

### Apply Pressure During Pressure

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## McCracken County High School

- McCracken County High School is located in Western Kentucky
- Approximately 2,000 students
- Our target audience includes the students of MCHS and HOSA State attendees











**SAVE A LIFE** 



### **Background Information**

- The top cause of <u>preventable death</u> in trauma patients is losing too much blood
- Approximately 20% of people who have died from traumatic injuries could have survived if someone near had been able to provide quick bleeding control.<sup>1</sup>
- Between 2000 and 2018, 277 active shooter events killed 884 people and wounded 1546.<sup>2</sup>
  - 21% of these events took place in schools or universities.



#### Literature Review

Study in Brooklyn, NY of 286 high school students revealed

Before Stop The Bleed training:

• 125/286 likely to help in bleeding emergency (44%)

After Stop The Bleed training:

• 228/286 likely to help in bleeding emergency (81%) 103 more students were likely to help<sup>3</sup>



# Why are we passionate about this topic?

- Stop The Bleed training is important for MCHS students and staff because we have had 2 school shooting within 30 miles of our campus in 26 years.
- The Heath High School shooting happened on December 1, 1997
- The Marshall County High School shooting happened on January 23, 2018



### Our Research Question

What percent of high school students know what to do in an emergency bleeding injury?

Do we have the ability to improve the knowledge and comfort level of assisting with bleeding emergencies by teaching Stop The Bleed.

### What is our goal?

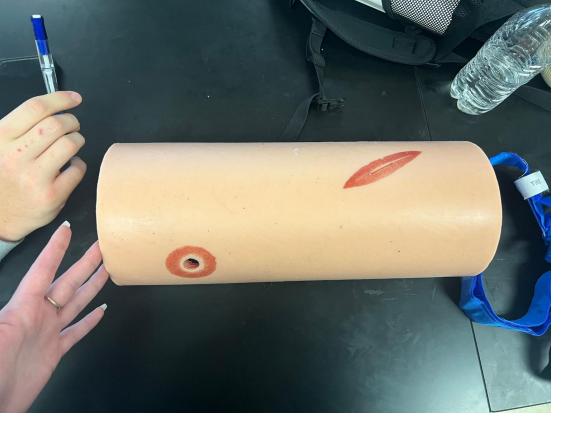
- To educate and train staff and students about how to prevent the #1 leading cause of deaths in trauma patients- bleeding out
- To increase the comfort and willingness of the public to intervene in a manner similar to bystander CPR.



### Project Activities

- Pre Survey
- Educational Posters around school
- "Go-Bags"
- Official Stop The Bleed training
  - Hands-on demonstration of proper tourniquet use
  - Packing a wound accurately
  - Applying pressure when bleeding
- Increase awareness of hemorrhage control throughout the school
- Post survey (pre and post survey are the same)







Pictured above: simulated extremity with Combat Application Tourniquets (CAT)





Pictured above: Students packing wounds with gauze and applying pressure.



Pictured above: Simulated blood hanging on an IV pole that connects to a practice wounded arm

#1 CAUSE OF PREVENTABLE DEATH IS BLEEDING

### STOP THE BLEED

TAKE SOME TIME & LEARN TO SAVE A LIFE

SIGN UP FOR CLASSES TODAY



APPLY PRESSURE UNDER PRESSURE EMAIL: ANDREA, HEINSER@MCCRACKEN.KYSCHOOLS.US





Pictured above: educational flyer posted on social media and students applying a tourniquet on simu

### **Project Evaluation**

 We will evaluate our project with a survey about individual knowledge.

 What students and staff know about hemorrhaging before and after we educate with Stop The Bleed

Post Survey



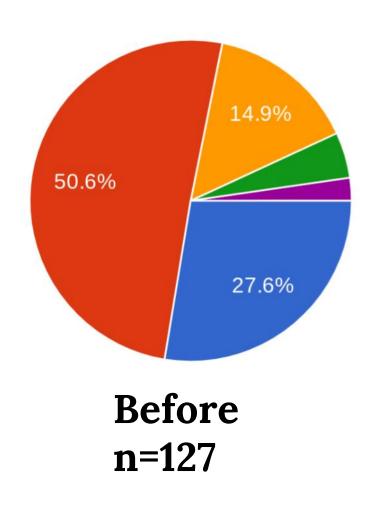


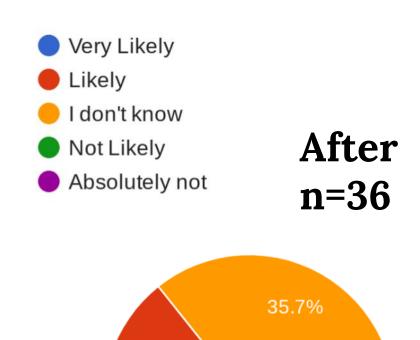
### Project Outcomes

- In this project we found that there were so many students interested in the medical field that didn't know how to begin exploring the different careers.
- We trained approximately 200 students

#### Question #1:

How likely would you be to help an injured person that is bleeding?





35.7%

28.6%

#### Question #2:

How comfortable would you be to help an injured person that is bleeding?

71% **After** n=36comfortable 64% **BEFORE** comfortable **Before** n=127**AFTER** 

#### Question #3:

Are you worried that you may cause more harm than good when assisting with a bleeding injury?

