



# Civilian Tactical Law Enforcement: What is the 'Standard of Care'?

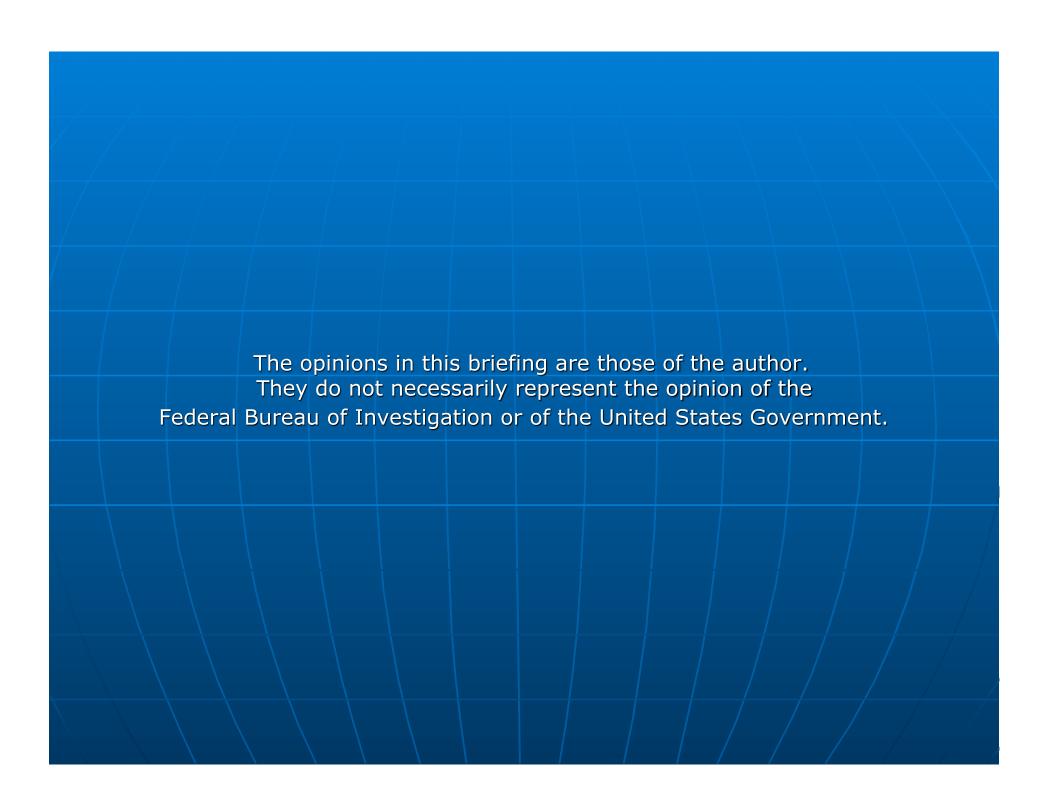
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This Briefing is UNCLASSIFIED



### SWAT doctors credited with saving officer's life during raid

11:55 PM CDT on Wednesday, October 17, 2007

By STEVE THOMPSON and TANYA EISERER / The Dallas Morning News

A Dallas police lieutenant shot in the neck during a Wednesday morning raid was expected to survive, thanks largely to two doctors on the SWAT team he led.



# Physician Involvement in SWAT 2009<sub>1</sub>

- 209 Teams
- 47% use physicians in some capacity
- 65% of these are emergency physicians

1. Gildea JR, J Emerg Med (2008) 35(4) 411-4

- Questions:
  - How are the other 50% supported?
  - With hundreds of SWAT operations weekly:
     What is a reasonable minimal standard?
     Achievable across U.S. jurisdictions
     Based on available resources

### Where Are We Coming From? 1996<sub>2</sub>

- 150 Teams
- 69% used 'civilian ambulance on standby'
- 94% of these had no specialized joint training

