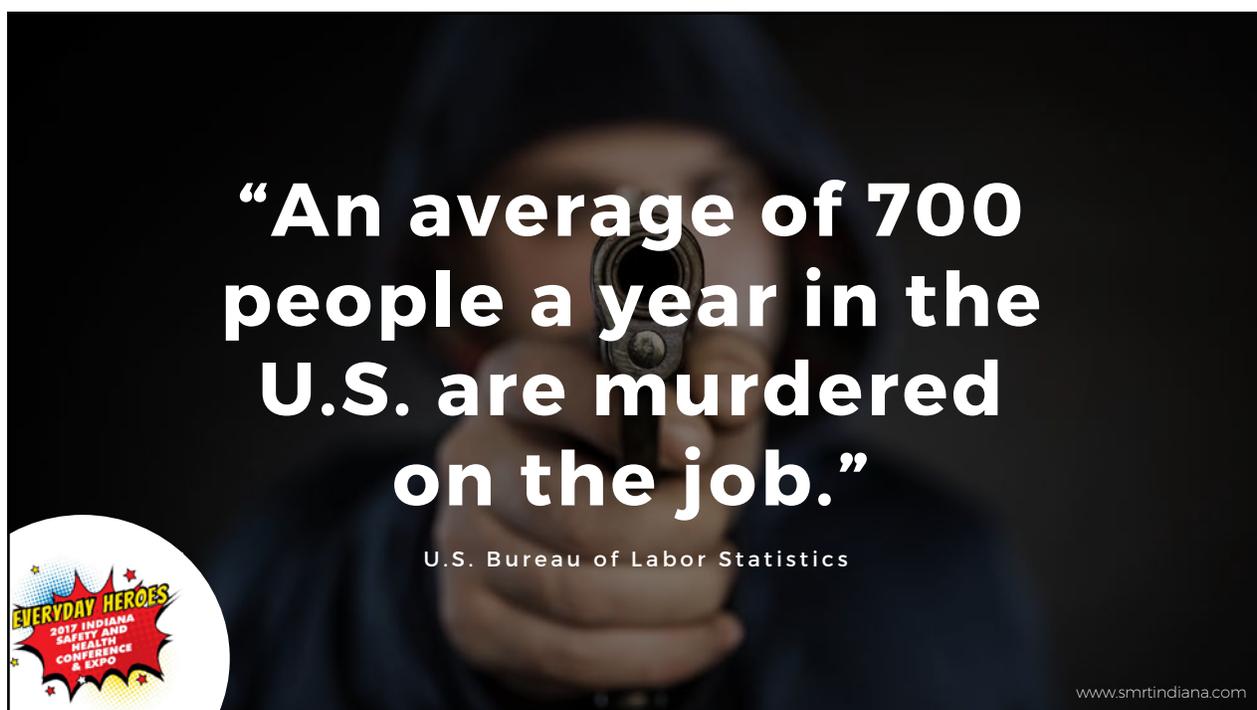


EVERYDAY HEROES
2017 INDIANA SAFETY AND HEALTH CONFERENCE & EXPO
Feb. 28-March 2, 2017
Indiana Convention Center Indianapolis
www.IHSAConf.com

PREPARING FOR & RESPONDING TO AN
ACTIVE SHOOTER OR INTENTIONAL MASS-CASUALTY

 SMRT Indiana



“An average of 700 people a year in the U.S. are murdered on the job.”

U.S. Bureau of Labor Statistics



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2,000,000

Average number of American workers who report being victims of workplace violence each year.

U.S. Occupational Safety and Health Administration



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WASHINGTON, DC
8:24 AM
WTTG

WASHINGTON, D.C.
8:24 AM ET

“In 2016 there were 366 mass shootings. Just 6 less than than 2015.”

