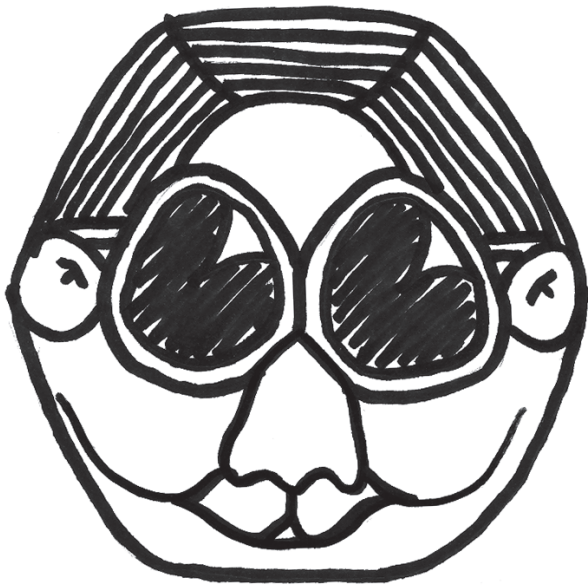


We're on their trail...



Name: The Polio Virus
Responsible for: Poliomyelitis or Polio

Characteristics:

Polio is highly infectious and a serious disease in humans. Young children are particularly at risk. Entering the body orally and multiplying in the gut, the virus produces initial symptoms of fever, stiffness and vomiting. More seriously, it may also enter the nervous system and spread along nerve fibres – destroying them in the process. In serious cases this can result in irreversible paralysis of the limbs and even loss of the ability to breathe unaided. All of this can happen within a matter of hours.

Where are we now?

Once prevalent throughout the world, two important vaccines that induce antibodies have helped to bring the virus under control. The development of injectable polio vaccine (IPV) by Dr Jonas Salk in 1955, followed by the oral polio vaccine (OPV) developed by Dr Albert Sabin, allowed the fight-back to begin. The oral vaccine also has the advantage of preventing viral replication in the gut (hence preventing onward transmission) and is administered on a sugar cube. In 1988, the World Health Organization pledged to eradicate polio, as had already been achieved with smallpox. This project continues, and since 1988 the number of countries with endemic polio has dropped from 125 to just six, with annual cases dropping from 350 000 in 1988, to just 1951 in 1995. Complete eradication is now a real possibility!

Can you help? Immunology needs you!