

# New Zealand Out-of-Hospital Major Trauma Destination Policy

South Island

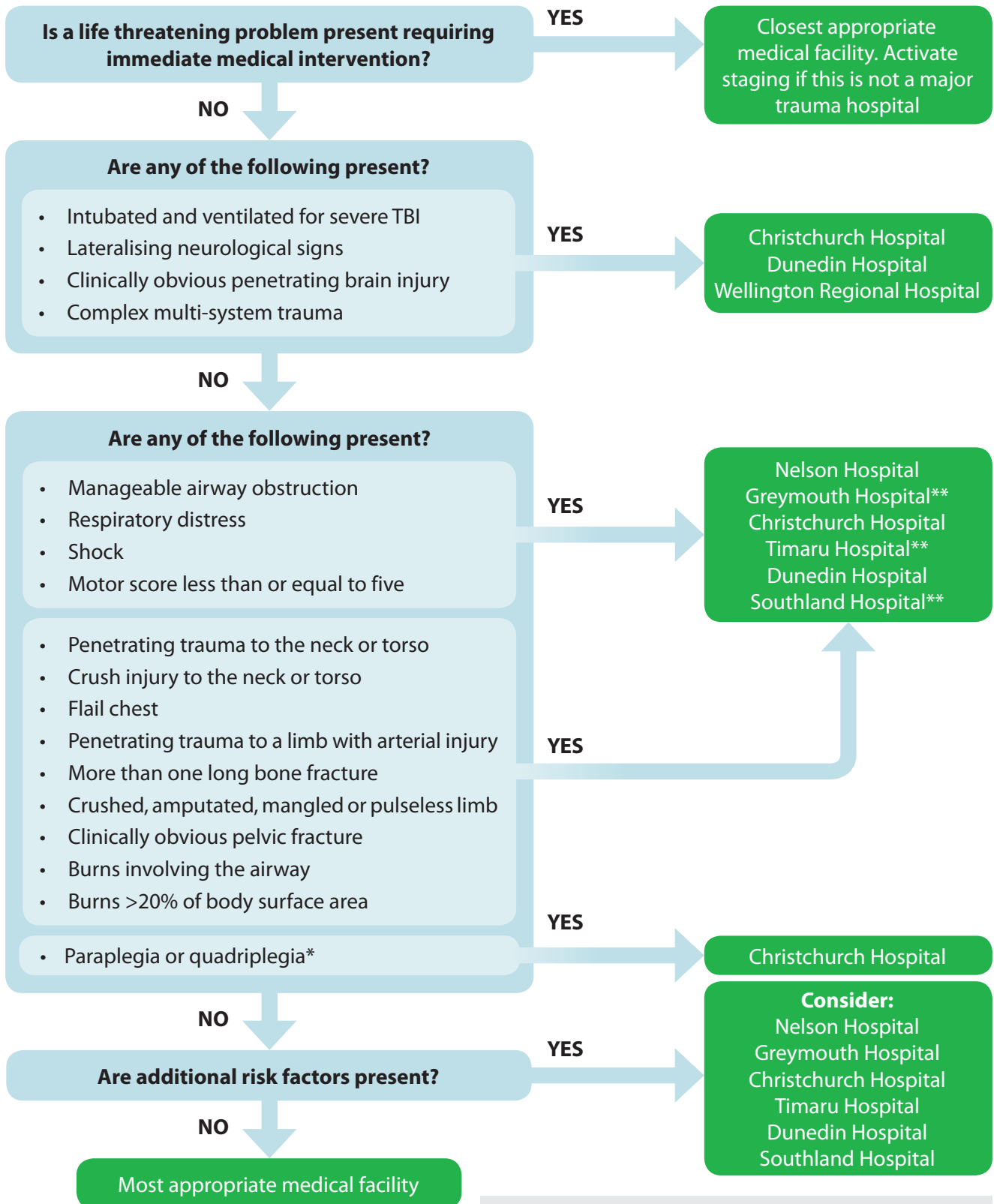
This document is for the use of clinical personnel when determining the destination hospital for patients with major trauma in the out-of-hospital setting in the South Island of New Zealand. It has been developed by the South Island Regional Major Trauma Network in conjunction with the National Major Trauma Clinical Network and the Ambulance Sector.

Publication date February 2017



# Major Trauma Destination Flowchart

South Island



**Note:**  
 \* Refer to the Spinal Cord Injury Destination Policy.  
 \*\*Patients with major trauma will only be transported to Greymouth Hospital, Timaru Hospital and Southland Hospital by road. All patients with major trauma in the catchment areas of these hospitals being transported by helicopter will be transported to: Christchurch Hospital, Dunedin Hospital or Nelson Hospital, provided it is feasible and safe to do so.

# Major Trauma Destination Policy: South Island



## Additional Information

### Introduction

- ▶ This policy is for the use of personnel in the out-of-hospital setting, when determining the transport destination for patients with major trauma within the South Island of New Zealand.
- ▶ It should be read in conjunction with the Major Trauma Destination Flowchart for the South Island, the New Zealand Out-of-Hospital Major Trauma Triage Policy, the National Major Trauma Network Staging Guidelines and the New Zealand Spinal Cord Injury Destination Policy.
- ▶ The goal of the policies is to ensure that patients with major trauma are transported directly to the most appropriate major trauma hospital, whenever it is feasible and safe to do so.

### Major trauma hospitals

- ▶ The following hospitals are designated to receive patients with major trauma:
  - Nelson Hospital.
  - Greymouth Hospital\*.
  - Christchurch Hospital.
  - Timaru Hospital\*.
  - Dunedin Hospital.
  - Southland Hospital\*.
  - Wellington Regional Hospital.

