WHO

NEWS ARTICLE

National Simulation Exercise to Strengthen the Laboratory System in Pakistan

The World Health Organization, United States Centers for Disease Control and Prevention and Pakistan National Institute of Health, jointly organized a two-day national simulation exercise to assess the performance of Pakistan’s public health laboratory system during a simulated viral hemorrhagic fever outbreak. The simulation exercises are important components of monitoring & evaluation of International Health Regulations (IHR 2005) alongside After Action Review, Annual Reporting and Joint External Evaluation. Almost 60 participants from six provinces took part in the exercise, including representatives of federal institutions, provincial public health laboratories, epidemiologists, directors of public health and district health officers. US Centers for Disease Control and Prevention funded the activity.

The inauguration session was attended by Dr. Ni’ma Saeed Abid, WHO Head of Country Office Pakistan, and Brigadier Dr Aamer Ikram, Executive Director, National Institute of Health.

Speaking on the occasion, Dr Ni’ma said, “Public health laboratories play a key role in managing health security and exercises like these make us better prepared for future outbreaks.” Furthermore, he reiterated WHO’s support with further improving Pakistan’s laboratory system.

While addressing the participants, Brigadier Dr Ikram said, “There is no better way to find out whether the laboratory system is working as intended than performing regular exercises and using the outcomes to guide improvement.” Dr Frank Konings, Regional Advisor for Public Health Laboratories at WHO Eastern Mediterranean Regional Office, indicated that this is the first
laboratory simulation exercise organized by WHO and national counterparts in the region and similar exercises will be arranged in future as well. This simulation exercise, held at NIH's Emergency Operations Center (EOC), specifically focused on a disease outbreak at district level that required specimens to move to national and international reference laboratories. It simulated the collection and handing of specimens from suspected cases of dengue and Crimean Congo hemorrhagic fever. The exercise consisted of analyzing the plans that are in place should an outbreak occur and a skill drill which covered practical events laboratories may experience. For the latter, staff were faced with simulated challenges in the laboratory, such as an accidental spill of potentially infectious fluids, which they had to address using their established routine.

Overall the exercise showed that mitigation plans are in place to detect outbreaks and to collect and transport specimens to enable timely laboratory testing. However, there remain areas for improvement through technical support and refresher trainings. The exercise further highlighted the importance of having effective communication and coordination mechanisms in place for sharing information as well as the need for the national, provincial and district health authorities to work together when responding to outbreaks. Participants were keen to reproduce the exercises in their provinces.

Major outbreaks of infectious diseases including those caused by novel pathogens are an increasing threat to global public health. The ability of the laboratory sector to safely, rapidly and accurately identify the pathogen responsible is a crucial component of any successful outbreak response. Simulation exercises provide a means to assess how ready the laboratory system is should such outbreaks occur. They can also identify areas where improvement is needed.

***