

Implementing the Stop the Bleedsm Campaign in a University Community

Robert A Katzer, MD, MBA^{*}, David A Beshai, BS[^], Ajeet Pal Bayo Bhatia, BA[^] and Andre Serop Ksajikian, BA[^]

^{*}University of California, Irvine, Department of Emergency Medicine, Orange, CA

[^]University of California, Irvine, Irvine, CA

Correspondence should be addressed to Robert A Katzer, MD, MBA at rkatzer@uci.edu

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ABSTRACT:

Audience: Anteater Emergency Medical Services (AEMS)'s implementation of the Stop the Bleedsm campaign targets both the student and faculty populations at the University of California, Irvine (UCI) community. We describe a system for wide dissemination of the Stop the Bleedsm campaign that could be used for any university or large business setting.

Introduction: Following a shooting at Sandy Hook Elementary School in Connecticut in 2012 that resulted in twenty-eight fatalities, twenty of which were children, the Joint Committee to Create a National Policy to Enhance Survivability from Intentional Mass-Casualty and Active Shooter Events was founded.¹ The American College of Surgeons (ACS) led the committee, which included representatives from the Federal Bureau of Investigation, the Major Cities Chiefs Association, and the Committee on Tactical Combat Casualty Care (TCCC). It followed the guiding principle that no one should die from uncontrolled bleeding at an intentional mass-casualty or active shooter event.² In 2015, the committee modified its focus from relying solely on law enforcement and professional first responders to empowering the general public through education in hemorrhage control. This new approach allowed the number of immediate responders who could provide hemorrhage control to increase significantly.³ Together with the White House, they developed the Stop the Bleedsm campaign, which teaches participants to provide hemorrhage control and, as a result, receive certification in Bleeding Control (B-Con) Basic.^{4,5}

At the beginning of fall 2017, a group of undergraduate emergency medical technicians (EMT) formed at UCI with the goals of providing standby basic life support services on campus and to promote emergency preparedness on the UCI campus. Working with faculty from emergency medicine and trauma surgery, a component of the emergency preparedness promotion included the adaptation of the Stop the Bleedsm campaign to fit the needs of UCI. This included certifying both undergraduates and faculty as instructors for the Bleeding Control Basic class. We describe how we organized a system for the dissemination of the Stop the Bleedsm campaign in a large university.

SMALL groups



Objectives: The main objective is to implement a system to use available resources of the Stop the BleedSM campaign to widely educate members of the university community in the utilization of multiple compression techniques including direct pressure, tourniquet application, and wound packing. Additional course objectives include using the Stop the BleedSM campaign to teach participants how to fit into the emergency response team as the immediate responder and the identification of life-threatening bleeding.

Methods: This is a small group session.

Topics: Stop the BleedSM, Bleeding Control Basic, bleeding control, emergency medical technicians (EMTs), compression techniques, life-threatening bleeding, immediate responder, tourniquet, wound packing.



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Learner Audience:

Undergraduate students and faculty.

Time Required for Implementation:

Establishing a framework in which AEMS was able to teach a large number of undergraduates and faculty on a consistent basis required two months. This time was used to train AEMS' EMT instructors, develop a website where participants could sign up for the course, and coordinate with the university to get the Bleeding Control Basic course approved so that AEMS could use on-campus classrooms.

The Bleeding Control Basic course lasts two to three hours depending on the number of participants. The class is split into a lecture portion and hands-on practice with tourniquets and hemostatic gauze. For larger classes, the hands-on activity takes a longer time because of limited instruction material.

Recommended Number of Learners per Instructor:

As mandated by the American College of Surgeons, there needs to be a maximum ratio of one instructor to every eight participants.

Topics:

Stop the Bleedsm, Bleeding Control Basic, bleeding control, EMTs, compression techniques, life-threatening bleeding, immediate responder, tourniquet, wound packing .

Objectives:

The overall objective is to implement a system to use available resources of the Stop the Bleedsm campaign to widely educate members of the university community. By the end of the implementation, users should have an organized system to offer regular Stop the Bleedsm classes to their community.

By the end of the Stop the Bleedsm sessions, participants will be able to:

1. Understand the importance of the immediate responder.
2. Identify life-threatening bleeding.
3. Apply direct pressure.

4. Apply a Combat Application Tourniquet (C•A•T®).
5. Create and apply a make-shift tourniquet.
6. Pack a wound with hemostatic dressing.

