

Week 9:

ABC assessment prioritization

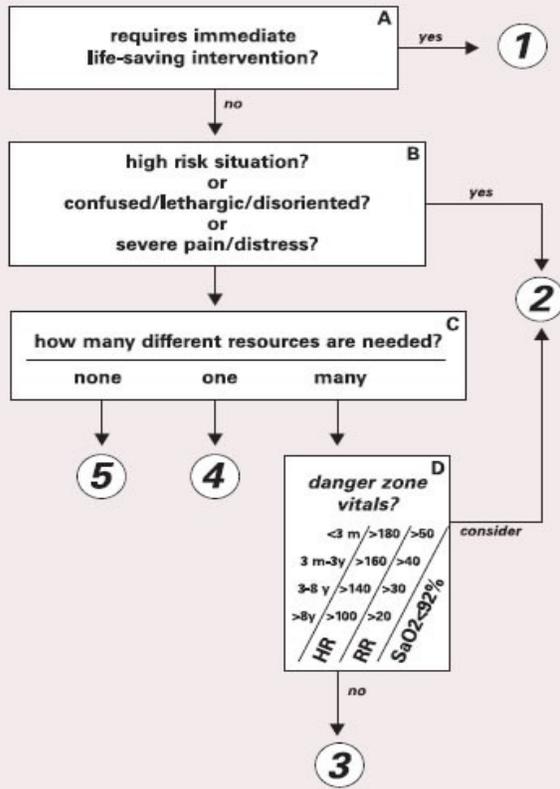
- Airway & C-spine
- Breathing
- Circulation
- Disability
- Exposure

Primary Survey

- Components
 - Rapid assessment of life-threatening conditions
 - Systematic approach
 - Guide with ABCDE principles
 - Standard precautions
- Performing on a client
 - Airway & C-spine
 - Breathing
 - Circulation
 - Disability
 - Exposure

ESI Triage: 5 level triage system incorporating concepts of illness severity and resource utilization to determine who should be treated first

- Assess acuity level
- Prioritize patients based on CC and presentation
- Examples:
 - Resuscitation (level 1) cardiac arrest
 - Emergent (level 2) CP with cardiac hx
 - Urgent (level 3) abdominal pain
 - Less urgent (level 4) laceration
 - Nonurgent (level 5) simple rash



- A. **Immediate life-saving intervention required:** airway, emergency medications, or other hemodynamic interventions (IV, supplemental O₂, monitor, ECG or labs DO NOT count); and/or any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SPO₂<90, acute mental status changes, or unresponsive.
- Unresponsiveness** is defined as a patient that is either:
 (1) nonverbal and not following commands (acutely); or
 (2) requires noxious stimulus (P or U on AVPLU) scale.
- B. **High risk situation** is a patient you would put in your last open bed.
- Severe pain/distress** is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0-10 pain scale.
- C. **Resources:** Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).

Resources	Not Resources
<ul style="list-style-type: none"> Labs (blood, urine) ECG, X-rays CT/MRI-ultrasound-angiography 	<ul style="list-style-type: none"> History & physical (including pelvic) Point-of-care testing
<ul style="list-style-type: none"> IV fluids (hydration) 	<ul style="list-style-type: none"> Saline or heparin
<ul style="list-style-type: none"> IV or IM or nebulized medications 	<ul style="list-style-type: none"> PO medications Tetanus immunization Prescription refills
<ul style="list-style-type: none"> Specialty consultation 	<ul style="list-style-type: none"> Phone call to PCP
<ul style="list-style-type: none"> Simple procedure -1 (lac repair, foley cath) Complex procedure -2 (conscious sedation) 	<ul style="list-style-type: none"> Simple wound care (dressings, recheck) Crutches, splints, slings

- D. **Danger Zone Vital Signs**
 Consider uptriage to ESI 2 if any vital sign criterion is exceeded.
- Pediatric Fever Considerations**
 1 to 28 days of age: assign at least ESI 2 if temp >38.0 C (100.4F)
 1-3 months of age: consider assigning ESI 2 if temp >38.0 C (100.4F)
 3 months to 3 yrs of age: consider assigning ESI 3 if: temp >39.0 C (102.2 F), or incomplete immunizations, or no obvious source of fever

