



## **ANATOMICAL**

## **PENETRATING INJURIES:**

- Head or neck
- Chest, shoulder, or axilla
- Abdomen or groin
- Extremities proximal to elbow or knee

# **BLUNT INJURIES:**

- CHEST:
  - o Flail chest
  - $\circ$  Sucking chest wound
  - o Tension pneumothorax

# • PELVIS / EXTREMITY:

- Two or more long bone fractures proximal to elbow or knee (eg. humerus & femur)
- o Open fracture or open dislocation
- o Fracture or dislocation with no pulse in affected limb
- $\circ$  Major amputation of extremity proximal to wrist or ankle
- o Crushed, de-gloved, mangled, or pulseless extremity
- o Major extremity hemorrhage (requiring tourniquet to control bleeding)
- Open book pelvic fractures / injuries
- HEAD / SPINE:
  - o Paraplegia or quadriplegia
  - Open or depressed skull fracture(s)
  - o Focal neurological deficit with evidence of head trauma

## **MAJOR BURNS:**

- Body surface area greater than 20% (any thickness)
- Critical location (face, neck, hands, feet, perineum)
- Potential airway involvement
- High voltage electrical burns

## OTHER:

• Pregnancy greater than 20 weeks gestation with any apparent injury (excluding minor extremity injuries)

## **PHYSIOLOGICAL**

## UNSTABLE VITAL SIGNS:

- GCS less than or equal to 13 with evidence of head trauma
- SBP less than 90 mmHg (adult)
- Heart rate greater than 120 beats per minute (adults)
- RR less than 10 or greater than 29 breaths per minute (12 months or older)
- RR less than 20 breaths per minute in infants (up to 12 months)

# TABLE B: MOI INDICATORS / SPECIAL CONSIDERATIONS FOR TRANSPORT TO TRAUMA CENTER <sup>2b</sup>

# FALLS:

- Adults greater than 10 feet or one building story
- Children greater than two times the height of the child

# **HIGH-ENERGY AUTO COLLISION:**

- Intrusion into occupant site (passenger compartment) greater than 12 inches
- Intrusion into any site on the vehicle greater than 18 inches
- Ejection (partial or complete) from automobile
- Death in the same passenger compartment
- Vehicle telemetry data consistent with high risk of injury

# AUTO VERSUS PEDESTRIAN / CYCLIST:

- Victim thrown or run-over
- Impact between vehicle and victim greater than 30 kilometers per hour
- Motorcycle crash greater than 30 kilometers per hour (without controlled slide)

# SPECIAL CONSIDERATIONS:

- Patients on anticoagulants, or with bleeding disorders (e.g., Hemophilia, von Willebrand's disease)
- Pregnancy greater than 20 weeks gestation without apparent injury
- Significant injury in the same passenger compartment

# INDICATIONS

• Major trauma where the incident has occurred within the geographic boundaries of the Interlake-Eastern Regional Health Authority (IERHA) or the Southern Health - Santé Sud regional health authority

## WARNINGS

• Not applicable

## NOTES

 Transport to the closest emergency department (ED) <u>regardless of physician availability or redirection (diversion)</u> <u>advisory</u>. In these critical situations survival is measured in minutes. If these cannot be resolved with the personnel, equipment, and expertise available on scene, emergency transport to a higher level of care or a better-resourced environment will be required. For most patients the benefits of additional "hands", a stable treatment platform, and reliable communications outweigh the disadvantage of no physician.

As soon as possible contact VECTRS. VECTRS will provide on line medical support (OLMS) if no local physician is available. Paramedics will remain with the patient for possible emergent ground transport.

VECTRS may conference in the transport physician and air medical crew for consideration of air intercept and / or subsequent IFT.

2. Contact VECTRS and indicate that you have a *major trauma patient who meets bypass criteria* for any patient(s) who meet any of the indicators in tables A or B, <u>regardless of your geographic location</u>.

- a. Patients with any anatomical or physiological indicator(s) listed in table A require assessment by the trauma team at the Health Sciences Center (HSC). Initiate transport as indicated and call VECTRS as soon as possible during transport. VECTRS will provide the TTA or trauma pre-alert.
- b. Patients with any mechanism of injury (MOI) indicator(s) or special consideration(s) listed in table B may require assessment by the HSC trauma team. Prior to departing the scene, call VECTRS. VECTRS may direct you to a Regional or local ED for initial assessment before possible secondary interfacility transfer (IFT) to the trauma center. VECTRS will provide the TTA or trauma pre-alert.
- 3. Notify the Virtual Emergency Care & Transport Resource Service (VECTRS) as soon as possible. VECTRS will provide a trauma team activation (TTA) if transporting to the Provincial trauma center, or a trauma pre-alert if transporting to an alternate destination. Appendix A contains the information required by VECTRS for TTA / pre-alert and hospital preregistration.

|                                  | LINKS |  |
|----------------------------------|-------|--|
| A01 - Standard Clinical Approach |       |  |

| APPROVED BY          |                                |  |
|----------------------|--------------------------------|--|
| Bytherel             | April .                        |  |
| EMS Medical Director | EMS Associate Medical Director |  |

# VERSION CHANGES (refer to X02 for change tracking)

• Addition of ACP work scope indicator

# APPENDIX A - INFORMATION REQUIRED FOR TRAUMA TEAM ACTIVATION (TTA)

- Name
- Date of birth
- Personal health information number (PHIN)
- Age / gender
- Mechanism of injury (blunt versus penetrating)
- GCS
- HR
- BP
- RR
- SaO<sub>2</sub> (indicate if supplemental O<sub>2</sub> required)
- Glucose (if relevant)
- Scene location
- Estimated transport time to trauma center or closest ED
- Brief description of injuries
- Brief summary of prehospital actions and interventions