

## TRAINING OBJECTIVES

- Define Public Health Emergency
- Define MRC Roles and Responsibilities
- Define Disaster Service Worker Volunteers
- Explain Emergency Management Systems



## NATURAL DISASTERS





#### NATURAL DISASTERS

- WEATHER RELATED
  - FLOODS
  - TORNADOES
  - WILDFIRES
  - · ETC.

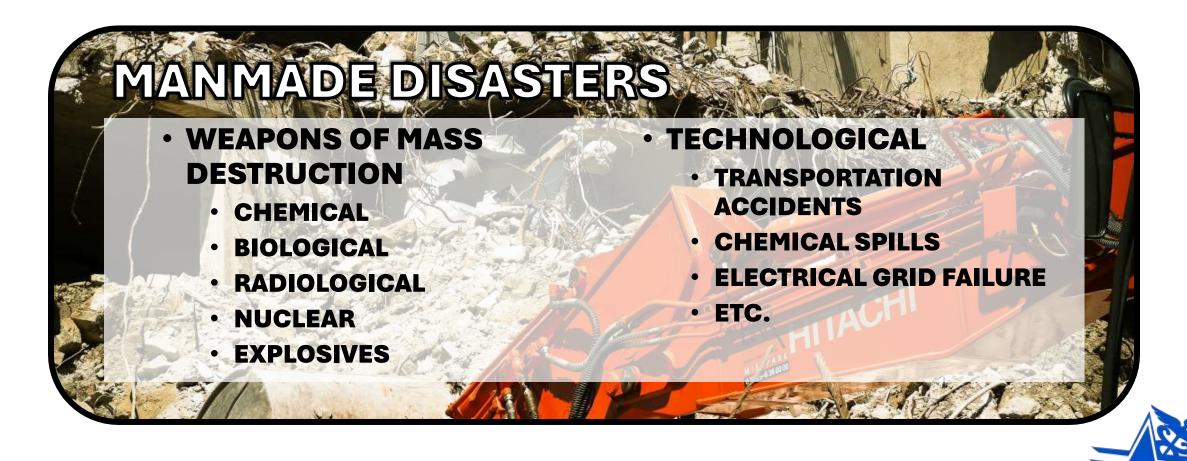
- DISEASE OUTBREAKS
  - · COVID-19
  - PANDEMIC INFLUENZA
  - SARS
  - · ETC.



## NATURAL DISASTERS







medica reserve corps

#### **PUBLIC HEALTH EMERGENCY IMPACTS**

- Large numbers of ill and deceased
- Spread of disease
- Water quality
- Food quality
- Access to healthcare
- Behavioral health issues
- Hazardous material exposure
- And even more





To empower and organize community volunteers to support local response efforts during a public health emergency through education, training, and exercising.



## MRC VOLUNTEERS ARE ESSENTIAL

- During an emergency, local emergency service agencies, hospitals, and other healthcare organizations may not have the resources to care for an increased number of patients and may need to rely on healthcare volunteers for assistance.
- MRC provides a group of organized and trained volunteers to fill gaps.



# DISASTER SERVICE WORKER VOLUNTEERS (DSWV)

- MRC volunteers are sworn DSWV
- The California DSWV Program was created in order to provide workers' compensation and liability benefits to sworn volunteers during participation in disaster-related activities.
  - Good Samaritan Laws in all states and US Volunteer Protection Act of 1997 (42 U.S.C. § 14501 - § 14505)
  - California has stronger protection for volunteers in the Disaster Service Worker Program (Emergency Services Act, CA Gov Code § 8657). Provides a limited immunity from liability for volunteers who are registered as DSWV while providing care during a disaster. It also provides workers compensation.
  - CA Gov Code §8623 and CA Gov Code § 8659 provide protection.

## **EFFECTIVE MRC VOLUNTEERS**

#### Ensure

Ensure competency in "all-hazards" basic emergency preparedness

#### Know

Know how the system works and where they fit in

#### Prepare

Prepare themselves and their families for emergencies



## MRC PROCEDURES & PERSONAL LIMITS

You must only perform the role that you are assigned

Volunteers will always receive training in their role

Sign in when you begin a shift, sign out at the end

"Freelancing" is not helpful to the MRC or anyone else You must know your limits in regards to your skills, knowledge, and abilities as they pertain to MRC roles.



## **MRC VOLUNTEER ROLES**

Pharmaceutical Distribution

Immunization /
Mass
Prophylaxis

EMS & Mass Casualties Mass Fatality Management

Warehouse operations

General staff

Operations

Planning

Operations

Logistics



## STRATEGIC NATIONAL STOCKPILE PLAN

- Activate and staff Receipt, Stage and Store Site
- Activate First Responder Point of Distribution (FRPOD) sites
  - Grover Beach Fire Station
  - San Luis Fire Station #1
  - Morro Bay Fire Station
  - Paso Robles Fire Station #1
- Activate and staff General Population POD sites
  - Multiple locations throughout county



## PANDEMIC INFLUENZA PLAN

- Develop Case Definition
- Provide Disease Surveillance
- Activate Surge Standard Operating Procedure (SOP)
- Activate Isolation and Quarantine SOP
- Activate Triage SOP
- Provide Risk Communication
- Activate FRPOD and PPOD





 Develop a personal / family emergency preparedness plan and an emergency kit to ensure that your family will be prepared in the event of an emergency.



## **FAMILY EMERGENCY PLAN**

Escape routes out of your home and away from your home with predetermined meeting points.

