THOT Presents: Break to Educate

Trauma and Disaster Response

Maureen Milligan, President & CEO, THOT

Jessica Schleifer, Director of Advocacy, THOT

Dr. Alan Vierling, Executive VP/Administrator of LBJ Hospital, Harris Health System

Jorie Klein, Director, Trauma Program - Rees-Jones Trauma Center
Parkland Hospital & Health System
THOT – What we do

- Trauma care - 10 of the state’s 17 highest level, regional trauma centers (Level 1)
- Waiver support - 11 of the state’s 20 anchors for the 1115 Transformation Waiver
- GME: About 63 percent of Texas hospital systems’ Graduate Medical Education (GME) residency positions;
- THOT member transferring hospitals provide the majority of IGT (state match) supporting Medicaid DSH and Waiver payments to Texas hospitals

THOT % of All Hospital Activity in Key Areas 2015

<table>
<thead>
<tr>
<th></th>
<th>Hospitals*</th>
<th>All Patient Days</th>
<th>Medicare Days</th>
<th>Medicaid Days</th>
<th>Outpt Visits</th>
<th>Unfunded care**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>4%</td>
<td>16%</td>
<td>10%</td>
<td>21%</td>
<td>30%</td>
<td>36%</td>
</tr>
</tbody>
</table>

**Unfunded care** includes the percentage of hospital activity that is not funded through traditional healthcare reimbursement sources.
Trauma includes injuries such as:

- Vehicular collisions
- Falls
- Gunshot wounds
- Burns

Traumatic injury is the leading cause of death of all Americans from birth through age 46.

- 192,000 deaths from trauma
- Annual societal cost of more than $671 billion
A **network** of EMS and air medical providers, acute care hospitals, personnel, and organizations that function in **an organized and coordinated manner** in a defined geographic area.

The trauma center and its surgical care team provide just one element in an inclusive and **integrated system of “disease management” for injury.**
The Texas Trauma System

- 22 Regions (Regional Advisory Councils – RACs)
- 288 designated trauma centers
- 18 Level I trauma centers
What makes a Level I Trauma Center?

In a word: Commitment

• Capable of providing total care for every aspect of injury – from prevention through rehabilitation.

• 24-hour in-hospital coverage by general surgeons, and prompt availability of specialties such as orthopedics, neurosurgery & anesthesiology

• Robust community injury prevention program

• Comprehensive quality assessment program.

• Organized teaching and research effort to help direct new innovations in trauma care.

The American College of surgeons verifies the presence of the resources listed in Resources for Optimal Care of the Injured Patient. These include commitment, readiness, resources, policies, patient care, and performance improvement.
Funding for the Texas Trauma System

• 1989: Statewide trauma system established with no funding

• 1992: Rules adopted to create 22 trauma service areas (22 nonprofit 501c3 RACs)

• 1997: State legislature allocated $4 million in 911 revenue to fund the RACs and EMS.

• 1999: 911 dollars were decreased and replaced with interest ($3 million/year) from state tobacco settlement endowment:
  • Did not cover the estimated $200 million (now ~$330 million) in uncompensated trauma care provided annually by trauma system hospitals.
  • Uncompensated burden largely borne by county hospital district taxpayers in urban counties with Level I trauma centers.


• 2003: Driver Responsibility Program (DRP) passed
  • Driver points/fees for driving infractions including DWI
  • Hold responsible those most likely to cause trauma injury
2016 - 2017 and 2018 - 2019
Trauma Add-on
Thank you

Increase:
• $97M AF
• Repeals the Driver Responsibility Program
• Preserves funding for uncompensated trauma care provided by hospitals and general revenue.
• This version has broad support from Counties, Hospitals, County Judges, Sheriffs, Smart on Crime Coalition, and other stakeholders.

• More details:
• Keeps surcharges for DWI and No Insurance and moves them over to the County and Municipal Courts as a traffic fine, and converts the 3 years of surcharges to a one time fine (i.e. $250 surcharge a year for 3 years for a conviction of driving with no insurance is now a onetime $750 court fine)
• Increases the State Traffic Fine from $30 to $50
• Increases slightly the amount of funding retained by the County and/or City to administer fines and collect revenue for the state
• Provides the local courts with discretion to address indigent and individual circumstances.

