Polio

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Poliomyelitis (polio) is a potentially paralysing, vaccine preventable, viral infection. The virus is transmitted through food or water contaminated by infected human faeces or by direct contact with an infectious person.

Polio is extremely rare in UK travellers with the last imported case occurring in 1993. Those at increased risk include travellers visiting friends and relatives, those in direct contact with an infected person, long-stay travellers, and those visiting areas of poor sanitation.

In 1988 polio commonly occurred in more than 125 countries on five continents, with more than 1,000 children paralysed every day. Since the launch of the Global Polio Eradication Initiative in 1988, worldwide rates of polio have been reduced by more than 99 percent. The number of countries where polio commonly occurs has declined from 125 to two: Afghanistan and Pakistan. The rest of the world remains at risk of polio importation, with a number countries still reporting imported cases of polio.

Most individuals (about 95 percent) who acquire polio do not develop symptoms. When they do occur symptoms may range from a mild illness with fever, to symptoms of meningitis (inflammation of the lining of the brain) or paralysis. Although paralysis occurs in less than one percent of infections it is frequently long lasting.

Prevention

An effective vaccination against polio is available. In addition to vaccination travellers should ensure good personal hygiene and follow advice on prevention of food and water-borne diseases.

Polio vaccine

The objective of the immunisation programme is to provide a minimum of five doses of a poliocontaining vaccine at appropriate intervals for all individuals. For adults and children from 10 years of age, who have not received polio vaccinations in the past, a three dose course of vaccinations can be provided.

Polio vaccine is recommended for:

- All individuals, from two months of age as part of the <u>UK routine immunisation schedule</u>.
- Travellers to areas or countries where there are recent reports of wild polio (see) and their last dose of polio vaccine was given 10 or more years ago.
- Individuals at risk of exposure to polio through their work, e.g. certain healthcare workers and microbiology laboratory staff.
- Certain groups of individuals travelling to countries affected by the WHO temporary recommendations that were initially implemented in May 2014.



In September 2004, inactivated polio vaccines (IPV) replaced oral polio vaccine (OPV) in UK routine vaccine schedules.

Vaccination schedules

Vaccine	Schedule and age range (in chronological order)
The <u>6-in-1</u> vaccine (DTaP/IPV/Hib/HepB)	3 doses given 1 month apart (offered at 2,3,4 months of age)
The <u>4-in-1</u> vaccine (dTaP/IPV)	Pre-school: single dose (offered at 3 years and 4 months or soon after)
The <u>3-in-1</u> vaccine (Td/IPV)	Single dose booster (offered at 14 years of age). Also used for adults and children from 10 years of age requiring initial course of 3 doses 1 month apart or travellers requiring single dose booster
Boosterix-IPV* (dTaP/IPV)	Single dose booster(for pregnant women 16 to 32 weeks gestation)

*Recommended for pregnant women between 16 to 32 weeks to protect unborn child against whooping cough (pertussis).

Length of protection

In most circumstances five doses of polio containing vaccine at the appropriate intervals is considered to give satisfactory long-term protection for life in the UK. However travellers to areas or countries where there are recent reports of polio and whose last dose of polio vaccine was 10 or more years ago should be offered a booster dose of a polio containing vaccine. See our <u>Country</u> <u>Information</u> pages for individual country recommendations.

Resources

- More detailed information can be found in our polio factsheet
- Polio vaccination certificate
- UKHSA: Immunisation against infectious disease. Polio
- UKHSA: Polio: guidance, data and analysis
- Further details on the vaccines can be found on the <u>Summary of Product Characteristics</u> (SPC) on the electronic medicines compendium
- World Health Organization: Polio eradication initiative