Family communications

Utility shutoff and safety

Caring for animals

Learn safety skills: First Aid and CPR

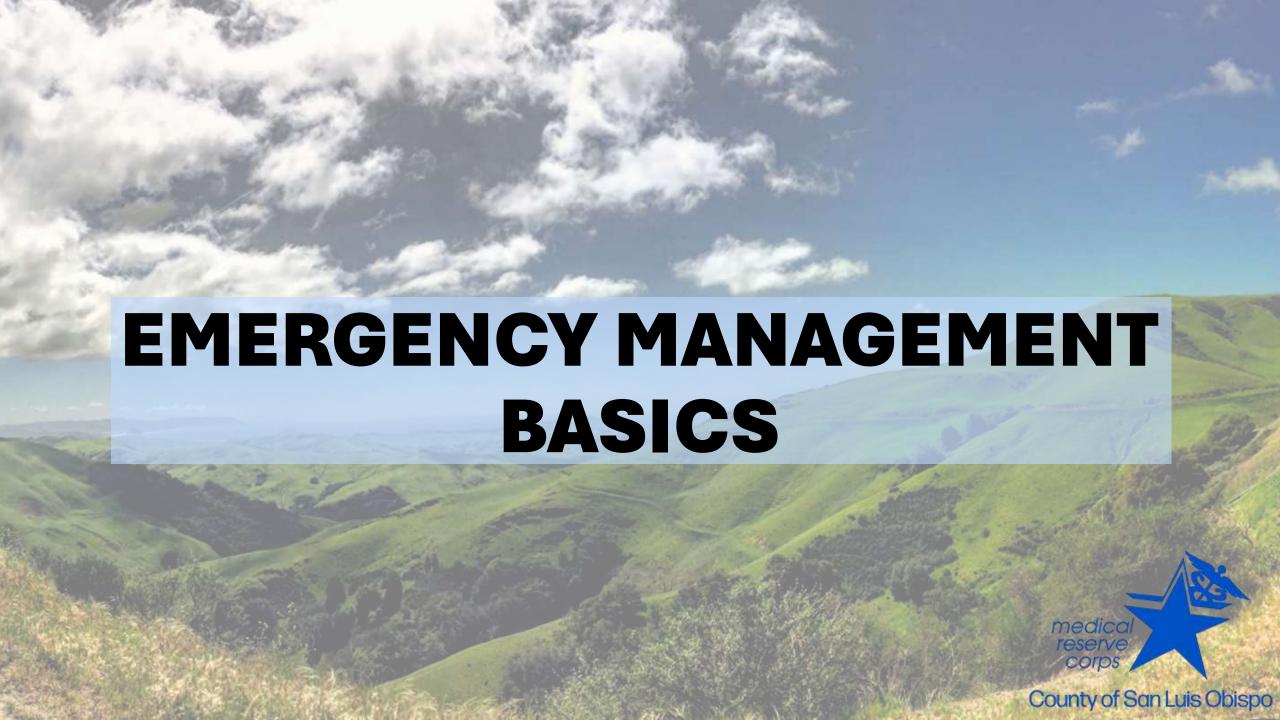
Location of your disaster supply kit



## **FAMILY EMERGENCY KIT**

- Three-day supply of nonperishable food.
- Three-day supply of water: one gallon of water per person, per day.
- · Pet food, water and medicines.
- Flashlight and extra batteries.
- · First aid kit.
- Sanitation and hygiene items (moist towelettes and toilet paper).
- Matches and waterproof container.
- Extra clothing.
- Photocopies of credit, identification cards, insurance paperwork and other important documents.
- Cash and coins.
- Special needs items; prescription medications, eye glasses, contact lens, hearing aid batteries.
- Other items to meet your unique family needs





#### **EMERGENCY MANAGEMENT SYSTEMS**

- All are integrated and share:
  - Flexibility
    - Tailored
      - Jurisdiction
      - Presenting Scenario
      - Mission (i.e. mass vaccination, fire suppression, hazardous material spill)
  - Expand and contract based on the "span of control"
  - Structure
  - Terminology



## NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)



Nationally Approved Response Management Structure



Developed in response to 9/11



Utilizes SEMS/ICS Structure as foundation



Requires all Federal departments and agencies to adopt the NIMS.



Requires all state and local agencies to utilize NIMS.

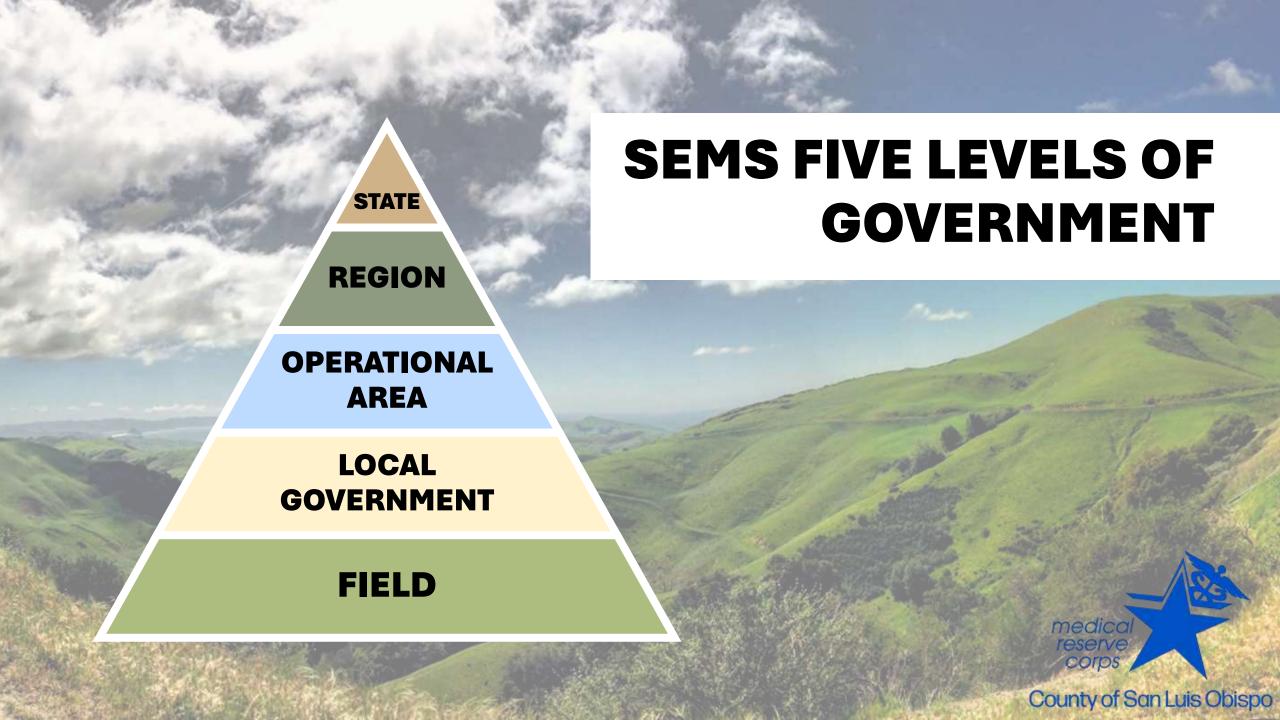
Requires all DSW to complete IS 100 and 700 training.



# STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)

- California's Emergency Response System
- Developed in 1993 to improve:
  - Flow of information and resources
  - Coordination of state and local emergency response efforts
  - Mobilization, deployment and resource tracking





#### **SEMS: FIELD LEVEL**

- "Where the rubber meets the road."
- Public works crews clearing roadways
- Fire engines and firefighters putting out fires
- Law enforcement officers evacuating people
- Ambulances taking people to hospitals



#### **SEMS: LOCAL LEVEL**

- Cities and special districts
- Manage and coordinate response and recovery activities
- Jurisdictional authority of field response resources

#### **SEMS: OPERATIONAL AREA LEVEL**

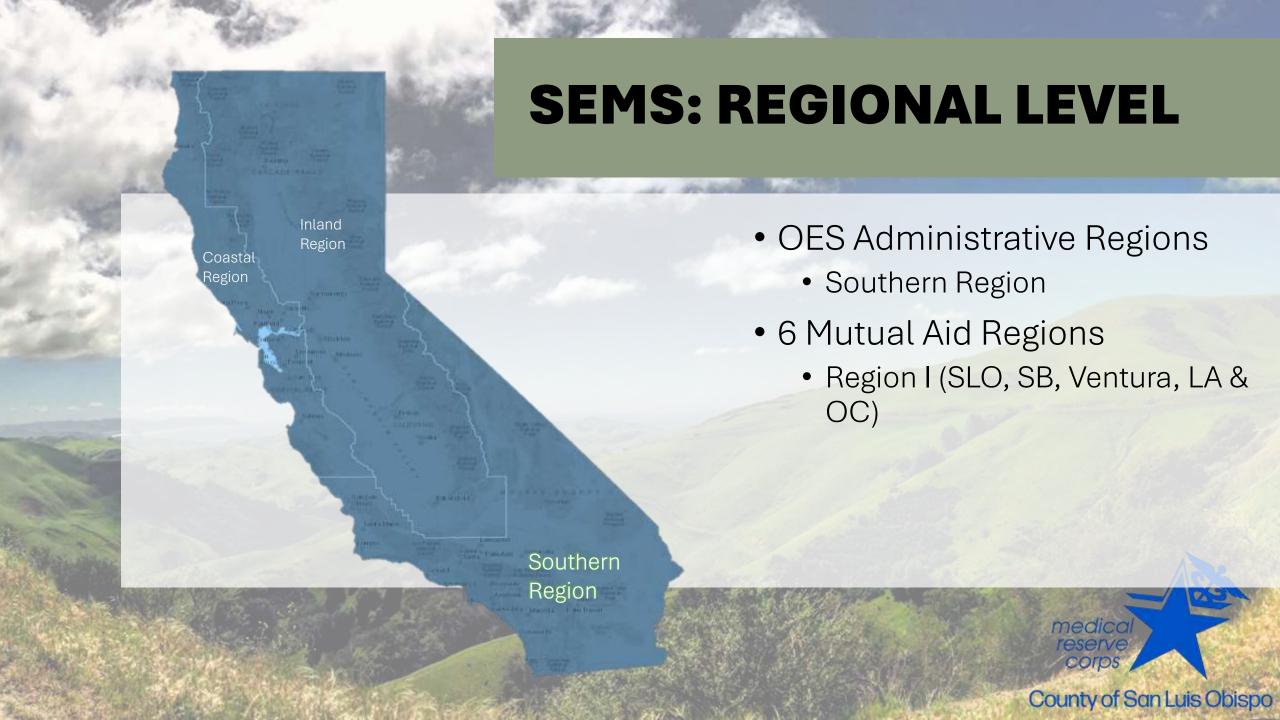
- Manage and/or coordinates
  - Information
  - Resources
  - Priorities
- Coordinates and communicates with
  - Local
  - State
  - Federal



#### **SEMS: OPERATIONAL AREA LEVEL**

- An Operational Area is: ALL local governments within the geographical boundary (our county)
  - County Government
  - Seven Incorporated Cities
  - Over thirty special districts
- Plus we also have locally based State agencies we interact with as an "informal" part of our Op Area, such as:
  - Cal Poly
  - California Men's Colony
  - Atascadero State Hospital





#### **SEMS: STATE LEVEL**

- CAL OES:
  - Receive & provide notification
  - Activate REOC & SOC
  - Provide support and resources
  - Coordinate with other State & Federal Agencies
- Other State Agencies will:
  - Activate DOC
  - Provide support and resources



## INCIDENT COMMAND SYSTEM (ICS)

Appropriate for all types of situations

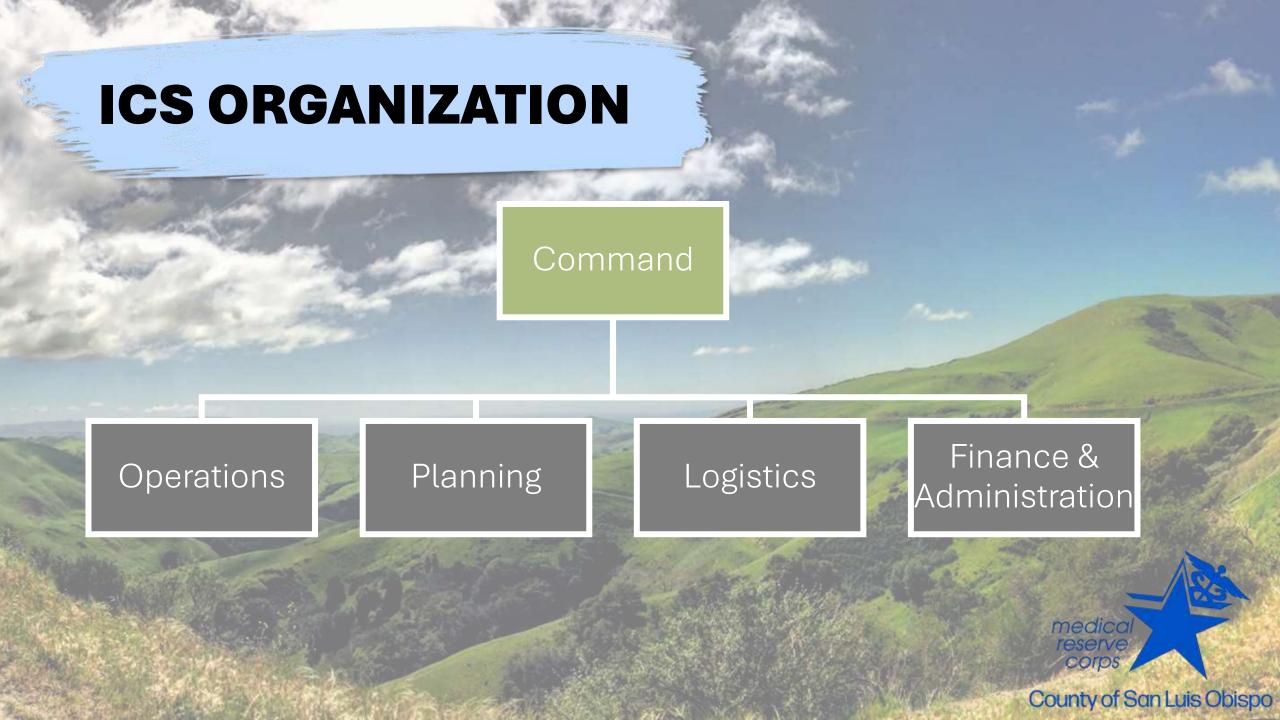
Management by Objectives Chain of Command

