Best Practices for Implementation of a Disease Surveillance System

The 2011 ARF Workshop aims to provide a forum to share technical and logistical best practices related to human and animal disease detection and surveillance. The workshop will focus on strategies to strengthen and integrate infectious disease detection and surveillance to ensure early warning for effective control of outbreaks, whether natural, accidental or intentional in origin. The workshop will build upon the 2010 ASEAN Regional Forum workshop, which focused specifically on laboratory biorisk management. Similar to the document for the 2010 workshop, the following list of key considerations is intended to generate discussion, and to facilitate the generation of an improved set of key considerations, specific to the ASEAN region; it represents some, but not all of the aspects to be discussed during the workshop.

Key Considerations:

- Implement WHO International Health Regulations (2005) core capacities for surveillance and response
 - Focus on program areas in the WHO Asia Pacific Strategy for Emerging Disease (ASPED)
 - Implement disease surveillance programs
 - Deploy Field Epidemiology Programs
 - Consider syndromic/indicator vs. event-based surveillance
 - Develop of strong case definitions for diseases
 - Link clinical reporting to laboratory confirmation
 - Develop laboratory capacity in country or through partnerships
 - Develop laboratory capacity for diagnosis of key diseases
 - Employ laboratory biorisk management
 - Implement laboratory quality management systems
 - Develop information systems for disease reporting
 - Create infection control standard operating procedures
 - Set standards, based on the pathogen and diagnostic method, for time from sample receipt into the laboratory to diagnostic confirmation

- Implement quality assurance mechanisms to assure timely and accurate reporting
- Reporting: Facilitate regional and international outbreak reporting, and laboratory confirmation, if requested
 - Coordinate outbreak reporting at the National level to WHO, FAO and OIE, as appropriate, as well as to other countries in the region
 - Network through the IHR National Focal Points, Ministries of Health, WHO, APSED, and others
- Response
 - Develop protocol for regional preparedness, alert and response
 - Develop protocol for public health emergency preparedness
 - Ensure capability to investigate and respond to outbreaks
- Encourage joint health and law enforcement criminal investigations of infectious disease events, and recognition of indicators of possible intentional misuse of biological agents
 - Enhance existing forensics laboratory and human capacity to investigate natural and intentional outbreak scenarios; organize regional network of forensic labs
 - Promote regional response collaborations and emergency resource sharing, including personnel.
- One Health: Integrate human and animal infectious disease surveillance for zoonotics, and emerging infections
 - Define how related Ministries will work together and share information
 - Define how laboratory confirmation of zoonotic and other illnesses will be performed, e.g., under Ministry of Health, Ministry of Agriculture, jointly, etc.
 - Coordinate outbreak reporting between relevant Ministries in country
- Conduct monitoring and evaluation of surveillance and response capacity