WASHINGTON D.C.
WASHINGTON NAVY YARD

PBS NewsHour
**SHOTS CONFIRMED
GUNFIRE REPORTED INSIDE BUILDING**

ERT AL

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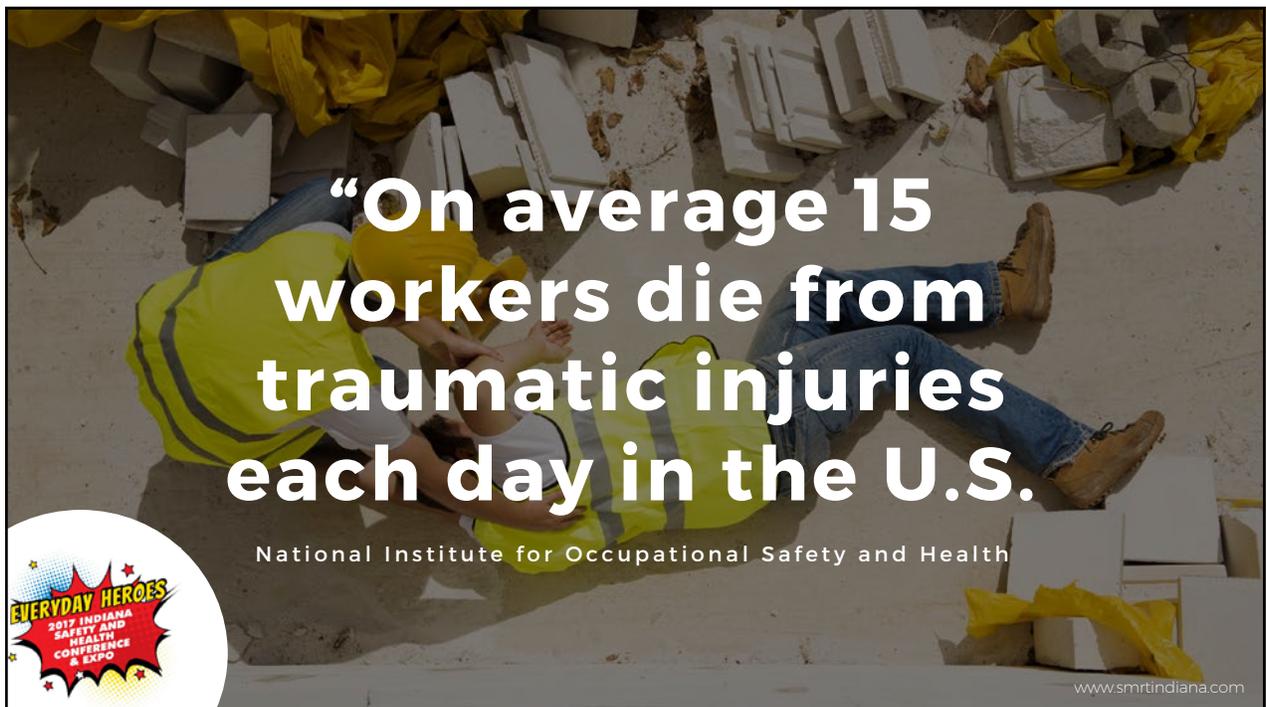
45.6%

The percentage of which active shooter situations occur in a place of business.

U.S. Department of Justice



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200 Each Day

The Average of American workers who are hospitalized do to traumatic injuries.

National Institute for Occupational Safety and Health



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WAITING FOR HELP IS NOT AN ACCEPTABLE PLAN

Care provided in the first few moments after an emergency has the greatest impact.

This means quality of life, recovery time, pain, scarring and even if someone will survive is determined by the person next to them and the supplies and equipment they have on hand, not the professional first responders

9-10 mins

4 mins

3-5 mins

**AVERAGE
RESPONSE TIME
FOR AMBULANCE
IN INDIANA**

**AMOUNT OF TIME
IT CAN TAKE TO
BLEED TO DEATH**

**WHEN HEART &
BRAIN TISSUE
BEGINS TO DIE
WITHOUT OXYGEN**





YOU'RE ON YOUR OWN

ON AVERAGE AN ACTIVE SHOOTER SITUATION LASTS 10-15 MINUTES.

