

HFD AND HPD TACTICAL MEDICAL TEAM



OVERVIEW

Introduction to Tactical EMS

- ▣ Special Operations Units in the military have utilized TEMS for years
 - Recognize the value in immediate treatment



Introduction to TEMS

- ▣ EMS agencies generally do not provide the training necessary to operate in a tactical environment
 - Concern over “Scene Safety”
- ▣ Requires consistent training with the local tactical unit to develop trust, proficiency, and understanding of their tactics



Introduction to TEMS

- Due to this recognized need, Tactical Emergency Medical Support was developed
 - Specialized Medical Training
 - Preventive Medicine
 - Knowledge of SWAT and PD operations



National Support for TEMS

- ▣ N.T.O.A. Position Statement
 - “The National Tactical Officers Association believes that TEMS should be provided within the inner perimeter by tactically competent certified pre-hospital care providers under the medical control of physicians with tactical training.”



Current State of TEMS

- ▣ US Army
 - Deploys physicians with their tactical medics
- ▣ US Air Force
 - Pararescuemen (PJ's) with their special tactics squadron
- ▣ FBI utilizes local or intra-department tactical medics to cover their tactical team
 - Hostage rescue team has its own emergency medical contingency
- ▣ ICE unit (Customs)
 - Tactical Medics trained via Johns Hopkins
- ▣ ATF, US Marshals, DEA, US Park Police, Secret Service, Border Patrol
- ▣ State Police
- ▣ Over 600 Departments



Clinical Justification

- ▣ Wound Data and Munitions Effectiveness Team Study (Vietnam)
 - 90% of combat deaths occurred in the battlefield
 - ▣ 42% succumbed immediately
 - ▣ **26% died within 5 minutes**
 - ▣ **16% survived between 5-30 minutes**
 - ▣ 8-10% died between 30 minutes-2 hours