Passed House Committee on Homeland Security & Public Safety, Full House, and Senate Committee on Transportation
A dedicated and stable source of funding is needed to ensure:

• The number of trauma centers keeps up with growing population of Texas
• People have access to life-saving care regardless of where they live
• More can be done through injury prevention and research to reduce the devastating impact of trauma on Texas families

14-year-old Caden from Kerrville
A little rain fell: Lessons learned from Harvey

Alan Vierling, DNP, RN, NEA-BC, FABC
Executive Vice President Harris Health System
Administrator Lyndon B. Johnson Hospital
• Who we are: Location of LBJ vs other hospitals
Who we serve: Caring for the working poor

Majority of patients at or below federal poverty limit

2017 Federal Poverty Limit: $24,600  
(For a family of four)

- Minimum wage: $7.25/hour
- Annual full-time employment: $15,080/year

Patient demographics
- Hispanic = 59.6%
- Black = 24.9%
- Caucasian = 8.3%
- Asian = 4.8%
- Native American = 0.02%
- Other = 2.1%

Harris Health System provided $648.7 million in charity care in fiscal year 2016.
Our team: Motivated to pay it forward

- We pay in the 50% percentile
- 90% of employees live outside our service area
- 43% of nurses have 5 or less years of experience
- Nearly all of our employees drive past about 6 hospitals on their way to LBJ
- LBJ employees have a mission to serve
Harvey: A heroic response to a historic storm
LBJ’s Harvey response: By the numbers

- **546 EC visits** during the storm
- **1,065** in-patient days
- **600+ LBJ employees** were on our ride-out team
- **180+ evacuees** were dropped off at the hospital during the storm. (They were provided food and shelter.)
- **14,000+ meals** provided during storm
- **250+ managed leaks** were recorded during the hurricane and moisture issues developed after the storm.
- **6 feet of water to area roads** that surrounded the hospital
- **12+ patient transfers from/to LBJ via U.S. Coast Guard helicopter** (without the aid of a helipad)
- **24 babies were born** at LBJ during the hurricane

- **123 dialysis procedures**
- **17 surgeries** performed
- **1st emergency brain surgery** performed in hospital history
- **7 dogs** and **1 cat**
- **133 beds lost** to moisture
- **Dozens of surgeries delayed**
- **50 % of OB volume** shifted to Ben Taub
- **100+ patients transferred** to other facilities in last two weeks
- **1 Med-Surg Unit Opened** at Ben Taub
- **0 equipment lost**
Lessons learned: Trust your training

- Choose your team wisely (600 for ride out)
- Make a decision once
- Don’t second guess
- There’s talking time and there’s walking time
- Simplify the mission
- “Keep it safe so everyone goes home.”
Lessons learned: Communicate early and often

Communications channels used:
- Email
- Employee hotline
- Digital signage
- Newsletters
- And more
Lessons learned: Employee listening

What are your employees saying about you on social media?

Rene Fenner
August 27 at 12:27pm - Houston

Update from the emergency room at LBJ General Hospital: the ER itself is pretty empty. Just a few sick patients, a few flood injuries, and some kids who were hypothermic, but flood refugees are being dropped off in dump trucks by EMS, drenched and in life jackets. We’re sheltering them in classrooms connected to the hospital, putting them in dry clothes, and the cafeteria has knocked it out of the park preparing food for them. Several hospitals in Houston have had to evacuate their ERs bc they’re on the bottom floor and flooding, but thankfully we are fine so far. We have one full staff for days and one for nights. We’re going on on day 3 and we’re riding this out until the water subsides, so exhaustion is going to hit hard pretty soon. Thankful for incredible hospital management who prepared ahead for this mess and employees who work their butts off and keep me entertained! I love my job.

