

April 17-20
2018

PREPAREDNESS
SUMMIT

Atlanta Georgia
HYATT REGENCY ATLANTA



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PREPAREDNESSSUMMIT.ORG

Stop the Bleed Training of Non-Healthcare Professionals



SAVE A LIFE



OFFICE OF
PUBLIC HEALTH
PREPAREDNESS

About Us

Our Vision:

A resilient Boston through healthy, informed, and connected communities that are supported every day and during emergencies by strong, integrated public health and healthcare systems.

- Community fares better after an emergency
- Equitable access to healthcare during & after emergencies



Introduction

- Presenters



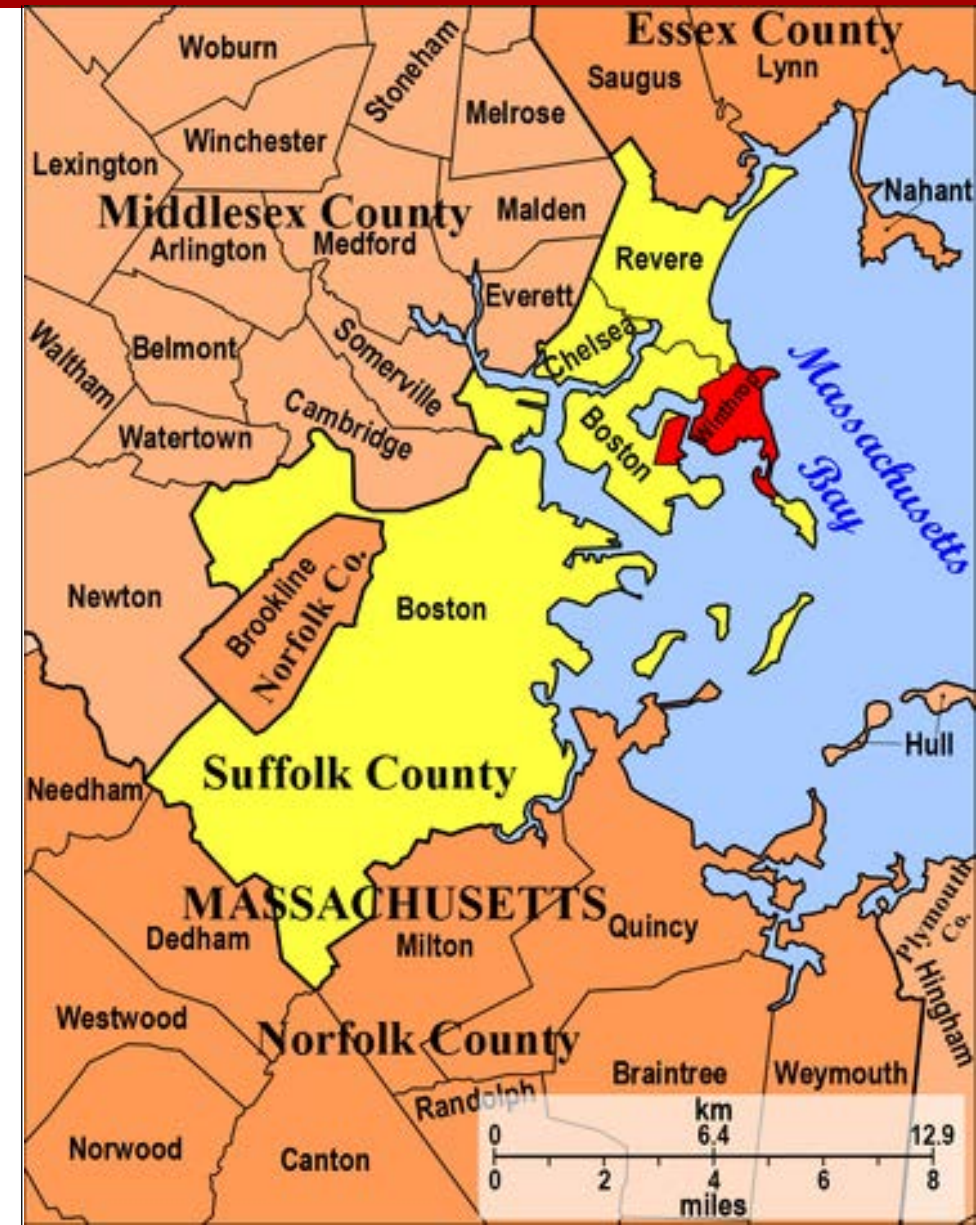
Mea Allen, M.Ed.
Associate Director
Education and Training



