

## San Bernardino Mass Shooting December 2, 2015



### SAN BERNARDINO MASS SHOOTING

- Two shooters armed with AR-15 style assault rifles enter the Inland Regional Center in San Bernardino and open fire on a group of San Bernardino County employees gathered at the Center for a training meeting and holiday luncheon.



### ORIGINAL SHOOTING TIMELINE

- First 911 call at 10:58 – “Shots heard in the area”
  - Almost immediately followed up by multiple calls of a shooting – elevated to an active shooter
- Multiple suspect descriptions were given...
  - 1-3 suspects (+possible get away driver)
  - White or Hispanic male suspects
- Suspects were in and out in about 2-3 minutes
  - 100+ .223 rounds fired (2 guns used)
  - 14 people killed
  - 22 people wounded
  - Determined to be a “terrorist event”.

### EVENT DETAIL

- SB County Department of Public Health training and end of year event.
  - 80 + County Employees present
- Syed Farook was present all morning - alone
  - Left the gathering sometime around 10:36AM
  - Left a bag on a table – center of the room
    - Later determined to contain a homemade RC IED
  - Two Suspects enter at approximately 10:58 and open fire

### INLAND REGIONAL CENTER



### POLICE RESPONSE

- Most wounded victims extracted by police officers
- Pick-up truck transport – Triage center across the street
- All but two victims extracted from the building are transported and survive (2 died in triage area).
- Hundreds are evacuated from the three buildings.



## POLICE RESPONSE

- Nearly 300 officers within 2 hours
  - 10 local police agencies
  - 4 FD's responded
- FBI
- ATF
- DHS
- US Attorney
- Regional Task Force Teams



## KEY LOCATIONS



## ISSUES RAISED DURING INTERNAL DEBRIEFS

- Medical Aid Response
  - Fire Department – Police Department cross training
  - Regional Debate – Fire Industry Standards
  - Tactical Medic Program
- Law Enforcement Medical Training
  - Litters
  - EMT training

## MASS CASUALTY INCIDENT RESPONSE

DECEMBER 2, 2015



LOMA LINDA UNIVERSITY HEALTH

## EMS ON SCENE



**BREAKING:** Several Killed and 20 Wounded in Ongoing Hostage Situation in San Bernardino, California

LOMA LINDA UNIVERSITY HEALTH

LOMA LINDA UNIVERSITY HEALTH

## LLUH WATERMAN TERRORIST INCIDENT TIMELINE

- 1110 Emergency Department receives notification via EMS that a mass casualty shooting has taken place in San Bernardino with 20 or greater potential victims expected.
- 1111 Executive Director of Emergency and Trauma services Connie Cunningham and Directors of Patient Care Emergency Department Shannon Canright and James Parnell notified.
- 1112 Admin On-Call notified. ED began setup of triage area, security perimeter, and trauma bays in preparation to receive patients. On-Call Trauma Teams and ED staff notified to report to ED
- 1117 ReddiNet message confirms notification; "Mass Shooting. This is not a drill"
- 1121 Emergency Management and Public Relations notified. Intel verified by ICEMA call to Security Control and given updates on situation.
- 1131 Condition Alert declared for mass casualty by Connie Cunningham (Emergency & Trauma Department) and Georgann Smith (Environmental Health and Safety)
- 1138 Emergency notification sent using Send Word Now to LLU leadership
- 1144 Security Officers secured perimeter around LLUMC and ED later supported by law enforcement. Triage set up complete. 2<sup>nd</sup> Emergency notification sent using Send Word Now to LLUH leadership. Patient #1 ARRIVES.

