LLE Medical Emergency First-Responder training

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Goals

• To help everyone become more confident and better prepared to respond to a medical emergency

• How?
  – Review and refine procedures NOT covered in First Aid Training
  – Prepare for, and conduct, mock drills to sharpen skills and reinforce training
Why are we here? Past Incidents include:

- 35 year old (YO) male, severely injured in target bay by diagnostic
- Diabetes – high blood sugar
- Fall in hallway – head injury
- Fall on icy sidewalk in winter
- Hand laceration from broken dish in lunch room
- Finger laceration from electrical outlet cover – opening package
- Scalp laceration from head bump in target bay
- 50 YO male with chest pain on OMEGA target bay bridge
- 50 YO female with sharp chest pain, difficulty breathing
- 35 YO male – sudden cardiac arrest (off site, ~1 hour after leaving LLE)
- Electrical shock caused reflex jerk and head bump
- Needle stick from blood-lancet
- Employee gave CPR to his infant with SIDS (sudden infant death syndrome)
- 60 YO male, sudden-onset dizziness, vomiting, ringing in ears
- 40 YO male in lab, w/back pain, dizziness
Open Discussion – Recollection of past experiences

- What do you recall about the patient/event?
- What do you recall about the scene?
- What went well?
- What didn’t?
- How did YOU feel as Patient?
- How did YOU feel as Responder?
Outline:

• Call for Medical Emergency Response Team
• First Aid Kits and Automated External Defibrillators (AEDs)
• Scene management
  • Scene Safety
  • Patient care
  • Scene coordinator
  • Crowd control
• Post incident follow-up
• Bloodborne pathogens
• Clean up
  • Protocols
  • Waste management
• Blood control kits
• Narcan instructions
First Response Calls

- When an event occurs that requires immediate medical attention:
  - Call LLE Reception to report the need for medical assistance
- The receptionist will ask the caller several questions and then broadcast an announcement requesting the assistance of the Medical Emergency Response Team (MERT)
- The caller should stay with the patient until responders arrive; let Receptionist know help has arrived or to page for help again
First Aid Kits are located in every restroom as well as other locations around the facility.

Five AED cabinets also contain Narcan (Naloxone) and Bleeding Control Kits.

Locations of AEDs and First Aid Kits are indicated on the LLE Building Map
Is the Scene Safe?

- Avoid exposing yourself to hazards such as fire, laser beams, radiation, electricity, chemicals, or bodily fluids
- Secure area hazards or move the patient to a safe location
- Wear Personal Protection Equipment (PPE)
  - First-aid cabinets in bathrooms and public areas contain items to treat minor injuries, and gloves, face mask, goggles and a resuscitation mask to protect the caregivers
  - Be sure to put on gloves when you arrive a the patient location

Cleanroom garments are NOT required when responding to emergencies, but don’t ignore hazards such as lasers, machinery, high voltage
Patient Care

• Caregiver:
  – Ask patient for permission to attend to them first (unless patient is unconscious)
  – If feasible, have same gender caregiver attend to patient

• The individual working with the patient should stay with the patient; and be the one to call 911 if necessary

• If 911 is called, provide the correct address (wrong address delays response)
  – West Entrance: 250 East River Road
  – East Entrance: 240 East River Road
Patient Interview Questions

Medical

• What’s going on?
• Has this happened before?
• Do you take medications for this?
• Who should we call?

Trauma

• What happened?
• Where do you feel pain?
• Are you feeling dizzy?
• (bleeding) Are you taking a blood thinner?

Patient Info

• Name
• Age
• Medications
• Allergies
• Emergency Contact info
Scene Management

• Scene coordinator - One person should maintain contact between the patient/caregiver, reception, and all other on-scene responders. Duties:
  – Report to reception if/when 911 is called
  – 911 advises UR Public Safety of call
  – If 911 is called, escort or designate someone to escort EMTs and UR Public Safety to the scene

• Crowd control
  – Once scene help has been established others may be required to manage the area to disburse crowds, release extra responders from further duties, and divert foot-traffic to routes away from the patient/caregiver.
Should the patient be moved?

