



THE GLOBAL LABORATORY INITIATIVE

Background

Currently, less than 5% of the estimated global burden of multidrug-resistant tuberculosis (MDR-TB) patients are being detected, lack of laboratory capacity and slow technology transfer to resource-limited settings being a crucial barrier. Scaling up laboratory services to meet the diagnostic challenges of drug-resistant and HIV-associated TB require a paradigm shift in developing laboratory policy development, settings laboratory norms and standards, guiding and coordinating technical assistance, and accelerating knowledge transfer.

In response to this need, the Global Laboratory Initiative (GLI) was established in 2008 as a Working Group of the Stop TB Partnership, with the GLI Secretariat hosted by the Stop TB Department of the World Health Organization (WHO). Membership of the GLI has continued to grow and more than 100 international partners have joined forces to accelerate and expand access to quality assured TB diagnostic services within integrated laboratory systems.

The GLI works closely with National TB Programmes, nongovernmental organizations, technical and financial agencies, scientific and academic institutions, and WHO offices at country and regional levels in strengthening TB laboratory services. GLI activities include:

- Global policy guidance on appropriate laboratory technology and best practices
- Effective technology transfer and coordination of technical assistance
- Laboratory advocacy and resource mobilization
- Laboratory capacity development
- Interface with other laboratory networks to ensure appropriate integration
- Standardized laboratory quality assurance
- Effective knowledge sharing (learning by doing)

GLI strategic priorities

Development of laboratory norms and standards, including WHO policy recommendations on the use of new diagnostics, specifications for TB laboratory equipment, laboratory biosafety, standard operating procedures for TB laboratories, and technical manuals for first- and second-line drug susceptibility testing

Acceleration of country laboratory strengthening, guided by a GLI Roadmap for Ensuring Quality TB Tuberculosis Diagnostics Services within National Laboratory Strategic Plans

Prioritization of human resource development and training, including development of comprehensive training and retention strategies, and proposals to train different cadres of laboratory consultants

Laboratory accreditation, involving a WHO-led task force with international experts and key partners, to develop a framework for a voluntary laboratory accreditation programme for national and regional TB reference laboratory networks

Laboratory biosafety guidance, under WHO and CDC leadership, to develop risk-based biosafety standards for laboratories in resource-constrained settings, supported by appropriate biosafety manuals and training packages

Expansion of the WHO Supranational Reference Laboratory Network to fill existing geographical gaps and enable supranational reference laboratories to assume broader laboratory strengthening responsibilities in response to the World Health Assembly 2009 call for universal access to TB diagnosis and the demand for expanded global drug resistance surveillance capacity.