## ED RESPONSE

- 1145 Law Enforcement arrives at Hospital to be liaison
- 1148 Patient #2 Arrives
- 1151 Patient #3 Arrives
- 1155 Patient #4 Arrives
- 1200 Incident Command Center established in LLUMC A-208
- 1203 Command Center notified by law enforcement that suspects were at large
- 1204 Send Word Now notification sent to "911 All" with location of incident and instruction to shelter in place if nearby
- ED waiting for additional patients and updates
- 1205
- 1416 911 Dispatch alerts Loma Linda of a bomb threat called in to them.
- 1530 PT #5 ARRIVES
- 1603 Code yellow cleared



## ED RESPONSE

Mass casualty triage set-up is completed within 18 minutes of activation

### INTERNAL COLLABORATION:

- Emergency Department
- Environmental Health and Safety
- Trauma Teams
- Facilities Management
- Campus Engineering
- Housekeeping
- Parking and Traffic
- CNS
- Security



### EXTERNAL COLLABORATION:

- Local Police Department
- Local Sheriff's Department
- LEMSA (ICEMA and REMS)
- Local Fire Departments
- Local Ambulance Services
- Central Supply Companies



## 17:48 CONDITION CLEARED??

- We waited to receive more patients. But by the evening, we had treated only five from the shooting.
- For hospital staff, reuniting patients with their families often felt like the most pressing task that continued into the evening and next day.
  - ReddiNet was key in locating patients receiving treatment



## LAW ENFORCEMENT & FIRE RESPONSE AND SUPPORT

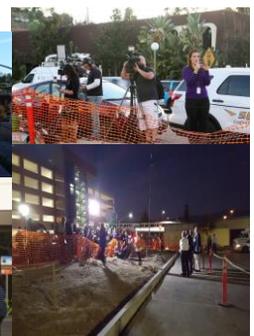
### Where do you need us and what can we do to help??

- 40 + Law Enforcement and Fire personnel respond from 12 agencies
- San Bernardino Sheriff's Department reports BOLO two suspects at large in a black SUV. Possible third suspect driving

### SIDE NOISE

- SBSO receives reports of an active shooter on Loma Linda campus – unfounded
- SBSO receives a bomb threat for LLUMC
  - SWN alert is sent out to "911 ALL" CODE YELLOW
  - Security and SBSO conduct a floor by floor search – unfounded
- Law enforcement remains on site for the next 30 hours.

## MEDIA



## Be Prepared

- » Know Emergency Codes
- » Disaster Drills
  - Take them seriously and do it often
  - We drill quarterly with ED staff
  - Annually with ED staff & EMS & Local LEMSA
- » Disaster supplies
  - Have disaster supplies on hand and readily available
  - Use your disaster supplies in your drills so that you are familiar with it.
- » FEMA training
  - FEMA provides training for disaster at all levels for all roles from police officers to fireman to ED and bedside nurses
  - It's free and it's very good training

Standardized Emergency Codes	
■	Code Red - Fire
■	Code Blue - Adult Medical Emergency
■	Code White - Pediatric Medical Emergency
■	Code Pink - Infant Abduction
■	Code Purple - Child Abduction
■	Code Yellow - Shooter Inpatient
■	Code Grey - Combative Person
■	Code Silver - Person with a Weapon and/or Active Shooter and/or Hostage Situation
■	Code Orange - Hazardous Material Spill - Evidence
■	Code Green - Missing High-Risk Patient
■	Code Triage: Alert - Activation of key personnel only
■	Code Triage: Internal or External - EOP activation

Don't Forget to take care of each other!



LOMA LINDA UNIVERSITY  
HEALTH



LOMA LINDA UNIVERSITY  
HEALTH

## COMMUNITY SUPPORT



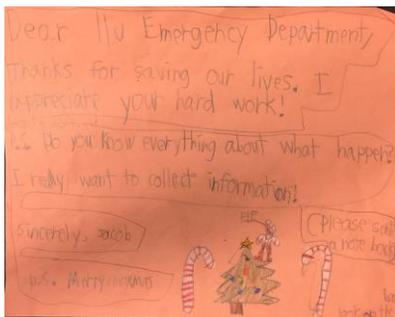
LOMA LINDA UNIVERSITY  
HEALTH

## COMMUNITY SUPPORT

- » We received support from local and national entities in the days following the event. Some of these are:
  - Costco
  - Firehouse Subs in Loma Linda
  - Angelo's Italian Restaurant
  - Coachella Pizza
  - Med 1 vents
  - Double Tree Hotel
  - Rialto Middle School student body
  - Loma Linda Academy student body
  - ENA sent flowers
  - A nurse from Austin Texas sent pizza.
  - The ED at Beth Israel Deaconess Medical Center
  - The Medical Center of Aurora in Colorado