Active shooter situations are unpredictable and evolve quickly. Individuals must be prepared both mentally and physically to deal with an active shooter situation before law enforcement arrives.



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EMERGENCY PLANNING & RESPONSE SYSTEM

WHAT IS MOHAWK?

The MOHAWK™ Emergency Planning & Response System is a simple and adaptive framework for preparing for and responding to emergencies big or small. This presentation is designed to walk you through a critical or threatening medical or traumatic injury but the MOHAWK system can be applied to any emergency situation.

M

MOBILIZE

Mobilize yourself to safety and with resources to intervene.

O

OPTIMIZE

You're limited only by the tools on hand. Come ready.

H

HALT

Halt or limit any further damage or injury.



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A

ACCESS

Access more advanced help as soon as possible.

W

WORK AS A TEAM

Work together for the best outcome.

K

KEEP WORKING

One emergency can lead to another and can deteriorate quickly..



MURPHY'S LAW

ANYTHING THAT CAN GO WRONG, WILL GO WRONG.

Emergencies are unpredictable and always affected by unforeseen variables. Most emergency response plans fail because they are static and unable to adapt to the dynamic environment created by emergencies and disasters.



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PACE METHOD

Prepare for things to go wrong. Plan and train for alternative solutions so you and your team can adapt efficiently and predictably.

PRIMARY

This is the overall best plan of action to take or system to use based on the most likely scenario. It's your Plan A.

PLAN A

ALTERNATIVE

Your alternate plan which takes into account the most likely factors that would make Plan A not viable.

PLAN B

CONTINGENCY

Your backup option. Often not as good as the first two. Should be minimally reliant on outside factors.

BACKUP PLAN

EMERGENCY

Plan you go for if all else fails. Probably not the best or most ideal but as foolproof as possible.

ALL ELSE FAILS

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SAFETY IS #1 PRIORITY

MOBILIZE YOURSELF TO SAFETY

Wanting to help those in need is a noble and admirable notion. Becoming an additional casualty only compounds the current problem. The goal is to become the solution and not part of the problem.

Evacuating to safety is everyone's first priority. Ensure everyone knows how to do this as safely and efficiently as possible.



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THE BODY GOES WHERE THE BRAIN HAS BEEN

		
RUN/ESCAPE	HIDE	FIGHT
IF POSSIBLE	IF ESCAPE IS NOT POSSIBLE	ONLY AS A LAST RESORT



LIMITED BY TOOLS ON HAND

OPTIMIZE YOUR ABILITY TO INTERVENE

Did you know the care provided within the first few minutes has the greatest impact on outcome, way before emergency services can arrive? That means quality of life, recovery time, pain, scarring and even if someone will survive is determined by the person next to them and the supplies and equipment they have on hand, not the professional first responders

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THE RIGHT TOOL FOR THE RIGHT JOB AT THE RIGHT TIME

① IF IT'S NOT WITHIN ARMS REACH, IT'S NOT A LIFE SAVER

First aid equipment is only helpful if it's close and accessible when and where the emergency is. Most kits are stored too far away from the site of the emergency, making them irrelevant when immediate intervention is necessary.

② TOO MANY OPTIONS LEADS TO ANALYSIS PARALYSIS

Most first aid kits take a "more is better" philosophy, which provides little advantage and causes confusion. In an attempt to fill with as many items, most first aid kits make items difficult to locate, use, and replace. Consistency between kits is important too.

③ WHEN A BAND-AID WON'T CUT IT

Make sure you have the resources to respond to the severity of the emergency. Traditional first aid kits are more applicable for minor cuts and scrapes and not significant injury or life threat. Without the right tools a rescuer's ability to intervene is limited.

