

Be able to triage patient

Disaster triage: Overall goal is to do the greatest good for the highest number of people.

- Assign tag color
 - What are the colors in the tagging triage system and their terms? Briefly describe each one.
 - Green Tag(**Non-urgent** or class III): Minor injuries that do not require immediate treatment
 - Ex: Fractures, sprains, strains, abrasions, and contusions
 - Yellow Tag(**Urgent** or class II): Major injuries that require treatment, patients who can wait a short time for care
 - Ex: Open fractures w/ distal pulse, large wounds that need tx w/in 30 min to 2 hrs
 - Red Tag(**Emergent** or class I): Immediate threat to life Ex: Airway obstruction or shock
 - Black Tag (**Expectant** or class IV): Expected and allowed to die, patients who are expected to die or are dead
 - Ex: Massive head trauma, extensive full-thickness body burns, & high cervical SCI requiring mechanical ventilation
 - The black tag indicates 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.
 - An example of a client that would be black tagged would be an unresponsive client that has a penetrating head wound.
 - Black tag category name: **EXPECTANT**
 - Would receive care last
- PPE – always wear the highest level of protection
- Emergency preparedness kit:
 - Items to include
 - What supplies would a nurse recommend community members include in a disaster preparedness kit?
 - A backpack with personal ID
 - Clean clothing, sturdy footwear, toiletries
 - Pocket-knife, first aid kit, matches in waterproof container
 - 3-day supply of water (1 gallon/day) / 3-day supply of non-perishable food
 - Blankets/sleeping bag/pillow
 - Adequate supply of prescription medications
 - Battery operated radio, flashlight and batteries
 - Credit card/cash/traveler's checks
 - Extra set of keys and full tank of gas in the car, cell phone

- Assess and prioritize acuity level
 - Prioritize patients based on chief complaint and presentation
 - What is the priority for any trauma situation, but particularly facial or neck trauma (including burns).
 - Airway
 - The nurse is caring for an elderly client that was found on the ground during a snowstorm. He is intoxicated, malnourished, frostbite to toes bilaterally, has a superficial non bleeding laceration to the right side of forehead, head lice and a core temp of 91.8 degrees. What condition does the nurse prioritize first?
 - Hypothermia (elevate core temp)

 - Nursing roles during a disaster
 - May be asked to perform duties outside usual scope of practice
 - Teach them how to do it once and then they perform this task
 - Suturing
 - Put in chest tube
 - RN may act as triage officer; delegate to others too
 - Disaster = New settings and atypical roles for nurses arise during a disaster
 - Perform outside scope of practice
 - A nurse may serve as a triage officer during times of disaster
 - Delegate to others

 - ABC assessment prioritization
 - Primary Survey
 - Components
 - The ABCDE principle for a primary survey includes:
 - A: Airway and c spine (Inhalation injury, obstruction, penetrating wounds)
 - B: Breathing (Anaphylaxis, flail chest, hemothorax, pneumothorax)
 - C: Circulation (Cardiac injury, pericardial tamponade, shock, uncontrolled hemorrhage, hypothermia)
 - D: Disability (Head injury, stroke) -- use GCS
 - E: Exposure
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- Consent:
 - Unresponsive patients

- The nurse is receiving a patient from EMS on a cart. EMS reports they received a call that he was laying outside of a bar on campus, allegedly asleep. He is very difficult to arouse but his vital signs are stable. There are no family members or friends present. No identification is found. Clearly he is not able to give consent for treatment (which is required). What action by the nurse is most important regarding this consent?
 - Obtain consent from (2) providers
 - **RN document pt. unresponsive**

Shock:

- Treatment
 - All types of shock receive fluid resuscitation
 - Most common: NS and LR (crystalloids)
 - Assessment
 - VS, ABG, I&Os, lung assessments, CBC/CMP, cultures

Burns:

- Escharotomy
 - Patient education
 - Partial-thickness wounds form eschar; once eschar is removed, re-epithelialization begins at wound margins & appears as red or pink scar tissue
- Wound care
 - Nursing interventions
 - Done during the acute phase
 - Considered a “major therapeutic intervention” of the acute phase
 - Flush chemical from wound & surrounding area w/copious amounts of saline solution or water
 - Cleansing and gentle debridement (using scissors & forceps) during a regular shower or w/patient in bed
 - Once daily shower & dressing change w/an evening dressing change in the patient’s room are often routine in burn centers
 - Extensive, surgical debridement done in OR
 - Patients find 1st wound care to be both physically & mentally demanding; provide emotional support & begin to build trust during this activity
 - INFECTION can cause further tissue injury & possible sepsis
 - Source of infection is likely the patient’s own normal flora, mostly from skin, respiratory, and GI system
 - Always wear PPE and use sterile gloves when applying ointments & sterile dressings

