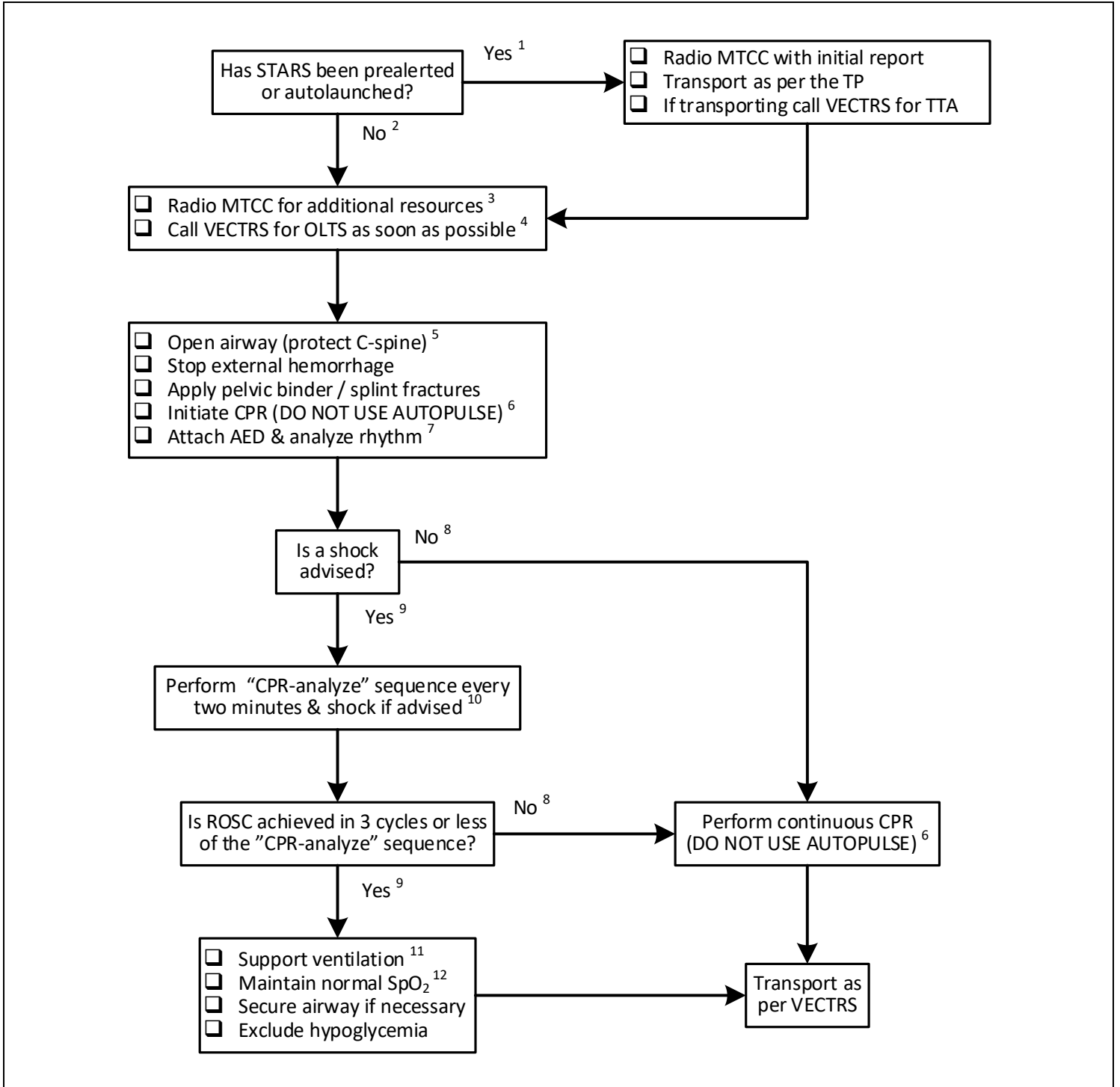
	F02.1 - BASIC TRAUMA ARREST FOR EMR	
	ALL AGES	TRAUMA
Version date: 2024-10-27		Effective Date: 2024-11-05 (07:00)



