1. Expanded Programme on Immunization

Expanded Programme on Immunization. EPI continues to perform well throughout the Western Pacific Region, building on past achievements while meeting new challenges. The programme’s effectiveness can be seen in the broad coverage for diphtheria, tetanus and pertussis (DTP3) in the Region, where more than 80% of children in 88% of all districts received three doses of the vaccine within a year of birth. In the Philippines, WHO is supporting a successful new approach, Reaching Every District (RED), to deliver immunization services to the hard-to-reach urban poor. RED has improved routine immunization coverage by focusing on district-by-district planning. It has re-established outreach services, increased community involvement and efficiently managed resources.

Despite these successes, fresh challenges remain in a number of countries and areas. In 2004, technical assistance for district-level micro-planning was provided to some countries still facing performance problems—Cambodia, the Lao People’s Democratic Republic and Viet Nam. In addition, comprehensive EPI reviews were conducted in Cambodia and China in 2004-2005 to identify areas where immunization systems need to be strengthened. In Viet Nam, a study was undertaken to identify barriers that impede improved EPI coverage. An action plan then was developed and implemented to address those barriers. Disease-specific goals—regional measles elimination and hepatitis B control—are being used to refocus efforts to strengthen routine immunization and surveillance systems.

Poliomyelitis. The Region continues to be free of poliomyelitis. There were 6529 acute flaccid paralysis (AFP) cases reported in the Region in 2004, resulting in an annualized non-polio AFP rate of 1.61 per 100 000 children under 15 years of age. The adequate stool collection rate was 88%. AFP surveillance systems function reasonably well in all countries and picked up cases of circulating vaccine-derived poliovirus (cVDPV) in Guizhou Province, China, in 2004 and vaccine-derived poliovirus (VDPV) in the Lao People’s Democratic Republic in 2004-2005. This enabled timely epidemiological investigations and supplementary immunizations. Low immunization coverage in these areas was responsible for the emergence of cVDPV. It also poses a threat for the re-establishment of transmission if wild poliovirus is imported.

Polio laboratory performance was effective over the past year. WHO supported the Regional Reference Laboratory in China in the development of a comprehensive workplan for improving the National Polio Laboratory Network. In addition, support was provided to the laboratories in the Region with performance gaps.

Work to complete Phase I laboratory containment of wild polioviruses and document the quality of the effort continued. The Regional Office supported countries that have completed the laboratory survey and inventory activities necessary for the preparation of assessment reports. These reports were submitted to the Regional Certification Commission for its 10th annual meeting held in October 2004. Technical support was provided to China and Japan as these countries still need to complete Phase I. Progress in Japan has been promising with substantial resources provided by the Government in 2004, while challenges remain in China.

Measles. This viral infection continues to be one of the leading causes of vaccine-preventable morbidity and mortality in children in the Region, despite a 95% reduction in deaths compared to the pre-
measles outbreaks for many years, Cambodia completed a national measles vaccination campaign between 2000 and 2004, targeting all children 9 months to 14 years. It resulted in a significant reduction in cases.

China has six eastern provinces that have nearly eliminated measles. In Guizhou Province, supplementary immunizations were conducted as part of an overall plan to decrease measles cases and deaths between 2003 and 2006. In addition, six other provinces are working on elimination but need additional resources.

Papua New Guinea’s national measles vaccination campaign has made important progress in estimating target populations, as well as improving planning and management. The campaign was phased in over a year, resulting in higher immunization coverage.

A successful measles elimination programme depends upon reducing populations at risk by increasing immunity. This requires two doses of measles vaccine to ensure adequate protection. Twenty-five countries and areas in the Region continue to provide a second dose of measles vaccine as part of their routine immunization schedules; seven countries provide the second dose through supplementary immunization activities. Four countries currently do not have a schedule for providing second doses.

Twenty-two countries collect case-based data in their measles surveillance systems. However, in many countries these systems provide only partial coverage. Seven countries with case-based measles surveillance systems report their data directly to the Regional Office. Finally, *The Field Guidelines for Measles Elimination* has been developed and distributed by the Regional Office.

**Hepatitis B.** Efforts to control hepatitis B continue to make substantial progress, but the disease remains a major public health problem in the Region. The Lao People’s Democratic Republic expanded tetravalent (DTP-HepB) vaccine administration nationwide in 2004, and Cambodia is expected to do so in 2005. With this, all the countries in the Region, except the Philippines, will be providing hepatitis B vaccination nationwide.
In 2004, 22 countries reported 90% or better coverage with three doses of hepatitis B vaccine. Two countries reported coverage between 81% and 89%, eight countries between 50% and 80%, and two countries with less than 50% coverage. In the Region, approximately 4 million children born every year do not receive hepatitis B immunizations. Australia, Japan, Macao (China), New Zealand, Singapore and five Pacific island countries and areas (American Samoa, Fiji, French Polynesia, the Federated States of Micronesia, and Wallis and Futuna) have succeeded in reducing seroprevalence to less than 1% in 5-year-old children born after the introduction of hepatitis B immunization, the goal for the regional programme. New Caledonia and the Republic of Korea are very near the goal, with seroprevalence rates between 1% and 2% in children born after vaccinations began.

Policy in most of the countries and areas in the Region calls for a first dose of hepatitis B vaccine within 24 hours of birth to reduce perinatal transmission. However, a very high proportion of the newborns in the Region are still not able to get a timely birth dose, mainly due to a high rate of home deliveries. Approximately 7 million births, some 30% of births in the Region, occur at home. In 2004, China and Viet Nam reviewed their birth-dose practices and pilot studies to test alternative ways of delivering birth doses.

The regional Technical Advisory Group, convened in June 2005, recommended setting 2012 as a target date for the regional measles elimination and hepatitis B control (by reducing HBsAG seroprevalence to <2% among 5 year olds). The recommended date will be considered for adoption at the fifty-sixth session of the Regional Committee in September 2005.

Immunization Safety. Major strides in safety have been taken. Technical assistance was provided to China and Viet Nam to strengthen their national regulatory authorities to ensure vaccine quality. By 2004, 15 countries in the Region had initiated the use of auto-disable syringes for some or all of their immunizations. Other countries use single-use disposable syringes. Papua New Guinea still uses non-disposable syringes to some extent for immunization. Efforts continue to ensure appropriate disposal of used needles and syringes through safety boxes and incinerators. Incinerators have been installed in some countries such as Cambodia and the Lao People’s Democratic Republic in 2004, with assistance from the Government of Japan.

EPI efforts have expanded in scope in many countries and areas with the introduction of new vaccines such as Haemophilus influenzae type B (Hib). Mongolia and Tonga introduced a pentavalent vaccine containing Hib in the first half of 2005, and Tonga intends to do so. Japanese encephalitis vaccine has been introduced in some countries with high disease burdens. In addition, the Region is preparing to introduce other vaccines, such as rotavirus and pneumococcus vaccines, expected to be available in next few years after the completion of disease-burden and cost-effectiveness studies.