Rescue Task Force

James Schwartz
Chief, Arlington County Fire Department
RTF Initiative

- Columbine High School Shooting – April 20, 1999
  - Eric Harris & Dylan Klebold
  - Both had self-inflicted fatal wounds
    - Occurred within 45 minutes from start of incident
    - No significant law enforcement entry for 1 hour
    - No medical operations inside for 4 hours
  - 12 students & 1 teacher killed
  - 24 wounded
  - Coach Dave Sanders
    - Bled for > 2hrs before dying
...Other Rationales for RTF

  - 10 terrorists – 6 killed / 4 arrested
  - 171 killed
  - Multiple attack sites
    - Taj Mahal Palace and Tower – 50 killed
    - Oberoi Hotel – 30 killed
    - Naraman House – 8 killed
    - Other incidents
Identifying the Gap

- Fire department assets stage
  - Remain in staging until police determine scene is secure
- A significant delay in medical operations
  - Wounded continue to die
ACFD Rescue Task Force

The ACFD answer to rapidly provide medical care and stabilize patients in areas that are clear but not secure
RTF Concept

First arriving street medics (NOT tactical medics) team up with two patrol officers (NOT SWAT) and move quickly into the “warm” zone along cleared areas to initiate treatment and evacuation of victims.
RTF Concept

• 2 police officers - 1 front security & 1 rear security
  • They **DO NOT** assist medics with care
  • Responsible for security & movement **ONLY**
RTF Concept

- Two fire department personnel
- Outfitted with ballistic gear
- Carry only medical supplies for Tactical Emergency Casualty Care (TECC)
- Tasked with point of wound stabilization and/or victim extrication
ACFD Benefits From RTF

- Strengthens relationship between police & fire
  - Improves day to day operations
- Faster victim triage, treatment, and evacuation
- Familiarization with police operations
- Mitigated risk operations
Doug Scott
Chief, Arlington County Police Department
The tragedy at Columbine High School in 1999 represented a paradigm shift for public safety’s response to an Active Shooter Event (ASE)

Following Columbine, there were 84 Active Shooter Event’s (ASEs) between 2000 and 2010

And the frequency of ASEs is increasing...
Police Perspective: Active Shooter

Frequency of ASEs per year

- ASEs per year
- Linear (ASEs per year)
Since Columbine, the Arlington County Police Department has been constantly evolving its ASE response to meet this growing threat by keeping an open mind about tactics, training, and equipment and making good use of lessons learned.
Tactics, Training, and Equipment

- A cadre of ASE trainers developed realistic tactical plans
- Standard responses changed to more effectively deal with the ASE threat
- The first responding officers must locate, engage and eliminate the threat as quickly as possible
- Skills are developed and maintained through an ongoing training program
- New equipment was introduced to allow a safe and effective response:
  - Rifle plate carriers and portable ballistic shields to supplement body armor
  - Patrol rifles to increase accuracy, range and effectiveness
  - ‘Go bags’ to carry essentials like ammunition, medical supplies and water
  - Breaching tools to aid in efficient entry
  - An armored personnel carrier to provide protection from gunfire during insertion and evacuation
August 11, 2007
Northern Shield Exercise
Marymount University in Arlington, VA

Sprawling college campus, target rich environment

Single gunman perpetrating an ASE

Police conduct a rapid response which evolves into a barricaded gunman
Lessons Learned

About 35 casualties in the ‘warm’ zone waiting for triage, treatment and evacuation

80-90 Fire and EMS personnel were staged nearby

90 minutes elapsed before scene is declared ‘safe’ by police

Many casualties perish due to the length of time between injury and treatment

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Lessons Learned

The After Action Review of Northern Shield highlighted strengths and weaknesses.

Arlington County Public Safety personnel were very effective and rapidly stopped the killing.

However, we clearly needed to develop a way to stop the victims from dying.

The shooting has stopped, but the bleeding has not.
Following the Marymount exercise, Dr. Reed Smith (OMD), Battalion Chief William McKay (Spec. Ops. Chief), and FF/Paramedic Blake Iselin of the Arlington County Fire Department developed a concept to improve life saving response.

