

Critical haemorrhage infrastructure site survey

This document is for staff who manage critically bleeding trauma patients in tertiary trauma centres and smaller secondary hospitals. It is one of four resources to support the implementation of guidelines and standardise the management of critical bleeding. The resources are available online in editable or print formats here: www.hqsc.govt.nz/our-programmes/national-trauma-network/publications-and-resources/publication/4398.

This site survey audit tool is to help providers complete an annual review of infrastructure and equipment availability for any service that may be required to manage the care of a critically haemorrhaging trauma patient.

Trauma volumes vary widely in different centres in Aotearoa New Zealand, which means not all providers will have the infrastructure to support all the suggested best-practice system changes included in the critical haemorrhage bundle of care (see www.hqsc.govt.nz/our-programmes/national-trauma-network/publications-and-resources/publication/4177). The bundle of care serves as a broad guide, but local systems are encouraged to adapt the bundle to suit their available resources.

Name:	Site:			
Site infrastructure	Y	N	NA	Comments:
Accelerated treatment pathway ('Code Crimson' or local equivalent)				
Formalised activation protocol for critical haemorrhage in place modified for local system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Agreed calling structure in place with hospital switchboard to notify key team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specifies how the lead clinician at the bedside is designated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Specifies the team member(s) designated to be responsible for blood component transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Formalised massive transfusion protocol in place modified for local system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reviewed at least three-yearly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any 'Code Crimson' amendments been made that modify your existing adult massive transfusion protocol specifically for traumatic critical haemorrhage patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

There is a specified method of recording time of activation and termination of the protocol within the medical record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A multidisciplinary committee reviews all protocol activations for quality assurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Equipment				
Bedside ultrasound in ED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV fluid warmer:				
In ED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In OT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rapid infuser:				
In ED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In OT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEG or ROTEM available on site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Staff capability building				
Simulation training at least annually on care of the critically bleeding patient:				
In ED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In OT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Other information
Describe the changes made specific to your local system in more detail:
Describe any challenges encountered implementing this work within your local system (eg, infrastructure, personnel availability, financial constraints).
Outline any plans you have to implement any further critical haemorrhage improvement work in 2022.

Are there any issues with bundle implementation that you would like advice or assistance with from the Health Quality & Safety Commission? If so, please describe below and send this feedback to help@majortrauma.nz for follow-up.

Abbreviations: ED = emergency department; IV = intravenous; OT = operating theatre; ROTEM = rotational thromboelastometry; TEG = thromboelastography.

Providers are free to edit and adapt this document as needed, including addition of provider logo.

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**Te Kāwanatanga
o Aotearoa**
New Zealand Government