One Health



The U.S. Centers for Disease Control and Prevention (CDC) defines the One Health approach as "a collaborative, multisectoral, and transdisciplinary approach — working at the local, regional, national, and global levels — with the goal of achieving optimal health outcomes recognizing the interconnection among people, animals, plants, and their shared environment."

At FHI 360, One Health is a core tenet of our global health security work as several of the most recent outbreaks have been of zoonotic origin. According to the WHO, approximately 60% of emerging infectious diseases originate in animals, accounting for 75% of novel human pathogens detected over the past three decades*. This demonstrates how crucial the One Health approach is in monitoring and controlling diseases at the human-animal interface. Leveraging a One Health approach ensures that animal, human, and environment health are prioritized in tandem and is integral to promoting global health security and preventing, detecting, and responding to pandemic-prone diseases.



FHI 360 One Health disease coverage: Ebola virus, H5N1 and H7N9 avian influenza, leptospirosis, Nipah virus, Middle East Respiratory Syndrome (MERS), COVID-19, rabies, enteric diseases and others.



Health work: Bangladesh, Burkina Faso, Ethiopia, Guinea, Indonesia, Kenya, Nepal, Philippines, and Vietnam.



FHI 360 projects supporting One Health:

Fleming Fund country grants (Nepal and Vietnam), USAID Infectious Disease Detection and Surveillance (IDDS), USAID Meeting Targets and Maintaining Epidemic Control (EpiC), CDC Enhancing Global Health Security (EGHS), and CDC Global Antimicrobial Resistance and Laboratory Response Network (GARLRN).



ENSURING WHOLE-OF-GOVERNMENT, MULTISECTORAL COORDINATION

A One Health approach requires collaboration across animal, human, and environmental health stakeholders. Our teams at FHI 360 have experience collaborating with multilateral bodies at the World Health Organization, the Food and Agriculture Organization of the United Nations, the World Organization of Animal Health, United Nations Environment Program, and others. To ensure local ownership, we also collaborate with national and subnational stakeholders such as ministries of health, agriculture, livestock, environment, wildlife, and rural development, as well as community-based organizations and other stakeholders. These collaborations help strengthen health governance structures and support the development and implementation of national action plans.

.....



With the Enhancing Global Health Security (EGHS) project, our team in Burkina Faso supported the adoption of the One Health approach to help detect public health threats early. We convened a multisectoral group composed of high-level ministry officials, donors, and other implementing partners in operationalizing the One Health Secretariat by developing terms of reference for regional and technical committees. With support from EGHS, the One Health Secretariat developed standard operating procedures for notification of public health emergencies of international concern, regulatory and legal texts governing the management of public health emergencies according to the One Health approach, and finalization of the National One Health Strategy.



STRENGTHENING SURVEILLANCE SYSTEMS

A One Health approach is essential to addressing antimicrobial resistance (AMR) and promoting rational antimicrobial use (AMU). Our team has experience working with local partners to strengthen One Health approaches to information sharing and to strengthening AMR and AMU detection and surveillance systems in both the human and animal health sectors. We also promote One Health approaches that involve coordination across different surveillance systems including environmental and wastewater surveillance.



Through the CDC-funded Global Antimicrobial Resistance Laboratory and Response Network (GARLRN), we are supporting Kenya's Ministry of Health to establish an active and sustainable environmental surveillance system by building and strengthening a network of environmental microbiology laboratories to monitor the presence of AMR microorganisms in household drinking water and in environmental water sources. Community interviewers trained by FHI 360 laboratory staff to conduct water testing activities in Asembo, Siaya province as part of the CDC GARLRN project in Kenya. *Photo credit: Eva Muchira/FHI 360*



LEVERAGING DIAGNOSTIC NETWORKS

A critical component of implementing a successful One Health strategy is based on robust diagnostic networks and systems. Countries need reliable capabilities for detecting zoonotic and non-zoonotic diseases and antimicrobial resistance, which requires high quality and accessible laboratories for human, animal, and environmental samples. Efficient specimen referral systems, integrated with comprehensive laboratory information systems and analytical testing capacity, ensure timely testing and reporting. With more than 15 years of experience, FHI 360 provides technical assistance and support to enhance countries' laboratory and diagnostic testing capabilities. This includes activities such as constructing and upgrading laboratory facilities, training technicians, and optimizing diagnostic networks. Additionally, we facilitate coordination between laboratories, clinicians, and field veterinarians to ensure seamless communication and collaboration.



In Indonesia, the USAID-funded Infectious Disease Detection and Surveillance (IDDS) project integrated laboratory and surveillance systems and revitalized Four-Way Linking (the linking and assessment of animal and human health epidemiology and laboratory information) to support the One Health Laboratory Coordination Group. The IDDS project in Indonesia also developed and implemented the interoperable information system for zoonotic and emerging infectious diseases to optimize an integrated information system for early detection, prevention, and response efforts.

Specimen collection for cross-sectoral integrated surveillance.
Photo credit: IDDS Indonesia