Expanded Programme on Immunization

Strategic issues

Over the past year, impressive progress was made towards the goals of measles elimination and hepatitis B control in the Western Pacific Region. Improved routine and supplementary immunization coverage has reduced the measles incidence rate to only 12 cases per 1 million people, and 27 countries and areas are likely to have achieved the hepatitis B control milestone of less than 2% chronic infection among children aged five and older in 2011.

There is much to laud but still cause for concern. Some countries experienced measles outbreaks in 2012, and others have yet to achieve the hepatitis B control milestone. Poliovirus importation into China resulted in 21 poliomyelitis cases in 2011, a grim reminder of the need for increased vigilance and intensified preparedness. Meanwhile, momentum towards maternal and neonatal tetanus elimination was maintained in all countries.

The greatest challenge in preventing diseases and attaining regional goals is reaching remote populations and urban poor with vaccines. Further progress in reducing under-five mortality could be made by extending the benefits of routine immunization to all children and introducing WHO-recommended new and underutilized vaccines.

Vaccine-preventable disease surveillance, supported by an accredited laboratory network, is critical for immunization systems if they are to identify, describe and prevent disease, monitor programme quality, verify programme achievements, and support new vaccine introduction. Surveillance for adverse events following immunization (AEFI) and well-functioning national regulatory authorities also are important components of immunization systems. Although vaccines are safe, occasional AEFI may threaten immunization programmes.

Action and results

WHO continued to support routine immunization strengthening by developing an assessment tool for district-level performance and outbreak risk. The “Reach Every District” approach was expanded and collaboration of health and education systems strengthened to improve immunization coverage in several countries. WHO also supported the evaluation, revision and development of comprehensive multi-year plans for national immunization programmes. To promote the benefits of vaccines, WHO brought together 25 countries and areas to commemorate Global Immunization Week.

In 2011, WHO worked intensively with countries to strengthen their preparedness for wild poliovirus importation and to conduct subnational risk assessments to better target required interventions. To foster cross-border and cross-regional collaboration, WHO supported China in holding an international workshop, Securing the Gains: Cross-regional Collaboration in Protecting Polio-free Areas.

In terms of maternal and neonatal tetanus elimination, WHO provided support to countries to guide interventions, strengthen capacities on surveillance, and improve coordination between the national immunization programmes and maternal and child health programmes.

WHO supported supplementary immunization activities to fight against measles, polio and maternal and neonatal tetanus, and ensured effective resource utilization by supporting multi-antigen campaigns and including additional health interventions, such as vitamin A and deworming medicines. WHO vigorously supported the national response to the imported polio outbreak in
China in August 2011, with direct technical support for case investigations, identification of high-risk groups, active disease surveillance, and outbreak planning and monitoring. As a result of these actions, measles has almost disappeared in several formerly endemic countries, the polio outbreak in China has been contained, and the risk for polio and measles importation-related outbreaks as well as tetanus has diminished in the Region.

WHO organized its first World Hepatitis Day, with the theme “Knock Down Hepatitis B by 2012” on 28 July 2011. WHO also supported a hepatitis B birth dose assessment in 10 provinces of Cambodia and serologic surveys in several countries to measure the impact of vaccination programmes and hepatitis B control status.

WHO continued its support for the Regional Commission for the Certification of Poliomyelitis Eradication (RCC) and Hepatitis B Expert Resource Panel (ERP), and established a Regional Verification Commission for Measles Elimination (RVC). The RCC concluded in November 2011 that the Region (outside of China) had remained free of circulating poliovirus. The RVC began its work by leading a consultation of Member States on measles elimination status and action plans to achieve the elimination goal. The ERP verified that Hong Kong (China) and Malaysia had reduced hepatitis B infection rates in children to less than 1% and Tonga to less than 2%.

WHO continued to support existing surveillance networks for acute flaccid paralysis, measles and rubella surveillance networks, as well as ongoing development of surveillance for congenital rubella syndrome, Japanese encephalitis, invasive bacterial vaccine-preventable diseases (meningococcal meningitis caused by *S. pneumoniae* and *H. influenzae*) and rotavirus. Data management, analysis and feedback were provided regularly to monitor surveillance and laboratory performance, understand disease epidemiology, and identify needed interventions to prevent disease and provide a rational basis for decision-making. For example, sentinel rotavirus surveillance in seven countries revealed that rotavirus caused 35%–60% of diarrhoea cases requiring hospitalization, suggesting rotavirus vaccine introduction would have substantial positive public health and economic impacts in these countries. In collaboration with the Health Promotion unit in the Regional Office, the Expanded Programme on Immunization (EPI) conducted a regional workshop on cervical cancer control in November 2011, resulting in country action plans to strengthen cervical cancer screening and human papillomavirus vaccination programmes.

A health worker checks a Lao monk’s proof of vaccination.
In support of surveillance for vaccine-preventable diseases, WHO has developed and maintained laboratory networks involving more than 400 public health laboratories. All poliomyelitis network laboratories and nearly all measles and rubella network laboratories in the Region were fully accredited in 2011. WHO provided training for poliovirus isolation, intratypic differentiation and screening for vaccine-derived polioviruses, as well as for building country capacity to conduct measles genotyping. Additional training was provided for laboratories supporting invasive bacterial disease and rotavirus surveillance.

A new Japanese encephalitis laboratory network was established with 10 laboratories, of which 8 have been fully accredited.

WHO’s assessment of national regulatory authorities in China and Japan found them to be fully functional. WHO continued to work with the China State Food and Drug Administration on the prequalification of several vaccines in order to improve regional vaccine security. WHO also convened workshops to create a regional alliance to assist countries without fully functional national regulatory authorities and to strengthen AEFI surveillance and causality assessments.

Future directions

Immunization is a cost-effective, life-saving intervention that contributes mightily to the achievement of Millennium Development Goal (MDG) 4 to reduce child mortality and MDG 5 to improve maternal health. As such, WHO will prioritize its work with Member States to provide technical support and help mobilize resources to ensure equitable access to vaccines of assured quality. WHO will assist Member States to achieve targeted disease eradication, elimination and control goals; to promote the rational introduction of new vaccines; to strengthen vaccine-preventable disease monitoring and surveillance systems, as well as laboratory capacity and data use; and to develop and expand continuously partnerships for immunization in the Western Pacific Region. To promote sustainability, a comprehensive approach that engages maternal, adolescent, child and newborn health, as well as health systems strengthening, is needed. Finally, WHO will continue its support to certification and verification bodies.