U. S. CDC
India

Accessible link: www.cdc.gov/global-health/countries/india

For over 50 years, CDC has partnered with India's Ministry of Health and Family Welfare to build effective public health systems to detect, prevent, and respond to health threats. As health threats emerge, CDC and national partners are prepared to leverage initiatives that strengthen global health security and respond to new public health challenges. CDC's work aims to protect the health of Americans and support public health around the world.

KEY ACCOMPLISHMENTS

- Collaborated with the National Centre for Disease Control (NCDC), National AIDS Control Organization (NACO), Indian Council of Medical Research (ICMR), and All India Institute of Medical Sciences (AIIMS) New Delhi, to strengthen surveillance for antimicrobial resistance (AMR) and healthcare-associated infections (HAIs) to detect, prevent, and respond to emerging AMR threats

- Achieved scale-up and certification of Integrated Public Health Laboratories (IPHLs) to accelerate outbreak detection and response. Achieved ISO accreditation of national and state HIV reference labs and HIV molecular labs under the national AIDS control program

- Trained over 26,000 public health response staff in epidemiology and disease surveillance, public health emergency management, laboratory diagnostic testing, and biosafety and quality management

- Supported the establishment, operation, and management of national and sub-national Emergency Operation Centers (EOCs) to coordinate the response to disease outbreaks, natural or human-made disasters, and other public health emergencies

- Collaborated with ICMR and the National Institute of Virology to strengthen India's genomic surveillance for influenza, enhance characterization of circulating strains of influenza viruses, and expand capacity to detect avian influenza viruses in humans

- Enabled the development and national rollout of HIV/sexually transmitted infections (STIs) laboratory and antiretroviral therapy (ART) service guidelines. The guidelines were disseminated across 712 ART centers, 130 HIV reference labs, 55 regional/state STI labs, 80 molecular labs, and 29 state AIDS Control Societies to standardize high-quality HIV detection, care, and treatment nationwide

CDC
U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

PROGRAM OVERVIEW

PUBLIC HEALTH SYSTEMS and SURVEILLANCE

CDC advances global health security priorities in India by providing technical expertise to strengthen public health systems and disease surveillance to prevent, detect, and respond to emerging infectious diseases. Efforts include:

- Strengthening One Health-based surveillance and workforce capacity
- Enhancing systems to detect, notify, and respond to infectious disease outbreaks
- Operationalizing a tiered public health laboratory network for priority pathogens, including HIV and TB
- Strengthening AMR surveillance and reporting

LABORATORY SYSTEMS

CDC is collaborating with the Government of India (GoI) to develop an integrated tiered lab network capable of detecting priority pathogens including HIV, TB, Nipah, influenza and other emerging infectious threats. CDC helps advance laboratory capacity in India across several key areas by supporting:

- Enhanced diagnostic capabilities, including point-of-care and multi-pathogen detection technologies
- Robust quality management systems
- The operationalization of a National Proficiency Testing program
- Strengthened biosafety and biosecurity practices
- Efficient specimen referral and transport mechanisms
- Expanded genomic surveillance and pathogen sequencing capacity

WORKFORCE DEVELOPMENT

CDC's Field Epidemiology Training Program (FETP) strengthens India's public health workforce to detect and control disease outbreaks at the source. To meet International Health Regulation targets, India needs to train over 7,000 epidemiologists. To help achieve this goal, CDC collaborates with GoI to enhance emergency management capacity by providing technical expertise to implement modern response frameworks and pandemic preparedness exercises. CDC aims to:

- Strengthen emergency management workforce capacity across five tiers: community, sub-district, district, state, and national
- Strengthen national and sub-national EOCs
- Develop and update emergency response plans, protocols, and procedures
- Train and equip rapid response teams with management and operations competence
- Offer real-time support for multiple activations of EOCs and outbreak response systems

ANTIMICROBIAL RESISTANCE (AMR)

CDC supports NCDC in strengthening the National Programme on AMR Containment by enhancing quality-assured testing, and developing implementation guidance and conducting trainings. The National AMR Surveillance Network now includes 65 hospitals across 27 states and 5 union territories. This network works alongside an expanding number of state-level AMR programs that enhance India's capacity to detect, notify, and respond to emerging AMR threats. CDC also supports AIIMS New Delhi in partnership with ICMR to develop and implement HAI surveillance and prevention through a rapidly expanding network of more than 90 hospitals.

HIV and TB

For two decades, as a key U.S. President's Emergency Plan for AIDS Relief (PEPFAR) implementer, CDC partnered with NACO to strengthen India's HIV response. This partnership has closed critical gaps in HIV detection, treatment, care, data systems, and program management, while expanding quality-assured laboratory networks, viral load testing, and integrated diagnostics for priority pathogens. CDC continues to work with NACO to sustain gains, improve efficiency, and accelerate progress toward HIV elimination.

CDC has improved the quality and efficiency of ART services, advanced differentiated service delivery models, strengthened retention strategies, and supported HIV and TB collaboration. To reach populations missed by routine systems, CDC introduced innovative approaches like social network strategies, targeted risk screening, and integrated models. CDC has strengthened national and state data systems by supporting the development of digital dashboards, monitoring platforms, and analytic capacity for real-time decision-making.

CDC also works with India's Central TB Division and National TB Elimination program on the 'TB Mukt Bharat Infection Prevention and Control' project across 20 states. This effort strengthens TB prevention in health facilities and communities. CDC developed India's first catalogue of drug-resistant TB mutations to improve interpretation of resistance patterns and enhance diagnostics and treatment.

INFLUENZA

CDC helps India prepare and respond to influenza pandemics. CDC works closely with Indian collaborators to:

- Maintain vigil on circulating types and subtypes of seasonal influenza viruses in the South Asian region
- Genomic characterization of circulating viruses to inform global selection of vaccine viruses for upcoming season
- Expand laboratory capacity for detection of avian/zoonotic influenza cases among humans
- Estimate the burden of influenza among high-risk groups and improve clinical management practices
- Provide support for influenza outbreak investigations for rapid identification of the strains of influenza virus