Lt. Brian Pomodoro
Sr. Program Manager
Disaster Response Training


Origins of Our Stop the Bleed Project

- Town of Winthrop, Mass.
- Sought regional approval
- Focus: Non-medical professionals



Course Description

- 90 minute program



67%

Module	Time
Intro to Course	5 minutes
Initial Actions	15 minutes
Bleeding Control Measures (<i>didactic, demonstrations, activities</i>)	60 minutes
Summary and Q&A	10 minutes

Instructional Design Process

Plan..... Project plan developed

Analyze.....Assess needs, determine goals

Design.....Based on objectives

Develop.....Slides, handouts, activities

Implement.....Deliver as pilot

Evaluate.....Were objectives met?

Sustain.....Support/Back to drawing board

Course Evolution - Planning

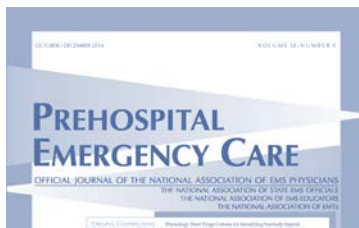
- Based on CPR training model
 - No certification
 - No testing
 - Yes, practice
- Existing STB courses

Course Evolution - Planning

- Content
 - Client input
 - Journal searches
 - Interviews



SAVE A LIFE



CASE STUDY

Tourniquet Application in a Rural Queensland HEMS Environment

Stuart Fludger, MB ChB, and Anthony Bell, MB, BS

Introduction

In reserves at a petrol station en route. Consequently, transit

The Truth about Tourniquets

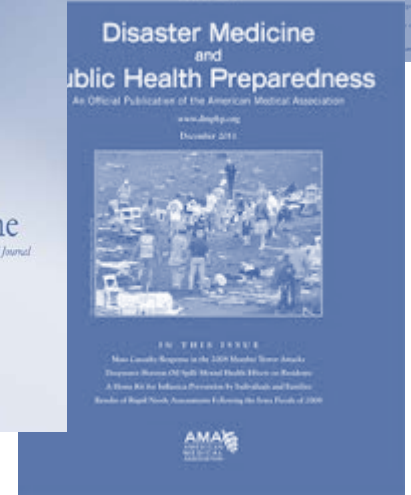
Safety profile

499 casualties from Iraq with tourniquets on 651 limbs
Overall survival was 87%

✓ Early application is key; survival rate was only 4% if the tourniquet were applied after shock was present.

There was a 1.5% incidence of peripheral neuropathy
No limbs were lost as a result of tourniquet ischemia
30 casualties died from extremity hemorrhage with prehospital tourniquets being used.

COL John Krug, *Journal of Emergency Medicine*



Course Evolution - Planning

- Planned as a project toolkit
 - Allows requesting agency to perform training
 - Student familiarity with instructors
 - Local SOPS can be presented



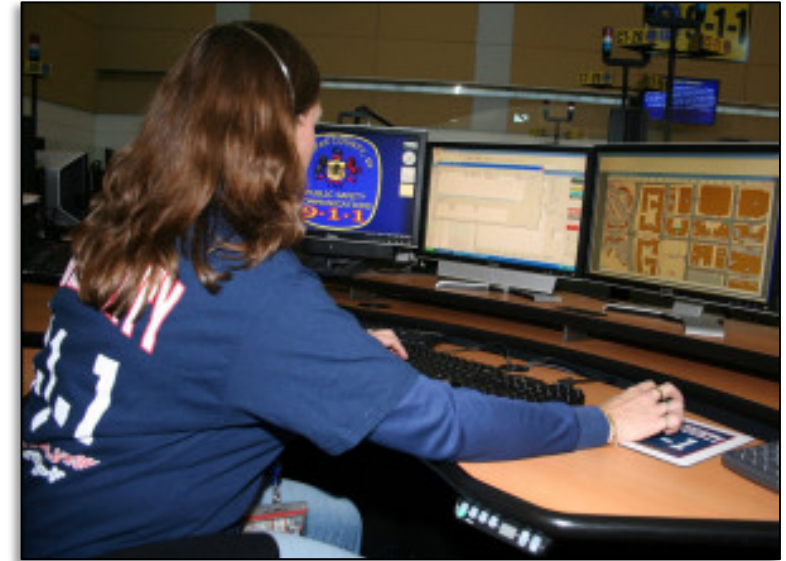
Course Evolution - Analyze

- Content decisions
 - Use of plain-language
 - Minimize jargon
 - Based on local response systems
 - EMS, Fire, Police
 - Avg. response times
 - Improvised tourniquets



Course Evolution – Design/Develop

- Include:
 - 9-1-1 contact information
 - Personal safety
 - Patient positioning
 - Basic anatomy
 - Direct Pressure
 - Commercial & Improvised tourniquets (TKs)
 - Experiential training!!