Linked objectives, methods and results:

By following our implementation methods, users can create their own organized system to educate their community widely with multiple instructors and course offerings (overall objective). Regarding specific objectives of the sessions, the initial lecture will discuss the importance of immediate responders and their role (objective 1). A variety of examples of life-threatening bleeding and how to identify it will also be discussed (objective 2). During the hands-on portion, the instructor will demonstrate and learners will practice applying direct pressure, applying a combat application tourniquet, applying a make shift tourniquet, and packing a wound with hemostatic dressing (objectives 3-6).

Recommended pre-reading for instructor:

Instructors for approved Bleeding Control Basic courses must all be certified. Certification requires both prerequisite healthcare provider skills and completion of a Bleeding Control Basic course. Eligible healthcare providers include certified instructors of several nationally recognized trauma courses such as Advance Trauma Life Support (ATLS). They also include the following levels of certification:

1. Prehospital care providers, including emergency medical responder (EMR), EMT, or paramedic.
2. Healthcare providers, including nurse, physician assistant, or physician.

Once healthcare providers complete a Bleeding Control Basic course, they can apply for instructor certification through the bleedingcontrol.org website. Certified instructors receive credentials to log into the instructors' section of the website, where they have access to many Bleeding Control Basic materials such as the PowerPoint and flyers, etc.

After the facilitator becomes certified as a Bleeding Control Basic instructor, it is recommended that he or she read the below press-releases to understand both the history and significance of the Stop the Bleedsm campaign:

1. The Hartford Consensus IV: a call for increased national resilience. Bulletin of American College of Surgeons. <http://bulletin.facs.org/2016/03/the-hartford-consensus-iv-a-call-for-increased-national-resilience/>. Published March 1, 2016. Accessed March 26, 2018.
2. FACT SHEET: Bystander: "Stop the Bleedsm" broad private sector support for effort to save lives and build resilience. The White House Office of the Press Secretary. <https://obamawhitehouse.archives.gov/the-press-office/2015/10/06/fact-sheet-bystander-stop>



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bleed-broad-private-sector-support-effort-save.
Published October, 06, 2015. Accessed March 26, 2018.

In our implementation, to become an AEMS Bleeding Control Basic instructor, the facilitator needs to read the following:

- The AEMS Stop the BleedSM Instructor Standard Operating Procedures (see attached).
- This SOP lists step by step instructions for instructors for setting up and executing a class, including links to UCI instructor videos and audio recordings that were created to ensure consistent classes and clear communication between instructors.

We recommend those implementing a similar system create their own SOP with applicable details for their system.

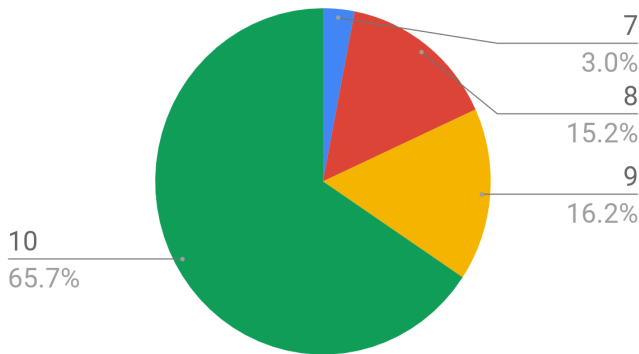
Results and tips for successful implementation:

Results:

Over the course of 23 classes, a total of 216 undergraduates and faculty received their Bleeding Control Basic certificate as a result of the efforts of AEMS and the UCI Trauma Center. A survey was administered during every course and of the 216 participants, 99 filled out the AEMS survey.

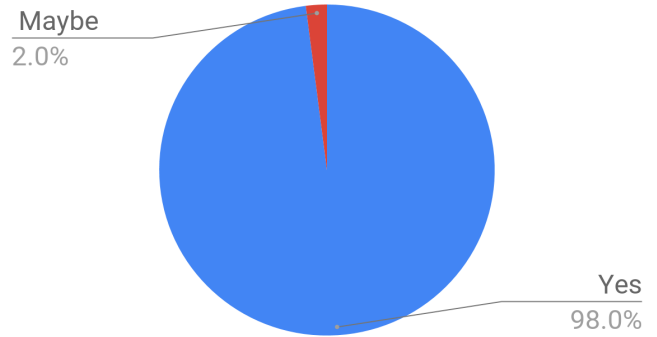
When asked "On a scale of 1-10 how useful did you find the course?" 65.66% (65/99) participants answered ten, 16.16% (16/99) answered nine, 15.15% (15/99) answered eight, and 3.030% (3/99) answered seven.

