The Importance of a Casualty Care Program

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Disclaimer

There is a commercially available product from Mercy Health System that has been assembled and retailed as only a Not-for-Profit system can do. This kit includes all the tools, resources, and educational materials necessary to bring Casualty Care in the Classroom to your community.

No person or persons at Mercyhealth, have any direct or indirect financial ties to profit from the sale of the aforementioned product.

Jay MacNeal

- Mercyhealth System EMS Medical Director
- Board Certified Emergency Medicine/EMS
- Fellowship Trained EMS
- EMS Instructor II
- Federal Disaster Medical Team
- Tactical Medical Director
- Firefighter/Paramedic
- National Terrorism/Preparedness
- HazMat/Emergency Response
- Law Enforcement Communications

Chris Wistrom

Ambulance Driver at age 16
Volunteer FF 16
EMT at 18
Medic at 19
Stanton IA volunteer FD, Red Oak, IA FD, Clarinda Regional EMS, Adams County Rescue, Pacific Junction Fire and Rescue
College Northwest Missouri State University
Medical School Kirksville College of Osteopathic Medicine
Residency Henry Ford Macomb-Detroit
SWAT Doc Macomb County Sheriff
Associate EMS Medical Director Mercyhealth
Father of 2
Husband to a lovely lady
EMS Field Physician

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Janesville, Wisconsin

Est Pop 63,575

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Never Heard of It

Where???

Huh??

Janes---what???

Who???

Isn't that in Arkansas?

This Guy

What does that mean?

Not increased funding

Not Pork-barrel spending (R)

Increased security concerns

Higher Threat/Target Profile

Need for Sharp Preparedness

Background

Columbine 1999
- 15 dead (including shooters) 24 wounded

Sandy Hook 2012
- 28 dead (including shooter)

VA Tech
- 33 dead (including shooter) 23 wounded

Aurora Theater
- 12 killed 70 injured

San Bernadino
- 14 killed, 22 injured

Pulse Night Club
- 49 killed, 53 wounded

2013 FBI Report on Active shooter

An average of 11.4 incidents occurred annually.

An average of 6.4 incidents occurred in the first 7 years studied, and an average of 16.4 occurred in the last 7 years.

70.0% of the incidents occurred in either a commerce/business or educational environment.

Shootings occurred in 40 of 50 states and the District of Columbia.

60.0% of the incidents ended before police arrived.

Source https://www.fbi.gov/news/stories/2014/september/fbi-releases-study-on-active-shooter-incidents/pdfs/a-study-of-active-shooter-incidents-in-the-u.s.-between-2000-and-2013

Table Top Winter 2013/14

What would happen if?

Much attention being given to active shooter

Most focused on Police operations

EMS and Law Enforcement interoperability.

What is happening on the medical end of this?

Where do we want to go?