- Unless there are reasons to move a patient, generally best not to.
- How to decide if patient should be moved?
  - What hazards are present?
    - Secure hazards if possible, else remove patient from hazard area
  - What is the nature of injury/illness?
    - e.g., vomit or aspiration risk? - roll on side
  - Is privacy needed?
  - Can you make the patient more comfortable, at-ease?
    - e.g., provide a chair, cover with a coat/blanket, provide cushion under head, etc.

Do you NEED to move the patient?
When to call 911?

• If in doubt about a patient’s safety, or if a patient exhibits any of the following, call 911:
  – Altered mental status
  – Potential threat to self or others
  – Unable to verbalize rational reasons for refusing care

• What if patient refuses care/ambulance?
  – The patient may refuse medical treatment if mentally competent
  – Discuss
What happens when you call 911?

- City of Rochester - How 911 Works - What Happens When You Dial 911
- Video - Tips for making a 911 call in a medical emergency
- Video – What to expect when you call 911 in a medical emergency

Dispatcher may provide instructions. Follow them!
Stay on line until told to disconnect

Typical questions:
- What is the address of your emergency?
- What is the nature of your emergency?
- What is your call-back number?
- What happened?
- Are you with the patient now?
- How are they?
- Is she/he breathing?

The 911 Dispatcher will notify University Public Safety
Accidental call? Stay on the line and tell the dispatcher before you hang up
Medical emergency follow-up

• Encourage the patient to seek medical evaluation and treatment
• Report all workplace injuries* to LLE Human Resources (HR); (Dave VanWey, Steve Stagnitto)
  – HR will prepare and submit a UR Employee Incident Report
  (https://shib2.its.rochester.edu/idp/profile/SAML2/Unsolicited/SSO;jsessionid=90646AB8B4650478BBD0ADCC3AC34894?execution=e1s1)

* see UR Policy 271 – Workers’ Compensation Insurance
  (http://www.rochester.edu/working/hr/policies/pdfpolicies/271.pdf)

Failure to promptly report a workplace injury can jeopardize the patient’s right to receive Workers’ Compensation
Use extreme care when handling bodily fluids

- Contact with other people’s blood and bodily fluids can spread disease through BBP. These diseases can be extremely serious
- Hepatitis B can survive in dried blood up to 7 days
- Common routes of infection in the workplace are:
  - Infected fluid entering through a break in the skin barrier, such as an open sore, or dry cracked skin
  - Infected fluid splashing onto mucous membranes (such as the eyes) while cleaning up a spill
  - Puncturing skin with a contaminated sharp such as a needle, glass, or razor

Treat all blood and body fluids as though they are infectious - Wet or Dry!
Bloodborne Pathogens (con’t)

Wash thoroughly after every emergency response

• If you contact bodily fluids (“anything wet or sticky”, e.g., blood, saliva, etc.), promptly call the Occupational & Environmental Medicine (OEM) Blood Exposure Hotline 585-275-1164.

• Disinfect contaminated surfaces, including floor, tables, chairs, door knobs, faucet handles

• LLE First aid providers are strongly encouraged to complete Bloodborne Pathogen Training on UR MyPath:
  – Open MyPath, login using UR NETID credentials
  – Search “bloodborne”
  – Select “EHS Bloodborne Pathogens Training 2018”
Minimize risk of exposure to bloodborne pathogens

- **Always** wear nitrile gloves, a face mask, and safety glasses with side-shields when handling body fluids

- Clean up potentially infectious spills using a 10% bleach solution, letting it set or soak in for 10 minutes to kill any pathogens (bleach available from the building facilities staff)

- Properly remove and dispose of soiled gloves in red biohazard bag

Small biohazard bags are located in each First Aid Kit; larger bags are available in the Safety Office Rm 1414
Disposal

• Dispose of sharps such as needles, lancets and razor blades in designated sharps containers

• Use a properly labeled sharps container or bag for disposal, put in the hazardous waste storage area on the shipping dock, and call the University Hazardous Waste Management Unit (275-2056) for pick-up
“Stop the Bleed” – Bleeding control kit

Assure your safety

Look for Life-Threatening Bleeding

Is a Trauma First Aid Kit available?