Like 102

John Riggs
August 29 at 10:10pm - Houston

After waiting impatiently for days to get to my friends at LBJ hospital I finally made it. The docs on my team worked Sat - Tuesday noon. The nurses and staff have been here since Friday and won’t leave until maybe tomorrow. Through this terrifying storm LBJ General Hospital has been an island of refuge in NE Houston. Houston doesn't realize that this hospital is such a vital sanctuary for a neglected community. Thank you to all my peers who make this place the light on the hill for so many.

"You are the light of the world. A town built on a hill cannot be hidden."
Lessons learned: When crisis hits, you’re no longer just the hospital

180 evacuees sought shelter at LBJ

During a crisis, trusted community institutions become the answer to every community problem.
Lessons learned: Awareness

- Managing staff expectations for a five-day ride experience
- Staff can be heroes and victims
- Managing burnout and fatigue during and after the disaster
Lessons learned: Humor opens doors
Lessons learned: Empathy is essential

“PEOPLE DON'T CARE HOW MUCH YOU KNOW UNTIL THEY KNOW HOW MUCH YOU CARE”
Lessons learned: Give them a break!

- Recreation
- Bingo
- Zumba
- Prayer services
- Down time
Lessons learned: Agility

- No idea is crazy in a crisis
- Outside life experience matters
- Be open-minded
- Try everything
- Failure is OK, just don’t quit
Lessons learned: Hire the right people and get out of the way

LBJ performs first emergency brain surgery during Hurricane Harvey

Prepare to be amazed.
Lessons learned: After the storm

https://www.youtube.com/watch?v=I0VXyjCXs78
Thank you!
THOT Presents: Break to Educate

Trauma Planning and Readiness

Jorie Klein, RN, BSN
Interim Director, Parkland Emergency Services
Director, Trauma Program - Rees-Jones Trauma Center
Parkland Memorial Hospital

Eric Epley, LP, Executive Director, STRAC
San Antonio, Texas
ESF-8 Health & Medical Orgs

Public Health System

EMTF

Health System

Emergency Management Systems
Emergency Response Preparedness and Planning

Regional leaders in emergency response preparedness and planning
  • Community Leaders
  • Administrative Leaders
  • Nursing
  • Physicians
  • EMS
  • Public Health
  • Volunteer Organizations

• Collaboration with regional planners
• Collaborates and integration with medical partners

Education
  • National Framework role of health care
  • Administrative Response – Incident Command System / Chain of Command
  • Clinical Response – Changes in patient care flow / resource management (ADLS, DMEP)
  • All hazard response

• Focus on hospital preparedness
  • Preparing every patient care unit; every first responder
  • Bystander training
Participation in Hazard Vulnerability Assessment

Natural Hazards

<table>
<thead>
<tr>
<th>EVENT</th>
<th>PROBABILITY</th>
<th>HUMAN IMPACT</th>
<th>PROPERTY IMPACT</th>
<th>BUSINESS IMPACT</th>
<th>PREPAREDNESS</th>
<th>INTERNAL RESPONSE</th>
<th>EXTERNAL RESPONSE</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>0 = N/A</td>
<td>0 = N/A</td>
<td>0 = N/A</td>
<td>0 = N/A</td>
<td>0 = N/A</td>
<td>0 = N/A</td>
<td>0 = N/A</td>
<td>0 - 100%</td>
</tr>
<tr>
<td></td>
<td>1 = Low</td>
<td>1 = Low</td>
<td>1 = Low</td>
<td>1 = Low</td>
<td>1 = Low</td>
<td>1 = Low</td>
<td>1 = High</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>2 = Moderate</td>
<td>2 = Moderate</td>
<td>2 = Moderate</td>
<td>2 = Moderate</td>
<td>2 = Moderate</td>
<td>2 = Moderate</td>
<td>2 = Moderate</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>3 = High</td>
<td>3 = High</td>
<td>3 = High</td>
<td>3 = High</td>
<td>3 = High</td>
<td>3 = High</td>
<td>3 = Low or none</td>
<td>33%</td>
</tr>
</tbody>
</table>

