



Clinical Practice Guidelines: Trauma/Limb injury

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Purpose	To ensure a consistent approach to the management of a patient with a limb injury.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
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Limb injuries can be very painful and visually distressing for a patient. As such, **they can distract the patient and the clinician from more serious injuries in a multitrauma situation.** Gaining a good history of the event to assess the mechanism of injury, and completing a thorough primary and secondary survey are always essential.

Clinical features



A fracture should be suspected if one or more of the following are present:

- Pain
- Swelling
- Bruising
- Loss of function
- Deformity
- Bony crepitus

Where communication is difficult (e.g. young children or dementia patients) the reluctance to move a limb may be the only sign of a fracture.

NOTE: *soft tissue injuries can include all but the latter two presentations.*

Suspect neurovascular damage if there is poor distal perfusion, or reduced distal sensation or movement.



Risk assessment

- Appropriate analgesia is very important.
- Procedural sedation (ketamine) may be required when managing complicated injuries (e.g. grossly displaced open fractures with compromised vascular supply).^[1]
- Limb immobilisation should generally be in near-anatomical position.

CPG: Clinician safety
CPG: Standard cares

Patient shocked?

Manage as per:
CPG: Hypovolaemic shock

Consider:

- Traction and splinting
- Analgesia

Limb poorly perfused?

Consider:

- IV access
- IV fluid
- Analgesia
- Positioning
- Fracture reduction
- Traction splinting

Consider:

- Analgesia
- Positioning
- Immobilisation

Transport to hospital
Pre-notify as appropriate

Note 1: Clinicians are only to perform procedures for which they have received specific training and authorisation by the QAS.

Note 2: Open wounds/fractures should be washed out with 1–2 litres of normal saline following adequate analgesia.

Note 3: Crush injuries to limbs should be treated as per CPG: Crush Injury.