- ▣ **42% within 30 minutes!!!**

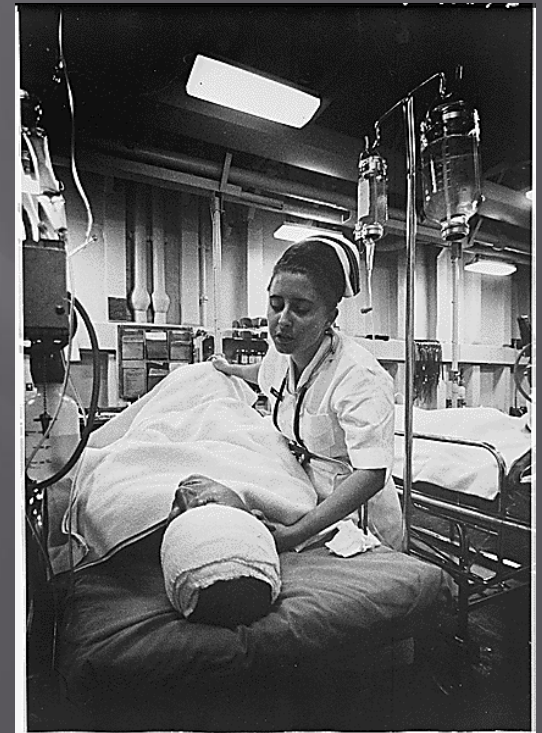


Clinical Justification

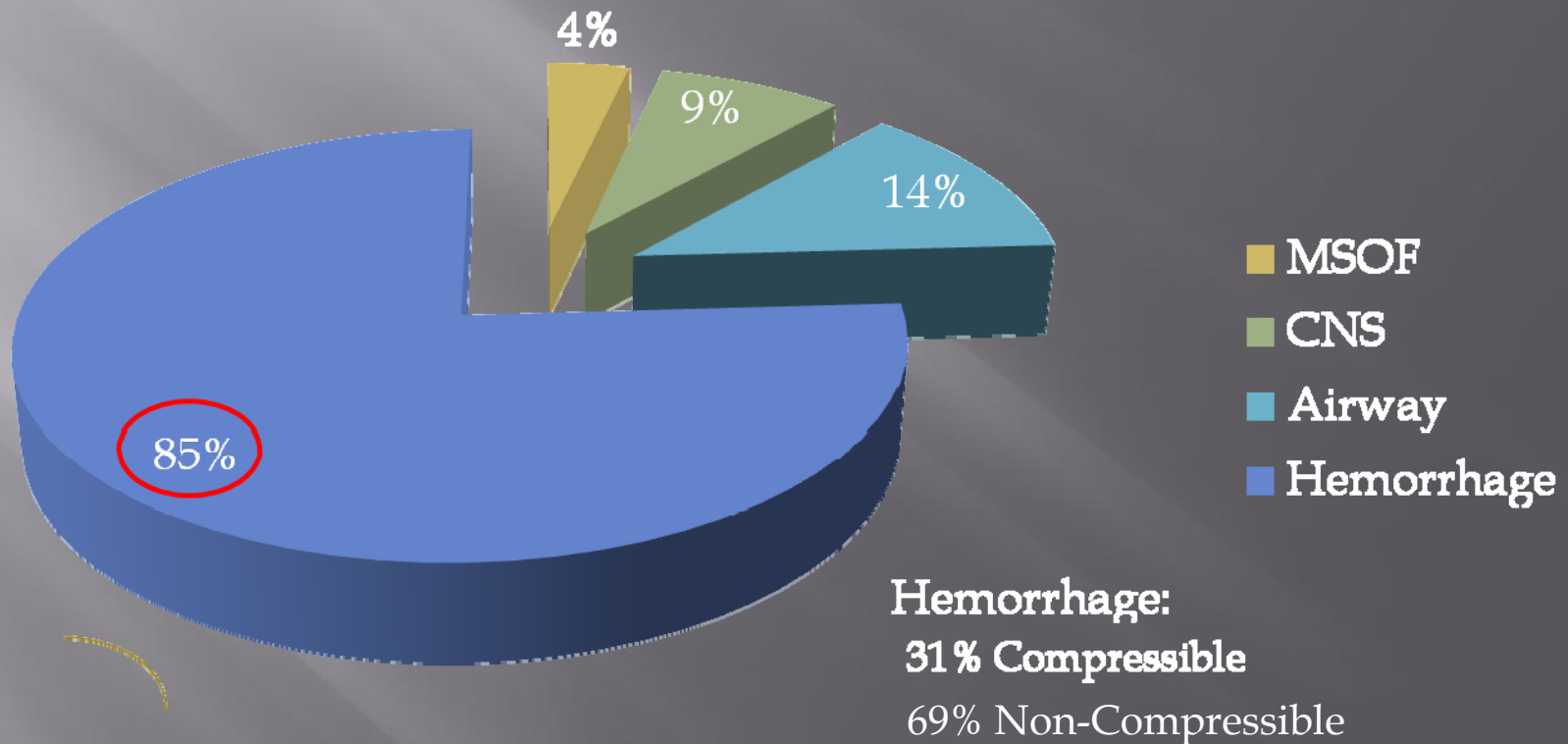
- ▣ Causes of Preventable Death
 - Hemorrhage from extremity wounds (60%)
 - Tension pneumothorax (33%)
 - Airway obstruction (6%)

- ▣ 90% of all combat deaths occur before the casualty reaches a medical treatment facility

- ▣ Data from Vietnam



Potentially Survivable Deaths (232) in OIF and OEF



From evaluation of 982 casualties, and casualties could have more than one cause of death. (Kelly J., J Trauma 64:S21, 2008)

Clinical Justification

- ▣ Per 1000 SWAT officer missions:
 - *3.2 injured innocent bystanders*
 - *1.8 officer casualties*
 - *33 officer injuries*
 - *18.9 injured perpetrators*

- ▣ Need for close medical support on call-outs
- ▣ Significant number of sports medicine related injuries during training, and call-outs.
 - Sprains/Strains, Lacerations

Purpose and Role of a TEMS Provider



Purpose and Role

- ▣ Primary Goals of a TEMS Unit:
 - Enhance the probability of mission accomplishment
 - Reduce mortality and morbidity among innocent civilians, officers, and suspects
 - Reduce line of duty injury and disability costs
 - Reduce lost work time for specially trained officers
 - Maintain good team morale by exhibiting concern for the health and welfare of the SWAT team members

Purpose and Role

- ▣ Expectations of a Tactical Medical Provider:
 - Provide immediate emergency care in the event of an injury to a civilian, team member, or suspect
 - Coordinate on-scene care with available resources
 - Monitor the medical effects of environmental conditions on individual team members as well as determine the potential impact of medical or health factors on a mission outcome
 - Conduct in-service training of SWAT officers such as buddy first-aid through scenario development

Tactical Medic Training

- ▣ Physical Conditioning
- ▣ SWAT School
- ▣ Weapons Training
 - Safety
- ▣ Close quarters battle/combat
 - Understanding tactics
- ▣ Field Medicine
 - Preventive
 - Pre-hospital
 - *TCCC*
 - Critical Care/Trauma Care



Attributes and Skills

- ▣ Hazardous Materials
 - Toxicology, hazardous materials, infectious agents
 - Advise command post regarding environment
 - Familiarity with SCBA, Level A/B suits
 - ▣ Methamphetamine Labs



Attributes and Skills

- ▣ Special Equipment
 - ▣ Maintain lightweight efficient equipment for rapid deployment
 - ▣ Barricade/Warrant vs. Manhunt vs. Waterborne ops