2. **Concept Development:** FF/EMT III Blake Iselin, OMD E. Reed Smith, Special Operations Chief William McKay collaborated on a concept that would be referred to a Rescue Task Force. After Columbine in 1999 the law enforcement community underwent a significant paradigm shift in the response to these rapidly evolving incidents. Since then, law enforcement response protocols in response to Active Shooter have evolved from a relatively large group (hall boss) down to the most expeditious single officer response. Fire/EMS treatment protocols in Arlington County have been updated and have adopted Tactical Emergency Casualty Care (TECC) guidelines. Further detailed information regarding the Committee for TECC see the reference listed at the end of this document. The TECC guidelines are based upon the principles of Tactical Combat Casualty Care (TCCC) but account for differences in the civilian environment, resources allocation, patient population, and scope of practice.
How ACPD Benefits from RTF

• Improved operational relationships between police and fire response assets
• Self treatment “first five minutes” medical training for police officers
• Police able to focus on police matters instead of victim rescue efforts
How To Get Police Onboard

- Overcoming the ‘us vs. them’ mentality
  - Who’s in charge of the scene
  - Cost sharing concerns
- Emphasize the force multiplying benefit during ASEs
- Emphasize improved operational relationships
  - During both ASEs and normal day to day operations
- Public image of collaboration between police & fire
RTF Roll-out for ACPD

- Collaborative conceptual development with fire department personnel
- Command level briefings
- Roll call training for all shifts
- Practical ‘hands on’ training during annual PAC OPS
- Ongoing large and small scale drills
Dr. E. Reed Smith
OMD, Arlington County Fire Department
NYPD Active Shooter Report 2012

- Comprehensive document summarizing commonalities, trends, and events
- Total qualifying cases from 1966-2012: 230
- Some common characteristics found but also a large degree of variation across broad categories
  - Age, Sex, Planning, Location, Relationship to victim, weapons used
Summary: Pattern of an Active Shooter

- Single white male (rare female) aged 35 yo (11-70 yo) opens fire without warning inside a well populated building during daylight hours
  - Will be armed with >1 firearm and will fire ~25 rounds
  - Will initially target specific people but is very likely to fire randomly before stopping
  - Will likely die, probably by applied force or committing suicide
Summary: Pattern of an Active Shooter

- Results in multiple wounded each with multiple wounds including higher percentage of head injuries
  - Average 0-5 (2) killed, 0-5 (2) wounded
  - Several high profile events with many wounded

- Wound Patterns??
  - Research on-going by GW, C-TECC, and ACFD
Summary: Pattern of an Active Shooter

- Duration of event
  - Average <10 minute duration
    - Most as short as 3-4 minutes
  - Average 12-15 min response by Police

93% of incidents in academic institutions were over prior to the first responding asset, police or fire/EMS, arriving on scene
Evidenced Based Medicine....
Time Counts!

- Majority of fatal combat injuries die within 30 minutes of wounding
  - Every minute with uncontrolled injury decreases chance of survival!!!
Death Curve For Penetrating Trauma in Combat

- Instantaneous Death
- Hemorrhage
- Airway obstruction
- Shock
- Infections

Prevention Of Injury

- First aid
- BLS skills
- ALS level skills

Surgery interventions And Antibiotics
Evidence from Combat Trauma

- 90% of combat deaths occurred prior to medical care
  - “The greatest benefit will be achieved through a configuration that puts the caregiver at the patient’s side within a few seconds to minutes of wounding “

-Wound Data and Munitions Effectiveness Team, 1970
Evidence from Combat Trauma

- Up to 15% of combat deaths are preventable
- 9% bleeding from extremity wounds
- 5% related to collapsed and damaged lung
- 1% occluded and damaged airway

-Textbook of Military Medicine, 1984
-Military Medicine Journal, 1978
Conclusions about Active Shooter/Active Killing Events

- After review of combat and post-incident data:
  - The immediate threat is rapidly mitigated in almost all incidents well prior to EMS/Fire response
  - The sooner the first responders start medical treatment, the greater the chance that victims will survive
  - The risk from active shooter incidents is very low in areas that are clear but not secure
The New EMS/Fire Paradigm

Initial EMS/Fire medical responders should work with Law Enforcement assets to rapidly deploy into areas that have been cleared but not secured to initiate treatment and effect rescue of injured victims.
Arguments Against Paradigm Shift

“Operating in an unsecured environment is too much risk for us to assume!”
Too Much Risk??

Responding to a multi-level single family dwelling with fire showing. Mother outside says 2yo is upstairs in back bedroom taking a nap.
Too Much Risk??

Responding to a call for a man down: 55yo male collapsed in church now unresponsive
Let's Talk About Risk...

- **83 Firefighter LODD in 2012**
  - 22 on-scene of fires
  - 12 after fire
  - 15 responding

- **21 EMS LODD in 2012**
  - Multiple injuries
  - Transportation related
Active Shooter Response Risk

- Responders to active shooter events killed or injured over 33 years studied
- Only 4 incidents documented
  - Officer wounded while pursuing suspect in Jackson, MS 1996
  - Trooper killed and second trooper injured at a traffic stop/ambush at onset of 1997 Colebrook NH shooting spree
  - Officer wounded in shootout following pursuit of suspect from Cal-Trans yard shooting
  - SWAT officer wounded by a man who opened fire in library of an Salt Lake City LDS church in 1999
Active Shooter Response Risk

- Add two to the list:
  - Base civilian police Sergeant Kimberly Munley injured when engaging Nidal Hassan at Ft. Hood
    - GSW left thigh x 2, GSW left wrist x 1
  - Lt. Brian Murphy ambushed while exiting vehicle as first arriving officer at Sikh Temple in Oak Creek, WI
    - Wearing ballistic chest protection
    - Multiple GSWs to neck and extremities
Arguments Against Paradigm Shift

“Operating in an unsecured environment is too much risk for us to assume!”

