



Strengthening laboratory capacity in response to emerging pandemic threats: FAO, OIE and WHO working together

Vision

A world capable of preventing, detecting, containing, eliminating, and responding to animal and public health risks attributable to zoonoses and animal diseases with an impact on food security through multi-sectoral cooperation and strong partnerships.

Organisms circulating in domestic and wild animal populations can potentially pose a threat to both animal and human health. As humans increasingly move into areas that are only sparsely populated, the risk of exposure to previously unknown agents is increased. The changes in eco-systems resulting from human activity may result in the emergence and spread of novel pathogens. Both the animal health and human health sectors have an interest in, and responsibility for, monitoring and controlling these pathogens.

There is a need to strengthen animal health and human health institutions and partnerships that are responsible for managing existing and novel diseases. When appropriate, protocols and standards for responding to emerging zoonotic diseases should be jointly developed. Where a disease has the potential to impact a large number of people or animals improvements in governance, infrastructure and response capacity can have national significance.

FAO-OIE-WHO Collaboration

Sharing responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces.

Early detection of zoonotic pathogens emerging in wild and domestic animal populations before they become a threat to human health is a priority for the public health and animal health sectors. An effective and credible laboratory service is an essential component of any early detection system and is needed by countries to fulfill their reporting obligations to OIE on listed animal diseases and unusual epidemiological events or emerging diseases, and for investigating events of potential international public health concern and reporting to WHO as required by the International Health Regulations (IHR).

Recognizing this, the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO), with their long-standing commitment to strengthening laboratory capacity and networking globally, have initiated a number of collaborative projects to help strengthen laboratory capacity and networking. Examples of these include the FAO/OIE/WHO Global Early Warning Systems for Animal Diseases including Zoonoses (GLEWS), the joint OIE/FAO Network of Expertise for Animal Influenza (OFFLU), the WHO Global Foodborne Infections Network (GFN), and the WHO Emerging and Dangerous Pathogens Network (EDPLN).

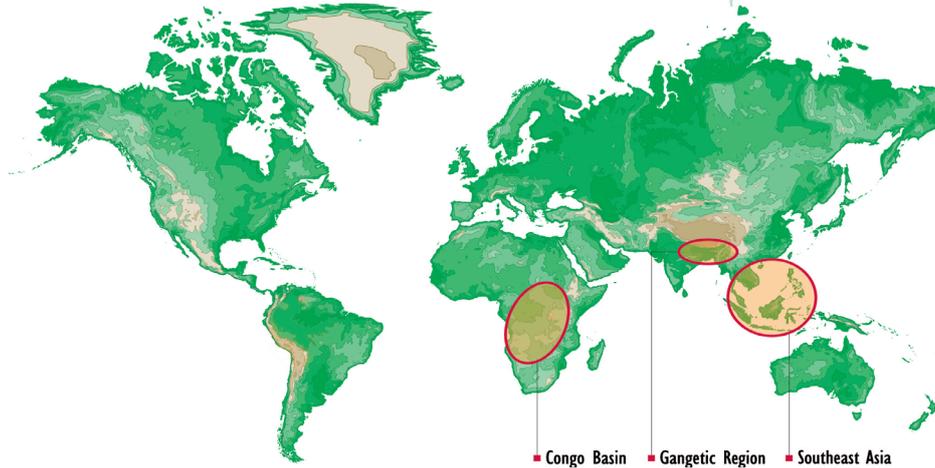


The IDENTIFY project

Recognizing the unique role played by the three organizations in promoting human and animal health at the global level, the United States Agency for International Development (USAID) invited FAO, OIE and WHO to jointly implement the IDENTIFY component of their Emerging Pandemic Threats (EPT) Program.

The IDENTIFY component seeks to strengthen national laboratory capacity for rapid and accurate detection of targeted diseases in regions defined by USAID as those where the risk of emerging human and/or animal diseases is highest. These regions have been identified as: the Congo Basin in central Africa and countries in South and South-East Asia.

The other components of the EPT program address detecting novel pathogens in wildlife (PREDICT); strengthening outbreak response capacity (RESPOND); and developing behaviour modification strategies to reduce the risk of disease transmission between animals and people (PREVENT).



FAO/OIE/WHO are implementing the IDENTIFY project through their existing institutional frameworks, mechanisms and networks.

Technical capacity building activities:

- Developing a list of the priority animal and human diseases in each of the selected regions and identifying the national, regional and international reference laboratories that are available to provide technical support for their detection.
- Review of existing FAO/OIE/WHO assessments of capacity at the national and institutional level to identify gaps and assist with capacity-building planning. Later stages would involve targeted evaluations using standardized laboratory assessment tools focused on strategically developing overall network capacity.
- Key stakeholder meetings (awareness workshops) at regional level including participants from relevant government departments to identify regional priorities and support the development of cross-sectoral approach for laboratories.

Development of guidance, policy and training:

- Support for the preparation and harmonization of joint international guidelines and standards for laboratories and promotion of national laboratory policy development.
- Development of standard operating procedures, guidance, policy and training consistent with the One Health approach.

Laboratory quality systems:

- Development of capacity building activities based on the joint FAO/IAEA/OIE/WHO Global Survey on Laboratory Quality Standards and External Quality Assessment Schemes.
- Focused activities around such themes as biosafety/biosecurity, quality assurance, specimen collection and handling and shipping.
- Development of FAO/OIE/WHO region-specific training materials.

Laboratory networking:

- Support for existing global networks with a regional focus, including diseased-based, GLEWS, OFFLU, GFN, EDPLN.
- Supporting the networking of national and regional reference laboratories testing for known diseases with those international reference laboratories institutions and networks involved in testing for novel pathogens in wildlife, domestic animals and humans.
- Establishing or strengthening linkages within and between regional and global laboratory networks across the public health and veterinary sectors.
- FAO/OIE/WHO laboratory twinning initiatives and partnerships.

The strengthening of laboratory networks within and across sectors along with meaningful investments in regional and national capacity building should result in more accurate and timely identification of pathogens threatening animal and human health.



World Health Organization

