

Frequently Asked Questions on:

Tetanus, diphtheria and polio vaccine

All travellers are recommended to be up-to-date with the UK immunisation schedule which includes vaccination against tetanus, diphtheria and polio.

Q. Country recommendations for tetanus, diphtheria and polio

A. Check itinerary in order to assess the traveller's risk of disease.

Tetanus: see NaTHNaC Health Risk Information Sheet for information on the epidemiology of disease and recommendations for travellers (<http://www.nathnac.org/pro/factsheets/tetanus.htm>).

Diphtheria: see NaTHNaC Health Risk Information Sheet for information on the epidemiology of disease and recommendations for travellers

Polio: NaTHNaC has reviewed the current global epidemiology of polio and has made a number of changes to recommendations that reflect the global status and the risk of polio to travellers. (http://www.nathnac.org/pro/clinical_updates/polio_recommendations.htm)

Q. Booster doses

Tetanus: Historically, five doses of tetanus have been recommended to be sufficient for life. This remains the case for residents who do not travel outside of the UK. However travellers to areas outside of Western Europe, North America and Australasia are advised to have booster doses at 10-yearly intervals due to the risk of acquiring a tetanus prone wound during travel, potential difficulties accessing medical care overseas, and unreliable supplies of tetanus immunoglobulin in resource poor areas [1].

Diphtheria: A booster dose may be recommended, after 10 years, according to the destination and the nature of travel intended, for example those who are going to live or work with local people in epidemic or endemic areas [1].

Polio: NaTHNaC has reviewed the current global epidemiology of polio and has made a number of changes to recommendations that reflect the global status and the risk of polio to travellers. Booster doses are no longer required for visits to the WHO regions of [Europe](#), [Western Pacific](#) and the [Americas](#) as WHO has declared these regions to be polio-free. Visitors to the WHO [African](#), [South East Asian](#) and [Eastern Mediterranean](#) regions should receive a booster dose if the traveller has not had one in the previous 10 years. The list of countries that fall within each WHO region can be found on the WHO website at: <http://www.who.int/about/en/>

Q. Use of the combined diphtheria, tetanus and polio vaccine Td/IPV - Revaxis™.

Booster doses using Revaxis™; If the traveller requires a booster dose of tetanus, diphtheria or polio, and the previous dose of any of these antigens was more than 10 years ago, combined Td/IPV should be used [1]. This means that Revaxis™ should be given even if it has been less than 10 years since a previous dose of one of the other antigens (polio, diphtheria or tetanus). If Td or IPV have been given in the last 4 weeks, delay Td/IPV vaccination until 4 weeks have elapsed.

Contraindications to Revaxis™: Td/IPV should not be given to those who have had confirmed anaphylactic reaction to a previous tetanus, diphtheria or polio containing vaccine or who have had an anaphylactic reaction to neomycin, streptomycin or polymixin B [1]. However, many persons with a history of anaphylaxis following a dose of tetanus toxoid will be found to be non-reactive upon intradermal testing for allergy to tetanus antigen, and can tolerate a further dose of tetanus toxoid without adverse events [2].

In general, a history of severe local reactions or systemic complaints are not a contraindication to further doses of vaccine. Additional discussion of contraindications and precautions can be found in the Green Book and accessed via the address below [1]. Health professionals may also call the [NaTHNaC advice line](#) to discuss a particular situation in a traveller (0845 602 6712).

Primary course immunisation: Revaxis™ (Td/IPV) can be used for individuals aged ten years and over at an interval of one month between each dose [1].

Use of Revaxis in travellers with special needs: The polio component is inactivated polio vaccine (IPV). It can be safely given to immunosuppressed persons and women who are pregnant and breast feeding, where clinically indicated [3]. Immunosuppressed persons may not develop a full antibody response to the vaccine.

References

1. Department of Health *Immunisation against Infectious Disease. The 'Green Book' chapters on Diphtheria, Hib, Pertussis, Polio and Tetanus.* London: HMSO; 2004. <http://80.168.38.66/article.php?id=400>
2. Jacobs R, Lowe R & Lanier B. *Adverse reactions to tetanus toxoid* 1982 JAMA; 1 January; 247 (1); 40 -42
3. Plotkin S, Orenstein W editors *Vaccines* 4th ed. Philadelphia: WB Saunders Co Ltd; 2004

Poliomyelitis occurs following infection with one of three serotypes of polio virus (1, 2 and 3) [1]. Infection with one virus type does not confer immunity to the other two types. Therefore, persons with a history of poliomyelitis only have type-specific immunity and will not be fully protected against other polio serotypes.

Do persons with a previous history of poliomyelitis disease require polio vaccination?

A previous history of poliomyelitis disease is not a contraindication to vaccination with poliomyelitis vaccine [2]. All previously unvaccinated individuals, including those with a history of poliomyelitis, should receive a primary course of three poliomyelitis containing vaccines (appropriate to their age group) with an interval of at least one month between each dose. Booster doses should be given at the appropriate interval according to UK guidelines.

References:

1. Chin J. editor. *Control of Communicable Disease Manual*. 17th ed. American Public Health Association, Washington. 2000.
2. Department of Health. Contraindications and special considerations. Chapter 7 (draft chapter, February 2006). in: *Immunisation Against Infectious Disease*. 2006. Available at:
http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/GreenBookGeneralInformation/GreenBookGeneralArticle/fs/en?CONTENT_ID=4097254&chk=isTfGX

Further information:

NaTHNaC. Travel Health Information Sheets. Poliomyelitis. Available at:
<http://www.nathnac.org/pro/factsheets/polio.htm>