Tornado  3  3  3  3  1  1  1  67%

Fire Outbreak  2  3  2  2  1  1  1  41%

Epidemic  3  2  2  2  1  1  1  33%

Severe Thunderstorm  3  1  1  1  2  3  1  33%

Drought  2  1  1  1  2  2  2  33%

Flood, External  2  1  1  1  2  2  2  33%
Preparing Hospital Patient Care Units

- Job Action Sheet Notebook

- Disaster Supplies
  - Flashlight / batteries for each patient (if patient care area)
  - Flashlight / batteries for average number of staff on-duty at peak volume hours
  - 1 bottle of water (16.9 oz. or greater) per patient
  - 1 bottle of water (16.9 oz. or greater) average number of staff on-duty at peak volume hours
  - Evacuation bag for patient care areas
  - Portable radio / charger / backup battery (radio must be charged)

- HICS Forms
  - 213 Communication / Message Form
  - 214 Activity / Documentation Log
  - 254 Patient Tracking Log (Only Patient Treatment Areas)
  - 260 Patient Evacuation Tracking Log (Only Patient Treatment Areas)
Tools - Evacuation Bag

Parkland Evacuation Bag Contents

**Evacuation Bag** (qty 1)
Used to hold evacuation supplies. May be carried or worn as a backpack. Has area on top flap for evacuation maps, notes and/or labels.

**Resealable Plastic Bag (Ziplock)** (qty 1)
This bag has most of the contents packed into this bag. The bag and contents can be removed and the orange nylon bag can be loaded with charts or other information and supplies that are important to bring during an evacuation.

**Flashlight** (min qty 10)
Flip up lights to activate. To be used by staff to provide hands-free care.

**Yellow Light sticks - 12 hour** (Cylume® safety light stick) (min qty 5)
Chemical light stick activated by bending until you hear a snap, then shake. Can be used to lay in floor to light the area or way out. Can be used for general lighting or to assist in marking designated area after evacuation has occurred.

**Silver Mylar "survival blanket"** (qty 24)
This thin silver colored blanket can be used to shield bed bound patients from cold or sun. They are also water resistant.

**Poncho-red, yellow or blue plastic** (qty 24)
Rain poncho may be used to protect from rain, or wind.

**Battery Powered Megaphone** (qty 1)
Uses 6 "D" cell or 6 "C" cell batteries. Verify which type you have and stock appropriate batteries. Megaphone can be used to communicate to groups evacuating while inside or outside the hospital. Do not pick up the megaphone unless you are planning to take charge of your group.
Emergency Food and Water

Hospital has approximately 11,000 employees

- 14,000 emergency self heating meals
- 14,000 16.9 oz. bottles of water
  - Deployed by Code Yellow activation at direction of Incident Command
# New Disaster Alerts

## Facility / Disaster Alert

<table>
<thead>
<tr>
<th>EVENT</th>
<th>Old Code</th>
<th>Recommended Plain Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bed Capacity</td>
<td>Resource Alert – Bed Contingency Plan</td>
<td>Facility Alert – Bed Capacity – Command Center Activated/Not Activated / Details</td>
</tr>
<tr>
<td>Utilities Downtime/Outage</td>
<td>Code Yellow</td>
<td>Facility Alert – Utility Descriptor – (Location) – Follow Downtime Procedures - Command Center Activated/Not Activated</td>
</tr>
<tr>
<td>Emergency Operations Response Plan Activation</td>
<td>Code Yellow</td>
<td>Disaster Alert – Descriptor - Command Center Activated/Not Activated - (Location)</td>
</tr>
<tr>
<td>Medical Decontamination Team Activation</td>
<td>Code Yellow – Decon</td>
<td>Facility Alert – Decon Team Activation- (Full / Partial)</td>
</tr>
<tr>
<td>Major Disaster in community</td>
<td>Code Yellow Lvl I or II</td>
<td>Disaster Alert- Command center activations/ details.</td>
</tr>
<tr>
<td>Evacuation</td>
<td>Code Yellow Evacuation Lvl 1-5</td>
<td>Disaster Alert- Evacuation – details.</td>
</tr>
<tr>
<td>Fire Alarm Activation</td>
<td>Code Red</td>
<td>Facility Alert – Fire Alarm Activation – (Location)</td>
</tr>
</tbody>
</table>