LOMA LINDA UNIVERSITY  
HEALTH



LOMA LINDA UNIVERSITY  
HEALTH



LOMA LINDA UNIVERSITY  
HEALTH

Thank You!!!



**'IN THE VALLEY OF DEATH'**  
 LESSONS FROM THE SAN BERNADINO MASS SHOOTING  
 David Turay MD PhD FACS



**EPIDEMIOLOGY**

FIREARMS ACCOUNTS FOR

- 30,000 deaths/year
- 88 deaths/day
- 160 none fatal injuries/day
- 3,000 deaths - age < 15 years

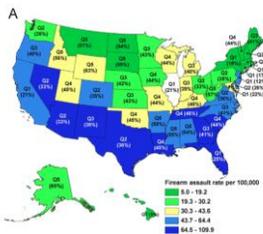
- Leading cause of death among US black males
- Previous convictions – **9** x likely to be involved in gun violence
- Prevalence of violence in severe mental illness **12% per year**
- **75%** firearm related injuries - uninsured

*JW Swanson - Annals of Epidemiology May 2015  
 Sotirios – JACS December 2015*

[www.thecrimereport.org](http://www.thecrimereport.org)



**ASSOCIATION OF VOILENT CRIMES/STATE & GUN OWNERSHIP**



**Table 1. Self-Reported Household Firearm Ownership Prevalence Across States in the U.S., by Year**

State	Percentage of households with a firearm			Change (delta), 2001-2004
	2001	2002	2004	
Alabama	51.7	57.9	52.2	0.5
Alaska	57.8	60.9	59.6	2.1
Arizona	31.1	37.0	32.3	1.3
Arkansas	55.3	58.7	58.6	3.5
California	21.3	—	20.1	-1.2
Colorado	34.7	34.8	34.6	-0.1
Connecticut	16.8	16.4	18.1	1.3

**PUBLIC MASS SHOOTING**

- No broadly accepted definitions
- 4 or more people killed – (US Congressional research service)
- **372** mass shootings in 2015
  - **475** Deaths
  - **1870** Wounded

*MC Monuteaux – Am J of Preventive Med August 2015*

[www.shootingtracker.com](http://www.shootingtracker.com)



'as we speak .....

Incident Date	State	City Or County	Address	# Killed	# Injured	Operations
May 23, 2016	New Jersey	Newark	102 Isabella Avenue	0	5	<a href="#">View Incident</a> <a href="#">View Source</a>
May 22, 2016	Louisiana	New Orleans	8639 Apple St	0	4	<a href="#">View Incident</a> <a href="#">View Source</a>
May 22, 2016	Tennessee	Nashville	100 block of Rains Avenue	0	4	<a href="#">View Incident</a> <a href="#">View Source</a>
May 22, 2016	California	Stockton	Poplar and Sutter Streets	1	3	<a href="#">View Incident</a> <a href="#">View Source</a>
May 21, 2016	Georgia	Jackson	Levi Barnes Road	1	3	<a href="#">View Incident</a> <a href="#">View Source</a>
May 18, 2016	Indiana	Indianapolis	34th Street and North Keystone Avenue	0	4	<a href="#">View Incident</a> <a href="#">View Source</a>
May 17, 2016	South Carolina	Ravenel	5360 Savannah Highway	3	1	<a href="#">View Incident</a> <a href="#">View Source</a>

[www.shootingtracker.com](http://www.shootingtracker.com)