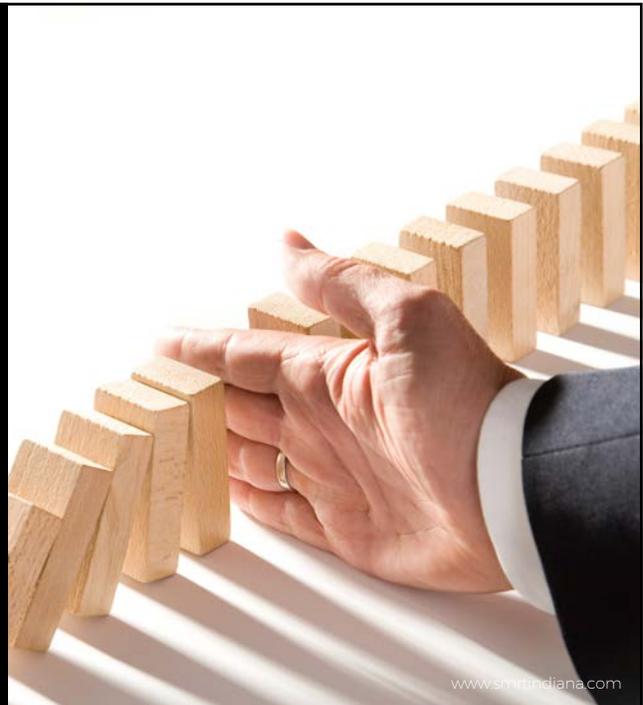


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KEEP IT SIMPLE

HALT FURTHER DAMAGE OR INJURY

You do not have the tools or resources to diagnose, fix, or prevent the emergency. Your focus is to safely stop or limit any further injury or damage occurring. This may be position someone on their side, putting pressure on bleeding wound or using a fire extinguisher.



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WHEN TO USE MORE ADVANCED BLEEDING CONTROL TECHNIQUES

- ⊙ EXCESSIVE AMOUNT OF BLOOD LOSS
- ⊙ CURRENT EFFORTS INEFFECTIVE
- ⊙ THE WOUND IS TOO LARGE TO EFFECTIVELY APPLY PRESSURE
- ⊙ PERSON HAS MULTIPLE LIFE THREATENING WOUNDS
- ⊙ YOUR SAFETY IS IMPACTED BY PROLONGED CARE



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TOURNIQUETS RECOMMENDED BY THE C-TECC

COMMERCIAL TOURNIQUET

Commercial tourniquets are designed to quickly stop bleeding by applying substantial circumferential pressure that stops venous and arterial blood flow distal to the application site.





C.A.T.
WINDLESS

A company is an association or collection of individuals, whether



SWAT-T
PRESSURE BAND

A company is an association or collection of individuals, whether



SOFTT
WINDLESS

A company is an association or collection of individuals, whether

Powered by SMRT Indiana

COMMON TOURNIQUET QUESTIONS

- **SHOULD I REMOVE A TOURNIQUET?**

When blood flow is stopped to an extremity there is among other things a build of lactic acid and clots. Without careful advanced medical care, releasing this build up into the blood stream can lead to life threatening emergencies. But without pain management people will often attempt to remove the tourniquet due to the extensive pain. Ideally advance medical care is available to remove tourniquet within 2 hours of application.
- **DOES TOURNIQUET APPLICATION = LOSS OF LIMB?**

This is actually quite rare. Unlike other parts of our body our extremities can recover even after hours of no oxygen or circulation. There have been cases in which tourniquet have been in place for upwards of 8 hours with no loss of limb.
- **ARE IMPROMPTU TOURNIQUETS AN ACCEPTABLE ALTERNATIVE?**

Making use of what you have on hand is a necessity in an emergency situation. There are many documented cases in which people effectively using improvised tourniquets. Unfortunately improvised tourniquets are usually not able to apply sufficient pressure and can also take time to locate and apply in an affective manner when seconds count. Do not sacrifice continuous direct pressure to make.