## Medical Alert

<table>
<thead>
<tr>
<th>EVENT</th>
<th>Recommended Plain Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac Arrest</td>
<td>Code Blue + Location</td>
</tr>
<tr>
<td>Medical Assist</td>
<td>Medical Assist + Location</td>
</tr>
</tbody>
</table>

## Security Alert

<table>
<thead>
<tr>
<th>EVENT</th>
<th>Recommended Plain Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Watch</td>
<td>Security Watch</td>
</tr>
<tr>
<td>Action – not be used – see PHHS event notification</td>
<td></td>
</tr>
<tr>
<td>Active Shooter</td>
<td>Code Silver</td>
</tr>
<tr>
<td>Lockdown</td>
<td>Code Orange</td>
</tr>
<tr>
<td>Bomb Threat</td>
<td>Code Brown</td>
</tr>
<tr>
<td>Missing Infant</td>
<td>Code Pink</td>
</tr>
<tr>
<td>Missing Patient</td>
<td>Code Green</td>
</tr>
<tr>
<td>Police event / incident</td>
<td>PHHS police event notification</td>
</tr>
</tbody>
</table>

## Weather Alert

<table>
<thead>
<tr>
<th>EVENT</th>
<th>Recommended Plain Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe Weather</td>
<td>Code Grey</td>
</tr>
<tr>
<td>Tornado</td>
<td>Code Black</td>
</tr>
</tbody>
</table>
Triage

Triage Team Deployed in Full Medical Decon Gear

- **Patient Receiving**
  - I - Immediate (red)
  - D - Wait 1 hr. (yellow)
  - M - Minimal (green)
  - E - Expectant To Die

- **Hospital Triage**
  - Medical Control Officer
  - Patient Flow Coordinator
  - ED
  - Trauma Resuscitation Bays
  - ICU
  - OR
  - General Unit

**Altered/Disaster Standards of Care**

**Greatest Good Greatest # of Casualties**
Surge Management

- **Emergency Department / Trauma Capacity**
  - Discharge Patients
  - Dispositions for all Patients
  - Move Non-Critical Patients to Alternate Locations for Work-up
  - Address Staffing Patterns – Stretcher Teams
  - *Unidirectional Flow*
    - Red Area / Yellow Area/ Green Area
  - Medical Controllers
  - Patient Flow Coord.

- **OR / ICU**

- **Inpatient units**

- **Special Populations**
Disaster Supply Carts

Stored in MRD
Pushed out to pre-designated units when Code Yellow I or II

- Different carts for different areas.
  - ABC Carts
  - Procedure carts
  - Wound managements
  - Infection prevention
  - Expanded isolation equipment
Altered Standards of Care

- Clinical Exam
- CT Head  GCS > 13
- Chest Film / Pelvic Film
- FAST Procedure
- H / H, Blood Typing, ABG
- Suturing / Splinting – Damage Control
- OR – Damage Control
- ICU Admission – Patients with chronic illness, anticipated long term ICU ventilation, poor prognosis – last admission ICU

- Note: Medical Staff Committee / Ethics Committee / Legal Team
Casualty Patient / Family

• Staff sharing

• Patient tracking system
  • Move through the units
  • Condition / status / family

• Casualty Family Response Unit
  • Trauma psychosocial team
    • Social workers, chaplains, volunteers

• Fatality management team
  • Nursing Supervisor / Chaplain
Staff Preparedness

• Staff - family response plan
• Resources for family center at hospital
• ID / driver’s license on 2 armbands
Mental Health

- Mental Health Unit Leader
- Staff Debriefing / Critique End of Shift
- House-wide Debriefing
- Screen Signs Stress
  - Physiological
  - Cognitive
  - Emotional
  - Behavioral
- Crisis Intervention / Post Traumatic Stress Referral
- Coordination of Behavioral Health
Volunteer Management