“There could be another shooter who is hiding and could attack us!”
More than One Shooter???

- 99% of incidents, the shooter acts alone
  - Two outliers: Columbine, Jonesville
Law Enforcement research conclusions regarding active shooter mental profile:

- “They generally try to avoid police, do not hide or lie in wait for officers, and typically fold quickly upon armed confrontation.”

- “They choose unarmed, defenseless innocents for a reason: They have no wish to encounter someone who can hurt them. They are personally risk- and pain-avoidant. The tracking history of these murderers has proved them unlikely to be aggressive with responders. If pressed, they are more likely to kill themselves.”
Arguments Against Paradigm Shift

“Operating in an unsecured environment is too much risk for us to assume!”

“There could be another shooter who is hiding and could attack us!”

“The police can bring the wounded to us.”
“Police Can Bring Us the Victims”

- No care initiated by extracting LE teams
  - Can be trained but may create role confusion
  - Requires constant maintenance of additional equipment and skill set
“Police Can Bring Us the Victims”

- LE resources need to be carrying out tactical police work
  - Poor use of a limited resource
  - Searching, clearing, and securing the area requires multiple LE assets
  - Need personnel to secure key real estate
    - Hallway intersections, stairwells, large open areas
    - Outer perimeter control
- Trained to move to shooter, not to initiate medical care
Arguments Against Paradigm Shift

“Operating in an unsecured environment is too much risk for us to assume!”

“There could be another shooter who is hiding and could attack us!”

“The police can bring the wounded to us.”

“That’s why we have tactical medics”
Tactical Medics as the Answer

- Are extremely useful if immediately available
  - Virginia Tech: Male student shot twice in leg
Tactical Medics as the Answer

• BUT are not always readily available
  • Typically respond with SWAT team
• Have a different dedicated job to do
  • Certainly can provide some aid, but as a whole, are dedicated to care for SWAT officers and SWAT mission
• Limited resource
  • How many medics on team??
  • How many patients to be treated??
Arguments Against Paradigm Shift

“Operating in an unsecured environment is too much risk for us to assume!”

“There could be another shooter who is hiding and could attack us!”

“The police can bring the wounded to us.”

“That is why we have tactical medics”

“Standard EMS doesn’t apply in these situations”
TCCC?? Civilian NOT Military....

- Tactical COMBAT casualty care (TCCC) is written for the military population working in military scenarios under military scope of practice and liability

- Fails to account for the difference in civilian population and scenario
The Civilian Translation: Tactical EMERGENCY Casualty Care

- Civilian threat-based care guidelines developed from military medical lessons learned
Tactical EMERGENCY Casualty Care

• Evidenced-based best practices medical guidelines for care at or near the point of wounding in high risk operations
  • NOT Law Enforcement tactical medic specific
  • For use by any first responder who is providing medical care whenever and wherever there is increased risk to provider and patient
Tactical EMERGENCY Casualty Care

• Goals:
  • Provide principles for point of wounding management of trauma for response to ALL atypical and high risk civilian emergencies
  
  • To balance appropriate medical care with the threat, the required tactics, and the civilian scope of practice, equipment, and population
TECC is “Situation Driven”

- Applied differently in each three dynamic phases defined upon the relationship between the injured, the rescuer, and the threat
  - Direct Threat Care
  - Indirect Threat Care
  - Evacuation Care
Arguments Against Paradigm Shift

“Responder safety first! Too much risk...”

“There could be more than one shooter...”

“The police bring the casualties to us....”

“Tactical medics can fill the gap”

“Standard EMS doesn’t apply here”

And my favorite....

“That is just not the way we do things”
“We Have Never Done it that Way”

Some people think that the World is flat, regardless of what the data and science say....
“We Have Never Done it that Way”

The answer to those who resist changing the paradigm is to address their concerns with:

TRAINING
TACTICS
EQUIPMENT
What Do We Know About Fire/EMS?

Brave men and women will likely “go to work” to save others.... AT LEAST we can give them the tools and training to mitigate the risks!
What If We Don’t Change??

- London Fire Brigade and 7/7 attacks
  - Heavily criticized by public for perceived lack of action
  - Following strict policy for safe scene operations
  - Cleared of blame in official Coroner's Inquest
WHAT IF WE DON'T CHANGE??

