

Victorian State Trauma System Guideline

# Early Trauma Care



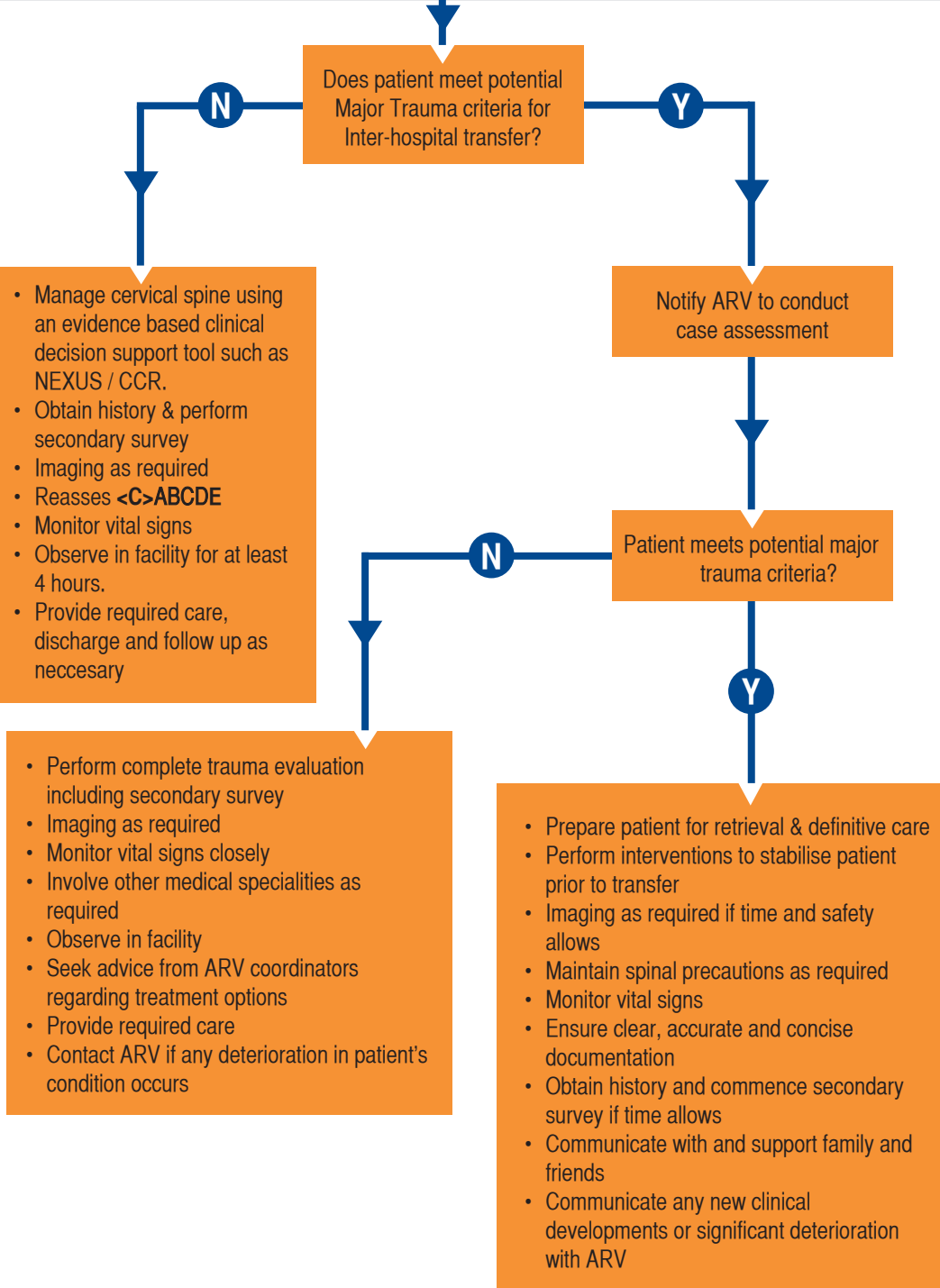
Make early contact with ARV for advice from the major trauma services and to initiate retrieval.

