

## Leadership Connection 2018 (15-18 September)

### The Need for Trauma Kits in Maryland Public Schools

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Maryland public schools lack the basic medical supplies to reduce loss of life if trauma injuries were to occur. Trauma injuries can occur anywhere at any time. From situations like active shooter, active stabber, to vehicular accidents or natural disasters, trauma injuries are unpredictable. The schools need to be prepared. Trauma kits offer the perfect solution and provide the needed medical supplies to prevent loss of life.

The top three trauma injuries are extremity hemorrhage, tension pneumothorax and airway obstruction. All of these are treatable with minimal supplies but are time sensitive injuries. The Committee of Tactical Emergency Casualty Care (C-TECC) guidelines place control of external hemorrhage ahead of airway control (2015). For example, victims in an active shooter incident are more likely to suffer exsanguinating extremity wounds than an airway injury. A person can bleed to death from a large arterial wound in 2-3 minutes while it may take 4-5 minutes to die from a compromised airway- this leads to replacing the traditional ABC mnemonic (for airway, breathing, circulation) with MARCH (Massive hemorrhage control/Airway support/Respiratory threats/Circulation [prevent shock]/Hypothermia). Hemorrhage is the second leading cause of death for patients injured in the prehospital environment. Hemorrhage accounts for 30-40 percent of all mortality. In one study, 57 percent of the patients who died had injuries that might have been amenable to tourniquet application (Navarro, 2016). With EMS response time around eight minutes (varies on situations like active shooter, or road blockages from natural disasters) this leads school nurses and faculty as the very first responders. Time is of the essence when treating trauma injuries, the schools need to have medical supplies available to allow for fast treatment and prevent loss of life.

Many Maryland public schools lack the most basic supplies to help treat trauma injuries, which puts the lives of the students and the faculty members at risk. Trauma kits are a solution. Items in a trauma kit can include but not limited to: tourniquets, chest seals, trauma dressings, pressure bandages, bleeding control dressings, CPR micro shield mask, nitrile gloves and trauma shears. One of the most important supplies included in trauma kits are tourniquets. Tourniquets are effective in decreasing the number of treatable exsanguination deaths due to extremity hemorrhage. In US combat fatalities: from 2001 to 2011 treatable exsanguination deaths dropped from 7.8% to 2.6% (2015). There is a decrease in preventable deaths though widespread training, dissemination and use of tourniquets (Shackleford, et al.). Ideally, it would be most beneficial to have tourniquets in every classroom.

The cost of trauma kits can range from \$100 and up. The number of trauma kits in a school would depend on the school size. Ideally, there should be supplies in every room (in case of an active shooter scenario). Teachers and faculty should also be trained on how to use the supplies. "Within 20 minutes of training, nearly anyone can become efficient in tourniquet application"- Deputy Godlove, School Resource Officer, Frederick County Sheriff Department. The supplies do come with instructions printed on them, so a lay person without training can still utilize them.

Ultimately, it is up to the school district on providing trauma kits for the schools. But without them, they are putting many lives at risk. The statement of "Oh that will not happen here" is blatantly wrong. We should be asking ourselves "When something does happen, are we prepared?" Maryland public schools are not prepared, and unfortunately is putting the safety and wellbeing of students at risk. Trauma kits can be utilized for many different types of injuries and can prevent loss of life. Being prepared keeps our students safe and ensures the best possible outcome if trauma injuries were to occur.

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**Title:**

The Need for Trauma Kits in Maryland Public Schools

**Keywords:**

Safety, Trauma injuries and Trauma kits

**References:**

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**Abstract Summary:**

Students' safety should be our top priority, but many Maryland public schools lack the basic medical supplies to provide aid in emergency situations. Without proper supplies the lives of students and faculty are at risk. Trauma kits are the solution.

## **Content Outline:**

### **Introduction**

Maryland public schools lack the medical supplies to provide aid if trauma injuries were to occur.

Trauma kits are the solution.

### **Body**

Main point #1: Trauma injuries are unpredictable; schools need to be prepared

Supporting point #1

A. Causes of trauma injuries (Emergency Situations)

B. National Statistics on Active Shooter Incidents, and School Shootings

Supporting point #2

A. EMS response time

B. School nurses and faculty are first responders

Main point #2 Top three trauma injuries

Supporting point #1

A. Trauma injuries treatable with minimal supplies but are time sensitive

B. ABC vs MARCH

Supporting point #2

A. Hemorrhage statistics

B. Tourniquet statistics

Main Point #3 Trauma kits are the solution

Supporting point #1

A. Supplies included in trauma kits

B. Training on using supplies

Supporting point #2

A. Costs of trauma kits

B. Examples of lives saved from trauma kits

## **Conclusion**

- A. Maryland public schools are ill prepared for trauma injuries
- B. Trauma kits offer many benefits and can save students' lives.

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**Professional Experience:** August 2015- May 2018- Student Nurse at Hood College, Frederick, MD  
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**Author Summary:** Ashley DeVries graduated with her Bachelor of Nursing Science in May of 2018. During her Community Health clinical rotation, she was assigned to a school nurse and was shocked to discover the lack of medical supplies the schools had. She has since presented to Frederick County Public Schools about the need for trauma kits in schools.