LOMA LINDA UNIVERSITY  
HEALTH

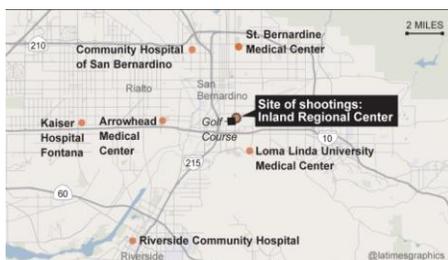


LOMA LINDA UNIVERSITY  
HEALTH

## TIMELINE OF EVENTS

- 11:00 am – shooting began
- 11:15 am – Mass casualty alert
- 11:28 am – First Trauma Activation
- 11:44 am – First patient arrived
- 11:55 am – The fourth(total five) patient arrived

## AREA HOSPITALS



LOMA LINDA UNIVERSITY  
HEALTH



LOMA LINDA UNIVERSITY  
HEALTH

## HOSPITAL'S RESPONSE

## FAVORABLE FACTORS

- Time of day
- Time of the week
- Proximity to scene
- Additional Medical facilities nearby
- 26 EM Residents in a nearby class room



LOMA LINDA UNIVERSITY  
HEALTH

## PERSONNEL (First 15 Minutes)

- 5 Emergency Medicine Attendings
- 20 Emergency Medicine Residents
- 8 Emergency Department Nurses
- 7 Acute Care/Trauma Attendings
- 5 General Surgery Chief Residents
- Anesthesia, SICU and other ancillary staff



LOMA LINDA UNIVERSITY  
HEALTH

## RESOURCES

- Mass Casualty Triage area (In front of ED)
- 12 Total trauma beds
- 5 Available operating room
- 4 Surgical ICU Beds
- 40 Units of O negative blood
- Calls from multiple hospitals pledging support



LOMA LINDA UNIVERSITY  
HEALTH

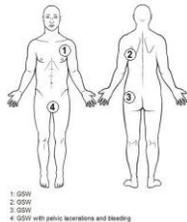
## PATIENT PRESENTATION AND INJURY PATTERNS



LOMA LINDA UNIVERSITY  
HEALTH

### CASE 1

LL ADULT TRAUMA DIAGRAM



- Female in her 50's
- Multiple GSW to torso
- Normal BP in route
- Hypotensive in ED
- Possible no lung sliding on E-FAST
- Transfusion initiated



LOMA LINDA UNIVERSITY  
HEALTH



LOMA LINDA UNIVERSITY  
HEALTH

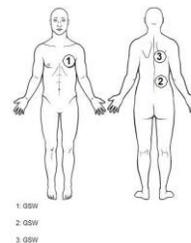
### Injuries and Interventions

- Laparotomy
- Pelvic and Perineal wounds with active bleeding
- Packing
- Exploration of Left Chest wall hematoma
- Proximal brachial artery and venous injury



LOMA LINDA UNIVERSITY  
HEALTH

### CASE 2



- Male in his 30's
- GSW's to torso
- Hypotensive in the ED
- Left needle thoracostomy
- Transfusions initiated
- E-FAST equivocal/neg



LOMA LINDA UNIVERSITY  
HEALTH



## Injuries and Interventions

- Non-therapeutic Laparotomy
- Left Tube Thoracostomy (in ED)
- Left Thoracotomy with extension to Right
- Pulmonary vein injury (repaired)
- Temporary vac closure

## Outcomes

- Mortality 0% (6 months follow up)
- Multiple operations (4/5 patients)
- ICU LOS (range) 5 – 48 days
- Hospital LOS (range) 1 – 56 days
- Complication - one patient accounted for all of the complications.