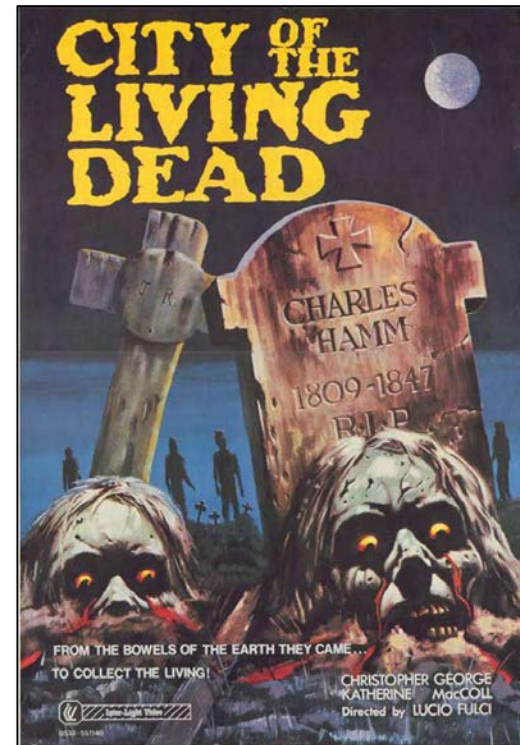
Course Evolution – Design/Develop

- Exclude
 - Elevation ✗
 - Supplying vessel ✗
 - Graphic Depictions ✗



Course Evolution – Design/Develop

- Graphic depictions rejected
- Operant conditioning/ positive reinforcement
 - Only works with repeated stimuli



Course Evolution – Implement Pilot

- Pilot #1
 - High school teachers and staff
 - Utilized local instructors
 - Police, Fire, School nurse
 - Delivered instructor-trainer orientation
 - Pilots – Video-recorded



Course Evolution – Evaluate Pilot

- Instructors:
 - Openly challenged content
 - Lots of “stories” (did not pertain to audience)
 - Demonstrated techniques, but did not practice
 - Did not supervise exercises

Course Evolution – Implement Pilot



Course Evolution – Evaluate Pilot

- Student Evaluations:
 - Mostly positive re: content
 - **High**-positives re: practical activities
 - Did not like - “stories”

Course Evolution – Back to Planning

- Lessons Learned from Pilot

“Slides should support instructor fidelity with course and design.”



Course Evolution – Back to Planning

- Instructor Development
 - Scope – Needs to be clearly defined
 - Instructor Orientation – A must
 - Skills – Should be demonstrated



Course Evolution – Back to Planning

Module	Edits
All	<ul style="list-style-type: none">• Cite sources on screen• Further edit medical terminology• Merge content wherever possible
Basic Anatomy	<ul style="list-style-type: none">• Edit anatomy descriptions.
Exercises	<ul style="list-style-type: none">• On-screen instructions and timing

Stop the Bleed Key Messages

Module 1
Slides 4, 6

Introductions

- Instructors
- Safety Briefing
 - Exits
 - Practical Exercises



Course Content Warning

- No graphic pictures
- Explicit examples may be used



- Mandatory
 - Brief introduction
 - Safety
- Evaluations said this was reassuring

Stop the Bleed Key Messages

Module 1
Slides 7, 8

Why is Bleeding Control Important?

- Trauma – In US, leading cause of death in adults
- Shock develops quickly even with rapid first-response



▪ 2015 - National Academy of Sciences, Engineering, and Medicine

What is your role?

- To apply bleeding control measures until trained personnel arrive



- WIIFM
 - What's in it for me?
 - Note: Source cited
- Clarifies context
 - Chain of survival


Stop the Bleed Key Messages



Stop the Bleed Key Messages

Module 2
Slides 10, 12

Personal Safety

- 
1. Protect yourself
 2. Protect victims
 3. Protect others

- Taught to all responders

What should you do first?

