Wilderness EMT Patient Assessment:
Teaching Checklist

GENERAL NOTES
1. This is a teaching tool only; good assessment need not follow this outline, and may be quite brief, based on experience and judgement.
2. The chronological order given is not necessarily the best for all situations, but serves as a useful teaching device and approximates the order of a good exam by an experienced WEMT.
3. Gain your patient's confidence, and your job will be much easier.
4. Reassurance is important emergency therapy, but don't lie in order to reassure.
5. Use your intuition, but do a thorough check to confirm it and to rule out other possibilities.

THE PRIMARY SURVEY to note and correct life-threatening situations
- 1. RESCUE from immediate hazards (e.g. falling, fire, drowning).
- 2. OBSERVE the situation; look for
  --mechanism of injury
  --the general environment, clues
  --obvious deformity or hemorrhage.
- 3. Establish COMMUNICATION or determine unresponsiveness.
- 5. B - BREATHING: make a quick check for present and adequate ventilation; institute the appropriate therapy:
  --support with artificial ventilation and/or O₂ if needed
  --seal severe sucking chest wounds
  --stabilize massive flail chest
  --reduce tension pneumothorax surgically.
- 6. C - CIRCULATION: check for the presence and adequacy of the carotid pulse; institute the appropriate therapy:
  --if no pulse, start CPR
  --stop major hemorrhage (P.E.S.T.)
  --treat severe shock with elevating feet, O₂, MAST, and IV fluids.
THE SECONDARY SURVEY to detect medical problems not immediately life-threatening

General Order
1. Trauma Patient:
   -- physical exam for trauma
   -- history
   -- vital signs
   -- physical exam for medical problems

2. Medical Patient:
   -- vital signs
   -- history
   -- physical exam for medical problems
   -- physical exam for trauma

3. Unconscious Patient:
   -- vital signs
   -- history
   -- combined physical exams

VITAL SIGNS
☐ 1. LEVEL OF CONSCIOUSNESS (LOC): alert and oriented or GCS number.
☐ 2. PULSE (P): rate, rhythm, (quality if abnormal).
☐ 3. RESPIRATIONS (R): rate and rhythm.
☐ 4. BLOOD PRESSURE (BP): systolic and diastolic, or systolic by palpation.

HISTORY
General note: don’t lead the patient, but don’t waste time.
☐ 1. CHIEF COMPLAINT (CC): In the patient’s own words, if possible; the primary reason he wants medical assistance.
☐ 2. HISTORY OF PRESENT ILLNESS (HPI): The patient’s present and recent symptoms; mostly the “W” questions.
   -- What? are the symptoms, and what is their quality?
   -- Where? does it hurt?
   -- How bad? does it hurt?
   -- When? does it hurt? What causes it?
   -- What makes it better or worse?
   -- What other? symptoms do you notice associated with it?
3. PAST MEDICAL HISTORY (PMH):
   --Recent doctor's care or hospitalization, and known medical problems.
   --Current medications.
   --Any allergies, especially to drugs such as penicillin.
   --Pertinent family medical history.

PHYSICAL EXAM - TRAUMA

General note: if a patient can convincingly deny any injury, you may skip all or part of this exam.

1. If the patient is communicative, find out where it hurts and check that out quickly. Then do a complete survey of the body, with the length and intensity of the exam appropriate for the probability of other injuries.

2. Head: inspect and palpate: pain, deformity, bruises, bleeding.

3. Eye: inspect: PERRL, movements, foreign matter, injury, conjunctiva color
   palpate: swelling or deformity of orbit, sensory innervation above and below, forehead temperature.


6. Mouth: inspect: injury, obstruction potential, smell
   palpate: face fractures.

7. Neck: inspect: retraction or tracheal deviation, injury
   palpate: cervical spine tenderness, pain, or deformity.

8. Thorax: inspect: bilaterally for symmetry, injury, signs of distress
   palpate: bilaterally for compression pain and fractures
   auscultate: breath sounds for equality and volume
   rales, ronchi, wheezes, or stridor?
   heart sounds normal?
   percuss: normal resonance?

    auscultate: bowel sounds (normal, abnormal, absent)
    palpate: distension, guarding, local tenderness, rebound.

10. Lumbar spine: palpate: pain, tenderness, deformity.

11. Pelvis: inspect: bruising, injury
    palpate: compression tenderness.

12. All Extremities:
    inspect and palpate grossly, bilaterally: injury, deformity, swelling
    inspect and palpate for circulation: pulse, capillary refill, temp.
    inspect for innervation: sensation, active movement, strength, reflexes.

PHYSICAL EXAM - MEDICAL

General note: if a patient can convincingly deny any medical problems, you may skip all or part of this exam. Usually, this medical exam concentrates only on those particular systems of interest; in other words, a complete exam as described here is seldom performed.

