

Vaccines for life

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Vaccines work by stimulating the immune system’s defence mechanisms to recognise an infectious agent and destroy it before it can make the person ill. Children under five years of age are more susceptible to disease as their immune systems are not fully developed.

Delays or disruptions in children receiving their scheduled vaccines have occurred for various reasons, such as misinformation, vaccine hesitancy, the COVID-19 pandemic, poverty and conflict. As a consequence, outbreaks of vaccine-preventable diseases, such as measles, are occurring around the world and in South Africa.

Certain vaccines are recommended throughout the lifetime of an individual. Infants are susceptible to diseases at a very young age. Therefore, they need to receive vaccines as early as possible after birth, receiving booster doses as they age to extend the protection.

South Africa’s Expanded Programme of Immunisation (EPI) (Figure 1) provides the following free routine immunisations to infants and children from birth until 12 years of age:

- BCG (tuberculosis vaccine)
- Oral polio vaccine
- Rotavirus vaccine
- 6-in-1 combination vaccine protecting against tetanus, pertussis, polio, *haemophilus influenzae type b*, and hepatitis B
- Pneumococcal vaccine
- Measles vaccine
- Tetanus and diphtheria combined vaccine

In addition to these vaccines, a vaccine is provided to females in public schools from nine years of age that protects against cancer caused by the human papillomavirus.

Other vaccines are available in the private sector and may be given as an alternative to, or in addition to, the vaccines available in the government sector. These vaccines include, amongst others, the measles-mumps-rubella vaccine (MMR), the chickenpox vaccine, the hepatitis A vaccine and the meningococcal meningitis vaccine.

EXPANDED PROGRAMME ON IMMUNISATION – EPI (SA) REVISED CHILDHOOD IMMUNISATION SCHEDULE FROM DECEMBER 2015

Age of child	Vaccines needed	How and where it is given
At birth	BCG Bacilles Calmette Guerin	Right arm
6 weeks	OPV (0) Oral Polio Vaccine	Drops by mouth
	OPV (1) Oral Polio Vaccine	Drops by mouth
	RV (1) Rotavirus Vaccine	Liquid by mouth
	DTaP-IPV-Hib-HBV (1) Diphtheria, Tetanus, Acellular Pertussis, Inactivated Polio Vaccine and Haemophilus Influenzae Type B and Hepatitis B Combined	Intramuscular/left thigh
10 weeks	PCV (1) Pneumococcal Conjugated Vaccine	Intramuscular/ right thigh
	DTaP-IPV-Hib-HBV (2) Diphtheria, Tetanus, Acellular Pertussis, Inactivated Polio Vaccine and Haemophilus Influenzae Type B and Hepatitis B Combined	Intramuscular/left thigh
14 weeks	RV (2) Rotavirus Vaccine*	Liquid by mouth
	DTaP-IPV-Hib-HBV (3) Diphtheria, Tetanus, Acellular Pertussis, Inactivated Polio Vaccine and Haemophilus Influenzae Type B and Hepatitis B Combined	Intramuscular/left thigh
	PCV (2) Pneumococcal Conjugated Vaccine	Intramuscular/right thigh
6 months	Measles Vaccine (1)**	Subcutaneous/left thigh
9 months	PCV(3) Pneumococcal Conjugated Vaccine	Intramuscular/right thigh
12 months	Measles Vaccine (2)**	Subcutaneous/right arm
18 months	DTaP-IPV-Hib-HBV (4) Diphtheria, Tetanus, Acellular Pertussis, Inactivated Polio Vaccine and Haemophilus Influenzae Type B and Hepatitis B Combined	Intramuscular/left arm
6 years (both boys and girls)	Td Vaccine Tetanus and reduced strength of Diphtheria Vaccine	Intramuscular/left arm
12 years (both boys and girls)	Td Vaccine Tetanus and reduced strength of Diphtheria Vaccine	Intramuscular/left arm

*Rotavirus Vaccine should NOT be administered after 24 weeks
 **Do not administer with any other vaccine



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Figure 1: The current EPI schedule

The prevention of outbreaks of vaccine-preventable diseases, many of which haven't been seen for years, depends on routine vaccines being given at the correct time to as many children as possible. It is estimated that 25 million infants went without routine lifesaving vaccines in 2021. Every clinic visit should be seen as an opportunity to review the child's vaccination card and, if necessary, catch up any vaccines that the child may have missed in the past.

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