Organization is flexible & adaptable

Effective span of control

Common terminology





#### **COUNTY HEALTH AGENCY ROLES**

Coordinate Health Agency response to incident(s)

- Public Health
   Emergency Primary
   Role
- Communicable
   Disease Outbreak
- Multi-Casualty Incident

Other Incidents – Support Role

- Nuclear Power Plant Incident
- Earthquake
- Flood



## COUNTY HEALTH AGENCY RESPONSIBILITIES

- Activate County Health Agency Department Operations Center (CHADOC)
  - Manage Health Agency Response and Resources
  - Communicate with hospitals, EOC, Special Care Facilities, CHCC, pharmacies, etc.
  - Coordinate with EOC for additional resource needs
- Communicate with California Department of Public Health (CDPH) and CDC, as appropriate
- Activate Strategic National Stockpile (SNS) and Pandemic Flu Plans as appropriate







# Type of disaster factors into sheltering decision

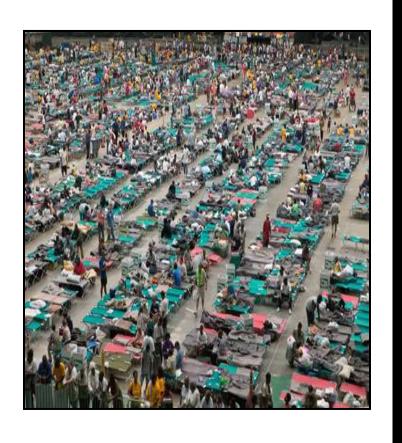
**Evacuation Center** 

# General Population Shelter

A safe, dry place to stay

Food

Basic medical or mental health needs



#### Evacuation Center/General Population Shelter

- Everyone is Welcome!
- Service Animals are Welcome Pets cannot be accommodated within the shelter
- Zero Tolerance for alcohol, illegal drugs, and weapons (including concealed weapons)
- Once evacuations lifted, there will be a 24 hour notice that the center will be closing
- If unable to return pre-disaster living situation, the client will be offered resources from various partners
- Basic medical and mental health services

#### **Medical Shelter**

- Opened by PHD-EMSA may be a separate facility or co-located with GP shelter
- For people in need of 24/7 licensed professional care or supervision



# What kinds of clients are seen in a Red Cross shelter?

- Generally, only 5-10% of the disaster-affected population will go to a shelter
- Many will have access and functional needs(AFN)
- Family may be the caregiver for those with functional needs



 Red Cross strives to obtain resources and staff to address the needs of shelter residents, keeping important support elements together



# Role of Red Cross Disaster Health Services

- Provides health assessment and care for disaster related health needs
- Coordinates with local public health authorities and local health resources
- In rare instances, may supplement the existing community health care delivery system



# Red Cross Community Nursing Health Model

- People living within the community as opposed to a facility
- 20-50% of the population has access and functional needs
- Assist shelter residents with their self-directed medical care and assist with replacement of medications or DME
- Make referrals as needed for acute care



#### **Resources**

- Shelter Trailer
- Nursing/DHS Kit/Trunk
   on every shelter trailer
- Medication Duffel
   request from Red Cross warehouse
- Durable & consumable medical supplies *i.e wheelchairs, adult diapers, walkers, etc.*
- Paperwork-can be found in DHS Kit
- Supervisors
  - > Shelter
  - Technical







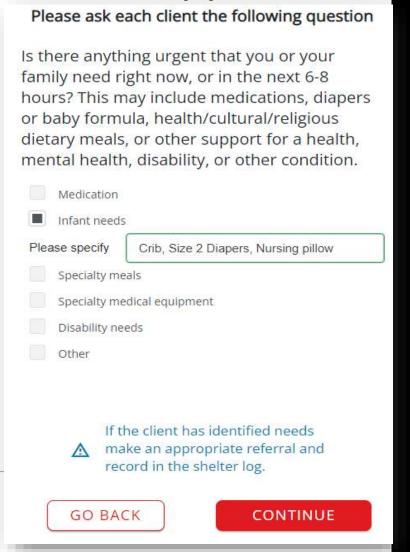


# **Shelter Registration**

#### SCIA [Shelter Client Information App]

Used for client Intake at Shelter's front registration desk via a computer laptop or mobile web-based site

- Records client's name, names of family members, and possible health needs in addition to other info.
- To the right is an example of one screens that is part of the intake app.





# **Shelter Referral Log**

 Check with the Registration desk if you are the first Health Services person arriving at shelter for any notations on the Shelter Referral Form

Date:	Incident/DR#:	Shelter Name/Location:	
Referral Timing	Client Name / Contact Info	Reason(s) for Referral	Referral To
Date/Time Recorded:  Date/Time Received:		Do not record confidential information	□ Health Services □ Mental Health □ Spiritual Care □ Shelter Manage □ SRT
ame of person who received referral:			□ Feeding □ Other (specify)
Date/Time Recorded:		Do not record confidential information.	Health Services     Mental Health     Spiritual Care
Date/Time Received			□ Shelter Manag □ SRT □ Feeding
ame of person who received referral:			□ Other (specify)
Date/Time Recorded:		Do not record confidential information.	Health Services     Mental Health     Spiritual Care
Date/Time Received			□ Shelter Manage □ SRT □ Feeding
Name of person who received referral:			Other (specify)



Shelter Referral Log

# Triage/Prioritizing

- Immediate medical concerns identified by registration
- Clients with access and functional needs
- Clients who left medications or Durable or Consumable Medical Equipment/Supplies (DME or CMS) at home when they evacuated.



## Additional shelter screening

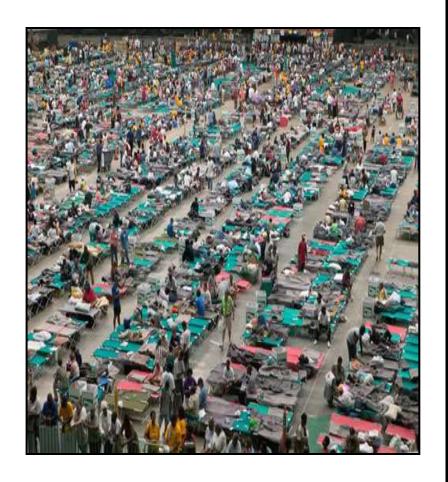
May not occur for about 6-12 hours, but needs to be done within first 24-48 hours

- Cot-to-Cot assessment
- CMIST worksheet
- Continued daily surveillance



#### Cot to Cot

- Health Service personnel walks through the shelter dormitory cot to cot
- Assessing shelter residents for unreported health problems
- Monitor clients for signs and symptoms of communicable diseases
- Assess dormitory for a safe environment
- Facilitate, assist, and support clients to promote a healthy surrounding