MANY victims survived the ferocity of the blasts, leaving their relatives frustrated and convinced more could have been done to save them...

SAMANTHA BADHAM: she was travelling to work with her partner Lee Harris, 35, on the Piccadilly Line train targeted by Jamarine Lindsay. Emergency services took up to an hour to find them lying beside each other on the tracks, but said the pair were alive and crying out in pain. Paramedic Adam Desmond said Miss Badham, 35, a web designer from Tottenham, North London, had smiled at him and squeezed his hand. Blast expert Colonel Peter Mahoney said her injuries were severe, but added: "We were not in a position to say survivable or non-survivable." Miss Badham died at the scene as she was taken out of the station. Mr Harris died in hospital. They were buried together in Herefordshire, where they grew up.

SHELLEY MATHER: The 26-year-old survived for an hour and 44 minutes after Lindsay's bomb exploded. The tour guide, from New Zealand, was still conscious when rescuers arrived and had been talking to another injured passenger. Paramedics treated her for a cut hand and Colonel Mahoney said she may have suffered severe head or abdominal injuries. Coroner Lady Justice Hallett said: "It was unlikely Shelley would have survived her injuries, even if she had been extracted earlier."

PHILIP BEER: After the Piccadilly Line blast, Patrick Barnes turned to his friend Philip Beer and asked: "Are we going to die?" Mr Beer, 22, a hair stylist, replied: "No, everything is going to be fine." An hour later, paramedic Peter Taylor heard Mr Beer, of Ilfordham, Hertfordshire, shout, "Help me." But when the paramedic tried to treat Mr Beer he said the hair stylist was not breathing, although he still had a faint pulse. Packed with large clouds of smoke, the explosion destroyed 13 buildings and killed 26 people. Firefighters used a water cannon to control the flames. At the time of the explosion, Mr Taylor was the only firefighter on duty in the area. He later said: "We were all just trying to help people."

CARRIE TAYLOR: An hour after waving goodbye to her mother, she was thrown across a Tube carriage by the blast from the Aldgate bomb. Other passengers helping the wounded passed she was still alive. Steven Reynolds, a trained first aider, held her and told her to "hang in there." Although the 24-year-old, a finance officer with the Royal Society of Arts, from Wembley, north-west London, was badly injured, passengers said she was breathing and speaking. She died 36 minutes after the blast. The emergency services had not reached her by this stage. The coroner said: "You can now be absolutely certain that..."
What If We Don’t Change??

Victims’ Families Spokesperson:

"The fact of the matter is that on July 7, 2005, they were operating in the same environment as the other emergency responders and yet did not take or were not willing to take the same calculated risks that were being taken by, for example, British Transport Police at King's Cross."

"In our submission, the sense has emerged from the inquest that the pendulum may have swung too far in favour of an overly cautious approach."

-The Telegraph, 6 may 2011
The New EMS/Fire Paradigm

• Initial EMS/Fire medical responders should work with Law Enforcement assets to rapidly deploy into areas that have been cleared but not secured to initiate treatment and effect rescue of injured victims

• Details
  • NOT tactical medics but first arriving EMS assets
  • Security provided by LE teams
  • Requires appropriate equipment and PPE
  • Should utilize TECC medical principles
ACFD Rescue Task Force
Overview of RTF Operations

- Shooting starts - 911 calls received
- Assault with Weapon dispatch goes out for Police and Fire – upgraded based on 911 info
  - 1 Battalion Chief
  - 1 Battalion Aide
  - 2 EMS Supervisors
  - 5 Medic Units
  - 2 Engine Companies
  - Mass Casualty unit
  - Fire Marshal
RTF Operations
RTF Operations
RTF Operations

Diagram showing RTF operations with V and CT markings.
RTF Operations
RTF Operations

Resupply boxes
Resupply boxes
RTF Operations

Resupply boxes
Resupply boxes
RTF Operations

- RTF teams remain on standby until entire area has been searched for victims
RTF Training For ACFD

- Phase 1: Initial Training of ALS providers
- 4 hour CME on Tactical Emergency Casualty Care
- 2 hour RTF Operations training
- 2 small scale drills with Police
- Large full-scale drill at Local High School
RTF Training For ACFD

• Phase 2: Ongoing ALS training and initial BLS training
  • 4 hour BLS CME on TECC
  • 4 hour ALS CME RTF and TECC refresher
  • 2 hour BLS training on RTF Operations
  • Multiple small unit drills with patrol
  • TECC training class in Recruit School
RTF Training For ACFD

- Phase 3: Sustainment training
  - Annual ALS/BLS CME TECC and RTF refresher
  - Trimester small unit and RTF operations drills
  - Annual large scale drill with Police
  - TECC and RTF training in Recruit School
  - RTF SOP and Medical Protocols