NO

YES

Is tourniquet available?

NO

Apply above the bleeding site

Tighten until the bleeding stops

YES

Pack the wound with bleeding control (hemostatic) gauze (preferred), any gauze, or clean cloth

Apply steady direct pressure

Where is the wound?

Arm or leg

neck, shoulder, groin

The Hartford Consensus: Improving Survivability

https://youtu.be/Yv7Fzyb2CFo

Flow-chart Source:

https://www.bleedingcontrol.org/~/media/bleedingcontrol/files/stop%20the%20bleed%20booklet.ashx
Narcan/Naloxone instructions

• Narcan is used for the treatment of an opioid emergency or a possible opioid overdose with signs of breathing problems and severe sleepiness or not being able to respond.

• **Naloxone** = generic name; **NARCAN** = brand name

• **NARCAN training video** - Instructions for administration of NARCAN® Nasal Spray 4mg (https://youtu.be/tGdUFMrCRh4)

• Patient recovery:
  – Move the patient onto their side after administering Narcan
  – Watch patient closely
  – If patient does not respond after 2-3 minutes another dose may be administered

**BEWARE:** Patient may wake up in an extremely violent state
Narcan/Naloxone instructions

• Identify opioid overdose and check for response
  – Ask person if he/she is OK and shout name

• Signs of opioid overdose:
  – Will not wake up or respond to your voice or touch
  – Breathing is very slow, irregular, or has stopped
  – Center part of their eye is very small, “pinpoint pupils”

• Narcan use:
  – Open Narcan package
  – Gently insert the tip of the nozzle into either nostril
  – Press plunger firmly to deliver dose of Narcan Nasal Spray
Follow-up report

• Who provided first aid assistance
• Observations
• Patient condition
• Scene
• Hazards
• Care provided
• What went well
• What could went wrong
• What could be improved
Mock Drills

Purpose: to practice responding in a realistic LLE medical emergency scenario. Learn to manage hazards, crowds, and provide effective first aid.

These will be the first four exercises:
• Head injury
• Chest pain
• Fall
• Bleeder

Exercise date will be known only by individual team, Coordinators, and LLE Management
• Late January
• March
• June
• September
“Ground Rules”

• Coordinators: Jake, Eugene, Karen, and Doug; will not be team members

• 4 Teams, 4-6 people per team. Each team assigned a “scenario”
  – Recommend team appoints a “leader” for team communication, etc.

• On day of event, one (or more?) team member is the patient, one is 911 dispatcher, others keep notes how scenario played out. Try NOT to interfere with responders

• Design each exercise to take ~45 minutes, followed by ~30 minute discussion & analysis

• Do NOT share specific details outside group and Coordinators
  – Coordinators will work with lab/facility supervisor

• Three, 30 minute, team planning meetings suggested
  – Team only - define the scenario. Keep simulation simple, focus on concepts. Be realistic to LLE work environment, do not go for maximum gore.
  – Team & Coordinators - Review and refine plan
  – Team & Coordinators - Verify readiness few days before exercise
True stories

- Trauma - https://www.youtube.com/watch?v=AsKihlJMDjg
- Heart Attack - https://www.youtube.com/watch?v=DCBiF3vk8
- Heart Attack - https://www.youtube.com/watch?v=CcqfI9jRbSE
- Overdose, Narcan - https://www.youtube.com/watch?v=RL4-Umip_Cc