

# Global Disease Detection

## *Detecting and Containing Health Threats*

### Global Disease Detection (GDD)

GDD operates as CDC's platform for developing and strengthening global capacity to rapidly detect, accurately identify, and promptly contain emerging infectious disease and bioterrorist threats that occur internationally.

*Enhancing global health security* - A weakness in the surveillance system for infectious diseases in any one country is a threat to all countries. This risk to U.S. national and global interests underscores the need for a coordinated and connected system to detect and respond to emerging, and re-emerging, infectious diseases.

*Protecting health through cooperation* - Through the revised International Health Regulations (IHR 2005), countries are responsible for effective monitoring, reporting, and response to any disease threat with the potential to harm the public's health. These guidelines require renewed cooperation and coordination between countries for full and effective implementation. Working in coordination with the World Health Organization, ministries of health and other U.S. government agencies, CDC is committed to helping countries with limited resources develop the essential detection control capacities.

### Mission

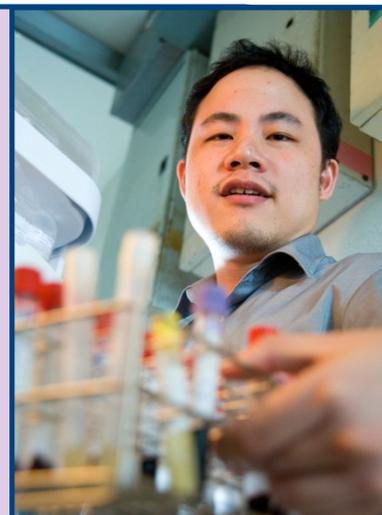
Based on experience with SARS, Congress directed CDC to "...mitigate the consequences of a catastrophic public health event, whether by an intentional act of terrorism, or the natural emergence of a deadly infectious virus..." Appropriations Report 108-81 (FY 2004)

### Contribution to a global system of disease protection through:

**Global Coverage** – A central focus of GDD is the development and expansion of GDD Centers in all World Health Organization (WHO) regions. Established Centers are presently located in Bangladesh, China, Egypt, Guatemala, India, Kenya, South Africa and Thailand. Additionally, CDC is developing capabilities in two GDD Centers in Kazakhstan and Georgia.

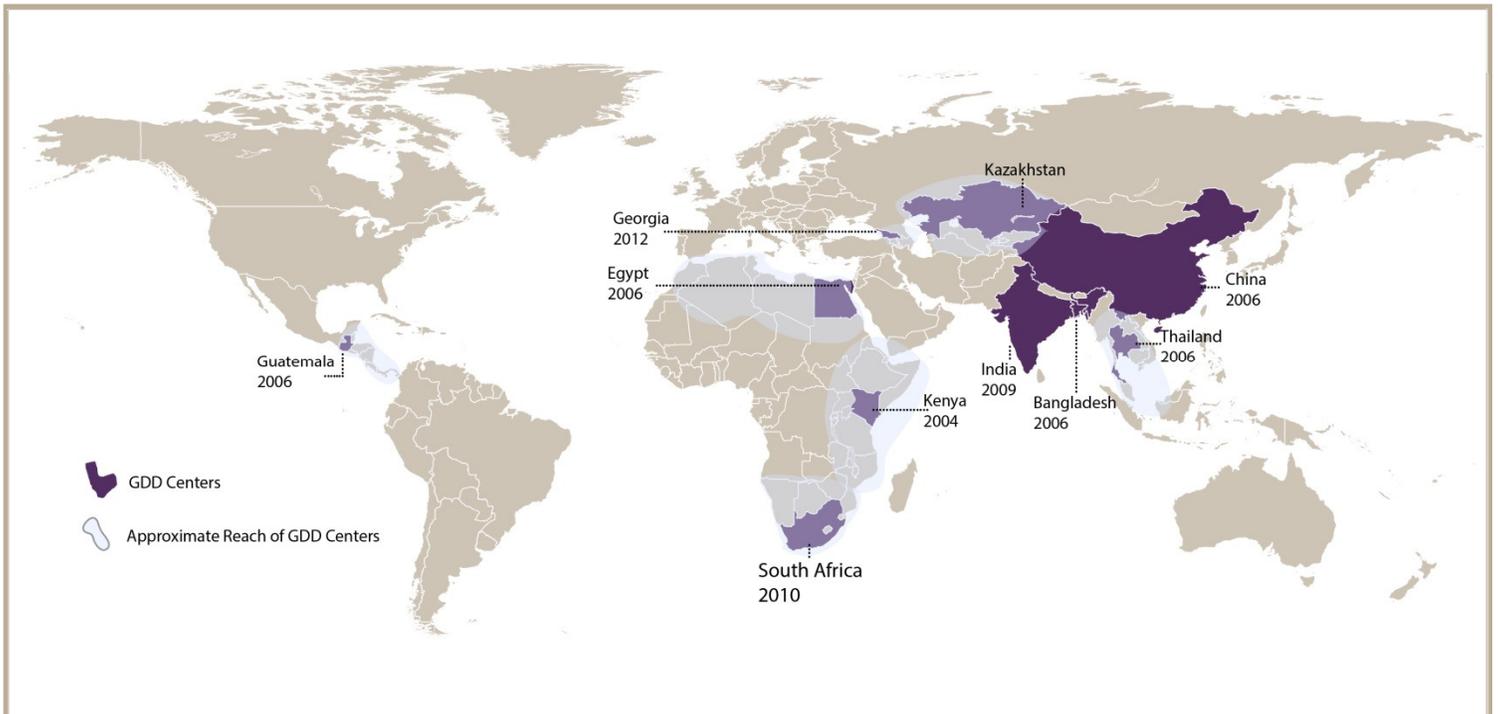
**Capacity Building** – CDC was designated by WHO as a key partner to help implement the IHR (2005) for its 194 member states, and named as the first WHO Collaborating Center for Implementation of International Health Regulations National Surveillance and Response Capacity. GDD supports the collaborating center by working directly with ministries of health, WHO, and established CDC programs to develop the critical core capacities to identify and control of emerging infectious diseases through:

- Emerging infectious disease detection and response
- Training in field epidemiology and laboratory methods
- Pandemic influenza preparedness and response
- Zoonotic disease investigation and control
- Risk communication and emergency response
- Laboratory systems strengthening



Photography @ David Snyder/CDC Foundation





**Global Disease Detection Centers** are located in all WHO regions. Together with partners, GDD Centers work directly with ministries of health to identify, control and combat priority infectious diseases. GDD Center locations are selected in consultation with invited countries, internal experts, WHO, and national and international partners, and based on:

- Public health significance
- Established CDC presence
- Regional coverage
- International partner presence

### Accomplishments

*Cumulative since 2006*

**1,257**

Outbreak Responses

**243**

New diagnostic tests established  
in 59 countries

**+77,000**

Participants in short term public  
health training

**GDD Center Activities** GDD promotes scientific discovery in partnership with host countries to identify new health threats and improve endemic burdens. Key to improved national and global health outcomes is the assimilation of five core activities measured and tracked in the field for: 1) outbreak response, 2) surveillance, 3) pathogen discovery, 4) training, and 5) networking.

**CDC Headquarters' Support** GDD Centers have access to the vast subject matter expertise throughout the agency. GDD also maintains a Technical Support Corps of experts that can be brought to the field on a 24/7 basis. These experts have assisted the GDD Centers in outbreak investigations and training in-country staff in surveillance and laboratory methods.

### Future Direction

- Build country capacity through IHR implementation
- Increase number of public health professionals trained in host countries
- Broaden and strengthen global partnerships