



PENNSYLVANIA EMERGENCY  
HEALTH SERVICES COUNCIL  
*Your Voice In EMS*

### RECOMMENDATION FOR CONSIDERATION

Board Meeting Date: March 14, 2018

Subject: Best Practice Recommendation – Commercial Tourniquets

VTR#: 0318-01

Committee/Task Force: Medical Advisory

Recommended Goal

Recommended Policy Change

Other:

#### **Recommendation:**

The Pennsylvania Department of Health should issue a best-practice recommendation for EMS agencies to carry at least six (6) commercial tourniquets on every licensed vehicle.

#### **Rationale [Background]:**

The use of tourniquets has a long and storied history in emergency medical services. Once thought of as a device of last resort, military and civilian research has shown them to be first-line device in cases significant blood loss from catastrophic limb injury.

The advent of commercial tourniquets has significantly increased their efficacy and decreased complications caused by homemade devices constructed from whatever was available at the time of injury. For the most part, there are two (2) types of commercial tourniquets: 1) those using a wide band compressed by a windlass or similar mechanism and 2) the wide rubber band type, where compression is created by stretched the band during application. Although the windlass type tourniquet is most common, the elastic band tourniquet provides effective hemostasis when properly stretched and may prove superior for pediatric and other patients with small limbs. With reduced tension, the band can be used as a compression dressing for less severe hemorrhage.

Licensed EMS vehicles in Pennsylvania are currently required to carry two (2) commercial tourniquets. The Medical Advisory Committee (MAC) recommends agencies be encouraged to increase this quantity to six (6) per vehicle and recommends agencies consider carrying a combination of windlass and elastic band devices. The recommended quantity of tourniquets can be a combination of those stored on the vehicle and/or carried on the provider's person.

The MAC believes increasing the number of devices per vehicle will better prepare agencies to manage multi-casualty incident involving an active shooter(s) and/or explosive device. This initiative also is an important first step for agencies who are developing specialized gear to operate in hostile threat environments. Encouraging providers to carry a tourniquet on their person reduces the time to application and facilitates self-rescue. The MAC is aware that in the eastern and northeastern regions of the commonwealth, hostile threat gear bags have been distributed, each containing six (6) commercial tourniquets.

#### **Medical Review [Concerns]:**

The PEHSC Medical Advisory Committee supports this best-practice recommendation.

**Fiscal Concerns:**

The fiscal impact of any unfunded mandate must be given careful consideration given the current financial state of EMS. The average cost of a windlass device is \$22 ea. and the elastic band device is approximately \$7/ea. The estimated system wide impact of a mandated change is approximately \$300K. It is for this reason the MAC supports a step-wise approach to achieving the goal, which allows agencies to purchase devices over a longer period based on available funding.

**Educational Concerns:**

The EMS agency medical director is responsible to ensure that providers are familiar with the tourniquets carried. PEHSC is willing to assist agencies by providing educational resources on the proper application of tourniquets, including incidents involving self-rescue.

**Plan of Implementation:**

We recommend the Department:

1. Issue an EMS information bulletin encouraging agencies to increase the quantity and type of tourniquets carried on its vehicles.
2. Assist agencies, to the extent possible, with bulk purchasing of tourniquets utilizing EMSOF, healthcare coalition or other funding sources.

The PEHSC Committee/Task Force offers consultation to the Department in regard to the content of this Vote to Recommend (VTR) and its attached documents. The PEHSC Committee/Task Force specifically offers staff or member support to participate in Department deliberations regarding this recommendation in an effort to convey committee/task force discussions.

**Board Meeting Comments/Concerns:**

None.

Signed: \_\_\_\_\_ Date \_\_\_\_\_

President

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For PEHSC Use Only – PA Department of Health Response

Accept:\_\_\_\_ Table:\_\_\_\_ Modify:\_\_\_\_ Reject:\_\_\_\_

Comments:

Date of Department Response:\_\_\_\_\_