2. Jones JS etal. Prehosp Disaster Med 1996;11:202-6

#### • Questions:

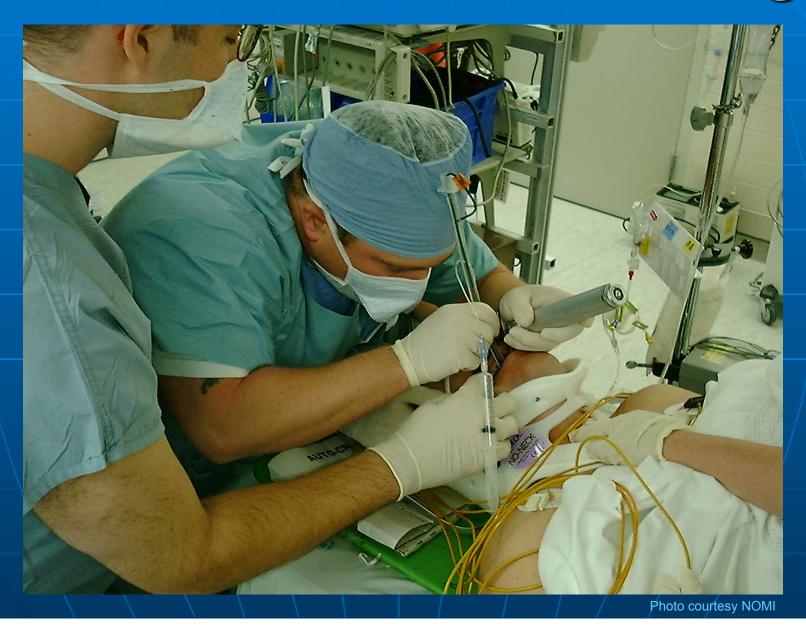
- Is this still 'the baseline' nearly 15 yrs later?
- How many teams continue to plan reactively?
- Are we still putting injured officers in police cars?

#### Selling integrated tactical EMS to "The Cops":





#### Civilian Trauma Care Setting



# "Wait a second, I dropped my laryngoscope...."



FBI Photo

#### Recent Military Experience

- In the Iraq AOR:
  - Significant number of penetrating limb injuries (GSW/IED)
  - Self-Applied TQ
  - Rapid Access to EMS
  - Time to definitive surgical care 70 min or less.



Photo courtesy NOMI

#### Similarities-Law Enforcement

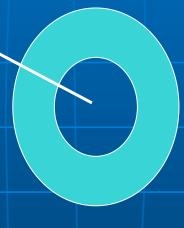
- In the SWAT scenario:
  - Significant risk of penetrating limb injuries (GSW/IED)
  - Self-Applied TQ use
  - Rapid Access to EMS
  - Time to definitive surgical care 60 min or less.



#### Goal: Rapid, Seamless Transition of Emergency Care



From within the Exclusion Zone-



To the Emergency Care System outside.





Sure, everything in here is important.

But *nothing* in here is a substitute for

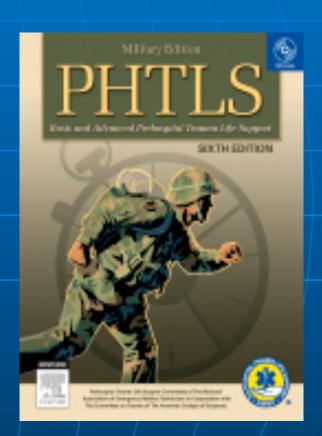
- The Medical OPLAN
- Rapid entry into The System
- Velocity

FBI Tactical Medical Bag
Configured IAW

BLS Table of Allowance 7.0, 10/2009

ALS Modifications for EMT-P only

- They Learn From Us.
- · We Learn From Them.
- It doesn't all fit.
- Some of it really does.