Before n=127

After n=36

Before: **36%** 

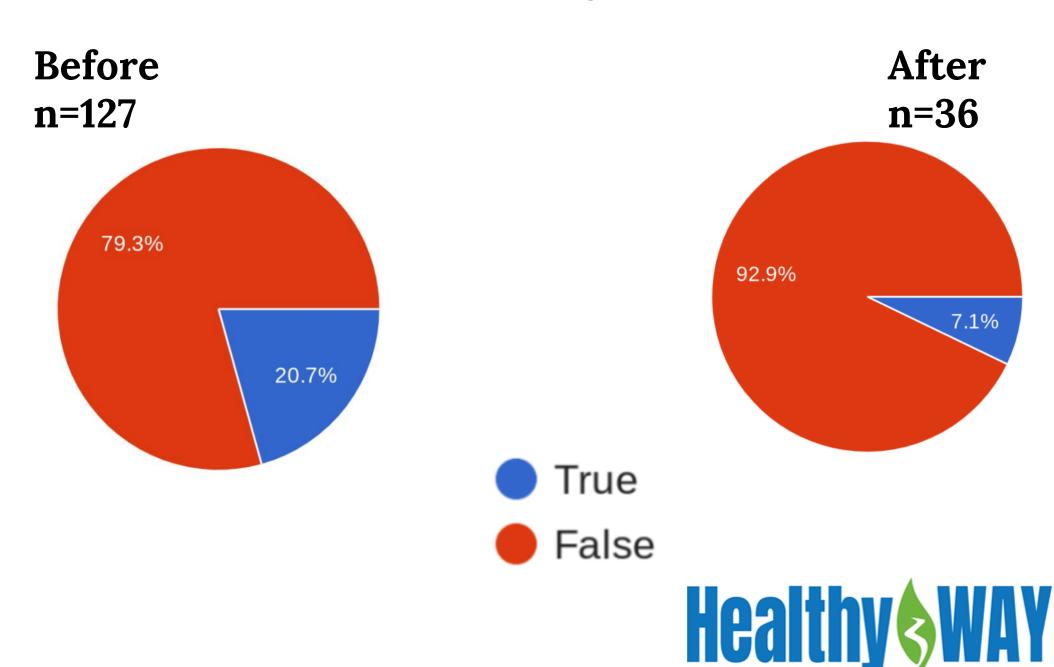
not worried/not really worried about causing harm

After: **32%** 

not worried/not really worried about causing harm

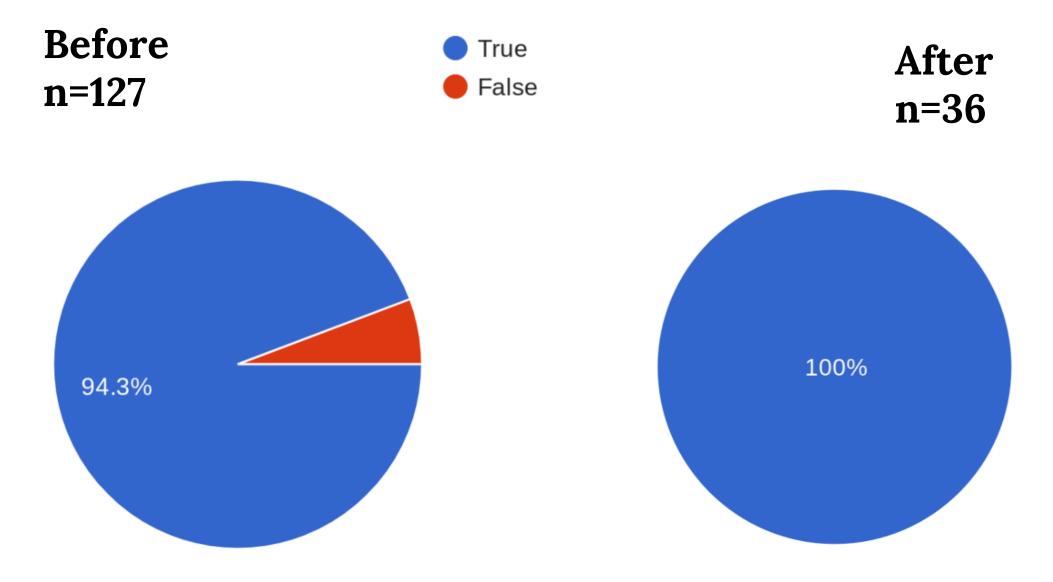
#### Question #4:

True or False? The tourniquet goes BELOW the wound.



#### Question #5:

True or False? You should apply pressure on open, bleeding wounds until emergency services arrive.



### Reflection

Aside from those multiple choice questions, we included open response questions to see what everyone really knew. They looked like:

How do you properly put on a tourniquet?

"place it above the wound and pull it tight then put a pencil or something under it and twist it"

#### What does "hemorrhaging" mean?

"when someone suffers from a great loss of blood through a ruptured vein"





### Reflection

We can conclude that our training was very effective, beneficial, and truly life changing. We know that everybody trained is more comfortable to help others in emergency situations.





### Acknowledgement

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- The project described is solely the responsibility of the authors and does not necessarily represent the official views of the UK Center of Excellence in Rural Health.







#### References

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