On a scale of 1-10 how useful did you find the course?"



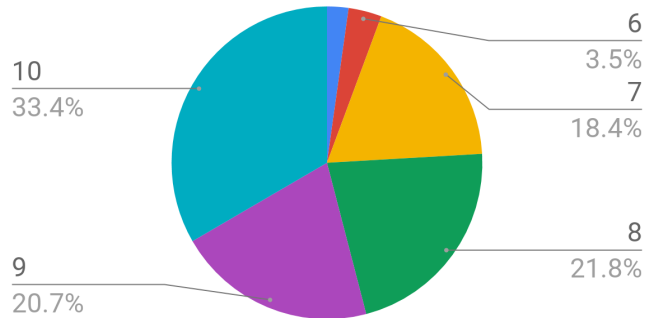
When asked "Would you recommend someone you know taking this course?" 97.98 % (97/99) answered "Yes" and 2.020% (2/99) answered "Maybe."

"Would you recommend someone you know taking this course?"



When asked "On a scale of 1-10, knowing what you know now, how well do you think you would handle a bleeding emergency?" 33.33% (29/87) answered 10, 20.69% (18/87) answered nine, 21.83% (19/87) answered eight, 18.39% (16/87) answered seven, 3.448% (3/87) answered six, and 2.230% (2/87) answered three.

On a scale of 1-10, knowing what you know now, how well do you think you would handle a bleeding emergency?



Reflections:

The survey results validated that participants believed in the importance of the Bleeding Control Basic Course as well. 96.97% answered that the course was between eight to ten in usefulness and not a single person said they would not recommend someone they know taking the course, showing us that they acknowledge the importance of the campaign.

However, the survey identified that there is room for improvement in the instruction and break-down of class time. When participants were asked how well they thought they could handle a bleeding emergency, the feedback varied. To tackle this issue in the future, instructors will increase the duration of the hands-on activity portion by encouraging participants to apply tourniquets to and pack the training legs multiple times in a rotation between the two training legs. They will also consider adding some moulaged patients to allow



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students to assess multiple victims, to identify life threatening bleeding, and practice applying tourniquets and complete packing without utilizing the amount of strength that is applied to the trainer legs.

Tips for Successful Implementation:

1. Have the framework completely set up before starting to teach participants. To do this, build a team that believes in the importance of the campaign and is willing to work together to achieve a common goal.
2. Have enough instructors to manage any increased influx of participants.
3. Have an organized, user-friendly website for participant use and sign-up. The website should include the purpose of the Bleeding Control Basic course and a page which lays out all of the classes available and offers a way for participants to sign up.
4. Ensure rooms are booked before allowing participants to sign up.
5. Advertise through multiple facets on campus. For example, AEMS advertises using school emails, flyers, class groups on Facebook and other social media, and pre-class announcements.
6. Reach out to other University organizations and offer to teach the Bleeding Control Basic Course to their organizations during the time of their regular meetings. This offers an easy way to certify many people and allows different organizations to advertise for you.
7. Administer the survey after the last hands-on practice. If it is solely sent through the follow-up email, the number of submissions greatly decreases. Including objective learning questions to the survey may also improve the organizers' ability to gauge material retention.

Pearls:

At the end of the course participants should be able to efficiently apply direct pressure, apply a tourniquet, and pack a wound in the unfortunate event of a severe hemorrhage. In addition, participants should be able to make a make-shift tourniquet in an event that no C.A.T. is available.

Content:

- **Appendix A:** AEMS: Stop the Bleed Instructor Standard Operating Procedures

Small Groups:

Creating the AEMS Framework to Teach Large Numbers of Participants:

1. Certify and train enough instructors to adequately staff weekly classes.

- AEMS initially started with five EMTs who were trained as instructors, but as of the date of this publication, that number has grown to seven. In addition to AEMS EMTs, some of the faculty of the UCI Trauma Center instructed Bleeding Control Basic courses with AEMS EMTs.
2. Set up a website in which participants can sign up for the Bleeding Control Basic courses.
 - A website was created so that participants can log on and sign up for classes that work for their schedule.
 3. Purchase a Bleeding Control Training Kit from bleedingcontrol.org or the necessary items elsewhere. **The recommended "training kit" costs \$950 and includes two training limbs, training (C•A•T®) tourniquets, instructional booklets, and QuickClot® moulage trainers in a pelican case.**
 4. Coordinate with the university to use its classrooms.
 - The Bleeding Control Basic course must be approved as a special event in order for AEMS to teach the courses in UCI classrooms.