Attributes and Skills

- ▣ Sensory-deprived or overloaded patient evaluations
 - Perform an evaluation under gunfire, in the dark, or austere environments



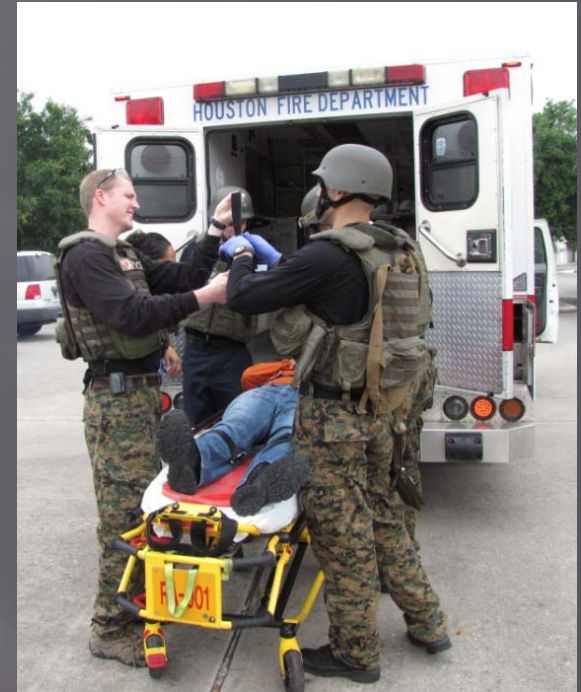
Houston Tactical Medic Team

- ▣ On Duty Team
 - 3 Physicians
 - 9 Tactical Medics
 - 1 Paramedic SWAT Officer
- ▣ Recruitment
 - Physical, Background Check, Medical Review, Interview
 - Continue to meet PT standard
- ▣ SWAT School
- ▣ 2 training days per month
 - Must attend 75%



Tactical Medic Team Funding

- ▣ UASI Grant
 - 2010
 - ▣ Budget \$252,174
 - ▣ Manpower for 2 first years
 - Only covers training, not deployments
 - ▣ Start up Equipment
 - 2011
 - ▣ Budget \$278,378
 - ▣ Team Maintenance
 - Addresses turnover and equipment usage
 - Addressed need to expand team
 - Shortcomings in previous budget recognized
 - Covers 2 years



Houston Tactical Medic Team

- ▣ Unarmed, No TCLEOSE certification
- ▣ Inner/Outer Perimeter (Scenario Dependent)
- ▣ Expanded set of protocols
 - Corneal Abrasion evaluation
 - Antibiotics
 - Expanded medications
 - ▣ i.e.. Ketamine, Toradol, OTC meds
 - Cricothyrotomy



Active Shooter Scenario

- ▣ Workplace
 - ▣ Johns Hopkins
- ▣ Mall
- ▣ School



North Hollywood

- ▣ 11 injured police officers
- ▣ 7 injured civilians
- ▣ 2 fatally injured perpetrators
- ▣ 2,000 rounds of ammunition



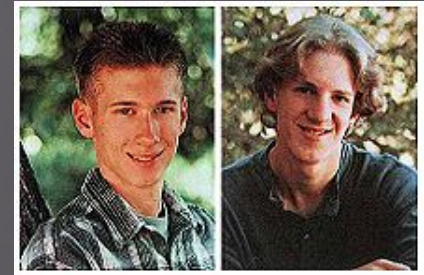
(Above Left) Bank Robber's Larry Phillips Jr. and Emil Matasareanu (Right).
(Bottom) Scenes from the North Hollywood Shootout.



Columbine

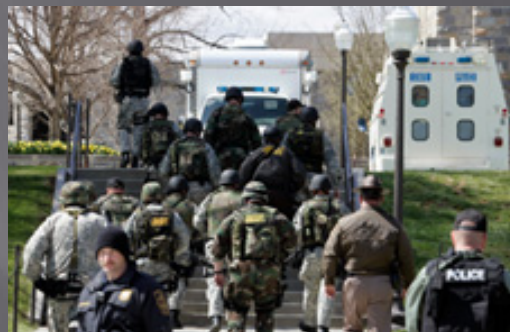


- ▣ April 20, 1999
- ▣ Two Seniors killed 12 students and 1 teacher
- ▣ Changed active shooter approach for PD



Virginia Tech Shootings

- ▣ April 16, 2007
- ▣ Seung-Hui Cho killed 32 people



Mumbai Attacks

- ▣ November 26, 2008
- ▣ 10 coordinated shooting and bombing attacks
- ▣ Killed 164 people, wounding 308
- ▣ Taj Hotel



Houston?

