Global Public Health Informatics Program (GPHIP)

Objective

In today's world where diseases spread rapidly without respect for borders, officials rely on technology to deliver accurate information in real time. Public health informatics is the systematic use of health information, technology, and computer science for public health practice, research, and learning. Informatics shapes public health programs by using electronic disease surveillance systems and other web-based reporting systems to ensure the availability of critical information for making sound decisions. In 2008, the Centers for Disease Control and Prevention (CDC) established the Global Public Health Informatics Program (GPHIP) to improve public health informatics science to support CDC's global mission. GPHIP collaborates with the global health community to promote data-based decision making and applies best practices to design, develop, and deploy health information systems. GPHIP is designated as a World Health Organization Collaborating Center for Public Health.

Program

GPHIP develops tools and supporting information systems to strengthen public health systems within epidemiology, surveillance, laboratory, and patient care practice. These systems advance:

- Public health services by strengthening and streamlining data collection, including the production of more accurate, timely, and complete information in (near) real time with mobile-based surveillance systems
- Utilization of standards to improve information exchange and sharing
- Primary and secondary prevention via electronic health records and improved laboratory systems
- Communications among geographically dispersed health workers and patients
- Integration of information systems enabling the exchange of data from various sources and systems

Public Health Accomplishments

- Developed tools for strengthening the global response to public health emergencies to help countries meet the International Health Regulations

- Improved disease detection and response with near real time reporting by developing a mobile based Infectious Disease Surveillance System for mass gatherings

- Improved biosurveillance in collaboration with DTRA in former Soviet Union countries through the development of the Electronic Integrated Disease Surveillance System (EIDSS)

- Improved data exchange by developing an integrated surveillance system for the Saudi Arabia National Guard that includes hospital infections, notifiable diseases, and environmental and occupational disease data

Future Goals

GPHIP will continue to work with domestic and global partners to strengthen public health systems in the following areas:

- Improve CDC mobile-based response capacity to strengthen domestic and global public health surveillance;
- Assist in development and deployment of a mobile-based data collection toolkit for GDD centers;
- Collaborate with WHO to test and implement an International Health Regulations monitoring tool
- Promote the adoption of the Health Metrics Network (HMN) framework
- Facilitate development of a standardized informatics vocabulary
- Promote informatics standards for surveillance and laboratory services

Partnerships

- China CDC
- Ministries of Health
- President's Emergency Plan for AIDS Relief (PEPFAR)
- Saudi Arabia Ministry of Health
- Saudi Arabia National Guard Health Authority
- US Department of Defense (DoD)/Defense Threat Reduction Agency (DTRA)
- United States Agency for International Development (USAID)
- World Health Organization (WHO)

Epidemiology Module 6 Veterinary training for students in Almaty, Kazakhstan

Where We Work

- Armenia
- Azerbaijan
- China
- Costa Rica
- Egypt
- El Salvador
- Georgia
- Guatemala
- India
- Kazakhstan
- Kenya
- Nicaragua
- Russia
- Saudi Arabia
- Thailand
- Ukraine
- Uzbekistan

For further information:

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