Training Materials:

1. Projector
2. Triangular bandage
3. Pen
4. Two Combat Application Tourniquets (C•A•T®)
5. Four QuikClot® Moulage Trainers
6. Two Z-Medica Hemorrhage Control Training™ legs

Pre-Course Tasks:

1. Register the course on <https://www.bleedingcontrol.org/> using the instructor portal.
2. Each AEMS instructor creates a sign-in sheet for participants to sign in, using Google Forms.
3. Each AEMS instructor creates a survey to administer at the end of the course using Google Forms. It includes the following questions:
 - On a scale of 1-10, how useful did you find the course?
 - Knowing what you know now, if presented with a bleeding emergency, how well do you think you would handle it?
 - Would you recommend someone you know take this course?
 - How did you hear about this course?
 - What can we do better?

Course Set- Up:

Both a projector and screen should be placed in the front of the room. Participants must be split into two groups and then one



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Z-Medica Hemorrhage Training leg, one tourniquet, and one QuickClot Moulage Trainer should be placed in front of each group. Finally, a laptop should be set up with both the pre-made sign-in and survey form.

Break Down of Course Time:

1. Lecture Portion

- Using the Bleeding Control Basic PowerPoint (accessible by certified instructors on www.bleedingcontrol.org) provided by the American College of Surgeons, instructors cover how course students fit into the emergency response team as the immediate responder, identify life-threatening bleeding, as well as the appropriate utilization of direct pressure, tourniquets, and wound packing with hemostatic materials.

1. Hands-on Training Portion

- In this portion participants are encouraged to practice what they learned in the lecture portion by applying both a C.A.T. and packing a wound with the QuikClot gauze on the Z-Medica training legs. Also, instructors cover how to apply an improvised tourniquet using a triangular bandage and pen and offer participants the chance to practice that skill on the Z-Medica training legs.
- The class is divided up into two groups for hands-on training, with one or two instructors at each hands-on station. The number of groups is limited by the two available training legs. Each training leg is used for the same hands-on skill.

2. Administer Survey

- After participants complete the second skill, they are asked to head over to the pre-setup laptop to take the survey.

Post- Course Tasks

1. Email participants and include the following:

- Their specific B-Con Completion Certificates
- A PDF of AEMS Stop the Bleedsm flyer
- The Stop the Bleedsm Booklet
- The following is an example of what the email may look like:

Subject: Stop the Bleed Certification

Body: Hello [participant's full name],

Congratulations on finishing the Stop the Bleed certification process! On behalf of all of AEMS, we want to thank you for doing your part and making UCI a safer place. We have attached your

completion certificate to the bottom of this email. Also attached is a link to a safe tourniquet that we recommend buying so that you are fully equipped.

Also, we would greatly appreciate if you could complete our short survey since we value your feedback as we continually strive to improve upon our courses to ensure that the material is presented effectively.

Here is the survey: [Google Form survey link]

If you enjoyed our class, we ask that you share our flyer (attached), and like us on Facebook (link below).

Tourniquet Link:

<http://a.co/hk85xRn>

Facebook:

[Facebook link]

UCI

**Anteater Emergency Medical Services
Irvine, CA**

anteaterems.com

Find us on Facebook and follow our page!

References/suggestions for further reading:

1. Vogel, Steve (12/14/2012) "Sandy Hook Elementary shooting leaves 28 dead, law enforcement sources say." *The Washington Post*. Retrieved May 6, 2018.
2. Active shooter and intentional mass-casualty events: The Hartford Consensus II. *Bulletin of American College of Surgeons*. <http://bulletin.facs.org/2013/09/hartford-consensus-ii/>. Published July 29, 2014. Accessed March 26, 2018.
3. The Hartford Consensus III: implementation of bleeding control. *Bulletin of American College of Surgeons*. <http://bulletin.facs.org/2015/07/the-hartford-consensus-iii-implementation-of-bleeding-control>. Published July 1, 2015. Accessed March 26, 2018.
4. The Hartford Consensus IV: a call for increased national resilience. *Bulletin of American College of Surgeons*. <http://bulletin.facs.org/2016/03/the-hartford-consensus-iv-a-call-for-increased-national-resilience/>. Published March 1, 2016. Accessed March 26, 2018.
5. FACT SHEET: Bystander: "Stop the Bleed" broad private sector support for effort to save lives and build resilience. The White House Office of the Press Secretary. <https://obamawhitehouse.archives.gov/the-press-office/2015/10/06/fact-sheet-bystander-stop-bleed-broad>



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private-sector-support-effort-save. Published October, 06, 2015. Accessed March 26, 2018



LEARNER AND INSTRUCTOR MATERIALS

Anteater Emergency Medical Services (AEMS)

Stop the Bleed Instructor Standard Operating Procedures

Overview

These are the instructions about your responsibilities as an AEMS Stop the Bleed Instructor.

