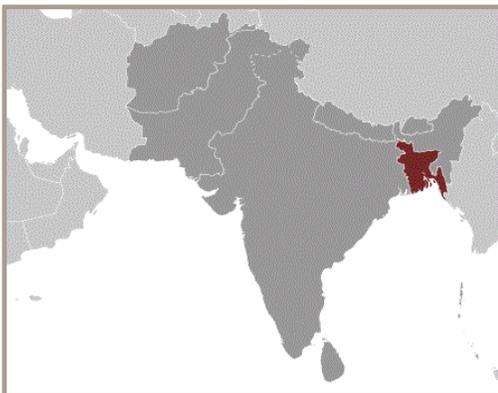


CDC in Bangladesh

Factsheet



Staffing
4 U.S. Staff

Impact in Bangladesh

- 17 acute disease outbreak investigations in collaboration with the government of Bangladesh in 2012
- 26 national influenza surveillance sites at district and tertiary care hospitals established within Bangladesh since 2009
- 16 sites for avian influenza surveillance among poultry workers established within Dhaka City Live Bird Markets in 2012
- 1,055 public health professionals received short course trainings since 2011



Center for Global Health
Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC) has been collaborating with ICDDR, B (formerly known as the International Centre for Diarrheal Disease Research, Bangladesh) over the last 40 years—most recently to strengthen the country’s capacity to detect emerging infectious diseases in human and animal populations and to provide training and other interventions to host country partners. A strong collaboration between CDC and the Institute of Epidemiology Disease Control and Research (IEDCR) within the Bangladesh Ministry of Health and Family Welfare (MOHFW) has further strengthened the country’s ability to detect and respond to disease threats. Since 2002, a CDC medical epidemiologist has led the Centre for Communicable Diseases at ICDDR, B and CDC is currently formally designating Bangladesh as CDC’s newest Global Disease Detection Center for enhancing global health security for rapid detection and response to emerging and reemerging infectious diseases.

Top 10 Causes of Death in Bangladesh

1. Cancer	13%	6. Preterm Birth Complications	4%
2. Lower Respiratory Infections	7%	7. Tuberculosis	3%
3. Chronic Obstructive Pulmonary Disease	7%	8. Neonatal Encephalopathy	3%
4. Ischemic Heart Disease	6%	9. Diabetes	3%
5. Stroke	5%	10. Cirrhosis	3%

Source: GBD Compare (<http://viz.healthmetricsandevaluation.org/gbd-compare/>), 2010

Influenza

CDC and ICDDR,B, in partnership with IEDCR, conduct surveillance for emergent and zoonotic strains of influenza and for severe respiratory disease and influenza-like illness in the general population and in hospitals across Bangladesh. In addition, they participate in outbreak investigations of respiratory illness and conduct research studies on seasonal and avian influenza and other respiratory viruses (e.g., estimating disease burden and mortality through enhanced surveillance, assessing pharmacy dispensing practices for respiratory illness, developing and evaluating novel surveillance and diagnostic methods for respiratory diseases, and evaluating the effectiveness of intervention programs, including the use of influenza vaccine in high risk populations). Since 2007, CDC has provided resources, training, and technical support to laboratories at IEDCR and ICDDR-B to strengthen diagnostics capacity for influenza and other respiratory pathogens.

Emerging Infections and Vaccine Preventable Diseases

CDC conducts public health research to learn more about the transmission and burden of select pathogens that cause diseases, such as encephalitis, rotavirus, pneumococcal disease, polio, and viral hepatitis. Additionally, CDC assignees assist government staff on effective outbreak investigation techniques and guide them on how to effectively respond to public health threats. Study results inform Bangladesh policy makers and help them reach decisions about introducing vaccines and other interventions to most effectively reduce burden of disease in the country.





Bangladesh at a Glance

Population:	161,083,804
Per capita income:	\$1,900
Life expectancy at birth women/men:	68/72 yrs.
Infant mortality rate:	49/1000 live births

Central Intelligence Agency, The World Factbook, 2012



Tuberculosis

CDC works collaboratively with ICDDR, B to better characterize the transmission and treatment of TB and drug-resistant TB in Bangladesh. Research activities, focused on improving prevention and treatment efforts, currently include ongoing surveillance of drug-resistant TB at 14 sites across the country, an investigation of nosocomial TB transmission, and evaluations of two TB program activities: hospital-based TB infection control and a new nationwide model for community-based treatment of multi-disease-resistant TB.

Zoonosis

CDC develops and evaluates strategies to mitigate risk of animal-to-human transmission of influenza through surveillance for new strains of influenza in swine and swine herders, poultry workers, live bird markets, and nomadic waterfowl. CDC also works with partners to improve the safety of slaughtering and backyard poultry-raising practices in villages. Since 2007, CDC has provided support for Nipah virus (a rapidly fatal encephalitis in humans, carried by fruit bats) surveillance at six hospitals in Bangladesh. CDC works with wildlife ecologists at EcoHealth Alliance to better understand the enzootic transmission cycle of Nipah virus within bats and the various risk factors that lead to transmission to humans. In addition, CDC supports the government of Bangladesh in investigating and responding to outbreaks of anthrax, avian influenza, rabies and Japanese Encephalitis.

Water, Sanitation, and Hygiene

CDC helps to support research on water, sanitation and hygiene through leadership and support from CDC assignees to ICDDR, B. Research studies include randomized controlled trials to assess the efficacy of tube well water disinfection on child diarrhea, efficacy of shame and disgust messages on hand washing and water disinfection, and the impact of individual and combined water, sanitation, hand washing and nutrition interventions on child growth and development. A large component of the research is impact assessment of interventions conducted by other agencies. For example, ICDDR, B conducted a five-year assessment of health and behavior outcomes associated with a program administered by the government of Bangladesh and UNICEF that was designed to promote hand washing, hygiene/sanitation and water quality improvement among 16.9 million people in rural Bangladesh.

Field Epidemiology Training Program (FETP)

CDC is the key partner in establishing the first FETP, modeled after CDC's Epidemic Intelligence Service, at the MOHFW in partnership with other public health institutions in Bangladesh. The FETP will build sustainable capacity to detect and respond to health threats and to develop epidemiologic expertise so the MOHFW can detect outbreaks locally and prevent their further spread. The two-year, intensive, hands-on training program will strengthen Bangladesh's public health workforce through multidisciplinary training in disease surveillance, outbreak investigation, laboratory management and diagnostics, program evaluation, and other areas of epidemiology through a mix of 25% classroom-based instruction and 75% mentored, in-service work. Ultimately, FETP graduates will apply these skills to their daily work for the MOHFW to implement and enhance disease surveillance, outbreak response, research, and data-driven public health policies and programs. The first cohort is expected to launch July 2013.

Publication Date: January 2013

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