

Title	MANAGING TETANUS-PRONE WOUNDS			Number	CL55
Effective From:		Duration:	No end date	Review:	01/05/25
Author:	Steven McDonnell			Version:	1.1
Other Ref:					
Contacts:					

Version Control

(Only last 3 versions, earlier versions can be found in the appropriate Archive directory for the document)

DATE	CHANGE	CHANGED BY
17.11.2015	Original Version	SM
21.04.2022	Reviewed, minor change	FW

Introduction

This procedure provides definitive guidance on BADGER management of patients presenting with tetanus-prone wounds.

This guidance identifies the usual tetanus immunisation schedule and management advice of patients with tetanus-prone wounds.

Tetanus is a notifiable disease.

Background to Procedure

Patients present with minor injuries, including open wounds, which may be tetanus-prone. **BADGER does not routinely provide post-exposure tetanus vaccination or administration of tetanus immunoglobulin.** However, patients enquiring about tetanus vaccination need reassurance and advice regarding their tetanus status.

For patients requiring tetanus **immunoglobulin, the clinician should contact the local infectious disease consultant or specialist.**

Tetanus Vaccination

The objective of the national immunisation programme is to provide a minimum of five doses of tetanus-containing vaccine at appropriate intervals for all individuals. In most circumstances, a total of five doses of vaccine at appropriate intervals are considered to give satisfactory long-term protection.

Primary Immunisation

Infants and children under ten years of age

The primary course of tetanus vaccination consists of three doses of a tetanus-containing vaccine with an interval of one month between each dose. If the primary course is interrupted it should be resumed but not repeated allowing an interval of one month between the remaining doses.

Children aged ten years or over and adults

The primary course of tetanus vaccination consists of three doses of tetanus-containing vaccine with an interval of one month between each dose. If the primary course is interrupted it should be resumed but not repeated, allowing an interval of one month between the remaining doses.

Reinforcing Immunisation

Children under ten years should receive the first tetanus booster combined with diphtheria, pertussis and polio vaccines. The first booster of a tetanus-containing vaccine should ideally be given three years after completion of the primary course, normally between three and a half and five years of age. When primary vaccination has been delayed, this first booster does may be given provided it is one year since the third primary dose. This will re-establish the child on the routine schedule.

Individuals aged ten years or over who have only had three doses of a tetanus-containing vaccine, with the last dose at least five years ago, should receive the first booster combined with diphtheria and polio vaccines (Td/IPV).

The second booster dose should be given to all individuals ideally ten years after the first booster dose.

Management of patients with tetanus-prone wounds

Tetanus-prone wounds include:

- Wounds or burns that require surgical intervention that is delayed for more than six hours
- Wounds or burns that show a significant degree of devitalised tissue or a puncture-type injury, particularly where there has been contact with soil or manure
- Wounds containing foreign bodies
- Compound fractures
- Wounds or burns in patients who have systemic sepsis.

Thorough cleaning of wounds is essential. If the wound, burn or injury fulfils the above criteria and is considered to be high risk, human tetanus immunoglobulin should be given for immediate protection, irrespective of the tetanus immunisation history of the patient. This is a precautionary recommendation since there is insufficient current evidence to support other alternatives. High risk is regarded as heavy contamination with material likely to contain tetanus spores and/or extensive devitalised tissue.

Although any wound can give rise to tetanus, clean wounds are considered to have a low likelihood of harbouring tetanus spores and of developing aerobic and acidic conditions that promote spore germination. Therefore, in the case of wounds such as clean cuts, human tetanus immunoglobulin need not be given.

Tetanus vaccine given at the time of a tetanus-prone injury may not boost immunity early enough to give additional protection within the incubation period of tetanus. Therefore, tetanus vaccine is not considered adequate for treating a tetanus-prone wound.

Patients who are immunosuppressed may not be adequately protected against tetanus, despite having been fully immunised. They should be managed as if they were incompletely immunised.

For those whose immunisation status is uncertain and individuals born before 1961 who may not have been immunised in infancy, a full course of immunisation is likely to be required.

Dosage of human tetanus Immunoglobulin

For prevention: 250IU by IM injection or 500IU if more than 24 hours have elapsed since the injury or there is a risk of heavy contamination or following burns. This preparation is available in 1ml ampoules containing 250IU.

Contraindications

There are few individuals who cannot receive tetanus-containing vaccines. The vaccines should not be given to those who have had:

- A 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).

Websites/further reading

<https://patient.info/> (Tetanus Immunisation)

Public Health England

<https://www.gov.uk/government/collections/tetanus-guidance-data-and-analysis>

Department of Health

<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>