VECTRS will provide TTA / prealert. Paramedics will provide prearrival notification¹³ **VECTRS: (204) 949-4000**

INDICATIONS

- Cardiac arrest due to major traumatic injury (for nontraumatic cardiac arrest refer to C01)

CONTRAINDICATIONS

- Health care directive prohibiting cardiopulmonary resuscitation (CPR)
- Injuries incompatible with survival ¹⁴

NOTES

1. The Medical Transportation Coordination Center (MTCC) will notify the responding ground unit when the Shock Trauma Air Rescue Society (STARS) has been prealerted or autolaunched for the same call. MTCC will request an initial report from paramedics by radio as early as possible. The transport physician (TP) will decide to launch or stand down based on this report.

If STARS responds to the call, the TP will be the most responsible physician (MRP). Paramedics will transport as directed by the TP.

If transporting, paramedics must also notify the Virtual Emergency Care & Transport Resource Service (VECTRS) as soon as possible. VECTRS will provide trauma team activation (TTA) if transporting to the Provincial trauma center, or a trauma prealert if transporting to an alternate destination.

2. If STARS is not involved or is stood down, VECTRS will assume responsibility and the VECTRS emergency physician (EP) will assume the MRP role.

Paramedics will contact VECTRS for on-line trauma support (OLTS) and will manage and transport as directed by the VECTRS EP or advanced care paramedic (ACP).

If transporting, VECTRS may conference in the TP and air medical crew (AMC) for consideration of air intercept. Paramedics may be directed to an alternate location for rendezvous.

3. Paramedics should anticipate the need for additional resources or clinical support. Radio MTCC early for backup, advanced life support (ALS) intercept, and / or additional resources (e.g. fire service) for extrication, egress and loading.

4. The decision to transport the trauma arrest victim without a return of spontaneous circulation (ROSC) or discontinue resuscitation in the field, as well as determining an appropriate destination if transporting, is complex. Emergency transport without ROSC and with no hope of survival exposes paramedics and the public to unnecessary risk.

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 should be considered in a patient with an isolated head injury who has been pulseless for only a short period of time.

Paramedics with the basic (EMR) work scope must consult with OLTS for all trauma arrests.

5. 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).

Always maintain personal safety when performing CPR during transport.

6. 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.
7. 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.
8. 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 a return of spontaneous circulation (ROSC) it is highly unlikely that further prehospital management will be effective. Advanced interventions at a hospital (e.g. decompression of tension pneumothorax, blood transfusion, surgery) may be lifesaving, but only if they are rapidly available.
9. For shockable rhythms due to isolated blunt chest trauma, high quality cardiopulmonary resuscitation (CPR) and early administration of shocks (defibrillation) can be lifesaving.
10. The “CPR-analyze” sequence represents two minutes of CPR followed by a brief pause for rhythm analysis and immediate defibrillation, if indicated. Minimize pauses in chest compressions and limit all interruptions to ten seconds or less. Continue chest compressions while the AED is charging.
11. Over-ventilation may reduce blood flow to the brain, which can worsen a neurological injury.
12. Provide supplemental oxygen to target pulse oximetry (SpO₂) value of 92% to 98% in adults and 94% to 98% in children.
13. If transporting, paramedics will provide notification (including an estimated time of arrival) to receiving emergency department (ED) staff.
14. 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

- A09 - AEROSOL GENERATING MEDICAL PROCEDURES
- C01 - BASIC CARDIAC ARREST

APPROVED BY



EMS Medical Director



EMS Associate Medical Director

VERSION CHANGES (refer to X06 for change tracking)

- Retitled with addition of “FOR EMR”
- Flow chart & notes revised for greater clarity and ease of use
- Paramedics will radio MTCC with initial report if STATS has been prealerted or autolaunched
- Paramedics with basic work scope must call VECTRS for OLTS for all trauma arrests
- Use of AutoPulse™ contraindicated