[LINK: AEMS Bleeding Control Basic Instructor Process Video](#)

[LINK: Sample Presentation Audio Recording](#)



LEARNER AND INSTRUCTOR MATERIALS

— PRE-CLASS TASKS —

What Will Be Done For You

1. The board will book all rooms for STB courses.
 - a. All locations of the courses will be added to the location of course instruction sign-up spreadsheet.
2. All participants will be emailed three days before the course with all course information.

Signing Up for Shifts

1. You can only do this if you are cleared by the QA Officers to be an STB instructor.
2. All courses you sign up for must be done a minimum of **10 days in advance** to that course, unless otherwise specified by the QA Officers.
3. For **Spring Quarter 2018** we are using a Google Sheet to sign up for shifts using this [link \(place your scheduling link here\)](#)
4. **This is subject to change for future quarters so the SOP will be updated accordingly.**

Registering Your Class on the Stop the Bleed Instructor Portal

1. **This has to be done a minimum of 7 days before your class.**
2. **Only 1 instructor needs to complete this task.**
3. Go to <https://www.bleedingcontrol.org/>
4. Click “Instructor Portal” in the top right corner.
5. Click “Add Class” in the left column.
6. For the *Sponsoring Organization Name* field, enter **XXXX**.
7. For *Organization Type*, enter **Other**.
8. For *Location Name*, enter the location that was provided in the instructor sign-up spreadsheet.
9. For *Class Address*, enter the following, depending on class location:
 - a. For any room on campus: **XXX**.
 - b. For off-campus locations: Enter the appropriate address according to Google Maps.
10. For *Class Phone Number*, enter your own cell number.
11. For *Capacity*, enter the capacity number found in the instructor sign-up spreadsheet.
12. For *Total Number of Instructors*, refer to the instructor sign-up spreadsheet.
13. For *Registration Method*, select **Website** (Link: **xxx.com**).

Contacting Other AEMS Instructors

1. Refer to the sign-up spreadsheet and contact other AEMS instructors to coordinate class.
2. Divide the set Pre-Class, In-Class, and Post-Class work among yourselves.
3. Divide the teaching of the course among yourselves.



LEARNER AND INSTRUCTOR MATERIALS

Coordinating Equipment Pick-Up/Drop-Off

1. Contact the Vice President regarding the location for Stop the Bleed equipment pick-up/drop-off.
2. **This must be done at least 3 days before any course.**

Contacting Non-AEMS Instructors

1. You may often teach a course with a medical professional who works at the UCI Trauma Center, so it is your responsibility to reach out to them via email.
2. Communicate with non-AEMS instructors using your **UCI Gmail only**.
3. **Only 1** AEMS STB instructor has to email any non-AEMS instructors. Here is an example:

Subject: AEMS Stop the Bleed Instruction Partner

Body:

Hello Dr./Mr./Mrs./ [professional's name],

My name is [your full name]; I am one of the Anteater Emergency Medical Services (AEMS) EMTs and I will be teaching the Stop the Bleed course with you on [class date]. The course will be located at [location name] in [room number/name]. If you need any help finding it please let me know. All equipment will be on site of the course for our use. If there are any specific ways you want to coordinate teaching the class please let me know. If you want to reach out to me my cell phone number is [your cell number] or you can reach me via this email address. Thank you for your help in teaching this course.

Sincerely,

[your full name]

4. Contact Information For the Medical Professionals Teaching **Spring Quarter 2018**
 - a. Instructors emails



LEARNER AND INSTRUCTOR MATERIALS

— IN-CLASS TASKS —

Setting Up

1. Presentation PowerPoint must be connected to screen/projector and ready to use.
 - a. PowerPoint file located in “Instructor Materials” tab.
2. **2 skills sections** must be set up, each containing: (1) rubber mannequin, (1) blue tourniquet, (1) hemostatic dressing.
3. Equipment crate must be kept out of range of the participants.
4. **2 forms** must be open* and ready for submissions as early as possible:
 - a. **Sign-In** sheet: XXXXX.
 - b. **Survey**: XXXX.
 - c. * = you can keep them open on two separate tabs on a spare laptop/tablet.