Community

Community threat level is at baseline

Kids are in school

Parents are at work

Community Resources

4 in town ALS ambulances

5 fire engines

10 on duty police cruisers

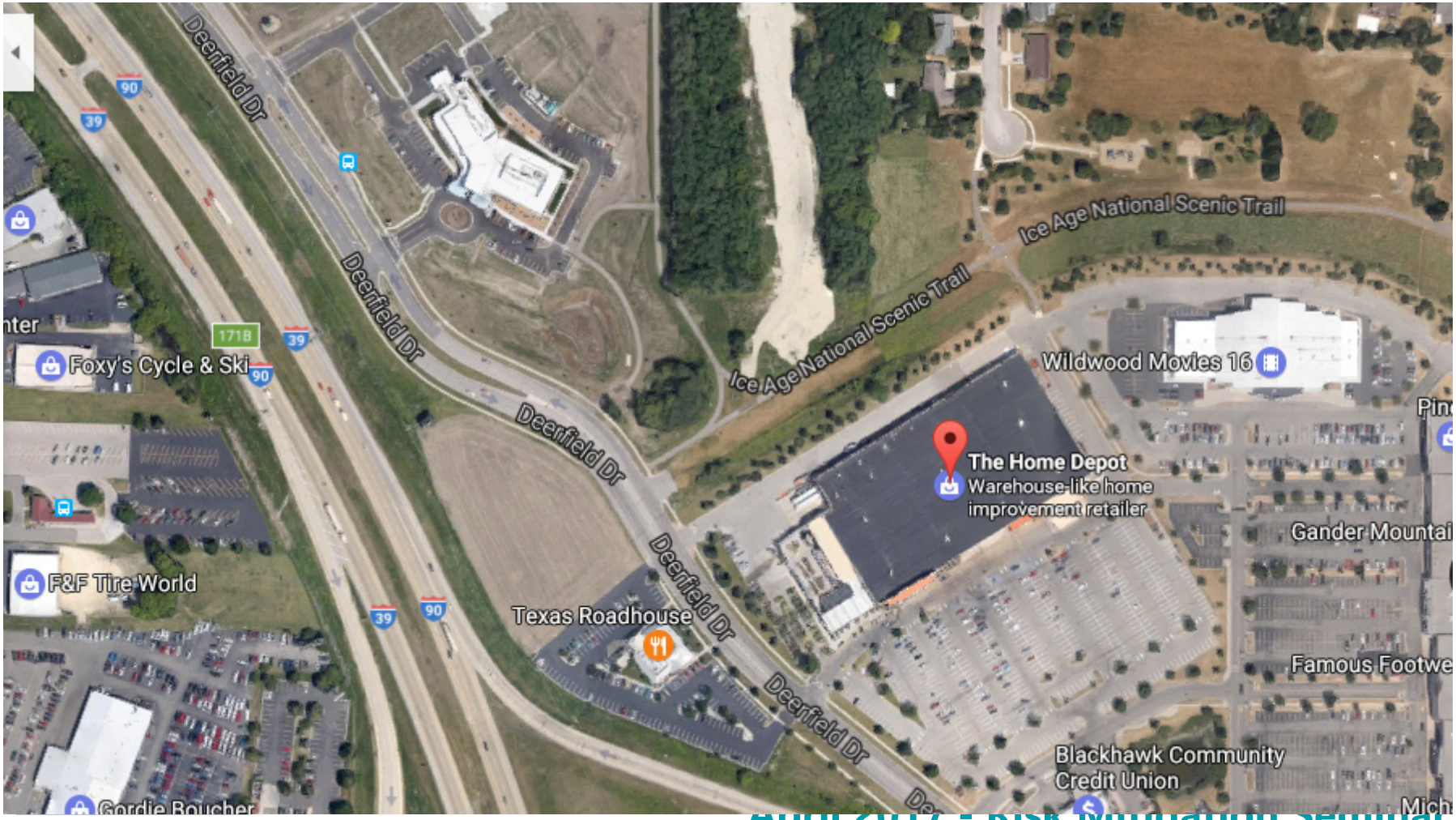
1 MD-1 physician response vehicle

Level II trauma center

Level III trauma center

Free standing ED with no trauma designation

Blue Monday: Is today the most depressing day of the year?



Scenario

1100hrs 911 receives call of disturbance at local movie theater

1101hrs 911 is overloaded with phone calls and text to 911 of injured and bleeding adults and children in theater 7

1101 hrs all available citywide pd, fire, ems dispatched

1104 first pd unit arrives on scene finding multiple “victims” running out of theater

1105 911 now receiving calls of active shooter in shopping plaza to east of theater

Send the Calvary

Police, fire, and EMS are at usual baseline work load, 50% resources occupied on routine calls

Hospitals are busy with flu season, EDs are full.

Operating rooms are occupied with routine cases.

Scenario

1106 additional pd units arrive to find one officer down bleeding, self applying TQ behind vehicle in east parking lot of theater

1107 suspect is quickly neutralized with patrol rifle

1107 EMS is still staging one block away hearing gunshots

1107 hospitals are unclear of victim count, but shut down all elective cases and try to clear EDs

1107 news media begins calling 911 center

1107 concerned family members begin calling 911 and head to theater

Scenario

1107 additional police units arrive on scene

1108 pd sergeant arrives on scene, establishes unified command with fire battalion chief

1108 pd units begin primary search and active shooter clearing approach

1108 SWAT team alerted, several members on scene already clearing buildings

1115 911 call received of additional suspect running behind freestanding ED one block away

1117 incoming sheriff deputy finds suspect is actually additional victim heading to ED

Scenario

1117 No pd units available to check additional threat

1120 Incoming State Patrol and Sheriff locate the additional suspect in proximity of freestanding ED, is actually a “victim” with GSW to hand

1120 Initial clearance has found no additional threat

1121 RTF begins to enter structure under armed escort of DNR game warden, state patrol

Inside the theater

PD entry teams have applied TQ and placed several "victims" in recovery position

They are unable to give accurate count of "victims" but believe it is between 10-20

SALT triage initiated by FD TEMS medic

There are too many "patients" for available transport

RTF teams identify multiple "patients" triaged RED needing immediate treatment for bloody airways, pneumothorax, and center mass GSW

Outside the theater

Casualty Collection Point is established

Transport Officer is designated

Families are arriving

Media is arriving

City officials are arriving

Egress is congested, rapidly cleared by authorities

Additional ambulances have arrived in staging

Salvageable patients are transported and dispersed as best as possible

Gap

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Emergency Management, EMS, Fire, Police, Public Health, etc. are all professional cathearders

