



## **VACCINE: YELLOW FEVER**



### **1. Vaccine indication**

Yellow fever (YF) vaccine is indicated for the active primary prevention of YF in persons not previously infected with the YF virus (YFV).

### **2. Rationale for vaccination**

The primary objective of YF vaccination is the prevention of infection with the YFV, and thereby preventing YF-associated complications such as haemorrhage, kidney and liver failure, and death.

### **3. Type of vaccine**

Live-attenuated viral vaccine.

### **4. Composition of the vaccine**

YF vaccine is developed from the 17 D strain of the YFV attenuated by propagation in chick embryo cell culture. The vaccine is available as a freeze-dried preparation that should be stored at 2°C to 8°C and be protected from light. It is reconstituted immediately before use and must be discarded within 6 hours of reconstitution.

### **5. Immunogenicity of the vaccines**

Following YF vaccination immune response is high with neutralizing antibodies developing in between 90% and 99% of vaccinees within a month of vaccination.

### **6. Efficacy and long term protection**

YF vaccine is very efficacious and seroconversion following immunisation will provide lifelong protection for almost all vaccinees. One long-term study found 80.6% of vaccine recipients seropositive 30 to 35 years after vaccination with a single dose of YF vaccine.

### **7. Candidates for vaccination**

YF does not occur in South Africa and travellers from endemic regions to South Africa should produce a YF certificate at the port of entry. The certificate becomes valid 10 days after vaccination and stays valid for 10 years. Failure to produce a certificate will result in the person being kept under observation for 6 days, or being vaccinated against YF. The cost for either measure is borne by the individual.

However, in endemic countries YF vaccine is included in the EPI schedule of those countries. In addition to babies, the following persons are also deemed to be candidates for YF vaccine:

- People who work in tropical rain forests of Africa and South America
- People who live in tropical regions of Africa and South America
- Travellers to YF endemic countries

## **8. Vaccination regimen and route of administration**

YF vaccine is administered subcutaneously to the deltoid arm for all recipients. The vaccine is given together with the measles vaccine at 9 months of age.

## **9. Side effects and special precautions**

Reactions to the YF vaccine are usually mild, although those who have an egg allergy should not be vaccinated. YF vaccine should also not be given to persons with severe immune deficiency, and pregnancy except during epidemics when the risk of YFV transmission may be very high. The vaccine is contraindicated in children under 6 months of age and is not recommended for those aged 6 to 8 months, except during epidemics when the risk of YFV transmission may be very high. The Asymptomatic HIV positive persons can be vaccinated.

Common side-effects following YF vaccination include pain at the site of injection, mild fever and headache.

### **Where to find us:**

South African Vaccination and Immunisation Centre (SAVIC)  
PO Box 173, University of Limpopo – Medunsa Campus  
0204, PRETORIA, Gauteng Province, South Africa

Tel: + 27(12)521 3077, Fax: + 27(12)521 4284, Email: [info@savic.ac.za](mailto:info@savic.ac.za); <http://www.savic.ac.za>