Wilderness First Aid Reference Cards

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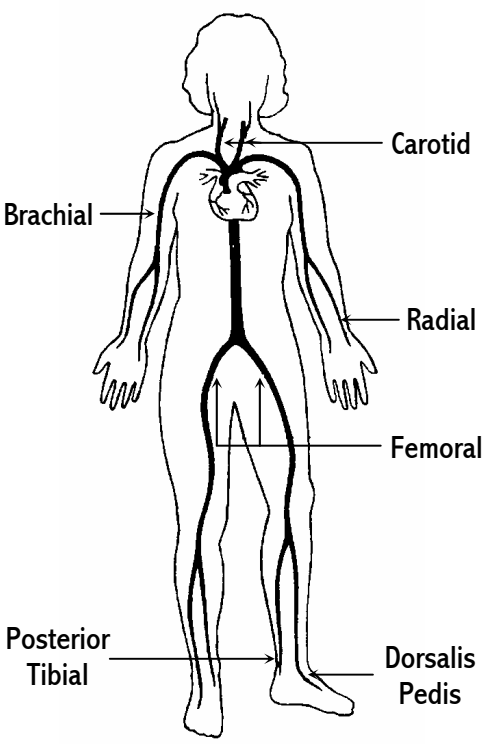
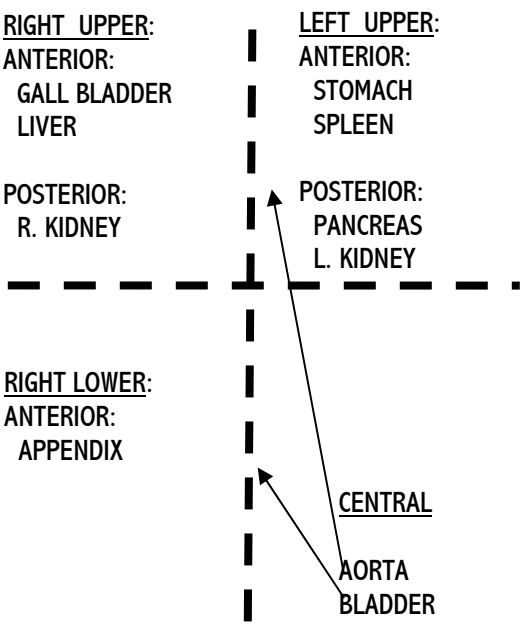
Pulse/Pressure Points

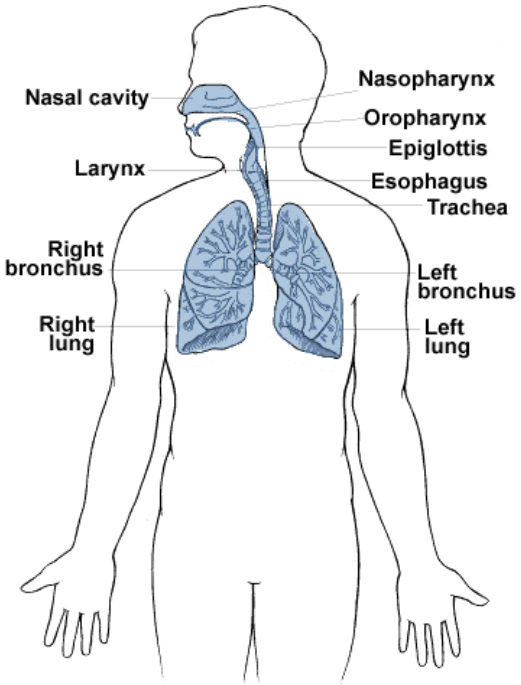


Abdominal Quadrants
(Looking at Patient)



Tenderness in a quadrant suggests potential injury to the organ indicated in the chart.

Airway Anatomy



Patient Assessment System

Scene Size-up
MOI
- Major trauma
- Environmental
- Medical

Safety/Danger
- Move/rescue patient
- Body substance isolation
- Remove from heat/cold exposure
- Consider safety of rescuers

Resources
- # Patients
- # Trained rescuers
- Available equipment (incl. Pt's)

BLS
Respiratory
- Air in and out
- Adequate

Nervous
- AVPU
- Protect spine/C-collar

Circulatory
- Pulse
- Check for and Stop Severe Bleeding

STOP → THINK:
A – Continue with detailed exam
VPU_ EVAC NOW

SOAP Note Information (Focused Exam)

Pt. Information
MOI
Environmental conditions
Position pt. found
Initial Px: ABCs, AVPU
Initial Tx

SAMPLE
Symptoms
Allergies
Medications
Past/pertinent Hx
Last oral intake
Event leading to incident

Physical (head to toe) exam: DCAP-BTLS, OPQRST

Normal Vitals
Pulse: 60-90
Respiration: 12-20, easy
Skin: Pink, warm, dry
LOC: alert and oriented

Possible Px: Trauma, Environmental, Medical
Current Px
Anticipated Px
Field Tx
S/Sx to monitor
Evac level

Patient Level of Consciousness (LOC)