\*Note: patients with major trauma will only be transported to Greymouth Hospital, Timaru Hospital and Southland Hospital by road. All patients with major trauma in the catchment areas of these hospitals being transported by helicopter will be transported to: Christchurch Hospital, Dunedin Hospital or Nelson Hospital, provided it is feasible and safe to do so.

- ▶ The following hospitals are tertiary major trauma hospitals:
  - Christchurch Hospital.
  - Dunedin Hospital.
  - Wellington Regional Hospital.

### Determining the most appropriate major trauma hospital

- ▶ The flowchart describes the preferred major trauma hospital/s, based on the best descriptor of the patient's clinical condition.
- ▶ The patient should be transported to the preferred major trauma hospital as described in the flowchart, whenever it is feasible and safe to do so.
- ▶ If it is not feasible or safe to transport the patient to the preferred major trauma hospital or more than one major trauma hospital is listed as an option, the patient should be transported to the most appropriate major trauma hospital. This will usually be the nearest major trauma hospital, but it may be appropriate to transport the patient to another major trauma hospital if that hospital has the most appropriate facilities to meet the patient's needs.

- ▶ Personnel will determine the most appropriate major trauma hospital taking into account all of the following:
  - The nature of the patient’s known injuries.
  - The patient’s anticipated clinical needs.
  - The facilities at the major trauma hospitals it is feasible and safe to transport to.
  - The location of the incident.
  - The transport modes available and the effect of weather on helicopter transport.
  - The transport times to the major trauma hospitals it is feasible and safe to transport to.
  - The other patients being transported from the scene, particularly if the number of patients is significant.
- ▶ Personnel should have a low threshold for seeking clinical advice if:
  - The transport time to the chosen major trauma hospital is significantly longer (this is not defined and requires clinical judgement) than the transport time to the nearest major trauma hospital **or**
  - Transport to the chosen major trauma hospital will involve bypassing (or over flying) another major trauma hospital, unless the nearest major trauma hospital is not designated to receive patients being transported by helicopter.

### Life threatening problems requiring immediate medical intervention

- ▶ The patient should be transported to the closest appropriate medical facility if they have a life threatening problem requiring immediate medical intervention that cannot be provided by personnel at the scene.
- ▶ Clinical judgement is required when determining that the medical facility is appropriate, but the medical facility must have the personnel and facilities to provide the required medical intervention.
- ▶ Personnel must activate staging via Control/Comms if the medical facility is not a major trauma hospital, preferably before leaving the scene.
- ▶ Personnel in the receiving medical facility must be notified as soon as possible of the intent to stage at the medical facility, preferably before leaving the scene.

### Severe traumatic brain injury (TBI) likely to require urgent neurosurgery

- ▶ Most patients with severe TBI do not require urgent neurosurgery. However, patients with a high probability of requiring urgent neurosurgery will usually benefit from being transported to a major trauma hospital with neurosurgical facilities.
- ▶ It is preferable to transport a patient with severe TBI and any of the following clinical features to Christchurch Hospital, Dunedin Hospital or Wellington Regional Hospital whenever it is feasible and safe to do so:
  - Has been intubated and ventilated **or**
  - Has lateralising neurological signs (for example unilateral pupil dilatation or unilateral weakness) **or**
  - Has a clinically obvious penetrating brain injury.
- ▶ Personnel should have a low threshold for seeking clinical advice if transport to Christchurch Hospital, Dunedin Hospital or Wellington Regional Hospital will involve bypassing (or over flying) another major trauma hospital, particularly if the patient is not intubated and ventilated.

### Complex multi-system trauma

- ▶ Patients with complex multi-system trauma will usually benefit from transport to a tertiary major trauma hospital. This is because tertiary major trauma hospitals have additional facilities and personnel to manage patients with complex multi-system trauma.
- ▶ Complex multi-system trauma cannot be tightly defined and clinical judgement is required, but includes patients with major trauma involving very severe injuries to more than one body region.
- ▶ It is preferable to transport patients with complex multi-system trauma to Christchurch Hospital, Dunedin Hospital or Wellington Regional Hospital, provided the transport time is not significantly longer (this is not defined and requires clinical judgement) than the transport time to the closest major trauma hospital.

## Burns

- ▶ Patients with burns greater than 20% of body surface area should usually be transported to the nearest major trauma hospital and then be subsequently referred to a Burn Centre. This is because some patients will be referred to Middlemore Hospital (the National Burn Centre).
- ▶ However, it is preferable to transport patients with burns greater than 20% of body surface area to Christchurch Hospital or Wellington Regional Hospital, provided the transport time is not significantly longer (this is not defined and requires clinical judgement) than the transport time to the closest major trauma hospital.
- ▶ Patients with burns greater than 20% of body surface area in the northern aspect of the South Island are transported to Wellington Regional Hospital and not to Hutt Hospital. This is because Wellington Regional Hospital is a major trauma hospital and Hutt Hospital is not.
- ▶ Burns less than or equal to 20% of body surface area and burns involving the face (without airway burns), hands or genitals may require treatment in a Burn Centre, but in the absence of major trauma these are not time critical and the patient should usually be transported to the most appropriate hospital and be subsequently referred if required.

## Major trauma hospitals outside the South Island

- ▶ It may be occasionally appropriate for the patient to be flown to a major trauma hospital outside the South Island.
- ▶ For example, in the northern aspect of the South Island it may be appropriate for the patient to be flown to Wellington Regional Hospital, particularly if the patient:
  - Has been intubated and ventilated for severe TBI **or**
  - Has lateralising signs (for example unilateral pupil dilatation or unilateral weakness) **or**
  - Has a clinically obvious penetrating brain injury **or**
  - Has complex multi-system trauma.
- ▶ Personnel should have a low threshold for seeking clinical advice if a patient is being flown outside the South Island.