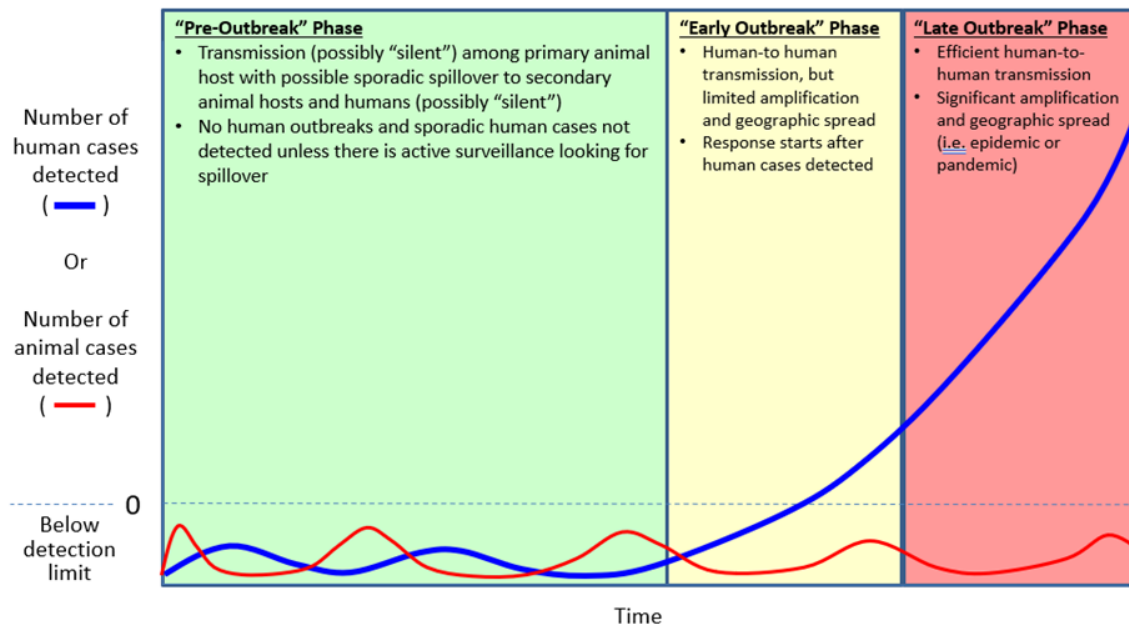
Provide direct support to at least 50 countries and use catalytic leadership...with key donors and partners to support at least 50 additional countries, to achieve "Demonstrated Capacity" in at least 5 technical areas by 2025.

Emergencies



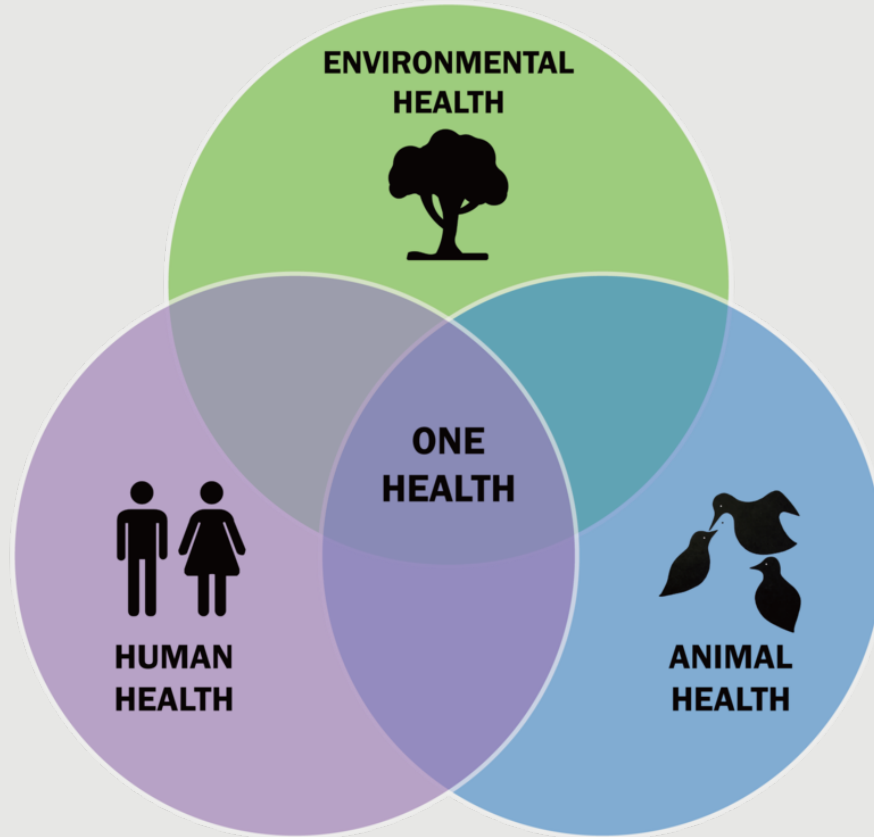
Phases of Health Emergencies

Characteristics of Human Outbreaks with Emerging Zoonotic Pathogens



Need (interlinked) global and country early warning systems that straddle public health, livestock health, wildlife health, pre-outbreak and post-outbreak.

Implementing the “One Health” Approach



Strategies for Public Health

- One Health multi-sectoral coordination across Ministries to strengthen public and animal health systems
- Include monitoring of wildlife, livestock, vectors, and human populations
- Employ multiple tools for detection: Detection of specific pathogens; Broad approach to detect multiple, evolving or emerging pathogens
- Improve public and animal surveillance and laboratory systems to test and report for animals and people.
- Connect communities, surveillance and lab networks through coordination with ministries across countries and regions; share results and data across government sectors
- Link to a global early warning systems to detect disease transmission from vectors and animals to humans

Thank you!

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