Reliable Pt:
Calm
Cooperative
Sober
Alert

Causes of Abnormal Consciousness:
Sugar
Temperature
Oxygen
Pressure
Electricity
Altitude
Toxins

AVPU
A+ Awake and Cooperative
A- Awake and lethargic or combative
V+ Responds with sound to verbal stimuli
V- Obeys simple commands with verbal stimuli
P+ Pulls away from source of pain
P- Moves toward source of pain
U Totally unresponsive

Shock Assessment

Hypovolemic – Low fluid (Tank)
Cardiogenic – heart problem (Pump)
Vascular – vessel problem (Hose)

Volume Shock (VS) early/compensated
- ↑pulse
- Pale skin
- ↑respiration rate
- Normal AVPU

Volume Shock late/decompensated
- ↑↑↑pulse
- Pale skin
- ↑↑↑respiration rate
- ↓AVPU

Comment:
If a pulse drops but does not return to 'normal' (60-90 bpm) within 5-25 minutes, an elevated pulse is likely caused by VS and not ASR.

Tx: Stop visable bleeding, elevate legs, keep warm, manage psychological factors, ventilate if respirations are inadequate, give O_2 and IV fluids if available and appropriately trained.

Acute Stress Reaction

Sympathetic (fight or flight)
- ↑pulse
- Pale skin
- ↑respiration rate
- Normal AVPU
- Pain masking
- Looks like early VS

(neumonic = SASR = Spin up)

Parasympathetic (rest and digest)
- ↓pulse
- Pale skin
- ↓respiration rate
- May feel light headed, dizzy, nauseous, faint, anxious

(neumonic = PASR = passout)

Tx: For either condition, calm patient and remove stressors as much as possible

Head Injuries

Concussion:
Patient must be awake, cooperative, improving, and have amnesia.

S/Sx
- Patient is awake now
- Amnesia
- Can't have S/Sx of ↑ICP
- Nausea/vomiting (once) 2° to P-ASR
- Headache
- Tired

↑ICP:
S/Sx – early
- Patient is A- or lower
- C/O headache
- Persistent vomiting
- Ataxia

S/Sx – late
- Patient is VPU
- Vomiting persists
- Seizure
- Coma
- Cardiac and respiratory arrest

Spine Ruling Out Process (WFR or WEMT)

Patient must:
- Be reliable
- Report no pain when focused on spine
- Report no tenderness when spine palpated
- Have normal motor exam
- Have normal sensory exam
- Report no shooting, tingling or electric "pain" radiating from extremities

Motor Exam: Compare strength in both hands and feet. Have pt. resist:
- finger squeeze; pushing down on hand
- push 'gas pedal'; pull up on foot

Sensory Exam: compare pt's ability to distinguish between pin prick and soft touch on back of hand and shin
- Use pin to prick
- Use cloth for soft touch

In cases where the spine can't be ruled out but the injury can be localized to the lumbar area, consult medical direction regarding need to continue c-spine stabilization.

Wound Cleaning

Partial thickness:
- Soap and water wash
- Scrub to remove particles
- 10% P.I.
- Keep moist
- Dress lightly

Full thickness, low to moderate risk:
- Clean w/in 2 hours of bleeding end
- Clean around area with 10% P.I.
- Pressure flush with drinkable water in short bursts along axis
- Bring edges toward (not touching) each other and hold in place with an occlusive dressing and/or steri-strips etc.

Full thickness, high risk:
Clean as previous, PLUS:
- Remove dead skin and tissue
- Remove foreign material
- Finish flushing process with 1% P.I. solution (strong tea or amber beer)
- Do not close in field
- Pack with thin layers of gauze soaked in 1% P.I. Remove and repack bid
- Dress with several layers of gauze. May place 10% P.I. between layers, but not directly on wound
- Consider splinting if wound is over a joint.

Common Causes of Pulse Changes

Strong, Slow:
- Normal sleep
- Simple fainting
- Early ↑ICP
- Well-conditioned athlete
- Hypothyroid

Weak, slow:
- Hypothermia
- Late ↑ICP

Irregular:
- Sinus arrhythmia
- Heart disease

Strong, fast:
- Early heat stroke
- Fever
- Hyperthyroid
- Early shock
- ASR
- Strenuous physical activity

Weak, fast:
- Overwhelming infection
- Late heat stroke
- Late shock
- Diabetic coma
- Some types of heart disease

Focused Survey Acronyms

From Patient:

SAMPLE = Signs/Symptoms, Allergies, Medications, Previous Injury, Last Meal/Drink, Events

Pt = Patient
Hx = History
Px = Problem
S/Sx = Signs/Symptoms
Tx = Treatment

Observed by Rescuer:

CMS = Circulation, Motion, Sensation

OPQRST = Onset, Provocation, Quality (dull, sharp), Radiation, Severity (1-10), Time

DCAP-BTLS = Deformities, Contusions, Abrasions, Punctures/Penetrations, Burns/Bleeding, Tenderness, Lacerations, Swelling

Hypothermia

98.6° to 90°:
Pt will be A to A-, shivering, have ↑urine output, ↓coordination and dexterity

Tx:
Active rewarming – give food (carbs first), liquids, remove from elements, exercise, shelter, layers, add external heat (heat packs or hot water bottles)

<90°:
Pt will be V, P or U; shivering will stop; HR and respirations will decrease; Pt may appear dead

Tx:
Passive rewarming – add insulating layers (hypowrap), handle with care, no rapid warming or movement, no CPR (AED may be used). PPVs may be given.

