

## **Technical Rescue Team (TRT)**

### **Purpose:**

The purpose of this protocol is to provide for the use of technical rescue EMS paramedics in the Washtenaw/Livingston Medical Control Authority during technical rescue-related activities and training in which their presence would be advantageous.

### **Procedure:**

When responding to a technical rescue scene, the TRT paramedics will respond along with another transport capable unit. The TRT paramedic will give a complete report of patient condition and treatments to the transporting unit. In the event the transporting unit is not ALS or if deemed necessary, the TRT paramedic(s) will ride to the hospital and maintain patient care during transport.

In cases where patient care must be performed in confined spaces, below grade or trench, in areas well above ground level, high angle, in collapsed structures, or other instances where technical rescue is necessary, TRT paramedics may enter such areas in order to perform medical assessment and care, provided that the TRT paramedic has the pertinent training/certification.

TRT paramedics may encounter patients whose injuries include suspension trauma, compartment syndrome, and crush injuries. In order to better care for these unique trauma injuries, TRT paramedics will be provided training designed to prepare them for the unique features associated with these specialized patients.

The TRT paramedic team will be comprised of Washtenaw/Livingston MCA cleared and licensed emergency medical personnel. The TRT paramedics will follow Washtenaw/Livingston MCA protocols. They will have radio capabilities which allow them to reach their agency dispatch and to reach Washtenaw/Livingston MCA hospitals for on-line medical direction. The EMS Medical Director will be contacted for each activation of the TFT as soon as possible.

In rescue situations where it is not possible to contact on-line medical direction, all post-radio orders will become pre-radio and medical control should be contacted as soon as possible. TRT personnel will contact the incident commander on scene for situation report. The TRT personnel will size up the situation and request additional resources as needed.

### **Equipment List:**

- Jump Kit
- Oxygen/Oxygen supplies
- Airway management supplies
- Suction
- Personal protection equipment
- ECG Monitor/Defibrillator
- IV Kit
- Drug Box
- TRT jump kit(s)
- Radios

**Drug Box Exchange:**

1. An MCA approved ALS unit will transport all patients which the TRT paramedic team treats. During a response, all medications used by the TRT paramedic will be replaced from the responding ALS unit's drug box.
2. The transporting ALS unit will then use their opened drug box for any additional treatment the patient might need during the transport. The ALS unit will be responsible for documentation of drug use. Upon arrival at the hospital the ALS unit will follow the usual box exchange procedure for an ALS unit.
3. The TRT paramedic will keep a log of all patients treated, drugs used and replaced from an ALS drug box.
4. At the end of the TRT paramedic response, the drug box must be returned to the hospital pharmacy for update of its contents, seal and expiration date.

**IV Kits/Fluids:**

1. The TRT paramedic team will carry two (2) MCA approved IV kit, one (1) saline lock, three (3) 1000 ml bags of Normal Saline, and two (2) liter bags of Normal Saline (for eye irrigation using Morgan Lenses).
2. The TRT paramedic team will replace the used kits and bags of IV fluid with items from the transporting ALS unit or at the hospital. The ALS unit will obtain a new IV kit at the receiving hospital following the normal IV exchange policy.
3. All remaining and used IV supplies will be given to the transporting ALS unit for proper disposal.

## Technical Rescue Team

### General Crush Injury

This protocol should be considered when the patient has been entrapped at the scene for more than two hours, one or more full extremities trapped by an object capable of causing a crush injury, including machinery, dirt, rock, and rubble or there is entrapment of patient with history of previous cardiac or renal disease or dialysis treatment.

**Crush Syndrome** should be suspected in patients with entrapment/compression of greater than one hour, especially when a large muscle mass/group is involved. Treatment of the patient at risk for Crush Syndrome *should begin before the patient is removed when practical.*

#### Pre-Radio

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow General Trauma Protocol, identify and treat life threats.
2. Assess for signs of Compartment Syndrome or Crush Syndrome.

#### Pre-Radio

PARAMEDIC

3. Establish large bore IV(s) and infuse one (1) to two (2) liters of Normal Saline *just prior to removal of patient when practical.*
4. Treat patient pain per the pain management protocol. Fentanyl is preferred to morphine.
5. Initiate cardiac monitoring assess for hyperkalemia, i.e. wide QRS or peaked T waves.
6. Administer oxygen to patient if environment allows.
7. Consider Albuterol 2.5 mg.via NMT during extrication process.
8. Administer Sodium Bicarbonate 100 mEq IVP prior to extrication and 50 mEq/hr IVBP or slow IVP if extrication is prolonged and hyperkalemia is suspected.
9. Administer Calcium Chloride 1 gram slow IVP over 5 minutes after extrication if hyperkalemia is suspected – T waves become peaked, if QRS widens, or if hypotension develops.

#### Post-Radio

PARAMEDIC

10. Consider application of tourniquet if bleeding cannot be stopped by other means. The on-call EMS Medical Director shall be contacted for decision-making guidance.