- Licensed Independent Practitioners
- Medical Staff Bylaws – Granting Disaster Privileges
- Identifying Volunteer Independent Practitioners
- Oversight / Supervision
- Government ID/ License
- DMAT, MRC, ESAR-VHP
- 72 Hour Follow Through
- Planning & Preparedness
UNDERSTAND RESOURCES AVAILABLE AND HOW TO REQUEST RESOURCES
Katrina - Mass Shelter - Medical Operation Center
Dallas Convention Center - September 2005
NEW RESPONSES: HIGHLY INFECTIOUS DISEASE RESPONSE
New Responses: Ebola Preparedness

• Initial Screening
  • Last 21 Days, did patient travel to West African Countries
    • Guinea
    • Sierra Leone
    • Liberia
    • Lagos
    • Nigeria
    • Democratic Republic of Congo
    • Senegal
  • Last 21 days, individual has been in direct contact with an Ebola infected individual in Dallas?

• If yes – Immediately place mask on patient and don personnel protective equipment, notify physician of positive exposure history screening

• Physician will evaluate patient

Trauma Level I Kit with impermeable gown, booties, bonnet, N95 respirator, safety glasses and double gloves
CREATE REALISTIC EXERCISES THAT ALIGN WITH HVA FINDINGS
Hospital Response Practice - Performance

- Realistic Exercises
- HVA Assessment
- Measurable Outcomes
- Community / Regional
- Simulator Exercises
- All Plans
  - Mass Casualty
  - Utility Interruptions
  - Evacuation
  - Alternate Care Site
- After Action Review
  - Performance Improvement
LEARN FROM PREVIOUS EVENTS; PLAN FOR NEW THREATS
Continuous Learning Journey

**Tornado, Texas 1979**
Impact - Lessons – Personal Resilience

**Flight 191 Down at DFW, August 1985**
Lessons Learned – Communication, Scene Security, Care Coordination, After Math
Set up Hospital Chain of Command

**Military Helicopter Crash In Chico, Texas; Feb. 1985**
9 Fatalities, 9 Critical Burns
Lessons – Communication, Coordination with Burn Centers

**Flight 1141 Down at DFW; August 1999**
Lessons - Communication, Patient Tracking
68 Survivors 13 Deaths Introduced use of Hamm Operators

**April 19, 1993 Branch Davidian, Waco, Texas**
Lessons – 80 deaths
Cooperation with FBI/ATF Burn Casualties

**Hurricane Katrina, 2005**
Lessons – Community Coordinated Response, Hospital in Shelter,

**Hurricane Gustav / Ike 2008**
Sheltering / Space for Sheltering

**H1N1 Epidemic 2009**
COPC Impact – Screening, Testing, Resource Management

**Bus Crash – 2013**
Multiple Casualty Event – Incident Command – Too Long to Set up; Coordination with field; ME; Family Response

**Ebola Response; 2014**
Lessons – Community Collaboration, Decon Readiness, Engagement

**Tornados in Garland, Texas 2016**
– Readiness, Situational Awareness, Communication

**Hurricane Gustav / Ike 2008**
Sheltering / Space for Sheltering
Real Events
Joplin Missouri May 22, 2011
Active Shooter Response – New Response

• Active Shooter – Individual actively engaged in killing or attempting to kill people in defined area

• 2000 – 2010: 84 Active Shooter Events

• 2000 – 2013: FBI Identified 160 Active Shooter Events
  • 486 Deaths; 557 Casualties
  • 60% Ended Before Law Enforcement Arrived
  • 64 Events 3 or More Killed
  • Highest Number Of Deaths – 32
  • 2 Events – More Than One Shooter
  • 2006 to 2013 Defined Increase From 6.4 to 16.4
  • 9 Officers Killed; 28 Wounded
  • Most Events Less Than 5 Minutes

• CONSTANT READINESS

• PREPARE BYSTANDERS – STOP THE BLEED PROGRAM
RECENT EVENT REVIEW
Passenger Tour Bus Rollover