Heat Related Symptoms

If heat is identified as a potential MOI and patient exhibits irrational behavior:

1) ALWAYS COOL PATIENT FIRST
2) Assess hydration status
   - If dehydration is established, hydrate with electrolyte solution
   - If hx includes copious H_2O, give electrolytes only
3) Complete focused survey
4) Treat symptoms as indicated by survey; continue to support cooling mechanisms

Heat exhaustion:
A-(irritable), temp. 99°-104°, pale

Heat stroke (early):
A- (irritable, combative), temp. >105°, pale if dehydrated, flushed if hydrated

Heat stroke (late):
V,P or U, seizures, coma, death

Electrolyte Sickness:
A-, V, P or U; Hx of H_2O but no food; can rapidly progress to ↑ICP

Patient SOAP Note

Patient Information	Name:	Rescuer:	
Age:	Weight:	Male	Female
Address:		Phone:	
		Date:	
		Time:	
Contact:		Phone:	

Scene Size-Up: Major Trauma Environmental Medical

Describe MOI

Describe Environmental Conditions

Position Patient Found		Initial Px	A V P U on arrival	
R / L side	Front / back	No respirations	No pulse	Unstable spine
Laying / Sitting / Standing		Severe Bleeding	Vomiting	Blocked Airway

Initial Tx

Subjective Information = What the patient tells you

Symptoms = Describe onset, cause & severity (1-10) of chief complaints

Time

Allergies = Local or systemic, cause, severity & Tx

Medications = Rx, OTC, herbal, homeopathic & recreational

Drug	Reason	Dose	Current
			Yes / No
			Yes / No

Notes

Past relevant medical Hx = relate to MOI

Last food & fluids = intake & output

H_2O	Calorie	Electrolyte
Urine color	Urine output	Stool

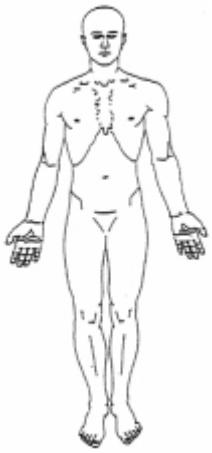
Events = Patient's description of what happened

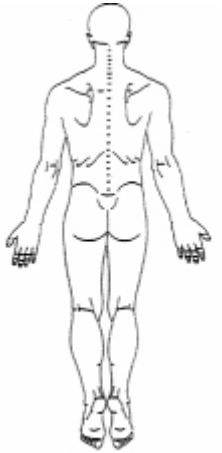
Amnesia Yes / No

Objective Information = What you see

Physical Exam = look for discoloration, swelling, abnormal fluid loss & deformity. Feel for tenderness, crepitus & instability. Check ROM and CSM.

Time





Vital Signs = get a baseline, then record changes

Time	Pulse	Resp	BP	Skin	Temp	AVPU

Assessment = What you think is wrong

Possible Px	Time	Current Px	Anticipated Px
Trauma			
UP ICP / Concussion			
Respiratory Distress			
Volume Shock			
Unstable Spine			
Trunk Injury			
Unstable Extremity Injury			
Stable Extremity Injury			
Wounds			
Environmental			
Dehydration / Low Na			
Hypothermia / Cold			
Heat Stroke / Exhaustion			
Frostbite / Burns			
Local / Systemic Toxin			
Local / Systemic Allergy			
Near Drowning			
Acute Mountain Sickness			
Lightning Injuries			
SCUBA / Free Diving			
Medical S/Sx			
Circulatory			
Respiratory			
Nervous			
Endocrine			
Genitourinary			
Musculoskeletal			
Skin / Soft Tissue			
Ears/Eyes/Nose/Throat			
Teeth / Gums			

Plan = what you are going to do

Field Tx	Monitor

Evacuation

Level 1 2 3 4
GPS / Grid Coordinates
Request ALS: Yes / No

Additional Notes

Additional vitals

Time	Pulse	Resp	BP	Skin	Temp	AVPU

Radio Report

Base, this is_____with _____
I have a _____ year old male/female whose chief complaint is:_____
_____
_____
as a result of:_____
_____
Patient is currently A V P U and was found Laying/Sitting/Standing on R/L/Front/Back side. Patient exam revealed _____
_____
_____
Spinal assessment revealed_____
Patient states _____
_____
Initial vitals were: HR:_____ RR:_____ Skin:_____ BP:_____
Current vitals are: HR:_____ RR:_____ Skin:_____ BP:_____
Treatments given are:_____
_____
_____
Anticipated problems during transport are:_____
_____
_____
Evacuation priority is: 1 2 3 4
We require: Litter / More People / Helicopter / ALS / _____
Our evacuation plan is _____
_____
Our GPS coordinates are:_____
LZ GPS coordinates are:_____