## 'The profile of wounding in Civilian public mass shooting fatalities'

- Retrospective review of autopsy reports
- 139 fatalities (371 wounds) – 12 Mass shooting events
- Dataset represents 15% of Mass shootings (1983 – 2013)

### RESULTS:

- 58% with GSW to the head and chest
- 20% extremity wounds
- 13.5% lower abdomen
- Probable site of fatal wounding (Head or chest 77% of cases)
- No deaths due to exsanguination from extremity wounds

*Sarani et al Journal of Trauma June 2016 Pub ahead of print*

## OPPORTUNITIES FOR IMPROVEMENT

### »COMMUNICATION

- Centralized and reliable source with a clear chain of command
- Establish secure back-up communication systems
- Mandatory periodic testing of the communication systems
- Limit hospital communication outlets/inlet

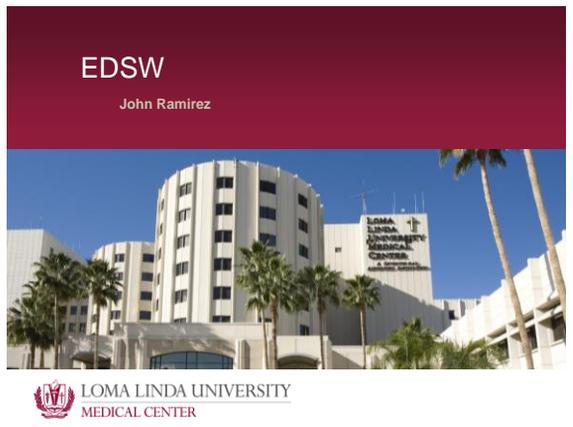
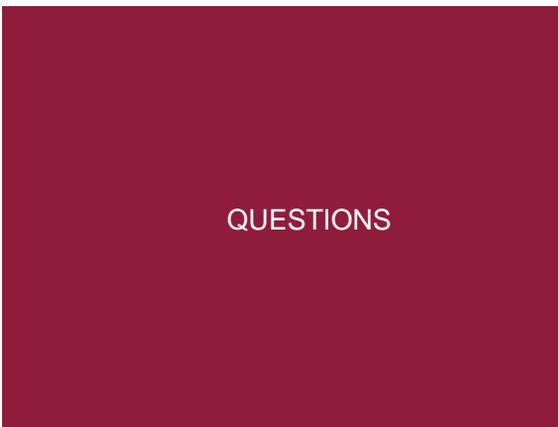
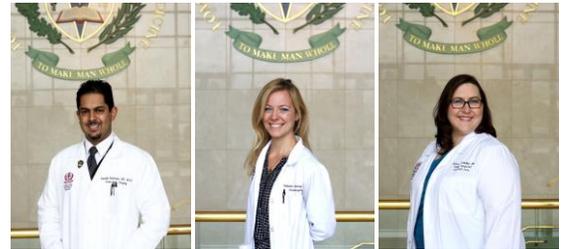
### »SECURITY/ STAFF PERSONAL PROTECTION

- Proper identification of personal (Vest, oversized badges)
- Proper screening of responders and patients
- Police presence (deterrence to criminal activity/violence)
- Safe transportation/escort of personal (in/out)

»PATIENT FLOW

- Smaller unit 'strike teams' with clear rest
- Crowd control
- Designated area for family and reserve staff
- Bypass of usual hospital protocols

Not so fortunate



## EDSW's Role



LOMA LINDA UNIVERSITY  
MEDICAL CENTER

## Typical Level A Trauma : Non-fatality

- » Notification
- » Preparation
- » Consultation
- » Family/Next-of-Kin
- » Therapeutic Support
- » Handoff



LOMA LINDA UNIVERSITY  
MEDICAL CENTER

## December 2, 2015

- » Notification
- » Preparation
- » Consultation
- » Family/Next-of-Kin
- » Therapeutic Support
- » Handoff
- » Atypical



LOMA LINDA UNIVERSITY  
MEDICAL CENTER

## Takeaway

- » Communication
- » Expectations
- » Training
- » Flexibility



LOMA LINDA UNIVERSITY  
MEDICAL CENTER



LOMA LINDA UNIVERSITY  
MEDICAL CENTER

END