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C. A. T. OR SOFTT

Applying a Windless Style Tourniquet

Use when bleeding not controlled with pressure, multiple life threats or large wounds.

01

IDENTIFY

Route the band around the extremity and pass through the buckle. If pre-prepared place extremity through the tourniquet.

02

POSITION

Position tourniquet 2-3 inches above the bleeding and tighten the strap. You should not be able to insert more than 2-3 fingers underneath the strap. Do not apply on knee or elbow.

03

TIGHTEN

Rotate the rod, also known as the windless, until bleeding is stopped. If familiar check for absent distal pulse to confirm proper tightness.

04

SECURE

Once confirmed secure the rod and record the time of placement on tourniquet or on patients head.

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S W A T - T

Applying a Pressure Band Style Tourniquet

Use when bleeding not controlled with pressure, multiple life threats or large wounds.

01

IDENTIFY

Identify point of placement between the wound and the body. If exposing the wound is not practical position SWAT-T on extremity as high on the extremity as possible. Do not apply on knee or elbow.

02

SECURE

Tightly wrap the SWAT-T around the limb at the appropriate location. Be sure to overlap the first wrap to secure the SWAT-T.

03

WRAP

Each subsequent wrap should be tight enough to stop blood flow, denoted by change in the "pressure indicator markings" on the SWAT-T. Minimize bunching or twisting when possible.

04

TUCK

Check periodically to ensure bleeding has not resumed. If bleeding is still present or returns do not remove rather consider placement of 2nd tourniquet or additional pressure to wound.

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CLOT ASSISTING

HEMOSTATIC

For severe hemorrhage not amenable to tourniquet use, Hemostatic Dressings are impregnated or laminated with materials that speed the clotting process. They either come in loose, granular powder, impregnated onto a bandage or retained inside an applicator.



COMBAT
GAUZE



CELOX
GAUZE



CHITO
GAUZE

HEMOSTATICS ALSO COMES IN GRANULE FORM



COMMON HEMOSTATIC QUESTIONS

- **WHEN SHOULD I USE A HEMOSTATIC?**

Hemostatic agents ideal for junctional wounds such as groin, hip, buttocks, armpit, shoulder and neck. Hemostatic suggested if access to more advanced care may exceed 2 hours and can also be used along with tourniquet application.
- **DO HEMOSTATIC AGENTS CAUSE BURNS?**

Some earlier generations of hemostatic dressing creating an exothermic reaction that created enough heat to cause an adverse affect. Current hemostatic agents do generate heat but not to a harmful level.
- **WHERE CAN I NOT USE A HEMOSTATIC?**

Hemostatic agents should never be allowed to enter eyes, airway, chest, and head injuries with exposed brain tissue or meninges. Although it can be used in the abdomen, it is most often ineffective as the hemostatic gauze must have firm and consistent pressure against the source of bleeding.



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TO TREAT PENETRATING CHEST WOUND

COMMERCIAL CHEST SEAL

A tension pneumothorax is a life threatening emergency and causes complete collapse of the lung. It occurs when air enters, but does not leave, the space around the lung (pleural space). This increased pressure prevent the lungs from expanding and can affect the flow of blood returning to the heart.





VENTED



UNVENTED



2/PACKAGE

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COMMERCIAL & IMPROVISED

Applying an Occlusive Dressing for Open Chest Wound

Remember to additionally locate and treat potential exit wounds with any penetrating trauma.

01

EXPOSE

Expose injury site and identify open chest wound. Quickly wipe area to remove blood, sweat or other fluids.

02

or

02

APPLY

Apply commercial occlusive dressing to wound during exhalation. Commercial chest seals may come with a vent to release a build up of air underneath the seal. AED pads can also be used as alternative.