• Bus Crash 2013
• Code Yellow Level II (2nd Tier Mass Casualty Response)
  • 14 patients with 70 minutes
  • 1st patient arrived 24 minutes after notification of crash
  • Age range 63-89
  • Evaluation
    • 10 CT Head/ ABD / Spine
    • 2 patient blood transfusion (6 max)
    • 3 patient to OR
    • ICU – 3
    • Floor – 5
    • Death – 1
    • Home – 2
ACTIVE SHOOTER EVENT
July 7th Dallas, Texas Event

2058 1st Officer Shot
2nd Officer Shot
3rd Officer Shot
4th Officer Shot
5th Officer Shot
6th Officer Shot
Civilian Shot

El Centro
7th Officer Shot
8th Officer Shot

Shooting From El Centro
9th Officer Shot
10th Officer Shot
11th Officer Shot
12th Officer Shot

(AK-74 and 2 handguns)

0030 Suspect Huddled in Hall

Approximately 0130 Remote-Controlled Robot with C-4 Explosive
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2058</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>4&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>5&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>6&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>Civilian Shot</td>
</tr>
<tr>
<td>El Centro</td>
<td>7&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>8&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>Shooting From El Centro</td>
</tr>
<tr>
<td></td>
<td>9&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>10&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>11&lt;sup&gt;th&lt;/sup&gt; Officer Shot</td>
</tr>
<tr>
<td></td>
<td>(AK-74 and 2 handguns)</td>
</tr>
<tr>
<td>0030</td>
<td>Suspect Huddled in Hall</td>
</tr>
<tr>
<td></td>
<td>Approximately 0130 Remote-Controlled</td>
</tr>
<tr>
<td></td>
<td>Robot with C-4 Explosive</td>
</tr>
</tbody>
</table>
July 7\textsuperscript{th} Event Parkland Patients

**Level I vs Level II Trauma Activations**

2058  
- 1\textsuperscript{st} Officer Shot
- 2\textsuperscript{nd} Officer Shot
- 3\textsuperscript{rd} Officer Shot
- 4\textsuperscript{th} Officer Shot
- 5\textsuperscript{th} Officer Shot
- 6\textsuperscript{th} Officer Shot

El Centro
- 7\textsuperscript{th} Officer Shot
- 8\textsuperscript{th} Officer Shot

Shooting From El Centro
- 9\textsuperscript{th} Officer Shot
- 10\textsuperscript{th} Officer Shot
- 11\textsuperscript{th} Officer Shot

(AK-74 and 2 handguns)

0030 Suspect Huddled in Hall

Approximately 0130 Remote-Controlled Robot with C-4 Explosive
July 7th Event MTP Activations

2058

1st Officer Shot
2nd Officer Shot
3rd Officer Shot
4th Officer Shot
5th Officer Shot
6th Officer Shot
Civilian Shot

El Centro

7th Officer Shot
8th Officer Shot

Shooting From El Centro

9th Officer Shot
10th Officer Shot
11th Officer Shot

(AK-74 and 2 handguns)

0030 Suspect Huddled in Hall at El Centro

Approximately 0130 Remote-Controlled Robot with C-4 Explosive
July 7th, 2016 Total Picture of Trauma Activity at Parkland’s Trauma Center

- 1554 MVC
- 1940 MCC
- 1959 MVC
- 2021 Burn
- 2110 GSW
- 2116 GSW
- 2116 GSW
- 2121 GSW
- 2120 Burn
- 2126 GSW
- 2154 GSW

- 2221 MCC
- 2302 MVC
- **0021 GSW**
- 0120 MVC
- 0120 MVC
- 0123 MVC
- 0517 Fall

1900 ED Volume: 226
46 Admit Holds Waiting
Transfer Acceptance by Trauma Attending
AK-74 Assault Rifle

The AK-47 and AK-74 are both Russian-made assault rifles designed by Mikhail Kalashnikov. The AK in the name refers to Kalashnikov (K) automatic (A) rifles and the numbers refer to the year in which they were designed (1947 and 1974). In 1978, the Soviet Union began replacing their AK-47 and AKM rifles with a newer design, the AK-74.