9/15/2023

#### What We See: Common Illnesses and Injuries

- Sudden onset of injuries and illnesses: wounds, respiratory problems, rashes, burns, bone, muscle and joint injuries.
- Aggravation of chronic health conditions: cardiac issues, hypertension, diabetes, allergies, gastrointestinal problems, dementia
- Stress-related symptoms: headache, gastrointestinal upset, fluctuation in normal vital signs, malaise, irritability, early labor



#### **Access & Functional Needs - AFN**

The phrase "access and functional needs" is used to describe those who under usual circumstances are able to function on their own or with support in areas of:



- C Communication : Hearing, vision or language barriers?
- M Maintaining Health: Assistance with osotomy care
- Independence: What do they need to be independent? a walker, wheelchair, "Medical" cot?
- Support Services/Self-Determination: Assistance with cognitive issues, a less stimulating area for autism issues?
- Transportation: Doctor's appt, Dialysis?



#### **C-MIST Worksheet**

American Red Cross	Total Number o	C-MIST Worksheet f Family Included on This Form:	
Pate: Client/Family Name:		County/State:	
Location in Shelter:		Interviewer:	
This document covers possible considias a guideline for referral purposes.	erations for access and funct	tional needs. It is not all-inclusive, but serves	
COMMUNICATION			
NEED:	ACTION:		
Access to auxiliary communication service	Provide written materials in atternative format (Braille, large and high contrast print, audio recording, or readers) Provide visual public announcements Provide qualified sign language or oral interpreter Provide qualified foreign language interpreter		
Access to auxiliary communication device		etypewriter [TTY, TDO, or CapTel] or cell publities; pen and paper	
Replacement of auxiliary communication equipment	Provide replacement Provide replacement	eyeglasses hearing aid and/or batteries	
MAINTAINING HEALTH			
NEED:	ACTION:		
Special diet Food Allergies (type)	Provide afternative (low sugar, low sodium, pureed, gluten-free, dairy-free, peanuf-free) food and beverages; (dief free)		
Medical supplies and/or equipment for every day care (including medications) not related to mobility "For replacement eyeglasses or hearing aid, see Communication "For assidive mobility equipment (e.g., wheelchair), see independence	Refer to Disaster Health Services to provide or procure one or more of the following:  Replacement medication:  Wound management/dressing supplies:  Disabetes management supplies (e.g., test strips, tances, syringes):  Bower or bladder management supplies (e.g., colostomy supplies, catheters):  Oxygen supplies and/or equipment		
Assistance with medical care normally provided in the borne Allergies (environmental or other high risk)  (hype)  For medical treatments that are not normally provided in the home (e.g., dalyss), see Transportation	Refer to Disaster Health Services to assist with one or more of the following:  Administration of medication Storage of medication (e.g., refrigeration) Wound management Bower or bladder management Use of medical equipment Universal precautions / infection prevention and control (e.g., disposal of tio-hazard materials, such as needles in sharps containers)		
Support for pregnant women Support for nursing mothers. Infant care availability	Provide support by ongoing observation Provide support and/or room for breastleeding women Assure diaper changing area is available		
Access to a quiet area	Provide access to a quiel room or space within the sheller (e.g., for eiderly persons, people with psychiatric disabilities, parents with very young children, children and adults with autism)		
Access to a temperature- controlled area	(e.g., for those who ca	air-conditioned and/or heated environment innot regulate body temperature)	
Mental health care (e.g., anxiety and stress management)	Refer to Disaster Me	ntal Health Services	

INDEPENDENCE				
NEED:	ACTION:			
<ul> <li>Durable medical equipment for individuals with conditions that affect mobility</li> </ul>	Provide assistive mobility equipment (e.g., wheelchair, walker, cane, crutches)  Provide assistive equipment for bathing and/or tolleting (e.g., raised look set with grab bars, handled shower, bath bench)  Provide accessible cot (may be a crib, inclined head or other bed hype)			
Power source to charge battery- powered assistive devices	Provide power source to charge battery-powered assistive devices			
☐ Bariatric accommodations	Provide barrains cot or bed			
Service animal accommodations	Provide area where service animal can be housed, exercised, and tolleted  Provide food and supplies for service animal			
Infant supplies and/or equipment	The second secon	Provide infant supplies (e.g., formula, baby food, diapers, crib)		
SERVICES, SUPPORT AND SELF-				
NEED:	ACTION:			
Adult personal assistance services Child personal assistance services 'Inc! general observation and/or assistance with non-medical activities of daily living, such as grooming, exiting, bathing, fuseting, dressing and und	Identify family member or friend caregiver   Assign qualified shetter volunteer to provide personal assistance   Services   Confact local agency to provide personal assistance services   Coordinate childcare support such as play areas; age-appropriate   activities, equal access to resources.			
TRANSPORTATION				
NEED:	ACTION:	_		
□ Transportation to designated facility for medical care / treatment     □ Transportation for non-medical appointment	Coordinate provision of accessible shelter vehicle and driver for transportation  Contact local transit service to provide accessible transportation			
Housing Challenges				
Pre-disaster homeless	Yes No			
Pre-Disaster Precariously housed	Yes No			
Pre-Disaster HUD housing occupant	Yes No	Pre-disaster Address:		
Actions:  No needs identified Confact Shelter Manager Confact Disaster Mental Health S Agency, please provide agency of Other Followup/Resolution/date Disaster Health Services (name/sign	name			

RES DHS CMIST Worksheet V.1,0 2017.01.03 1 RES CMIST Worksheet V.1,0 2017.01.03 2

# **What We Do**

- Provide care for disaster-caused, related or aggravated injuries or illnesses
- > Assist client with replacing immediate-need prescriptions
- Assist with obtaining essential eyeglasses, prosthetic devices, hearing aids and other equipment lost <u>as a result of the</u> <u>disaster</u>
- ➤ Help replace medical supplies and durable medical equipment for health maintenance
- Assist with payments or referrals for disaster-related medical care
- Provide referrals to other health care services (e.g., public health, mental health, clinics and community agencies)
- Assist with activities of daily living that includes hands-on care especially if caregiver is not available



#### What We Do, Continued

- Surveillance and disease health event reporting
- > Health Education
- Provide for staff wellness
- > Ensure a healthy environment
  - Promote good hygiene
    - Cleanliness of children's toys
    - Hand sanitation
    - Kitchen conditions
  - Monitor environmental safety
    - Check for site hazards
    - Safely secure medications
- County Health inspections



