Background

The IHR requires the reporting of H5 or any novel influenza viruses. This reporting can only happen if there is a network of influenza laboratories that can collect and transport the specimens from the peripheral level of health services to the district and central level where the laboratory diagnosis can be made or confirmed. In some cases, this may necessitate the shipment of specimens outside the country for more advanced testing. Therefore, the philosophy of building the capacity of the influenza network has been to strengthen infrastructure, train workforce and provide critical diagnostic reagents that are not commercially available.

Achievements

The national influenza centres (NICs) of Bangladesh, DPR Korea, India, Indonesia, Myanmar, Sri Lanka and Thailand have been assessed for diagnostic capability and the laboratories in Bangladesh and Myanmar were designated as the NICs in their respective countries and included in the WHO Global Network of Influenza Surveillance (FLUNET). At the regional level, the National Institute of Virology, Pune, India was designated as the WHO H5 Reference Laboratory. The new WHO H5 Reference Laboratory will play a critical role in the Region in providing diagnostic referral services that support surveillance, epidemiological tracing and vaccine development, as well as training staff and enhancing their skills.

Skills of the laboratory staff in molecular diagnosing of avian influenza were imparted in a PCR training workshop in Hong Kong in February 2008. Participants from nine Member countries were also trained in an IATA workshop in March 2008 held in Dhaka, so they can ship infectious substances including signing of the dangerous goods declaration, through intercountry activities held at Dhaka. Procurement of diagnostic reagents from WHO H5 Reference Laboratory Hong Kong and their distribution to national laboratories has ensured the availability of diagnostic avian influenza reagents for prompt and accurate diagnosis of H5 and seasonal influenza viruses.

A regional meeting was held in the newly designated H5 reference laboratory at NIV Pune for Networking of National Influenza Centres in the Region. This meeting enabled information-sharing activities and led to the formulation of a three-pronged regional strategy focussing on networking mechanisms, capacity building and monitoring of influenza activities in the Region.

Gaps and needs

A number of challenges remain to be overcome to reach the final goal of every country being able to detect and diagnose (or refer specimens) for influenza viruses, from the peripheral to the tertiary levels. In many countries, collection and transportation of specimens from remote areas continue to pose a problem that can only be overcome by strengthening the infrastructure, training and workforce. Sustaining a virology laboratory also remains a daunting task because many laboratories suffer from lack of equipment and trained personnel as well as a steady supply of high-quality diagnostic reagents.