☐ 1. Age, sex and general appearance.
☐ 2. Head- inspect: color of skin, conjunctiva, sclera; tissue turgor.
☐ 3. Mouth- inspect: smell, tissue turgor and color of tongue.
☐ 4. Neck- inspect: jugular vein distension
      palpate: trachea position
      auscultate: trachea sounds.
☐ 5. Thorax (lungs)- inspect: quality of respiration
      auscultate: rales, rhonchi, wheezes, stridor, pleural rubs
      percuss: blood or air in pleura
☐ 6. Thorax (heart)- auscultate: PMI in normal place? sounds distant?
      S3 present?
☐ 7. Abdomen- inspect: hip flexion, contour, distension
      auscultate: bowel sounds
      palpate: distension, guarding, local tenderness or mass,
      rebound tenderness.
☐ 8. Limbs- bites? injection marks? normal innervation and control?
      reflexes if unconscious.
☐ 9. CNS- LOC
      PERL
      eye movements
      cranial nerves
      affect
      muscle tone and reflexes
      motor or sensory paralysis.
VITAL SIGNS PRACTICE

CHECKLIST

1. Take full vital signs, and report them to an assistant who will record them. Do so three times if time allows.
   - LOC (use GCS)
   - P (rate, rhythm, quality)
   - R (rate, quality)
   - BP (auscultated; systolic & diastolic)
     (color and temperature
     (PERL)

2. Palpate the following pulses on two people:
   - Carotid
   - Facial
   - Temporal
   - Subclavian
   - Brachial
   - Radial
   - Femoral
   - Popliteal
   - Dorsalis Pedis
   - Tibialis Posterior

3. On at least two people, perform palpated BPs in the following areas:
   - Arm (Brachial A.)
   - Calf (Dorsalis Pedis or Post. Tibial A.)
   - Thigh (Popliteal A.)

4. If you're bored by all this, try testing some of the cranial nerves:
   - I Olfactory: Smell, each nostril
   - II Optic: Vision, both visual fields, both eyes
   - III Oculomotor: Eye mvt. inward (nasally)
   - IV Trochlear: Eye mvt. down and laterally
   - V Trigeminal:
     Motor: Clench jaw
     V1 Forehead sensation
     V2 Cheek sensation (except angle of jaw)
     V3 Jaw sensation
1. Explain procedure to patient if appropriate.

2. Place BP cuff around upper arm with center of inflation bag over brachial artery, OR RADIAL PULSE AT WRIST.

3. Palpate brachial pulse at antecubital fossa (with fingers, not thumb).

4. *Count pulse over 15 seconds; \( x^4 \) = pulse rate. Note: regular or irregular, full or thready.

5. Continue to keep fingers on pulse; count respirations over 15 seconds, \( x^4 \) = respiratory rate. (Count over a full minute if irregular or slow) Don't let patient know you are counting respirations. Note: quality and regularity. Note patterns.

6. Place stethoscope in ears with earpieces pointing forwards; place diaphragm over pulse location. Best to hold with thumb over stethoscope head and fingers on far side of arm, or vice versa.

7. Close thumb wheel and pump cuff to 200 mm Hg. Crack open thumbwheel and let the pressure drop (about 10 mm Hg/sec.) For adults: note pressure when solid sounds are first heard (systolic) and when sounds disappear (diastolic). For children: note pressure when sounds first appear (systolic) and when sounds suddenly become softer (diastolic). Don't keep cuff inflated for long periods. As soon as diastolic pressure is noted, open thumbwheel fully.

8. If no BP can be auscultated by the above method, obtain a systolic estimate as follows: Palpate the pulse at the wrist (radial or ulnar artery) or at the elbow (brachial artery in antecubital fossa). Inflate cuff to 200 or 20 above when pulse disappears, then slowly deflate cuff until pulse reappears. Note the pressure then open thumbwheel fully.

9. Touch face or neck with back of hand to estimate temperature.

(10) Pull down lower eyelids to check color, check pupil equality and response to light.

(11) Check alertness, orientation to time, person and place, and level of distress; obtain estimate of level of consciousness.

GLASGOW COMA SCALE

<table>
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<th>Best</th>
<th>Motor</th>
<th>Response</th>
<th>Verbal</th>
<th>Eye</th>
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<tbody>
<tr>
<td>Obey spoken command</td>
<td>Localises</td>
<td>Withdraws</td>
<td>Oriented x3</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>M6</td>
<td>5</td>
<td>4</td>
<td>V5</td>
<td>E4</td>
</tr>
<tr>
<td>Motor Localises</td>
<td>Extensor response</td>
<td>None</td>
<td>Confused conversation</td>
<td>To speech</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Response</th>
<th>Inappropriate words</th>
<th>Incomprehensible sounds</th>
<th>To pain</th>
<th>None</th>
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<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

| None | |
|------|
HYPERTERMIA QUIZ

1. The term "hypothermia weather", referring to weather presenting a great risk of hypothermia to those in the outdoors, means:

2. What two important cautions must be kept in mind when transporting and handling hypothermic patients? Why?

3. When a hypothermic person is rewarmed in a tub of warm water, several complications may develop. Name two of these which are related to the cardiovascular system.

4. What are three good places to put hot packs on a hypothermic patient?

5. You are snowed in at a ski lodge. Someone is brought in who has broken through the ice on the pond and been in the water for somewhat less than a minute. His muscles are rigid and he is incoherent (GCS=13). You are in charge. What do you do?

6. You are on a search in the Blue Ridge for a lost hiker. Your team finds him in a ravine where he has been overnight after a fall. He has a broken left wrist and ankle, and possibly some broken ribs; his pulse is 42 and faint, respirations 8 and shallow, BP is 100 systolic by palpation (you can't hear it with the stethoscope). He is communicative but disoriented, and his limbs are cold and somewhat stiff; his pupils are slightly dilated and slowly reactive. You have with the team a pad and sleeping bag, a stove and food, some hot packs, and within an hour you can get a Stokes, IV fluids, and a warm O2 generator to the scene. What is your treatment now? What is your treatment when the equipment arrives? (The evac team has advanced EMIs with radio communication, but the physician on the other end trusts your judgement, especially if the radios don't work, as they probably won't, and he'll cover whatever you do.) What do you do special during the evac?