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Definition	ESI-1	ESI-2	ESI-3	ESI-4	ESI-5
Stability of vital functions (ABCs)	Unstable	Threatened	Stable	Stable	Stable
Life threat or organ threat	Obvious	Likely but not always obvious	Unlikely but possible	No	No
How soon patient should be seen by HCP	Immediately	Within 10 min	Up to 1 hr	Could be delayed	Could be delayed
Expected resource intensity	<ul style="list-style-type: none"> High resource intensity Staff at bedside continuously Often mobilization of team response 	<ul style="list-style-type: none"> High resource intensity Multiple, often complex diagnostic studies Frequent consultation Continuous monitoring 	<ul style="list-style-type: none"> Medium to high intensity Multiple diagnostic studies Complex procedures 	<ul style="list-style-type: none"> Low resource intensity One simple diagnostic study 	<ul style="list-style-type: none"> Low resource intensity Examination only
Examples	Cardiac arrest, intubated trauma patient, overdose w/ bradypnea, severe respiratory distress	Chest pain probably resulting from ischemia, multiple trauma unless responsive	Abdominal pain or gynecological disorders unless in severe distress, hip fracture in older patient	Closed extremity trauma, simple laceration, cystitis	Cold symptoms, minor burn, recheck (e.g. wound), prescription refill

Opioid overdose

- Treatment
 - Narcan/naloxone

Acetaminophen OD

- Manifestations
- Phase 1 (w/in 24 hrs of ingestion): malaise, diaphoresis, N/V
- Phase 2 (24-48 hrs after ingestion): RUQ abd pain, decreased UO, diminished nausea, elevated LFTs
- Phase 3 (72-96 hrs after ingestion): N/V, malaise, jaundice, hypoglycemia, enlarged liver, possible coagulopathies including DIC
- Phase 4 (7-8 days after ingestion): recovery, resolution of symptoms or permanent liver damage, LFTs remain high
- Treatment
 - Activated charcoal
 - Acetylcysteine

Hypothermia (systemic)

- Manifestations
 - Shivering, slurred speech, slow/shallow breathing, weak pulse, lack of coordination, fatigue, confusion, loss of consciousness

Frostbite (localized)

- Nursing Interventions
 - Ears, fingers, & toes (typically)
 - Restore normal body temperature
 - Hourly neuro and VS checks
 - Antibiotic ointment when performing wound care

Consent

- Unresponsive patients
 - Document that patient is unconscious: implied consent

Heat Stroke: most serious form of heat stress

- Manifestations
 - **Core temperature of >105.3**
 - AMS
 - Absence of perspiration
 - Circulatory collapse
 - Neurological symptoms
 - Brain sensitivity to thermal injuries
 - Hallucinations, loss of muscle coordination, combativeness

Airway obstruction

- Manifestations
 - Respiratory distress, SOB, cyanosis, lack of circulation

RACE acronym for fire

- Rescue
- Alarm
- Confine
- Extinguish/evacuate

Carbon monoxide poisoning

- Manifestations
 - Dyspnea, HA, tachypnea, confusion, impaired judgment, cyanosis, respiratory depression

Week 10:

Nursing roles during a disaster

- Triage
- Treat patients
 - May be out of area of expertise
 - May take on responsibilities typically held by physicians or APRNs
 - Sutures, etc.
 - On site training
- Do the most good for the most people possible

**Nurses may serve as triage officers during a disaster

HICS

- Hospital Incident Command System
 - Modification of the ICS used by both hospitals and law enforcement agencies
 - Incident commander is hospital emergency preparedness coordinator who oversees and **coordinates all efforts** surrounding event
 - Identifies facility responsibilities and channels of reporting

Disaster Triage

- **Assign tag color**

Triage Category

Priority

Color

Typical Conditions

Immediate: Injuries are life threatening but survivable with minimal intervention. Individuals in this group can progress rapidly to expectant if treatment is delayed.

Delayed: Injuries are significant and require medical care but can wait hours without threat to life or limb. Individuals in this group receive treatment only after immediate casualties are treated.

Minimal: Injuries are minor, and treatment can be delayed hours to days. Individuals in this group should be moved away from the main triage area.

Expectant: Injuries are extensive, and chances of survival are unlikely even with definitive care. Persons in this group should be separated from other casualties, but not abandoned. Comfort measures should be provided when possible.