In a group



Designate 1
person to call
9-1-1

While
others
assist
victims

By yourself



Manage
bleeding

Then call
9-1-1

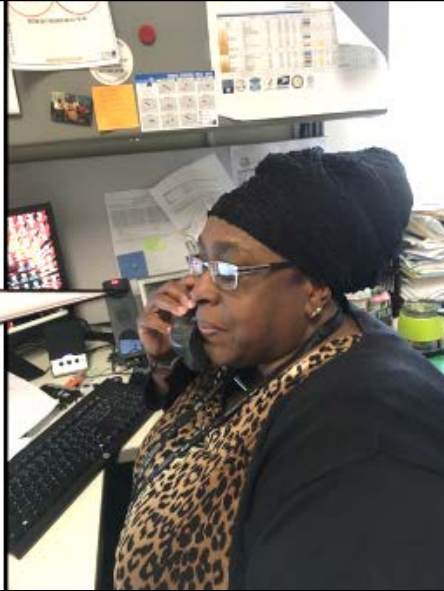
- Follows CPR training
 - Concept already familiar to students

Stop the Bleed Key Messages

Module 2
Slides 15, 16



123 Main St.
The Bach Building,
Office 710, on the
seventh floor



- Activity in first ten minutes



The Dunkies on
Broad St.



Stop the Bleed Key Messages

Module 2
Slides 17, 18

GOOD
OR
BAD
MESSAGE ?



Construction site on 17
Beethoven Rd
I'll have someone meet
you and guide you in



GOOD
OR
BAD
MESSAGE ?



OK, what's our
location right now?



Stop the Bleed Key Messages

Module 2
Slides 22, 24

Interacting with Victims

- Introduce yourself
 - Calms yourself
 - reassures victim
- Tell them your intent
- Be truthful
- Describe what you're doing

I'm going to put
a tourniquet on
your leg



Moving Victims

Clothes Drag



Blanket Drag



- New concept to most students

- We argued about this

Stop the Bleed Key Messages

Module 3
Slides 30, 31

Evaluating Bleeding

What is a minor wound?

What is a serious wound?

When do I use a tourniquet and when do I use direct pressure?

Evaluating Bleeding

MINOR WOUNDS

- Able to cover wound with palm of one hand
- Wound edges close together
- Slow oozing

SERIOUS WOUNDS

- Amputation or obviously severe wound
- Spurting blood
- Wound edges distant
- Direct pressure ineffective after 5 minutes

- Anticipated these questions; thought we'd address them up front
- Research on this yielded multiple results

Stop the Bleed Key Messages

Module 2
Slides 41, 47

Wound Location: Summary

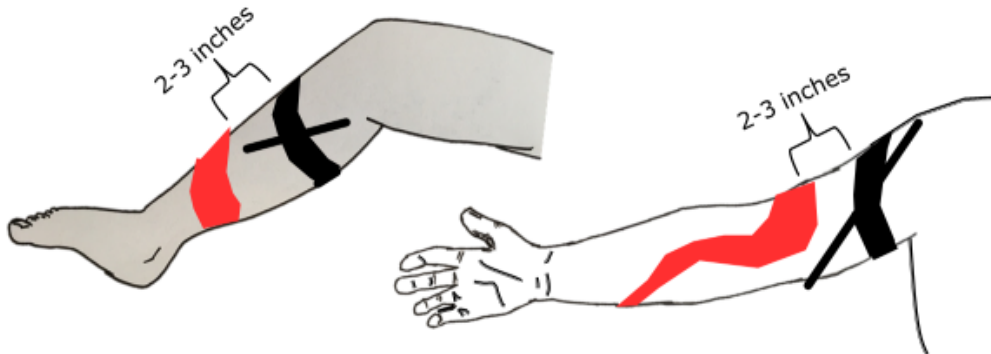
Key Point

Apply tourniquets
to arms and
legs only



Tourniquet Placement

2-3 inches above the wound



- Original presentation, 12 slides
- Cut to 6
- Broad variance in recommendations

Stop the Bleed Key Messages

Module 2
Slides 45, 56, 59

Direct Pressure

Let's practice !

- Use Handout #2
- Break into pairs
- Practice Direct Pressure on your partner using compress materials
- Switch roles and repeat
- 5 minutes per pair

Tourniquets

Let's practice Commercial Tourniquet !

- Use Handout #2
- Break into pairs
- Practice commercial tourniquet application on your partner
- Switch roles and repeat
- 10 minutes per pair

