

Accessible version: https://www.cdc.gov/globalhealth/countries/india/

For over 50 years, the U.S. Centers for Disease Control and Prevention (CDC) has engaged in highly successful technical collaboration with the Government of India and Ministry of Health and Family Welfare while addressing India's public health priorities. As new health threats emerge, CDC and national partners are well-placed to leverage past successful initiatives to strengthen global health security capabilities and rapidly respond to new public health challenges.



CDC-supported acute febrile illness and acute encephalitis syndrome surveillance efforts across 13 high burden states and produced data-driven change in national policy



CDC helped improve infection prevention and control at 50 hospitals led by the All India Institute for Medical Sciences



CDC supports India's nationwide HIV behavioral sentinel surveillance—the largest in the world—and integrated biological and behavioral surveillance among key populations



CDC was instrumental in drafting the national operational guidelines for antiretroviral (ART) services and national guidelines for HIV care and treatment. These guidelines were disseminated to staff from 625 ART centers and 29 state AIDS Control Societies



laboratory quality toward International Organization for Standardization accreditation for 130 HIV reference labs and over 5,000 HIV testing sites, leading to early and accurate diagnosis of HIV

CDC helped enhance



CDC works with National Tuberculosis (TB) Elimination Program to strengthen stateand district-level capacity to use local data to accelerate TB control and elimination efforts in 11 states across India



With CDC support, National Institute of Research in TB conducted next generation sequencing on a prospective cohort of patients with drug resistant TB across India. This effort identified common and new TB mutations and led to the first Indian TB catalogue of mutations



Since 2012, India Field Epidemiology Training Program (FETP) officers investigated over 550 outbreaks and conducted over 300 surveillance evaluations



CDC's advanced molecular diagnostic trainings helped the National Institute of Virology to scale up PCR SARS-CoV-2 testing across India's influenza laboratory network



CDC has supported training for thousands of staff on COVID-19 and other emergencies



CDC helped strengthen antimicrobial resistance and healthcare-associated infection surveillance across 29 states



CDC's support of the National Public Health Surveillance Project strengthened implementation of polio, measles, and COVID-19 vaccination campaigns, outbreak response activities, and surveillance

## **Strengthening Public Health Systems**

CDC supports global health security priorities in India by providing technical expertise in strengthening public health systems to prevent, detect, and respond to emerging infectious diseases, such as COVID-19. CDC focuses on real-time disease surveillance, laboratory systems and diagnostics, workforce development, and emergency management. Efforts include developing the evidence base and leading technical guidance for Integrated Public Health Laboratory (IPHL) implementation; strengthening surveillance and reporting for antimicrobial resistance (AMR), Healthcare Associated Infections (HAI), Acute Febrile Illness (AFI), Acute Encephalitis Syndrome (AES), and zoonotic diseases. CDC also supported training for over 10,000 workers in epidemiology and disease surveillance, public health emergency management, laboratory diagnostic testing, and biosafety and quality management.

#### **HIV/AIDS**

As a key implementer of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), CDC works with the National AIDS Control Organization (NACO) to implement evidence-based, high impact, sustainable interventions in prevention, testing, treatment, and viral load monitoring. CDC uses an equity lens while striving to close access gaps among key populations. Through Project Sunshine, CDC implements strategies to improve prevention, testing, and treatment options for people in northeastern states where HIV prevalence is highest (Manipur, Mizoram, and Nagaland). In collaboration with NACO and State AIDS Control Societies, CDC supported treatment optimization and differentiated service delivery models, such as multi-month dispensation, decentralized drug dispensation in the community and health system settings, and person-centered package of services. NACO later adopted these strategies across a network of 540 antiretroviral treatment (ART) centers throughout the country.

## **Tuberculosis (TB)**

CDC supports the National Tuberculosis Elimination Program (NTEP) to end TB by supporting four strategic pillars: detect, treat, prevent, and strengthen capacity. CDC provides technical support and implements projects, such as external quality assessment (EQA) for rapid molecular tests that ensure accurate and timely results. This EQA is applied to over 800 machines annually; NTEP plans to eventually cover all 3,000 testing sites.

# Field Epidemiology Training Program (FETP)

FETP strengthens the public health workforce's abilities to detect, respond, and control disease outbreaks at the source. CDC continues to support FETPs across India through mentorship for outbreak investigations, surveillance evaluations, COVID-19 activities, and regular remote training. As of January 2023, India FETP has trained over 900 officers across three tiers (advanced, intermediate, and frontline), with over 200 officers currently enrolled. Moving forward, CDC is collaborating with institutions to meet India's goal of having one epidemiologist per 200,000 people.

#### Influenza

CDC's influenza program focuses on strengthening three main areas: the influenza surveillance network, public health research, and pandemic preparedness. Influenza viruses change constantly and require continued vigilance. CDC helps India prepare for pandemics in alignment with India's Pandemic Influenza Preparedness and Response Plan by strengthening laboratories and training clinicians on effective case management and infection control. Many of these activities were developed during the 2009 influenza A/H1N1 pandemic but are directly relevant to the current COVID-19 pandemic. Strong influenza surveillance has enabled India to detect influenza seasonal peaks during monsoons, understand the seasonality of influenza in tropical countries, and guide timing for influenza vaccination.

#### **Emergency Management**

CDC partners with the Government of India to enhance emergency response capabilities that are critical for the country's response to infectious diseases and other public health threats. CDC provides technical support to apply modern emergency management concepts and principles using a common framework for public health response and exercises. CDC focuses on increasing emergency management human resource capacity; strengthening national and sub-national emergency operations centers (EOCs); developing emergency response plans, protocols, and procedures; training rapid response teams; and providing real-time support for multiple activations of EOCs and outbreak response systems.

#### **Antimicrobial Resistance (AMR)**

CDC works to increase AMR and Healthcare-Associated Infections (HAI) surveillance and institutionalize infection prevention control capacity nationally and sub-nationally. CDC supported the Government of India to establish the National Antimicrobial Surveillance Network, which increased the country's network from 10 laboratories in 2013 to 40 laboratories across 29 states and union territories. CDC partnered with the Indian Council of Medical Research and the All India Institute of Medical Sciences to develop and implement a network for surveillance and prevention of HAIs. These networks were used to quickly disseminate COVID-19 information to hospitals.

#### Vaccine-Preventable Diseases

CDC supports efforts to eradicate or control vaccine-preventable diseases in India through the Universal Immunization Program. Since the mid 1990's, CDC has helped strengthen epidemiology and laboratory methods, routine immunization services, training methods, data systems, case-based disease surveillance, and outbreak preparedness and response. CDC's support of the National Public Health Surveillance Project strengthened implementation of polio, measles, and COVID-19 vaccination campaigns, outbreak response activities, and surveillance.

CDC STAFF

8 U.S. Assignees30 Locally Employed

# AT A GLANCE

Population: > 1.4 billion Per capita income: : > \$7,220 Life expectancy: F 71 / M 68 years Infant mortality rate: 28/1,000 live births Source:

Population Reference Bureau 2022, India

# TOP 10 CAUSES OF DEATH

- 1. Ischemic heart disease
- 2. Chronic obstructive pulmonary disease (COPD)
- 3. Stroke
- 4. Diarrheal diseases
- 5. Neonatal disorders
- 6. Lower respiratory infections
- 7. Tuberculosis
- 8. Diabetes
- 9. Cirrhosis and other chronic liver diseases
- 10. Falls

Source: GBD Compare 2019, India





For more country information www.cdc.gov/globalhealth/countries/country

CS337176C Publication Date February 2023