1	Red	Sucking chest wound, airway obstruction secondary to mechanical cause, shock, hemothorax, tension pneumothorax, asphyxia, unstable chest and abdominal wounds, incomplete amputations, open fractures of long bones, and 2nd/3rd degree burns of 15%–40% total body surface area
2	Yellow	Stable abdominal wounds without evidence of significant hemorrhage; soft tissue injuries; maxillofacial wounds without airway compromise; vascular injuries with adequate collateral circulation; genitourinary tract disruption; fractures requiring open reduction, débridement, and external fixation; most eye and central nervous system injuries
3	Green	Upper extremity fractures, minor burns, sprains, small lacerations without significant bleeding, behavioral disorders or psychological disturbances **WALKING WOUNDED**
4	Black	Unresponsive patients with penetrating head wounds, high spinal cord injuries, wounds involving multiple anatomic sites and organs, 2nd/3rd degree burns in excess of 60% of body surface area, seizures or vomiting within 24 hours after radiation exposure, profound shock with multiple injuries, agonal respirations; no pulse, no blood pressure, pupils fixed and dilated

- Prioritize by acuity

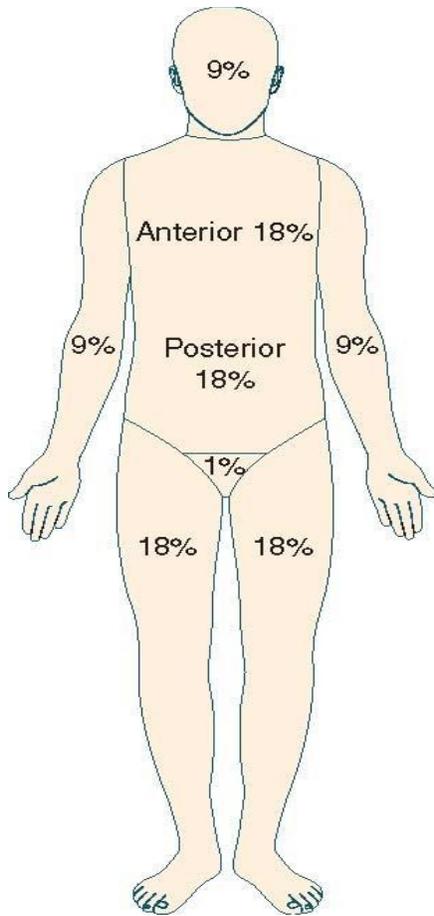
ABC assessment prioritization

Emergency preparedness kits

- Items to include
 - Backpack, personal identification, clean clothing, sturdy footwear, pocket-knife, 3-day supply of water, 3-day supply of non-perishable food, blankets/sleeping bag/pillow, first aid kit, adequate supply of prescription medications, battery operated radio, flashlight and batteries, credit card/cash, extra set of keys, full tank of gas, cell phone, toiletries, matches in waterproof container

Burns:

- Escharotomy
 - Patient education
- Wound care
 - Nursing interventions
 - Cleaning and gentle debridement
 - Scissors & forceps during a regular shower or with patient in bed
 - Once daily shower and dressing change with an evening dressing change in the patient's room
 - Provide emotional support and begin to build trust
 - Wear PPE and use sterile gloves when applying ointments and sterile dressings
 - Avoid risks of infection
 - Permanent skin coverage
 - Autograft
- Emergent phase
 - Nursing Interventions
 - Maintain patent airway
 - Administer IV fluids (prevent hypovolemic shock)
 - Preserve vital organ functioning
- Assessing severity of burns
 - Depth
 - Extent
 - Location
 - Patient risk factors
- ABC assessment prioritization
 - If unresponsive: CAB
 - Circulation, airway, breathing
 - If responsive: ABC
 - Airway, breathing, circulation
- Rule of Nine's
 - Calculate TBSA affected



- Prioritize nursing interventions based on TBSA
- Fluid resuscitation
 - Fluids used, over what timeframes
 - Calculate using Parkland Baxter formula
 - Signs of adequate replacement
- Facial burns
 - Priority assessment
 - Airway
- Anticipated electrolyte imbalances
 - Potassium shift from injured cells and hemolyzed RBCs release K⁺ into circulation
 - Hyperkalemia
 - Sodium moves into interstitial spaces and remains there until edema formation ends
 - Hyponatremia
- Inhalation injury:
 - Treatment
 -
 - Nursing interventions

- Rapid initial and ongoing assessment is critical
- Airway compromise and pulmonary edema can develop over the first 12-24 hours
- Circumferential burns
 - Nursing interventions
 - Monitor circulation
 - Could cause compartment syndrome or nerve damage
 - Anticipate endotracheal intubation and mechanical ventilation
 - ABCs
 - VS, O2 sat, heart rhythm, LOC
 - Monitor pain level
 - Monitor urine output
 - Help with self care
 - Protect hands and feet
- Medication calculation