

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 of 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
The <u>6-in-1 vaccine</u> : diphtheria, tetanus, acellular pertussis, polio, <i>Haemophilus influenzae</i> type b and hepatitis B (DTaP/IPV/Hib/HepB)	Three doses: given at 8, 12 and 16 weeks of age and a fourth dose at 18 months of age
The <u>4-in-1 vaccine</u> : diphtheria, tetanus, acellular pertussis and polio (dTaP/IPV)	Single pre-school booster dose: given at 3 years, 4 months old or soon after
The <u>3-in-1 vaccine</u> : tetanus, diphtheria and polio (Td/IPV)	Single booster dose: given at 13/14 years of age
	A low dose diphtheria-containing vaccine should be offered to anyone aged 10 years or over whether they require the vaccine as part of a primary course or as a booster
Diphtheria, tetanus, and acellular pertussis (Tdap)	Single booster dose: offered to pregnant women 16 to 32 weeks gestation*
From July 2024, a non-polio (IPV) containing pertussis vaccine is preferred but the diphtheria, tetanus, acellular pertussis, polio vaccine (dTaP/IPV) can be used for pregnant women if Tdap is contraindicated or unavailable [8]	

^{*}Recommended for pregnant women between 16 to 32 weeks to protect unborn child against whooping cough (pertussis). Women may still be immunised after week 32 of pregnancy, but this may not offer as high a level of protection to the baby.

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 Country Information pages for individual country recommendations.

Resources

- More detailed information can be found in our <u>polio factsheet</u>
- 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
- WHO: Polio
- WHO: Polio eradication initiative