Implementation of IHR (2005) requires epidemiological skills including compilation, analysis and interpretation of health data and initiation of timely and appropriate public health action. These skills are essential for using Annex 2 of the IHR document, i.e. the decision instrument for verification and notification of events that may constitute public health emergencies of international concern (PHEIC). Furthermore, promptness and quality of investigation and effectiveness of containment measures are highly contingent upon the epidemiological and clinical skills of health workers and rapid response teams to mount a coordinate response.

In summary, it is imperative that Member countries develop and maintain epidemiological skills as part of developing core capacity required for implementation of the IHR (2005). To this end, developing tailor-made courses in applied epidemiology, including descriptive and analytic skills, surveillance, epidemic preparedness and outbreak investigation, are essential. Likewise, it is important to train health workers in application of basic principles and tools in epidemiology and management of emerging and re-emerging infectious diseases of public health importance.

**Achievements**

An assessment of existing core capacities at various levels of the health system, including health services, laboratory and designated ports of entry/exit, was completed in Member countries in 2006/07. The results from the assessments were further discussed at the first regional workshop on implementation of IHR, held in April 2007. Based on these findings, WHO has incorporated capacity development activities in its biennial workplan, including training in epidemiology, courses on management of tropical diseases of public health importance, rapid containment of avian influenza and influenza pandemic and training of rapid response teams.

Accordingly, in 2007 WHO, in collaboration with experts in Field Epidemiology Training from Bangladesh, India, Indonesia and Thailand, adapted and organized a three-month training at the National Institute of Communicable Diseases (NICD)-Delhi. A total of 21 medical officers from eight Member countries successfully completed the three-month field epidemiological training programme. In November 2007, a total of 17 medical officers and clinicians from nine member countries completed a two-week course on tropical diseases of public health importance. The course was organized with technical support from Mahidol University and NICD. In August 2007, a total of 16 health workers from two Member countries completed the one-month paramedical training on epidemiology and surveillance at NICD. Similarly, in May 2008, two-week field epidemiology training was organized for 18 health workers from the Republic of Maldives. Furthermore, support was provided to Member countries to strengthen skills of health workers in surveillance, investigation and response to avian influenza and influenza pandemic, including trainings on containment, clinical management and rapid response. To further enhance ongoing efforts on strengthening epidemiological capacities, in February 2008 SEARO has established an informal working group on epidemiology.

**Gaps and needs**

There is a need to scale-up ongoing efforts to strengthen core capacity for implementation of IHR. However, the current capacity for conducting training in epidemiology in some of the Member countries is limited. Thus, there is a need to provide support to build national capacity for local training, including through promoting institutional networking among centres of excellence in Member countries and with WHO collaborating centres.