Interdisciplinary Task Force

An extensive literature review performed by LEO, School Staff, FD/EMS, and medical professionals

Very little in the way of medical efforts in active shooter

A ton of medical data on preventable causes of death, research from Global War on Terror, Tourniquet use (safety and safety in children)

Our Team

Dr. Rod VanBeek MD USN-ret
- Navy Seal
- At Oklahoma City Bombing

Dr. James MacNeal DO
- Student/SWAT medic VA Tech
- 20+ years EMS experience

Dr. Robb Whinney DO
- Director Trauma

Dr. Chris Wistrom DO
- SWAT physician 17 years EMS experience

Officer Biddick (combat medic)
- United States Army medic

Sgt Blaser (SWAT commander)
- 20+ years Law Enforcement

Cpt Tom Brunner
- 20+ years EMS/FD experience

Dr Yolanda Cargile EdD
- Director Student Services

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Identified Problem

The interval between time of wounding and time of professional medical care is far too long

This diaspora needs to narrow

Proposed Answer

Attack from both ends

Supply those within the scene medical knowledge, tools and the empowerment to use them

1. CCC
2. WCC

Get medical care into those scenes

3. RTF
4. TECC
5. TEMS

1. CCC-Casualty Care in the Classroom

We wanted to find a quick easy implementable solution to empower teachers to stop the dying in the event of an active shooter and empower them to act.

Remember this is a full year prior to Hartford III and almost 2 years before Stop The Bleed

Program was developed from scratch and formatted in a Train-The-Trainer style

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Goal

Cost effective

Sustainable

Easy to train

Treat leading causes of preventable death in penetrating trauma

Applicable anywhere in the world

Sustainable

Cost of ownership

- Kit cost / years to expiration

Time and cost to train

- 45 minute training from start to finish
- Trained at welcome back orientation each year
- No cost involved as SRO / School nurses of volunteers do the training

Ease of Training

Who

- Trained by local professionals who already own expertise of the material

What

- Based on chosen equipment and a factor in choosing what goes into the bags

When

- 45 minutes (ideally annually)

Why

- The obvious-stop the bleeding
- The unobvious-Empowerment

Causes of Combat Death

31% Penetrating head trauma
25% Surgically uncorrectable torso trauma
10% Potentially surgically correctable trauma
9% Hemorrhage from extremity wounds
7% Mutilating blast trauma
5% Tension pneumothorax
1% Airway problems
That's 88% Wheres the other 12%?
12% Other- Mostly from infections and complications of shock
Well noted and Defined in multiple sources TCCC, TECC, Journal of Trauma, Special Operations Medicine, etc

Process

Survey that hyperlinks to video

Video ~12 min introduces concept and tourniquet

Day of training

- 10 min Lecture
- 35 min of hands on

Resend survey for before and after feedback

Retrain with CPR, with School Resource Officer, School Nurse or by design

Mercy Casualty Care Kit

www.mercycasualtycarekits.com

All teaching materials, videos, prop building instructions

Implementation guide

Questions to mhsccc@MHemail.org

To Date

We have trained over 5000 school staff across 9 states

Pre-K-12

Public Schools

Private Schools

Parochial Schools

Montessori Schools

School in a Mosque

16 technical colleges have sampled the program (1 fully implemented)

State College

All the infrastructure is there for you to do it too.