#### Military "Care Under Fire" Phase

- Return Fire and Take Cover
- Move Casualty to Cover and apply self aid
- Airway generally deferred until next phase\* (\*in civilian terms, "scene safe")
- Stop life threatening external hemorrhage
  - By casualty self aid (self applied TQ)
  - Apply TCCC recommended TQ over clothing,
     2-3 in proximal to bleeding site

1Tactical Combat Casualty Care Guidelines 2008

# CSH Baghdad-2006 Tourniquet Study<sub>2</sub>

- 232 patients
- 87% survival
  - When applied before shock developed:
     90%
  - When applied after shock ensued: 10%
- Complications
  - Transient nerve palsy: 1.7%
  - Amputations caused by TQ: zero

# CSH Baghdad-2006 Tourniquet Study<sub>2</sub>

- In 5 patients with wounds deemed treatable by TQ who did not receive them:
  - "Lost pulse within minutes, died prehospital"
  - "Arrived w/o VS within 15 min of wounding".

# CSH Baghdad-2006 Tourniquet Study<sub>2</sub>

- These 5 fatalities who did not receive TQ were matched against 13 patients with similar Injury Severity Scales and Abbreviated Injury Scores:
  - Survival rate with TQ: 77%
  - Survival rate w/o TQ: zero

2 Kragh JF etal. J Trauma 2008;64:S38-50

# CSH Baghdad 2006 Tourniquet Study

Some field witnesses reported that active external bleeding had stopped...and that they had underestimated the speedy lethality of uncontrolled limb bleeding"

<sup>2</sup> Kragh JF, etal. Annals of Surg 2009;249:1-7

### What Can We Apply to Civilian EMS?

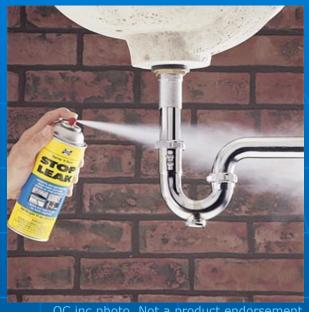


Photo: Amedd.army.mil

- Do we recognize "the speedy lethality of uncontrolled bleeding"?
- Does the short-term complication rate of TQ justify its use when speed is essential?
- Once the utility of TQ is recognized in specific settings, can we collect data clarifying outcomes in the civilian sector?

#### Hemostatic Agents

- Misconceptions of the role of these agents persists.
- Need to emphasize primacy of pressure techniques and TQ vs. hemostatic dressings.
- Recent studies by US Army Institute of Surgical Research:
  - Resulted in D/C of use by the US Army of hemostatic agents other than "Combat Gauze" pending further study.



OC inc.photo. Not a product endorsem

### On-Scene Care Should Never Trump Definitive Care

#### Hemorrhage

- Low threshold for TQ use.
- Hand-Off to Local EMS outside perimeter
- If Definitive Care is Close-Leave TQ On, Primary Assessment and Go

#### Airway

- AFTER scene safe. (NOT under fire)
- Simple adjuncts (NPA/Suction/Position/BVM)
- If Definitive Care is Close & the above works, Primary Assessment and Go
- All SWAT Operators Get Basic A/B/(C = TQ) training
- All Receiving EMS Get LE Scene Safety training
  - 'The Phase Line is The Hard Line'

#### Acknowledgements

- Beekey AC etal, J Trauma 2008; 64:S28-27
- Cordts PR, Brosch LA, Holcomb JB. J Trauma 2008;64:S14-20
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- Doyle GS, Taillac PP, Prehosp Emer Care 2008; 12:241-256
- Jones JS etal. Prehosp Disaster Med 1996;11:202-6
- Kragh JF etal. Annals of Surg 2009; 249:1-7
- Kragh JF etal. J Trauma 2008;64:S38-50
- Mabry R, McManus JG, Crit Care Med 2008; 36:258-266
- Gildea JR, Janssem JR, J Emerg Med 2008;35:411-4
- Special thanks to our colleagues in military medicine
  - Trauma and Injury Subcommittee-Defense Medical Board
  - Naval Operational Medical Institute
  - U.S. Army Institute for Surgical Research
  - Dr. John B. Holcomb, MD , FACS
- And our definitive care colleagues who are there for us.
   Every time.

