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# 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**](https://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](https://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.

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| **Name:** Click or tap here to enter text. | **Site:** Click or tap here to enter text. |
| **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 |[ ] [ ] [ ]  Click or tap here to enter text. |
| Agreed calling structure in place with hospital switchboard to notify key team members |[ ] [ ] [ ]   |
| Specifies how the lead clinician at the bedside is designated |[ ] [ ] [ ]   |
| Specifies the team member(s) designated to be responsible for blood component transport |[ ] [ ] [ ]   |
| Formalised massive transfusion protocol in place modified for local system |[ ] [ ] [ ]   |
| Reviewed at least three-yearly |[ ] [ ] [ ]   |
| Have any ‘Code Crimson’ amendments been made that modify your existing adult massive transfusion protocol specifically for traumatic critical haemorrhage patients |[ ] [ ] [ ]   |
| There is a specified method of recording time of activation and termination of the protocol within the medical record |[ ] [ ] [ ]   |
| A multidisciplinary committee reviews all protocol activations for quality assurance |[ ] [ ] [ ]   |
| **Equipment** |
| Bedside ultrasound in ED |[ ] [ ] [ ]  Click or tap here to enter text. |
| IV fluid warmer:In ED |[ ] [ ] [ ]   |
| In OT |[ ] [ ] [ ]   |
| Rapid infuser:In ED |[ ] [ ] [ ]   |
| In OT |[ ] [ ] [ ]   |
| TEG or ROTEM available on site |[ ] [ ] [ ]   |
| **Staff capability building** |
| Simulation training at least annually on care of the critically bleeding patient:In ED |[ ] [ ] [ ]  Click or tap here to enter text. |
| In OT |[ ] [ ] [ ]   |

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

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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