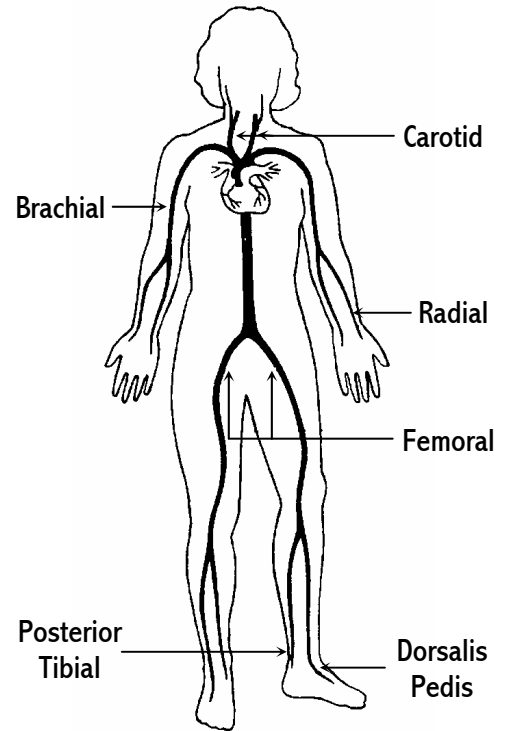




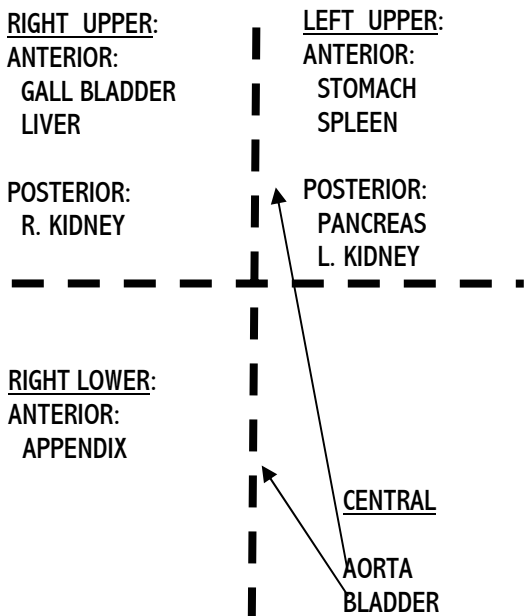
# Wilderness First Aid Reference Cards

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## Pulse/Pressure Points

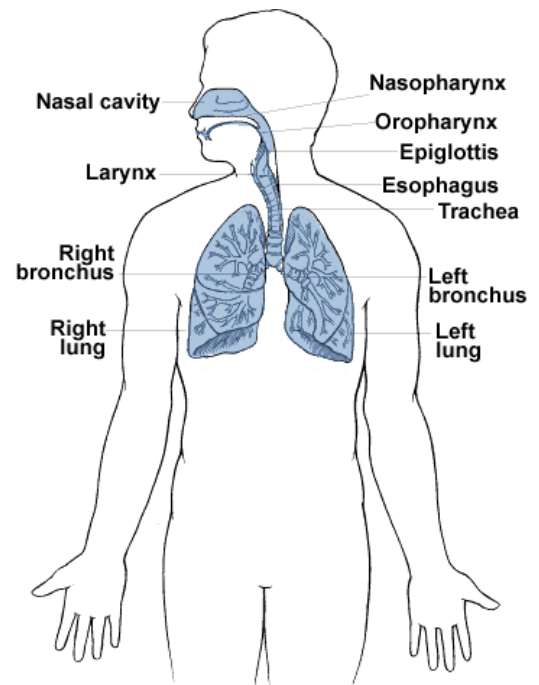


## Abdominal Quadrants (Looking at Patient)



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

### 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

### Causes of Abnormal Consciousness:

**S**ugar

**T**emperature

**O**xygen

**P**ressure

**E**lectricity

**A**ltitude

**T**oxins

## 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 visible bleeding, elevate legs, keep warm, manage psychological factors, ventilate if respirations are inadequate, give O<sub>2</sub> 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

