

## Tetanus

### Vaccine Information

[Indications for use of vaccine](#)

[Availability of vaccine](#)

[Vaccine schedules](#)

[Interrupted courses](#)

[Contraindications](#)

[Adverse Events](#)

[References](#)

[Reading List](#)

[Links](#)

The Summary of Product Characteristics (SPC) for the individual vaccine should be consulted for specific information relating to the product (1,2,3). Tetanus toxoid vaccine is now only available as a combination vaccine.

### Indications for use of vaccine

For immunisation against diphtheria and/or tetanus and/or polio in travellers over 10 years, who need a primary course or booster doses (4).

Travellers to areas where medical attention may not be accessible should a tetanus prone injury occur and whose last dose of a tetanus-containing vaccine was more than 10 years previously, should receive a booster dose of Td/IPV, even if the individual has received 5 doses of vaccine previously. This is a precautionary measure in case immunoglobulin is not available to the individual should a tetanus prone injury occur (4).

[Back to top](#)

### Availability of vaccine

During the autumn of 2004 changes to the vaccines available for immunisation against tetanus were made on the recommendation of the Joint Committee of Vaccination and Immunisation (JCVI). This follows the discontinuation of two vaccines in the UK in 2003; low dose diphtheria for adults and adolescents; and diphtheria and tetanus for children. Details of the vaccines can be found in the summary table below.

[Back to top](#)

## Vaccine schedules

Vaccine	Manufacturer/ distributor	Schedule	Length of protection	Age range
Pediacel™ [2] (diphtheria, tetanus, 5 component acellular pertussis, inactivated polio vaccine and <i>Haemophilus influenzae</i> type b vaccine – DTaP/IPV/Hib)	Sanofi Pasteur MSD	Primary immunisation at 2, 3 and 4 months	Three years, DTaP/IPV, single lifetime dose for Hib	2 months to 10 years
Repevax™ [3] (low dose diphtheria, tetanus 5 component acellular pertussis and inactivated polio vaccine – dTaP/IPV)	Sanofi Pasteur MSD	Pre-school booster; single dose	Seven years for the dT/IPV. No data on aP.	3 years, 4 months to 5 years
Infanrix IPV™ [4] (diphtheria/tetanus/3 -component acellular pertussis/inactivated polio vaccine (DTaP/IPV)	Glaxo Smith Kline	Pre-school booster; single dose	Boosted in adolescence and adulthood. No data on aP	Booster from 16 months to 13 years of age
Revaxis™ [5] (low dose diphtheria, tetanus and inactivated polio vaccine Td/IPV)	Sanofi Pasteur MSD	Single dose booster.	10 years	10 years and over

[Back to top](#)

## Interrupted courses

It is not necessary to restart an interrupted series of a vaccine or toxoid or to add extra doses; the normal schedule should be resumed as soon as possible. Longer than recommended intervals between doses do not reduce final antibody concentrations, although protection may not be attained until the recommended number of doses has been administered.

**Pediacel®** (1)

There is no data regarding the administration of Pediacel® for one or two doses and use of different vaccines for other doses. Therefore it is recommended that infants who receive Pediacel® for the first dose should also receive this vaccine for the second and third doses of the primary immunisation series.

**Repevax® (2) & Revaxis® (3)**

Not applicable, single dose.

[Back to top](#)

## Contraindications (1,2,3,4)

- Confirmed anaphylactic reaction to a previous dose of a tetanus containing vaccine or
- A confirmed anaphylactic reaction to neomycin, streptomycin or polymyxin B (which may be present in trace amounts).
- If an individual is acutely unwell, immunisation may be postponed until they have fully recovered. This is to avoid wrongly attributing any new symptom or the progression of symptoms to the vaccine.
- Neurological complications of unknown origin within 7 days of previous vaccination

[Back to top](#)

## Adverse events

### **Pediacel® (1)**

- In controlled clinical studies performed with Pediacel®, 71% of 451 infants immunised at 2, 4 and 6 months experienced a reaction (pain, erythema or oedema) at the injection site within the first 24 hours after vaccination. Also 64% of infants experienced a systemic reaction, which was of moderate to severe intensity in 16%.

### **Repevax® (2)**

- Children 5 to 6 years old  
In a clinical study, children were primed at 3, 5 and 12 months of age with a DTaP vaccine with no additional dose in the second year of life. These children received Repevax® at 5 to 6 years of age. The most frequently reported adverse events occurring during the first 24 hours included the following:

Very common (>10%): injection site pain and swelling; fatigue

Common (1-10%): injection site erythema and pruritis; fever  $\geq 38^{\circ}\text{C}$

Uncommon (0.1%-1%): Diarrhoea, vomiting

The rates of general symptoms after the first day but within 10 days after vaccination were low; only fever ( $\geq 38^{\circ}\text{C}$ ) and fatigue were reported in  $>10\%$  of subjects. Transient severe swelling of the upper arm was reported in  $<1\%$  of subjects.

- Children 3 to 5 years old  
150 children primed at 2, 3 and 4 months of age with DTwP vaccine (with no additional dose in the second year of life) received Repevax® at 3 to 5 years of age. The most frequently reported adverse reactions occurring during the first 7 days included the following:

Very common ( $>10\%$ ): injection site pain, erythema and swelling; fatigue, fever  $\geq 37.5^{\circ}\text{C}$ , irritability

Common (1-10%): injection site bruising and dermatitis; diarrhoea, vomiting and rash

### **Revaxis® (3)**

In clinical studies, the most common events occurring after vaccine administration were local injection sites reactions (pain, erythema, induration and oedema) reported by 65 to 80% of subjects in each trial. These usually had their onset with the 48 hours following vaccination and persisted for 1 to 2 days. These reactions are sometimes accompanied by injection site nodules.

[Back to top](#)

## References

1. Sanofi Pasteur MSD *Summary of Product Characteristics: Pediacel* 27 April 2005
2. Sanofi Pasteur MSD *Summary of Product Characteristics: Repevax* 10 March 2005
3. Sanofi Pasteur MSD *Summary of Product Characteristics: Revaxis* 29 September 2004
4. Department of Health. *Immunisation against Infectious Disease*. London: HMSO; 2004 <http://www.dh.gov.uk/assetRoot/04/08/73/89/04087389.pdf>

[Back to top](#)

## Reading List

Plotkin S, Orenstein W, editors. *Vaccines*. 4<sup>th</sup> edition. Philadelphia: WB Saunders Co Ltd; 2004

[Back to top](#)

## Links

Committee to Advise Tropical Medicine and Travel (CATMAT) [http://www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/vpd-mev/tetanus\\_e.html](http://www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/vpd-mev/tetanus_e.html)

The Merck Manual of Medical Information online 2004  
<http://www.merck.com/mmhe/sec17/ch190/ch190t.html>

[Back to top](#)