

Tetanus prophylaxis – Adult & Paediatric

'There may be some slight variations within your Trust compared with the contents of this document, this document can be used and adapted if you do not have a Trust version'

ASSESSMENT

A Tetanus prone wound is:

- Any wound or burn that requires surgical intervention that is delayed for > 6 hours
- Any wound or burn at any interval after injury that shows one or more of the following characteristics:
 - A significant degree of devitalised tissue
 - Puncture-type wound
 - Contact with soil or manure likely to harbour tetanus organisms
 - Open fracture
 - Any wound containing foreign bodies
 - Wounds or burns in patients who have systemic sepsis.

Intravenous drug abusers are at greater risk of tetanus. Every opportunity should be taken to ensure that they are fully protected against tetanus. Booster doses should be given if there is any doubt about their immunisation status.

Immunosuppressed patients may not be adequately protected against tetanus, despite having been fully immunised. They should be managed as if they were incompletely immunized.

High risk wounds:

- Heavy contamination with material likely to contain tetanus spores
- Extensive devitalised tissue

The full course of diphtheria, tetanus & polio vaccination, 5 doses (2013):

Schedule	Paediatric age	Paediatric vaccine	Adult	Adult vaccine
Primary course (3 doses)	2, 3 and 4 months	DTaP/IPV/Hib	Each 1 month apart	Td/IPV
4 th dose	3 years 4 months – 5 years	DTaP/IPV	10 years after primary course	Td/IPV
5 th dose	13-18 years	Td/IPV	10 years after 4 th dose	Td/IPV

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/327799/Tetanus_Immunoglobulin_Handbook.pdf

MANAGEMENT OF TETANUS-PRONE WOUNDS

- All wounds require thorough cleaning, whatever the tetanus status.

Table of management

Immunisation Status	Clean Wound	Tetanus Prone Wound	
	Vaccine	Vaccine	Human tetanus immunoglobulin
Fully immunised i.e. has received a total of 5 doses of tetanus vaccine at appropriate intervals	None required	None required	Only if high risk
Primary immunisation complete, boosters incomplete but up to date	None required (unless next dose due soon and convenient to give now)	None required (unless next dose due soon and convenient to give now)	Only if high risk
Primary immunisation incomplete or boosters not up to date	A reinforcing dose of vaccine and further doses as required to complete the recommended schedule (to ensure future immunity)	A reinforcing dose of vaccine and further doses as required to complete the recommended schedule (to ensure future immunity)	Yes: one dose of human tetanus immunoglobulin in a different site
Not immunised or immunisation status not known or uncertain	An immediate dose of vaccine followed, if records confirm this is needed, by completion of a full 5 dose course to ensure future immunity	An immediate dose of vaccine followed, if records confirm this is needed, by completion of a full 5 dose course to ensure future immunity	Yes: one dose of human tetanus immunoglobulin in a different site

WHICH VACCINE TO USE?

Age	Components	Vaccine stocked at BCH	Dose
Primary immunisation for children < 10 years	DTaP/IPV/Hib	<i>Pediacel</i> or <i>Infanrix-IPV+Hib</i>	0.5 ml IM
Booster for children 3 – 10 years	dTaP/IPV	<i>Repevax</i>	0.5 ml IM
Primary immunisation for children ≥ 10 years	dTaP/IPV	<i>Revaxis</i>	0.5 ml IM
Booster ≥ 10 years			

HUMAN TETANUS IMMUNOGLOBULIN

- Standard dose: 250 units IM
- If > 24 hours since injury or heavy contamination or following burns: 500 units IM should be given
- If IM tetanus immunoglobulin cannot be sourced, Human normal immunoglobulin for subcutaneous use (Subgam) may be given IM
- Volume of Subgam to achieve recommended dose of 250 units is approximately 5mL

REFERENCE

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