Shared health Soins communs Manitoba	F02.1 - BASIC TRAUMA ARREST (ALL AGES)	
	Version date: 2025-03-23	Effective Date: 2025-04-30 (07:00)
EMR only		

- ❑ Standard clinical approach(A01)
- ❑ Open / maintain the airway [2]
- ❑ Protect the C-spine during resuscitation / implement SMR if transporting [3]
- ❑ Stop external hemorrhage
- ❑ Apply pelvic binder & splint fractures
- ❑ Initiate CPR (DO NOT USE AUTOPULSE) [4]
- ❑ Attach the AED, analyze the rhythm & shock if advised [5]
- ❑ Immediately resume CPR x 2 minutes [4]
- ❑ Repeat the analyze / shock / CPR sequence up to 2 more times on scene [6]

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Is ROSC achieved in 3 cycles or less of the analyze / shock / CPR sequence? [7]

No →

NO ROSC:

- ❑ Resume / continue CPR (DO NOT USE AUTOPULSE) [4]
- ❑ Call VECTRS / OLMS while preparing to transport [8]
- ❑ Transport or discontinue as advised

Yes ↓

ROSC:

- ❑ Support ventilation [9]
- ❑ Maintain normal SpO_2 [10]
- ❑ Secure airway if necessary
- ❑ Exclude hypoglycemia
- ❑ Initiate transport towards the closest ED
- ❑ Call VECTRS / OLMS during transport & continue / redirect as advised [11]

VECTRS: (204) 949-4000

INDICATIONS
• Cardiac arrest due to major trauma

CONTRAINDICATIONS / CAUTIONS
• Health care directive prohibiting cardiopulmonary resuscitation (CPR) • Injuries incompatible with survival [14] • For cardiac arrest not due to major trauma refer to C01

NOTES

1. Without delaying patient care, paramedics with the basic (EMR) work scope must call the Virtual Emergency Care & Transport Resource Service (VECTRS) and consult with on line medical support (OLMS) for all trauma arrest cases (A07). [8]
2. Airway maneuvers during resuscitation are considered aerosol-generating medical procedures (AGMP). Chest compressions and defibrillation are not. Appropriate personnel protective equipment (PPE) is required (A09).
3. Do not attempt to "clear the C-spine" on the scene. Protect the cervical spine during resuscitation and implement spinal motion restriction (SMR) as soon as possible if transporting.
4. Always maintain personal safety when performing CPR during transport, especially during egress and transport.

   Minimize pauses in chest compressions and limit all interruptions to ten seconds or less. You can safely continue chest compressions while the AED is charging.

   The scientific literature is divided on the risks versus benefits of mechanical compression devices (MCD) in patients with traumatic arrest, with some studies showing increased bleeding and death. ERS policy at this time precludes the use the AutoPulse™ during traumatic arrest.
5. For patients less than 8 years of age or 25 kilograms weight use pediatric pads. If the patient's age is unknown, use visible signs of puberty to differentiate a child from an adolescent. If pediatric pads are not available, use adult pads but ensure separation by at least 2.5 cm (consider antero-posterior placement).

   When using an automated external defibrillator (AED) in a patient with an implanted cardioverter-defibrillator (ICD) or pacemaker, place the electrodes at least 8 centimeters (3 inches) away from the pulse generator.
6. The sequence of rhythm analysis, shocking (if advised), and immediately resuming CPR for 2 minutes should be performed up to 3 times on the scene, unless pre-empted by a return of spontaneous circulation (ROSC).
7. For shockable rhythms due to isolated blunt chest trauma (commotio cordis) high quality cardiopulmonary resuscitation (CPR) and prompt administration of shocks can be lifesaving.

   However, most traumatic cardiac arrests do not present with a shockable rhythm. For these patients, if opening the airway and staunching bleeding does not result in ROSC it is highly unlikely that further prehospital management will be effective. Advanced potentially life-saving interventions may be available at a hospital but only if they are rapidly available. If no shock is advised, scene time should be kept to a minimum.
8. The decision to transport the trauma arrest victim without ROSC or discontinue resuscitation in the field depends on many factors. Emergency transport without hope of survival exposes paramedics and the public to unnecessary risk.

Sometimes, however, transporting to a health care facility and deferring the decision about discontinuation to a health care provider with additional training and experience may be in the best interest of the patient's family and providers (e.g. child victim, family distress, provider uncertainty). Organ donation may be considered in a patient with an isolated head injury who has been pulseless for only a short period of time.

9. Over-ventilation may reduce blood flow to the brain, which can worsen a neurological injury.
10. Provide supplemental oxygen to target pulse oximetry (SpO2) value of 92% to 98% in adults and 94% to 98% in children.
11. If ROSC is achieved, VECTRS / OLMS can assist with determining the most appropriate destination based on your location, and can conference in the transport physician and air medical crew for consideration of an air intercept or transport.
12. If transporting, paramedics will provide notification (including an estimated time of arrival) to receiving emergency department (ED) staff.
13. Injuries incompatible with life include decapitation, incineration, transection of the thorax or abdomen, substantial destruction of vital organs (heart, lungs, brain), or separation of vital organs from the body.

LINKS / REFERENCES
• A01 - Standard Clinical Approach • A07 - VECTRS / OLMS • A09 - Aerosol Generating Medical Procedures • A12 - Air Pre-Alert & Auto Launch • C01 - Basic Cardiac Arrest • F06 - Spine & Spinal Cord Trauma

APPROVED BY	
	
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VERSION CHANGES (refer to X06 for change tracking)
• Simplified flow chart & revised notes for greater clarity & ease of use