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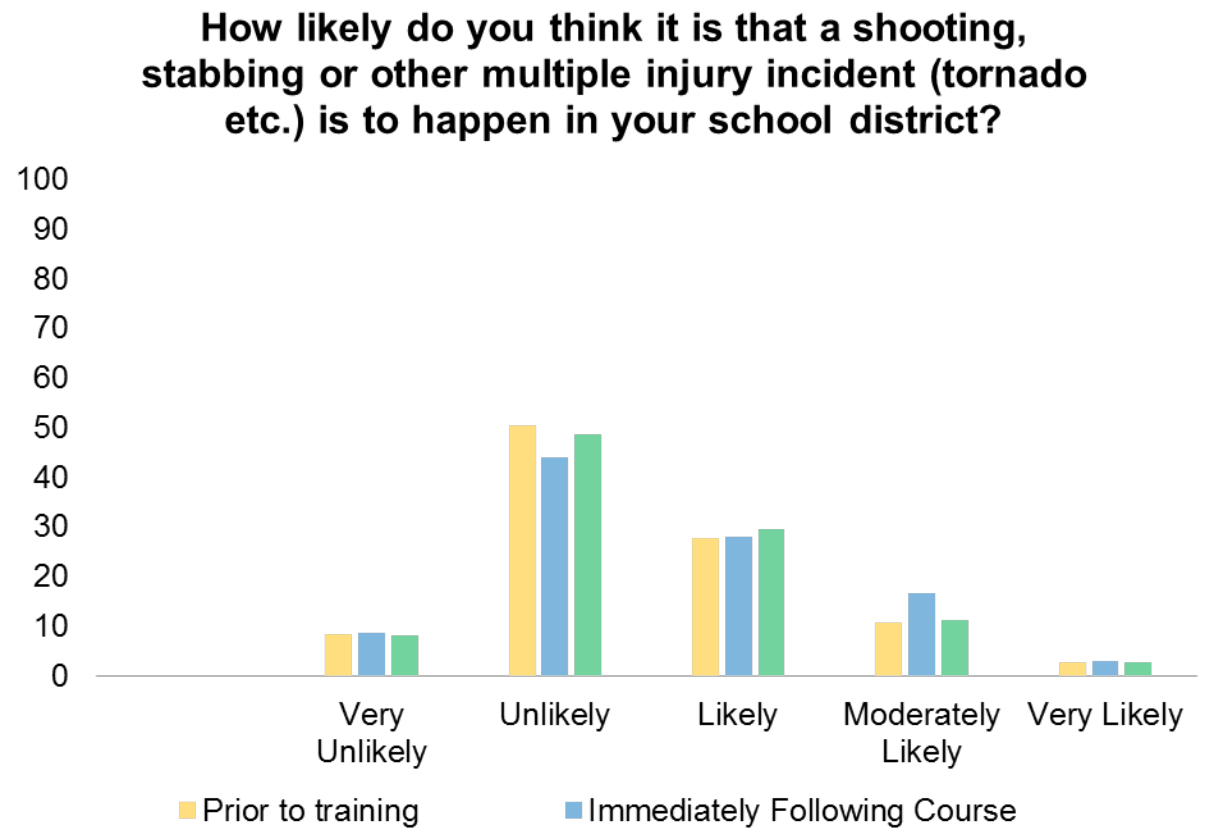

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2. WCC-Workplace Casualty Care

Tenets of TECC simplified for lay person

Boiled down to 1 hour

Guidance offered for purchase of commercial kits and placement

1 Movie Theater and Three large companies regionally so far with several classes scheduled

Proposed Answer

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3. RTF

Concept has been in our region since 2001

Implementation has been scattered

Milwaukee County has a very nice guideline SOP

We have medical direction for 80-ish agencies in N Illinois and S Wisconsin

Developed and trained every provider a 4 hour intro to RTF

Phase two training nearly completed with practical application

Phase three planned for joint operations

3. RTF for LEO

Facilitated meetings and guidance to all county LEO agencies to agree in RTF concept

Train-the Trainer developed in 30min awareness PPT for shift briefing

County now working on Automatic Mutual aid response plan (in progress)

Preparations being made for joint training and full scale exercises.

Proposed Answer

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Supply those within the scene medical knowledge, tools and the empowerment to use them

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Get medical care into those scenes

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5. TEMS

4. TECC

Know it, love it, live it

Every officer in county trained in tourniquet use and equipped (no small task)

Committed to offering the class every other month without course minimum numbers

Trained several hundred LEOs to date

First Advanced TECC class coming up in April

Proposed Answer

Attack from both ends

Supply those within the scene medical knowledge, tools and the empowerment to use them

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2. WCC

Get medical care into those scenes

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5. TEMS

5. TEMS

4 day full TEMS course

Conjunction with NTOA

Upcoming course October 24-27

Registration at ntoa.org

5. TEMS refresher

Coming soon

“Build it and they will come”
or as IT says “Why are there all those cops in my basement with guns?”

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Community Tactical Training Center

25, 000 sqft
Indoors
Climate controlled-important in Wisconsin
Dedicated Tactical training space
- Church
- Office
- ER
- Classroom
- Theater
- Apartment
- Locker rooms
- Board room
- Night club

Integration

EMR/EMT/Medic

- Mandated RTF, encouraged TECC, available TEMS
- Instructors for WCC and CCC

Community

- Volunteers in TTC, trained in CCC and WCC

Nurses

- Volunteers in TCC, Trainers for CCC and WCC, able to take RTF, TECC, or TEMS

Doctors

- Trainers for CCC, WCC, TECC, TEMS, RTF and multidisciplinary conferences

LEO

- Soon to be mandated RTF (0.5 hr intro class), encouraged self aid/buddy aid, TECC, TEMS

Next Steps

Education of Hemorrhage Control for HS students

- Beloit Township Turner HS
- Edgerton HS

Education of Hemorrhage Control for Public

- PSA with EMS World (in Editing)

Continue to spread the Education

- We are today with Casualty Care where we were with CPR in the early 1960s

Questions?

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Thank you!

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