APHL works with countries around the world to build strong and resilient national laboratory systems. We support and coordinate the US national public health laboratory system that serves all 50 states, as well as US territories.

With over 50 years of experience managing public health laboratory programs, we apply our expertise to serve national laboratory systems across the globe. APHL provides technical assistance, trainings and workshops, policy development, strategic planning and more across the capabilities outlined below.

**Biosafety and Biosecurity**
APHL supports countries in improving laboratory biosafety and biosecurity through risk assessments, trainings, mentorships and supporting programs, such as the Biological Safety Cabinets (BSCs) Certification Training Program which focuses on developing participant skills in the maintenance and certification of BSCs.

**Energy**
Laboratory access to a reliable source of power is critical to healthcare service delivery and disease control and prevention. APHL supports the installation of various energy solutions—including solar energy systems—at laboratories, clinics and hospitals, and provides training for system maintenance.

**Foodborne Surveillance**
APHL supports capacity building for surveillance of antimicrobial resistant pathogens through the Global Antimicrobial Resistance (AR) Laboratory and Response Network, and partners with PulseNet International for training and laboratory capacity building for implementing surveillance of bacterial enteric pathogens.

**Informatics and Data Modernization**
APHL supports countries in evaluation, design and implementation of laboratory information systems (LIS), which facilitate efficient management of testing workflows, enable public health and clinical laboratories to report results, and address the data integration, interoperability, visualization, standardization and standardizing necessary for effective utilization of laboratory data by surveillance and clinical partners.

**Laboratory Accreditation**
APHL assists countries to build their laboratory workforce and move toward accreditation through capacity building in quality management systems (QMS), laboratory leadership, internal and external quality assessment and specific diagnostic techniques related to a country’s disease testing priorities. APHL uses “train the trainer” programs to build laboratory workforces that can apply QMS toward accreditation and enhance the quality of a country’s laboratories.
Wastewater Surveillance
APHL supports laboratory capacity building for collecting and testing wastewater samples for molecular and genomic surveillance using an NGS approach. This surveillance program is principally designed to test for SARS-CoV-2, but the number of pathogens being surveyed can be expanded based on a country’s need for pandemic preparedness.

Workforce Development
APHL develops and implements custom workshops and curricula focused on eliminating immediate technical gaps while also comprehensively addressing a broad range of management and leadership skills to enhance workforce capacity and support laboratory system building.

Learn more by visiting APHL.org/GlobalHealth-Capabilities