

Prevention

The incidence of paralytic polio has reduced dramatically since the introduction of vaccination. Two forms of polio vaccine have been developed, the Salk Inactivated Polio Vaccine and Sabin Oral Polio Vaccine. Table 1 summarises the major characteristics of each of these vaccines.

Table 1: Comparison of Polio Vaccines

Salk Inactivated Polio Vaccine (IPV)	Sabin Oral Polio Vaccine (OPV)
<ul style="list-style-type: none">• Developed in 1955 by Jonas Salk¹• Stimulates serum IgM, IgG and IgA but not secretory U_gA – immunity induced by antibody transuding into the oropharynx⁸• Delivered by injection• Requires trained personnel to administer injection• Confers immunity, but client can still act as a carrier• Remains indicated in pregnant, immunosuppressed and unvaccinated clients over the age of 50³¹• No risk of vaccine associated paralysis	<ul style="list-style-type: none">• Developed by Albert Sabin and was approved for use in 1962¹• Composed of attenuated or “weakened” live strains of poliovirus³⁰• Delivered orally• Does not require extensive medical training to administer vaccine• Confers life-long immunity and prevents the client from acting as a carrier• World Health Organisation recommends the use of OPV, as it is less expensive and easier to administer to large populations of infants and children• Slight risk of vaccine associated paralysis. In a very small number of cases, vaccination is associated with paralytic polio (VAPP), which affects either individuals recently vaccinated with OPV, or non-vaccinated individuals (particularly the immunocompromised) in direct contact with healthy vaccinees.³² (Currently estimated that there is one case of VAPP per 2.5 million doses of OPV administered)¹• May be transmitted to others for “secondary vaccination”
<ul style="list-style-type: none">• Vaccinates only the client who receives it	