- Permanent skin coverage is the primary goal; autograft (patient's own skin) or allograft (cadaver skin) is generally used; newer biosynthetic options are now available
- Increase caloric intake
- Vitamins ACE, multivitamins, zinc, ferrous sulphate
- Partial-thickness wounds form eschar; once eschar is removed, re-epithelialization begins at wound margins & appears as red or pink scar tissue
- Emergent phase – burn – 72 hrs: The primary goal is to maintain a patent airway, administer IV fluids to prevent hypovolemic shock, and preserve vital organ functioning
 - Emergent (resuscitative) phase is time required to resolve the immediate, life-threatening problems resulting from burn injury
 - Primary concerns – onset of hypovolemic shock & edema formation
 - Nursing interventions
 - Begins at time of injury
 - Ends w/restoration of normal capillary permeability
 - Duration usually 48-72 hr
 - Includes prehospital care & emergency care
 - Assess bowels – may have paralytic ileus d/t shunted blood to vital organs
 - Protect from infection – where sterile gloves during ointment application and dressing changes
 - Hydration
 - Monitor for hypovolemic shock and AW edema
 - Monitor labs
 - Hyperkalemia – immediately after burn d/t massive cell destruction (decreased BP, muscle twitching/cramps, paresthesia)
 - Hypokalemia – later w/fluid shifts (shallow resp, confusion, weak/thready pulse, n/v)
 - Hyponatremia – during burn shock d/t plasma loss/3rd spacing as well as during 1st week of acute phase (lethargic, HA, confusion, seizures, coma)
 - Elevated Hgb, Hct, BUN, glucose (d/t stress)/dehydration
 - Carboxyhemoglobin: more than 10% - IDs smoke inhalation
- Rules of Nines
 - Calculate TBSA affected
 - Head in whole = 9%
 - Anterior midline = 18%
 - Posterior midline = 18%
 - Trunk = 36% total
 - Each arm in full capacity = 9%
 - Each leg in full capacity = 18%
 - Perineal area in whole = 1%
- Prioritize care based on TBSA
 - Remove pt from source of burn and stop burning process
 - Circulation = #1 for unconscious pt – Compressions-Airway-Breathing (CAB)

- Unconscious call CAB!
- Burn pt may have other injuries that are priority over the burn
 - Internal bleeding/C-spine fracture/Pneumothorax]
- Fluid resuscitation
 - Fluids used, over what timeframes
 - LR
 - $\frac{1}{2}$ over first 8 hrs
 - Next $\frac{1}{2}$ over last 16 hrs
 - 4 mL per kg x % burned
 - Calculate using Parkland Baxter formula:
 - 4mL LR/kg x %TBSA burn
 - Signs of adequate replacement
 - Improvements in vitals/cap refill/LOC/UO

Bioterrorism

- Anthrax (Category A = High mortality): Caused by *Bacillus anthracis*
 - Action
 - Skin contact with infected animals
 - Consumption of raw meat
 - Inhalation of spores
 - Early s/sx
 - Skin lesions
 - Edema
 - Pruritus
 - Macule/papule/vesicle formation
 - Cough
 - HA
 - Fever/chills
 - N/V
 - Weakness
 - Dyspnea
 - Syncope
 - Mild chest discomfort
 - Late s/sx
 - Bloody diarrhea
 - Ascites
 - Stridor
 - Hypoxia
 - Cyanosis
 - Diaphoresis
 - Hypotension
 - Shock

- Severe respiratory distress
- Treatment
 - Penicillin
 - Erythromycin
 - Gentamicin
 - Doxycycline
- Standard precautions
 - Patient is not contagious
 - Cremation is recommended
- Ebola virus (Category A = High mortality)
 - Action
 - Contact with blood or body fluids
 - Early s/sx
 - Fever
 - Muscle aches/pain
 - fatigue
 - Late s/sx
 - Diarrhea
 - Abdominal pain
 - Vomiting
 - Dehydration
 - Shock
 - Confusion
 - Agitation
 - Delirium
 - Encephalitis
 - Treatment
 - Ventilation
 - Dialysis support
 - Contact & Droplet precautions
 - Isolated private room
- Sarin gas (Nerve agent = Toxic)
 - Action
 - Inhibition of cholinesterase (inhaled or absorbed percutaneously/subcutaneously)
 - Early s/sx
 - Diaphoresis
 - Twitching
 - Late s/sx
 - Increased secretions
 - Gastrointestinal motility
 - Diarrhea
 - Bronchospasm
 - Decontamination

- Soap & water
- o Treatment
 - Supportive care
 - Benzos
 - Atropine
 - Pralidoxime