03

TUCK

Continuously monitor person for increased difficulty breathing, negative chest movement on affected side, signs of shock which may be a sign of a build up of air. If suspected "burp" the dressing during exhalation.





CALL 911 EARLY

ACCESS MORE ADVANCED HELP ASAP

To ultimately intervene in an emergency special training, tools and resources are required. This many times requires advanced medical or emergency intervention with its effectiveness being greatly determined by time. The sooner you alert emergency services the better the outcome and the better the chance for survival.

Call 911 early. Error on over-care. You can help save significant time by being proactive.

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KEEP IT SIMPLE

WORK TOGETHER AS A TEAM

The faster you can intervene in a life threatening emergency, the greater chance of survival and quality of life. This is where teamwork, planning and training can really make a difference. Situations change quickly and in the heat of the moment these can be missed.



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STAY CALM & WORK TOGETHER

TEAMWORK

Consider developing a team structure. Although the individuals may vary in each situation, understanding roles and responsibilities will facilitate a more cohesive and effective response.



<h3>HERO</h3>  <p>First contact. Initiates emergency response, preforms initial assessment and interventions.</p>	<h3>HELPER</h3>  <p>Works with hero to provide care. Second pair of eyes for things missed and team safety.</p>	<h3>RUNNER</h3>  <p>You need your stuff and help. The runner can bring equipment, alert emergency services, and guide them.</p>
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ONE THING CAN LEAD TO ANOTHER

KEEP WORKING, KEEP REASSESSING

Situations can deteriorate quickly and unexpectedly in emergency situations. Continually monitor & reassess until more advanced help is reached. Go through MOHAWK to see if you've missed anything or can improve care.



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SHOCK IS A LIFE THREATENING EMERGENCY

SIGNS OF SHOCK

Shock is life-threatening condition that occurs when the body is not getting enough blood flow.





CHEST DISCOMFORT

May present as a dull or "pressure" like pain in chest or back. Can radiate down arms or into jaw.



MENTAL STATUS

Can include confusion, lethargy, feeling tired all the way to unresponsive.



SKIN CONDITION

May appear discolored (pale, cyanotic), cool to the touch, clammy or profuse sweating.



TROUBLES BREATHING

Increased rate and work of breathing. Person may complain of not getting enough air.

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NOT ALL BLEEDING CAN BE SEEN

HOW MUCH BLOOD CAN I LOSE?

A person can bleed to death in as little as 3-5 mins.





0-15%

0-750ml

Minimal changes in the body. Slight increase in heart rate and no measurable changes in BP. The body shifts fluid into the blood vessels to help compensate for the loss.



15-30%

750-1500ml

Body is working to compensate. Heart Rate increase. Respirations increase to make up for the loss of blood but the BP remains stable. Person may become anxious or restless.



30-40%

1500-2000ml

Body unable to compensate. Decrease in BP. Because of declining O2 to brain, begins to appear pale, cool, clammy, confused and anxious and increased breathing



>40%

>2000ml

Person will show profound confusion and lethargy and appear extremely pale or cyanotic and cool & clammy to the touch. Max amount of compensable loss.



DON'T STOP WORKING

THINGS TO CONSIDER WHEN REASSESSING INJURED PERSON

- ① LOOK FOR PREVIOUSLY MISSED INJURIES
- ① TREAT FOR SHOCK BY HELPING MAINTAIN BODY HEAT
- ① REEVALUATE PREVIOUS INTERVENTIONS
- ① CONSIDER VIABILITY & ADVANTAGE OF EXTRICATION
- ① ENSURE YOUR CONTINUED SAFETY

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MATT GRAHAM

LINES, LANES & LIGHTS

"There is a plan for when the structure starts to fall away, for when the lines, and the lights, and the lanes are no longer relevant. The simplest and most efficient way is to accept this premise: the structure you see is created and, when that structure starts to fall away, you can create another one. Recognize and accept that the rules may not apply."