Sign-In

1. All participants must completely fill the Participant Sign-In Sheet or the online sign-in Google Form to be eligible to receive the course completion certificate.

Instruction

1. Deliver the presentation.
2. If possible, incorporate one or more live “demonstrations” of real-time bleeding management.
3. Helpful tips:
 - a. Be interactive and entertaining. Try not to be monotonous and lackluster.
 - b. Be open to answering questions.
 - c. Do not simply read from the presentation; add to the content.
 - d. Be sure to introduce AEMS and the UCI Trauma in your introduction.

Selling Tourniquets

1. If available, the **unopened black tourniquets** (not the blue practice tourniquets) are **\$20 each** and will be located in the equipment crate.
2. Participants can either pay using cash or through Venmo.
 - a. Cash: Hold on to the cash and arrange a time with the Treasurer to give it to him.
 - b. Venmo: @XXXX.

Survey

1. At the end of the presentation, ensure that **ALL** participants complete the Google Forms survey.



LEARNER AND INSTRUCTOR MATERIALS

Cleaning Up

1. Return all equipment to the equipment crate; organize appropriately.
2. Return equipment crate to location determined in your Pre-Class tasks.



LEARNER AND INSTRUCTOR MATERIALS

— POST-CLASS TASKS —

Emailing All Participants

1. **You will need the sign-in sheet/information to complete all Post-Class Tasks.**
2. Use the AEMS STB Google account to email all participants **individually**.
 1. **Important:** The AEMS STB Google account (including Gmail and Drive) are strictly for Stop the Bleed purposes ONLY. Do not give login credentials to non-AEMS STB instructors.
3. Add the following **3 attachments to each email**.
 1. **“Stop the Bleed Booklet.pdf”**
 - i. Found in the “Completion Certificates Actual” folder in the AEMS STB Google Drive.
 2. **“stopthebleedflyer.png”**
 - i. Found in the “Completion Certificates Actual” folder in the AEMS STB Google Drive.
 3. **Course Completion Certificate** (PNG file only)
 - i. Click the “Instructor Materials” tab >> download the PDF.
 - ii. Use a PDF reader software to edit 3 fields: **participant’s full name, date of class, and certifying entity (Anteater Emergency Medical Services & UCI Trauma Center)**.
 - iii. Save all individual PDFs to a folder on your computer, named “PDF.”
 - iv. Upload all PDFs to pdf2png.com.
 - v. Download the .zip file.
 - vi. Extract all PNGs and save them in a separate folder on your computer named “PNG.”
 - vii. Attach the corresponding PNG certificates, NOT the PDFs.
4. Example of the email:

Subject: Stop the Bleed Certification

Body:

Hello [participant’s full name],

Congratulations on finishing the Stop the Bleed certification process! On behalf of all of Anteater EMS, we want to thank you for doing your part and making UCI a safer place. We have attached your completion certificate to this email in addition to a short booklet that includes the key points we covered during the class. Also, below you will find a link to a safe, reliable tourniquet that we recommend buying so that you can be equipped in the case of a bleeding emergency.

Thanks again for your participation!

If you enjoyed our class we ask that you share our flyer (attached), like us on Facebook (link below), and follow us on Instagram (link below)!

Tourniquet Link:



LEARNER AND INSTRUCTOR MATERIALS

<http://a.co/hK85xRn>

Facebook:

<https://www.facebook.com/AnteaterEMS/>

Instagram:

<https://www.instagram.com/anteaterems/>

UCI Anteater Emergency Medical Services

Irvine, CA 92617

aneaterems.com

Find us on Facebook and follow our page!

Uploading Certificates to the STB Drive

1. Move both the “PDF” and “PNG” folders to a new folder on your computer named “[class date].”
Example: “Jan 31 18.”
2. Upload “[class date]” folder from your computer to the AEMS STB Google Drive, in the “Completion Certificates Actual” Drive folder.

Closing the Class

1. Go to the Instructor Portal “Dashboard.”
2. In the row for your class, there will be an “Edit/Close Class” column. Under this column, click “Close Class.”
3. Complete the demographics pop-up and submit.

Completing the STB Data Spreadsheet

1. Fill in all empty fields for your class date in the Stop the Bleed Data Google Sheet using this [LINK \(place your scheduling link here\)](#).