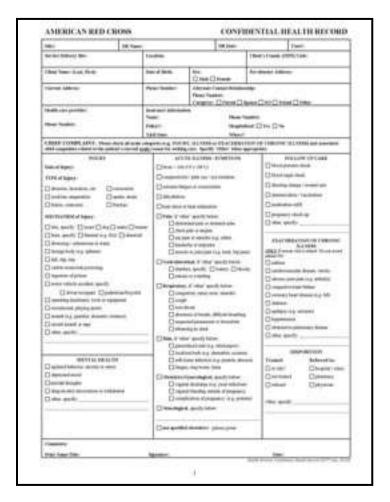
# Red Cross HS Paperwork

- The Client Health Record
- DHS log
- Aggregate Morbidity Report Form
- Client Consent to Share Information
   (Form requiring a signature specific to Red Cross Health and Mental Health Services)
- CMIST Form



## **Client Health Record**

- Confidential Health Record utilized by Health Services to document all care provided, including referrals and education
- Documentation should include a statement related to the disaster and their health-related needs [SOAP documentation encouraged - S (subjective), O (Objective, A (Assessment), and P (Plan)]
- Documentation on this record continues until health needs are met (several visits may be included)



- Information is confidential and kept by only health service
- Client Health Records are kept at the local Red Cross office in a locked location for 15 years (remember confidentiality)

9/15/2023

#### **Client Health Record**

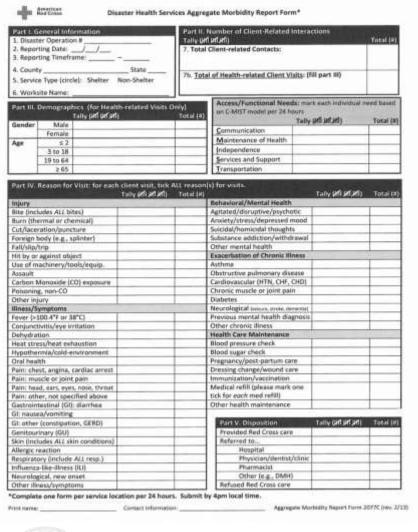
	Fill in CRLT information that appries to the type of interaction. DAT response may not require all fields				
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Service Delivery Site		City/County/	CityCounty/State		
		Client In	tomator		
Name (Last, First)		10			
Age	Date of Birth	Primary Language  Date of Bern		Voterier FT Vo	н Пън
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Current Address				Phone #	
Atternate Contact Name				Phone #	
		eest Disposse	Direct Divine Dots		
Name				Proru #	
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8	Primary Complaints	
Check all complaints that apply to the correspond plents medical history in this area.	not visit under each category related to the patient. For foliperup visits, enter the state next to the box.	b main moreonto for seeking care. Do to update the notes section
Date of Injury	Acute (Brees/Symptoms (Cont's)	Care
Type of Injury  Assaulon, cut, summons Assaulon, cut, summons Assaulon, cut, summons Conclusion Ensile, contrustes Fischer Spran, Strate  Other  Mechanism of Injury  Use of machinery, fusion or expansion Fischine Contrustes Fischine Contrustes Fischine Contrustes Fischine Contrustes Metric Constitution Fischine Fischin Fischine Fischine Fisc	Cardiac event of the 2015.  Faver (> 100.41 for 30°C)  Feder (> 100.41 for 30°C)  Feder (> 100.41 for 30°C)  Feder (> 100.41 for 30°C)  Cond-estated candidon symptoms  Cond-estated candidon symptoms  Cond-estated candidon symptoms  Condended (> 100.41 for 30°C)  Condended (> 100	Blood pressure check Medication risk Blood signs (beck) Blood signs (beck) Blood signs (beck) Blood signs (beck) Pregnancy ( point parker amentment Descript (cherge) / wound or Descript (che
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#### **Aggregate Morbidity Form**

- Records information concerning disaster-related injuries and illness for the CDC
- Data is used by CDC to make recommendations on preparedness and response
- Should reflect anything we do to assist clients





#### **Medications in the Shelter**

- Encourage clients to safely and securely store their medications. Assist shelter residents with this process, if necessary
- Nurses do not dispense medications, they make them available to the shelter residents (this includes OTC meds)
- Nurses assist shelter residents in their self directed medical care





# **Additional situations**

➤ Working with Partners

Other Red Cross groups

Other County Agencies

**Community Resources** 

- >Unaccompanied minors
- ➤ Co-location of medical facilities/PHD shelters



#### Disaster Mental Health

The direct and indirect effects of a disaster can be traumatic for people – including clients and Red Cross volunteers.

Disaster Mental Health volunteers work with both groups offering emotional support and assessment and making referrals as needed.

#### THE CLIENT

Be aware of how the Client is responding to the situation. There may be pre-existing problems that become exacerbated by the disaster.

THE WORKER

Be aware of your own
needs and those of fellow
team members.



#### Service Animals Are Welcome in Shelters

- Are individually trained to provide assistance to a person with a disability
- Shelter staff may ask only two questions to determine if an animal is a service animal:
  - (1) "Is this a service animal required because of a disability?"
  - (2) "What work or tasks has the animal been trained to perform to help with your condition?"



# Questions??







# Thank you!

gayle.robinson@redcross.org 805-637-6582

Soft Tissue Injury,
Fracture
Management, &
Bleeding Control

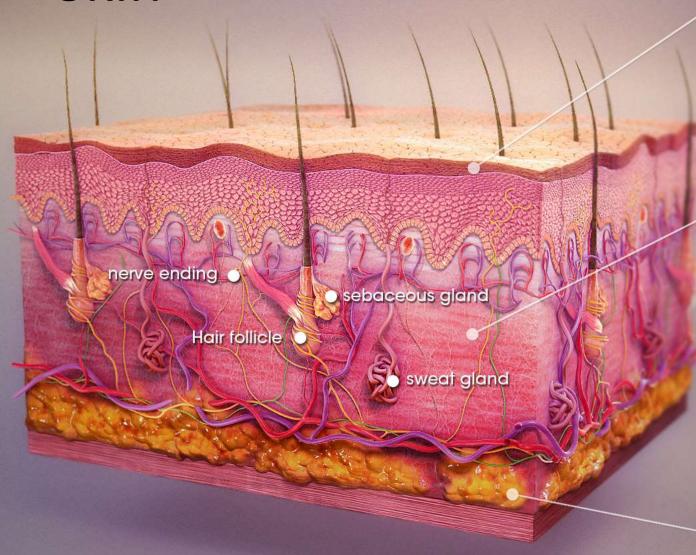
Ryan Rosander



## **SOFT TISSUE INJURIES**



### Skin



#### **Epidermis**

- relatively waterproof
- prevents most bacteria, viruses, and other foreign substances from entering the body
- produces the pigment melanin that gives human skin, hair, and eyes their color

#### **Dermis**

- nerve endings: sense pain, touch, pressure, and temperature
- sweat glands: produce sweat in response to heat and stress
- **sebaceous glands:** secrete sebum into hair follicles. Sebum is an oil, that keeps the skin moist and soft
- hair follicles: produce various types of hair found throughout the body

#### Fat Layer

helps insulate the body from heat and cold, provides protective padding, and serves as an energy storage area.