<p>Pt = Patient                  Hx = History                  Px = Problem                  S/Sx = Signs/Symptoms                  Tx = Treatment</p>
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### 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<sub>2</sub>O, 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<sub>2</sub>O but no food; can rapidly progress to ↑ICP

**Patient SOAP Note**

Rescuer:

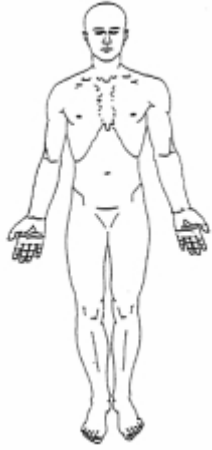
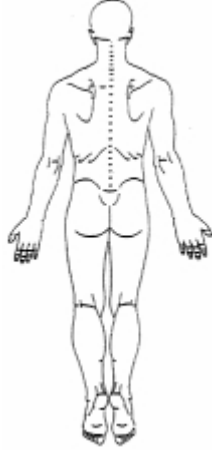
<b>Patient Information</b>		Name:	
Age:	Weight:	Male	Female
Address:		Phone:	
		Date:	
		Time:	
Contact:		Phone:	
<b>Scene Size-Up:</b> Major Trauma Environmental Medical			
Describe MOI			
Describe Environmental Conditions			
<b>Position Patient Found</b>		<b>Initial Px</b>	A V P U on arrival
R / L side	Front / back	No respirations	No pulse Unstable spine
Laying / Sitting / Standing		Severe Bleeding	Vomiting Blocked Airway
<b>Initial Tx</b>			

**Subjective Information = What the patient tells you**

<b>Symptoms</b> = Describe onset, cause & severity (1-10) of chief complaints			
Time			
<b>Allergies</b> = Local or systemic, cause, severity & Tx			
<b>Medications</b> = Rx, OTC, herbal, homeopathic & recreational			
Drug	Reason	Dose	Current
			Yes / No
			Yes / No
Notes			

<b>Past relevant medical Hx</b> = relate to MOI		
<b>Last food &amp; fluids</b> = intake & output		
H <sub>2</sub> O	Calorie	Electrolyte
Urine color	Urine output	Stool
<b>Events</b> = Patient's description of what happened		Amnesia Yes / No

**Objective Information = What you see**

<b>Physical Exam</b> = look for discoloration, swelling, abnormal fluid loss & deformity. Feel for tenderness, crepitus & instability. Check ROM and CSM.						
Time						
<b>Vital Signs</b> = 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
<p><b><i>Trauma</i></b></p> <ul style="list-style-type: none"> <li>↑ ICP / Concussion</li> <li>Respiratory Distress</li> <li>Volume Shock</li> <li>Unstable Spine</li> <li>Trunk Injury</li> <li>Unstable Extremity Injury</li> <li>Stable Extremity Injury</li> <li>Wounds</li> </ul>			
<p><b><i>Environmental</i></b></p> <ul style="list-style-type: none"> <li>Dehydration / Low Na</li> <li>Hypothermia / Cold</li> <li>Heat Stroke / Exhaustion</li> <li>Frostbite / Burns</li> <li>Local / Systemic Toxin</li> <li>Local / Systemic Allergy</li> <li>Near Drowning</li> <li>Acute Mountain Sickness</li> <li>Lightning Injuries</li> <li>SCUBA / Free Diving</li> </ul>			
<p><b><i>Medical S/Sx</i></b></p> <ul style="list-style-type: none"> <li>Circulatory</li> <li>Respiratory</li> <li>Nervous</li> <li>Endocrine</li> <li>Genitourinary</li> <li>Musculoskeletal</li> <li>Skin / Soft Tissue</li> <li>Ears/Eyes/Nose/Throat</li> <li>Teeth / Gums</li> </ul>			

**Plan = what you are going to do**

Field Tx	Monitor
<p><b>Evacuation</b></p> <ul style="list-style-type: none"> <li>Level 1 2 3 4</li> <li>GPS / Grid Coordinates</li> <li>Request ALS: Yes / No</li> </ul>	

### 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: \_\_\_\_\_