**Muzzle Velocity** - 900 m/s (2,953 ft/s) (AK-74, AKS-74, AK-74M), 735 m/s (2,411.4 ft/s) (AKS-74U)

**Rate of Fire** - 650 rounds/min (AK-74, AKS-74, AK-74M), 650-735 rounds/min (AKS-74U)
Level III Code Yellow Activation

- Awareness
- Command / Control
- Incident Commander
- Units May Call Additional Staff for Help
- Security / Lockdown

- Trauma – 6 people Reported
- Check Availability
  - OR, ICU, Blood Bank
- Called General Surgery, Burns, ICU Team (Trauma Present in M POD)
- Anesthesia presence
- Cleared out POD M for Arriving Casualties
Incident Command – Code Yellow Level III (Minimal Staff Report)
Active Shooter More Challenging

• Operating Room
  • 7 am to 11 pm 54 cases
  • 11 pm – 7 am 2

• Blood Bank
  • 17 patients other than Shooting Victims
    • Total 17 Units
    • MTP 3 Shooting Casualties
What Worked

- Relocate patients – prepare for arrivals (Once Level III Called)
- Patient Tracking
- Small stretch teams – Focus on care, decrease noise, confusion
- Medical Controller – Physician accesses patient for appropriateness of treatment area
- Once person in charge and directing activities – reporting to Incident Commander
- Trauma team, Emergency General Surgery, Burn team, SICU responded to trauma bays
- 3 trauma attending on site, 2 additional on standby
- 2 Anesthesia faculty in trauma bays – 1 remained in trauma bays
- 6 trauma staff reported in (Director + 4 managers and 1 TNC)
- Security / lockdown
July 7th

- **Officer’s Families**
  - Each family had a private room
  - Family allowed to stay with Officer once stable
- **Challenges**
  - 3 Officers Died
    - Clearance from DPD to allow family to say good-bye
    - Private time for family to say good-bye
    - Time for fellow officers to say good-bye
- **Space for all officers**
  - Food, water, resources
  - DPD Chaplain, Dart Chaplain, DFR Chaplain, PDP Officer in charge coordinating with Parkland
- **Mayor, City Council Members, County Commissioners all at hospital**
- **Sea of Officers**
July 7th

- Media
  - Press Conference
  - Multiple one on one interviews
  - Challenge to protect patient privacy
  - Potential for emotionally charged comments
  - Media request for multiple days
Care of Responders / Staff

- Immediate debriefings
- Cultural competencies
- Compassion fatigue
- Employee Assistance Program
- Grief support
- PTSD screening
- Create resilience
Is There A Difference In Active Shooter Events?

• No advanced warning as with hurricane, tornado, transportation events
• May arrive in non-ambulance vehicles
• May have high number of Immediate patients
• Immediate need for OR, blood, MTP
• Trauma resuscitation – full scale for each patient
• Surgical intervention
• Teams must be “on point”
• Command & Control set up after first patient arrival
• Full support from Pharmacy, Lab (ROTEM?)
• Hospital Security - Lockdown
• Measures to address each patient’s family
• Media interaction – prepare for more emotionally charged
Mass Shooting Events: Trauma Center Criteria

• Should trauma centers have defined criteria to meet the needs of a mass shootings in their immediate community and the region well defined?
• Should level I trauma centers have a defined crisis intervention team to address the psychosocial aspects of the event for their facility as well as the responders and the community?
• Should level I trauma centers have defined expectations regarding the number of MTP capabilities immediately available?
• Should trauma centers have defined expectations for integration and response with the regional infrastructure for disaster response?
• Should level I trauma centers be required to have a stand-ready Command Center 24/7/365 with appropriately trained staff immediately available?
• Should the site reviewers for trauma centers be required to attend the DMEP course and have a higher understanding of disaster response to facilitate evaluation of the trauma center’s capabilities?
We have two cemeteries, no hospital.
Current Environment

- Constant alert
- Resources for readiness
- All hazard response plans
- System response
- Mutual sharing
- Community integration
- Regional coordination
- Regional resource tracking
- Build resilience
- Be prepared for the next