

EXPANDED PROGRAMME ON IMMUNISATION

The expanded programme on immunisation (EPI) was established by the World Health Organisation in 1974 to develop and expand immunisation programmes for vaccine-preventable diseases, throughout the world. When the programme was started, less than 5% of children were being immunised against initial EPI target diseases, viz. polio, measles, tetanus, pertussis, diphtheria and tuberculosis. In the beginning, immunisation programmes were limited to urban areas in industrialised countries. In 1977, the goal was set to make immunisation available to every child by 1990. To attain these objectives the WHO set about improving the health system infrastructure and improving vaccination coverage in all countries of the world. The levels of immunisation coverage globally, now stand at around 80% for children under 1 year of age.

The success of the EPI represents a major public health achievement, but much remains to be done. Though not an EPI target disease, the eradication of smallpox by immunisation in 1977 represents what can be achieved with a dedicated disease eradication programme. This led to the World Health Assembly declaring in 1988 that they aimed at eradicating polio by the year 2000. The target was not met. By 2002, polio had been eliminated in all but 6 countries of the world. Unfortunately, a setback occurred in August 2003 when Nigeria, one of the remaining countries with circulating wild poliovirus, suspended polio vaccination leading to a polio epidemic that has led to wild poliovirus being re-established in Sudan, Chad, Ivory Coast, and Burkina Faso, and the Nigeria poliovirus has since been linked to outbreaks in 9 countries including Yemen and Indonesia.

Even with these successes, worldwide, over 3 million children die prematurely annually due to vaccine-preventable diseases. Recently, additional vaccines have been added to the EPI schedule: Haemophilus influenza b for all countries, and for endemic countries, either hepatitis B vaccine or yellow fever vaccine, or both.

The new South African EPI (EPI-SA) schedule effective from April 2009 and method of vaccine administration

AGE	VACCINE	ROUTE OF ADMINISTRATION
Birth	BCG TOPV	Intradermal injection to right upper arm Drops by mouth
6 weeks	TOPV RV DTP-IPV/Hib Hepatitis B PCV ₇	Drops by mouth Liquid by mouth Intramuscular injection to the left thigh Intramuscular injection to the right thigh Intramuscular injection to the right thigh
10 weeks	DTP-IPV/Hib Hepatitis B	Intramuscular injection to the left thigh Intramuscular injection to the right thigh
14 weeks	RV DTP-IPV/Hib Hepatitis B PCV ₇	Liquid by mouth Intramuscular injection to the left thigh Intramuscular injection to the right thigh Intramuscular injection to the right thigh
9 months	Measles PCV ₇	Intramuscular injection to the left thigh Intramuscular injection to the right thigh
18 months	DTP-IPV/Hib Measles	Intramuscular injection to the left arm Intramuscular injection to the right arm
6 years (both boys and girls)	Td	Intramuscular injection to the left arm
12 years (both boys and girls)	Td	Intramuscular injection to the left arm

BCG – Bacilli Calmete-Guerin (Anti-tuberculosis vaccine)

TOPV – Trivalent oral polio vaccine

DTP-IPV/Hib – Diphtheria, tetanus, pertussis vaccine, inactivated polio vaccine, *Haemophilus influenzae* type b vaccine

Td – Tetanus and diphtheria vaccine

RV – Rotavirus vaccine

PCV₇ - 7-valent pneumococcal vaccine

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