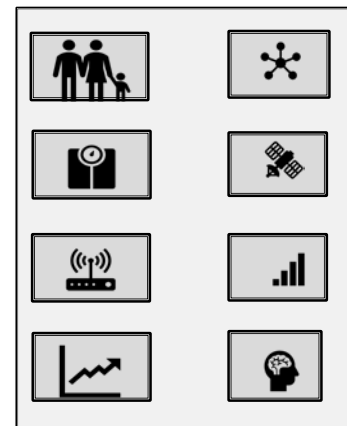
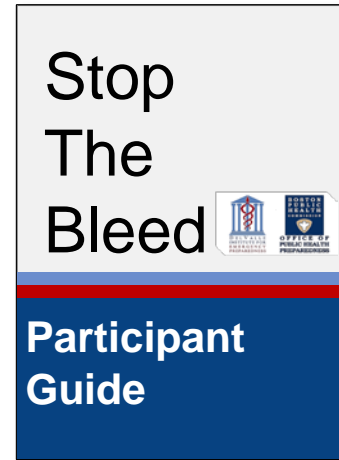
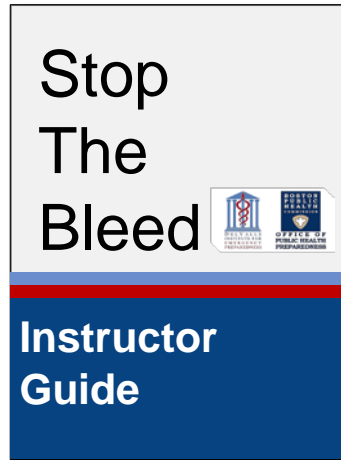
Tourniquets

Let's practice ! Improvised Tourniquet

- Use Handout #3
- Break into pairs
- Practice improvised tourniquet application on your partner
- Switch roles and repeat
- 10 minutes per pair

- Activities – bulk of course
 - Experiential training
- Handouts align with activities

Recommended Training Materials



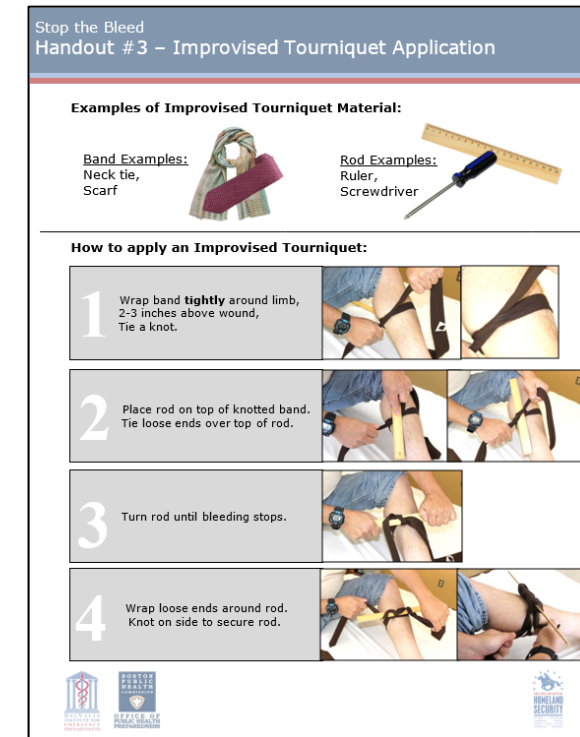
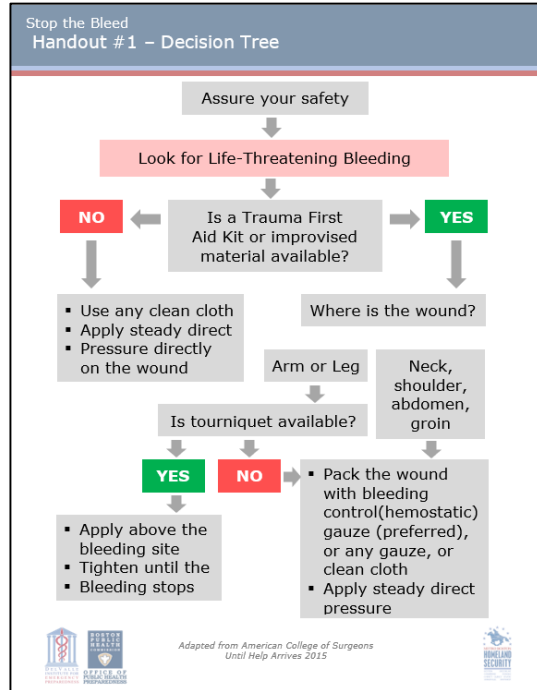
Recommended Training Materials



Activity Materials

- Improvised compress
- Medical compress
- CAT (*Commercial TK*)
- Improvised TK Band
- Improvised TK Rod

Stop the Bleed Exercise Demonstration



Questions?



Thank you for participating

**To access our presentation materials,
please visit:**

<https://delvalle.bphc.org/PrepSummit2018>

For further questions or comments, please contact:

**Office of Public Health Preparedness
www.bphc.org/preparedness**

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Preparedness
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