# Three Types of Soft-Tissue Injuries

#### Closed injuries

- Damage is beneath the skin
- Surface is intact

#### Open injuries

- Breaks the skin's surface
- Exposes deeper tissues to contamination

#### **Burns**

• Covered in next lecture



# Characteristics of Closed Injuries

- History of blunt trauma
- Pain at the site of injury
- Swelling
- Discoloration

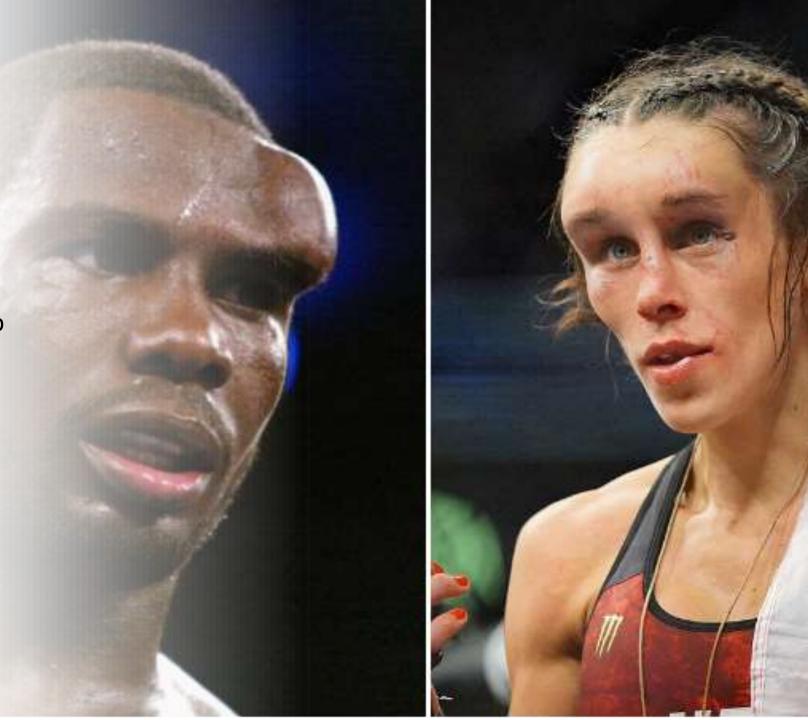


## Closed Injuries

- A contusion (bruise) cause bleeding beneath the skin but does not break the skin. Buildup of blood produces blue or black ecchymosis.
- A hematoma is blood collected within damaged tissue or body cavity.

#### **Treatment:**

Apply ice for the first 48-72 hours. Apply on and off 20-minute increments.

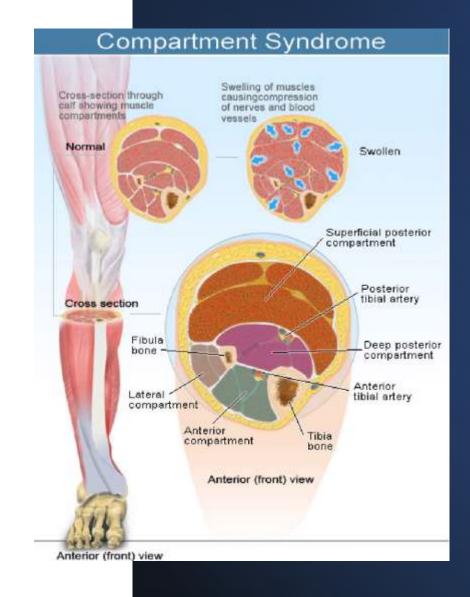


# Close Injuries Cont. Compartment Syndrome

- Caused by a crush or compressive injury.
- Painful condition that occurs when pressure within the muscles builds to dangerous levels.
- This pressure can decrease blood flow, which prevents nourishment and oxygen from reaching nerve and muscle cells.

#### **Treatment:**

Surgical intervention



#### Sprains/Strains

- Sprains are ligament injuries resulting from wrenching or twisting a joint.
- Strains are injuries to a muscle or tendon, and are often caused by overuse, force, or stretching. The ankle is the most sprained or strained joint.

#### **Treatment:**

R.I.C.E.



# Open Soft Tissue Injuries

- Protective layer of the skin is damaged.
- Would is contaminated and may become infected.
- Types:
  - Abrasions
  - Lacerations
  - Avulsions
  - Punctures/Penetrations



#### Abrasions

- An abrasion is a wound of the superficial layer of the skin.
- Caused by friction when the skin rubs or scrapes across rough or hard surface.

#### **Treatment:**

Keep wound clean with soap and water, cover the wound.





#### Avulsion

- An avulsion separates various layers of soft tissue so that they become either completely detached or hang as a flap.
- Potential for significant bleeding.
- Never remove avulsed skin flap.

#### **Treatment:**

Control bleeding, replace avulsed skin and apply dressing and bandage into place.



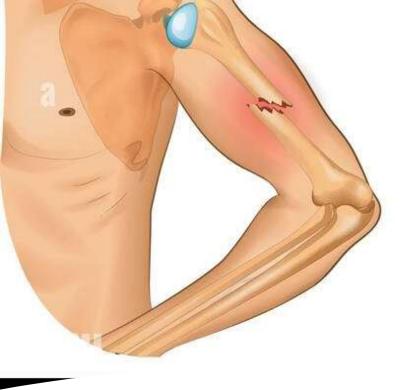
#### Penetrations/Punctures

- Caused by sharp pointed object
- May have no external bleeding.
- Internal bleeding may be severe.
- Might also have an exit wound.
- Examples include gunshot/stab wound.

#### **Treatment:**

If penetrating object is still impaled, apply bulky dressing and bandage in place. Otherwise, cover with a dressing and keep clean.







Types of Fractures

• Open fracture: When the fractured bony fragments are exposed to external environment by means of wound.

• Closed fracture: The fracture fragments are not exposed and are contained under the skin.

## Reasons for Splinting

- Reduce pain
- Prevent damage to muscles, nerves, and blood vessels.
- Prevent a closed fracture from becoming an open fracture.
- Reduce bleeding and swelling.
- Prevent a fractured bone from moving into soft tissues.



# Types of Splints (1 of 3)

- Rigid splint:
- Inflexible device used to maintain stability
- Must be long enough to secure above and below fracture site.