- The primary survey is designed to detect and treat actual or imminent life threats.
- Avoidance of hypovolaemia in trauma is a cornerstone of management.
- Trauma patients are at risk from complications due to hypothermia.

Early Activation

- Gather vital information
- Activate Trauma Team
- Designate roles
- Set up to receive patient
- Ensure safety using PPE

Primary Survey						
<b>CATASTROPHIC HAEMORRHAGE</b>	<b>AIRWAY / C-SPINE</b>	<b>BREATHING</b>	<b>CIRCULATION</b>	<b>DISABILITY</b>	<b>EXPOSURE / ENVIRONMENT</b>	<b>ADJUNCTS</b>
<ul style="list-style-type: none"><li>• Identify large volume external bloodloss</li><li>• Provide immediate management</li></ul>	<ul style="list-style-type: none"><li>• Assess airway stability &amp; protect as needed</li><li>• Be prepared for a difficult intubation</li><li>• Maintain full spinal precautions</li></ul>	<ul style="list-style-type: none"><li>• Identify and treat life threats</li><li>• Assess RR, work of breathing, SpO<sub>2</sub> &amp; symmetry</li><li>• Oxygen therapy to maintain SpO<sub>2</sub> 94-98%</li><li>• ETCO<sub>2</sub> monitoring if intubated, maintain 35-45mmHg</li></ul>	<ul style="list-style-type: none"><li>• Identify &amp; control source of haemorrhage</li><li>• Insert x 2 large bore IV cannulas</li><li>• IO access if required</li><li>• Assess HR/BP/Cap refill</li><li>• Initial management of hypovolaemia - early admin of blood products. If unavailable small boluses of crystalloid fluids to maintain end organ perfusion.</li></ul>	<ul style="list-style-type: none"><li>• Assess consciousness level - AVPU</li><li>• Check pupils</li><li>• Test BSL</li></ul>	<ul style="list-style-type: none"><li>• Fully expose and inspect patient</li><li>• Prevent heat loss</li><li>• Log roll</li></ul>	<ul style="list-style-type: none"><li>• eFAST scan</li><li>• Analgesia</li><li>• X rays: Chest, Pelvis</li><li>• Bloods: FBE, X-match, U&amp;E, Lactate, ABG</li><li>• 12 lead ECG</li><li>• Orogastric tube if intubated</li><li>• AMPLE mnemonic</li></ul>



Key Points

**Primary survey**

- A systematic approach using <C>ABCDE should be used to treat actual or imminent life threats and prevent complications from these.
- Deterioration in a patients clinical condition can be swift and this will be evident in their vital signs and level of consciousness.
- If in doubt, repeat <C>ABCDE.

**Fluid resuscitation**

- A balanced approach to fluid resuscitation in trauma leads to preservation of vital organ function until bleeding can be controlled.

- Blood products: should be given at a 1:1:1 ratio if available
- Crystalloid fluids: If blood products unavailable, then small fluid bolus to maintain end organ perfusion.
- Consider TXA if within time limits

**Prevent heat loss**

- Early recognition of hypothermia and aggressive management can help to avoid potentially lethal complications.
- Use warmed IV fluids; cover the patient with warm blankets as well as keeping the room warm, use a forced air warming machine if available.

Life Threats

**Exsanguinating external haemorrhage**

- Obvious large-volume external blood loss must be managed as an immediate priority in the pre-hospital environment and on arrival to the ED.
- The use of tourniquets, haemostatic dressings as well as direct pressure should be implemented to control bleeding until urgent surgery can be arranged.

**Airway obstruction**

- If there is potential that the patient's airway may deteriorate, early intubation should be considered.
- Always have emergency airway equipment available.

**Chest Injuries**

- The chest should be auscultated, fully exposed and inspected for any wounds, bruising or deformity.
- If any life threats are detected they should be managed in the primary survey before moving on.

**Pelvic Injuries**

- Pelvic binder in-situ

**Life Threats**

- » Tension / open pneumothorax
- » Massive haemothorax
- » Cardiac Tamponade