# Types of Splints (2 of 3)

- Soft splint:
- Pillow
- Useful for lower leg
- Useful for forearm



## Types of Splints (3 of 3)

- Self-splint, or anatomic splint:
- Uses the body
- Injured extremity tied to an uninjured part of the body







## To Apply a Slint

All fractures and dislocations should be stabilized before the victim is moved.

Cover open wounds with sterile dressing.

Check circulation, sensation, and movement (CSM).

If pulses are absent, gently line up fracture or dislocation.

Never force anything into position.

# To Apply a Splint

If two people are present, one should support the injury site, while the other person does the splinting.

When possible, place the splint on both sides of the injured body part.

With rigid splints, use extra padding.

Apply splints firmly, but do not restrict blood flow, always check CSM.

Use RICE (rest, ice, compression, and elevation).

## Splinting Guidelines

- Possible spinal injuries take precedence.
- Tell victim not to move.
- Place rolled blankets or towels on each side of the neck.
- Keep victim in a neutral, in-line position until EMS arrives on scene.

#### Slings

- An open triangular bandage can be used as a sling.
- A folded triangular bandage, known as a cravat, can be used as a swathe in conjunction with a sling.
- Slings are used for dislocated or fractured arm, elbow, or shoulder.



#### Humerus Fracture

- Use rigid splint.
- A temporary splint extending from the shoulder to the forearm and holding the elbow bent at 90 degrees can be used for initial management of the fracture.





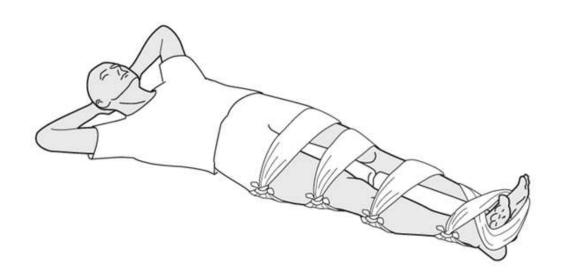
### Lower Leg Splinting

- Can use either soft or rigid type splinting.
- Soft splint such as a pillow and tape keeps fracture immobile and padded.
- Rigid splint keeps fracture immobile, but make sure to use plenty of padding surrounding the injury.



### Femur Fracture Splinting

- If in extreme pain, apply gentle traction to leg, until relief is felt.
- Can use anatomic splinting, rigid type splint, or soft splint.
- Wait until EMS personnel arrive and apply a traction splint.





#### **SAVE A LIFE**

## STOP THE BLEED® Course American College of Surgeons

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Version 2



BLEEDINGCONTROL.ORG STOPTHEBLEED.ORG





#### Stop the Bleed® is a collaborative effort by:



The Hartford Consensus Group



The American
College of Surgeons
Committee on
Trauma



The Committee on Tactical Combat Casualty Care



The National
Association of
Emergency Medical
Technicians

#### Why Do I Need This Training?

The #1 cause of preventable death after injury is bleeding.

#### Goals

#### 1. Identify

Recognize life-threatening bleeding

#### 2. Stop the Bleed

Take steps to STOP THE BLEEDING

- ✓ Pressure
- ✓ Packing
- ✓ Tourniquets

#### **Personal Safety**

#### YOUR safety is YOUR first priority

- If you are injured, you cannot help others
- Help others only when it's safe to do so
- If the situation changes or becomes unsafe:
  - √ Stop
  - ✓ Move to safety
  - ✓ If you can, take the victim with you

#### Personal Safety

#### YOUR safety is YOUR first priority

- Wear gloves if you can
- If you get blood on you, be sure to clean any part of your body that the blood has touched
- Tell a health care provider that you got blood on you, and follow his or her direction

A Alert 911

**B** Bleeding

**C** Compress

### A Alert 911

- Call 911
- Know your location
- Follow instructions provided by 911 operator

### **B** Bleeding

- Find source of bleeding
- · Look for:
  - ✓ Continuous bleeding
  - ✓ Large-volume bleeding
  - √ Pooling of blood

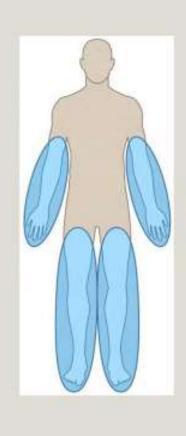
### **B** Bleeding

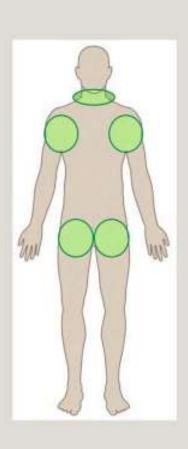
- There may be multiple places the victim is bleeding
- Clothing may also hide life-threatening bleeding

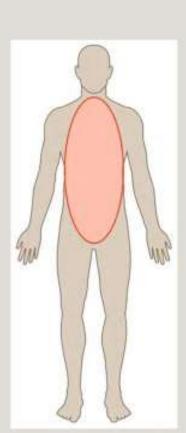
### **B** Bleeding

- Arms and legs
- Neck, armpits, and groin

Body







A Alert 911

Bleeding

C. Compress - Pressure

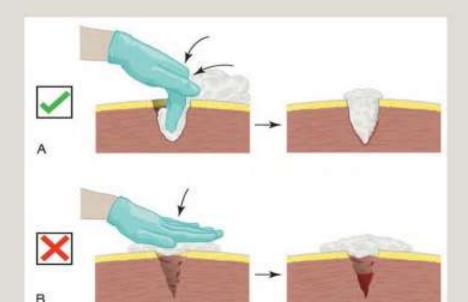


### C Compress - Pressure

- Apply direct pressure to wound
- Focus on the location of the bleeding
- Use just enough gauze or cloth to cover injury
- If pressure stops the bleeding, keep pressure on wound until help arrives

## C Compress - Packing

- For large wounds, superficial pressure is not effective
- If bleeding is from a deep wound, pack gauze tightly into the wound until it stops the bleeding; hold pressure until help arrives



## C Compress - Tourniquet

- Apply 2 to 3 inches above wound
- Do not place over the elbow or knee
- Tighten tourniquet until bleeding stops
- Do NOT remove the tourniquet

## C Compress - Tourniquet

- Can apply to others or on yourself
- Can be applied over clothes
- Tourniquets HURT
- A second tourniquet may be required to stop the bleeding



#### Bleeding control in children

- In all but the extremely young child, the same tourniquet used for adults can be used in children.
- For the infant or very small child (tourniquet too big), direct pressure on the wound as described previously will work in virtually all cases.
- For large, deep wounds, wound packing can be performed in children just as in adults using the same technique as described previously.

#### Summary

- ✓ Personal safety
- A Alert 911
- **B** Find bleeding
- C Compress with pressure and/or packing
- C Compress with a tourniquet
- ✓ Wait for help to arrive











The only thing more tragic than a death... is a death that could have been prevented.