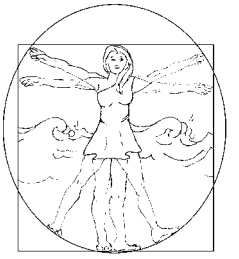


*the Wilderness Medicine Training Center Inc*

[www.WildMedCenter.com](http://www.WildMedCenter.com)



## WMTC Renewal Packet

Use this Renewal Packet when applying for recertification after taking a 3-day WMTC Wilderness First Aid workshop (WFA). To receive a new certification you MUST:

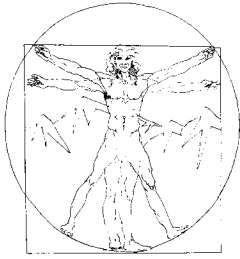
- 1) Successfully complete a WMTC 3-day WFA before your current certification expires.
- 2) Complete and return the entire packet within two months (60 days) of your course end.
- 3) Score 80% or higher on each exam. If you fail one or both sections of the exam, you may retake the failed portion; however, you must score 90% or higher on your second attempt to receive certification. An additional \$10 processing fee is charged for each section of the exam you retake; the fee must accompany your exam. If you fail the exam twice you will need to retake the entire course. You must answer the exam questions according to WMTC protocols. Note that a protocols from other wilderness medicine providers (e.g.: spine injury and epinephrine use) and language (e.g.: head injury, concussion, increased ICP) may differ slightly from ours.

After you have completed all the requirements for recertification, mail the entire packet to:

WMTC Recertification  
P.O. Box 11  
Winthrop, WA  
98862

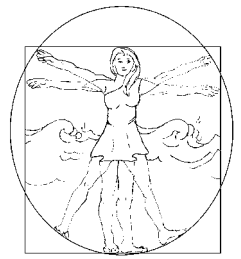
Renewal Packets that are submitted incomplete will delay the process. Make sure you have included all the required materials before mailing. We will send you the results of your exam via e-mail. Assuming your Renewal Packet is complete and you pass both exams, you should receive your new certification card within six weeks.

Please e-mail [office@WildMedCenter.com](mailto:office@WildMedCenter.com) with any questions or problems.



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## WMTC Renewal Application

Name \_\_\_\_\_ Home Phone \_\_\_\_\_

Address \_\_\_\_\_ Work Phone \_\_\_\_\_

\_\_\_\_\_ E-mail \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip code \_\_\_\_\_

Current level of certification (circle one):    WEMT    WFR    WAFA

Course Dates \_\_\_\_\_ Location \_\_\_\_\_

Lead Instructor's Name (print clearly) \_\_\_\_\_

### Renewal Packet Checklist

- \_\_\_ Completed Application Form
- \_\_\_ Copy of your original/current certification and WMTC 3-day WFA certification card
- \_\_\_ Check for \$25 US (first attempt)
- \_\_\_ Check for \$10 US (failed one exam) or \$20 US (failed both exams)
- \_\_\_ Completed Renewal Exam Part I
- \_\_\_ Completed Renewal Exam Part II (Case Study Exam)

### WMTC OFFICE USE ONLY

Part I Score

Part II Score

Pass / Fail

Date

# Renewal Exam Directions

## Part I

Circle corresponding letter next to all the correct answers directly on the test. There will be at least one correct answer for each question. All the answers are correct for some of the questions. You will lose one point for incorrect answers and ten points for questions that are not answered. Answer all the questions.

If you don't understand the question or think the question is unfair, answer it anyway and write your concerns on a separate sheet of paper in essay form. Remember to number the question.

## Part II

Use the SOAP answer sheets provided:

The Possible Problem List heading is for your reference only. Draw a line through all the problems that can be ruled out based on a lack of mechanism as described in the story. If a mechanism of injury is NOT discussed in the story it is not relevant. For example: If environmental conditions are not discussed you can assume that any problems related to that MOI are not relevant. Under the Time heading write the time indicated in the story. Under the Problem List heading write all the problems that the patient is experiencing at the time you have indicated. Under the Anticipated Problem List heading write all the anticipated problems that might develop and are not under your control. For example: If you can clean the patient's wounds assume that they will not become infected and do not put "infection" under anticipated problems. You cannot prevent a concussion from developing into increased ICP; therefore, if concussion appears on your Problem List increased, ICP should appear on your Anticipated Problem List.

Under the Treatment & Evacuation Plan heading write all your field treatments, what and how you will monitor your patient, and note if the patient needs an evacuation. If an evacuation is required, note its type and level according to the following scale:

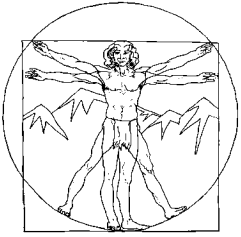
Type: self, assisted, simple carry, litter carry, or other (specify)

Level 1: immediately life threatening; patient will likely die without hospital intervention (e.g.: increased ICP, volume shock, severe respiratory distress, advanced disease, near drowning with respiratory distress, moderate to severe hypothermia, HAPE/HACE etc.)

Level 2: potentially life threatening; the patient may develop a life threatening problem that requires hospital intervention (e.g.: concussion getting worse, mild respiratory distress, local infection, spine & cord injuries, near drowning with no respiratory distress etc.)

Level 3: non-life threatening; able to treat in the field but patient is unable to continue/resume normal activity within a reasonable length of time. (e.g.: concussion getting better, uncomplicated unstable injuries, shoulder dislocation, etc.)

Level 4: non-life threatening; able to treat in the field and patient is able to resume normal activity within a reasonable length of time and continue with the trip without putting themselves or their party at risk. (e.g.: minor wounds, stable injuries, etc.)



Name: \_\_\_\_\_ Score: \_\_\_\_\_

## *the Wilderness Medicine Training Center Renewal Exam Part I*

*Circle the correct answer(s); many questions have multiple answers.*

1. *You are top-roping an ice climb a half mile from the highway with some friends when you take a short fall. During the fall your left crampon catches and you twist your ankle. Although it's slightly swollen and hurts quite a lot, you can still move it and the distal CSM is intact. You can even stand on it okay but when you try to walk on the uneven ground it hurts. The following is true:*
- you have a stable ankle injury; consider waiting till your friends are through, splint the ankle, and have them assist you to the car*
  - you have an unstable ankle injury; have your friends carry you to the car immediately and take you to the nearest hospital or clinic*
  - going to the hospital or clinic is not necessary; you should take OTC pain and anti-inflammatory medications, rest, ice, and elevate your ankle until the swelling goes down*
  - going to the hospital or clinic is not necessary; you should take OTC pain and anti-inflammatory medications and then use the foot normally*
2. *Your friend has been stung on his right ankle by a wasp. Although he has been stung by a wasp before, he has never had an allergic reaction. Within ten minutes his entire ankle is swollen. Your assessment is:*
- he is having a local allergic reaction*
  - he is experiencing a systemic toxic reaction*
  - he has a systemic allergic reaction (anaphylaxis)*
  - he is having a local toxic reaction from the bee venom*

*You should:*

- give a .3 cc injection of epinephrine immediately in his thigh or deltoid followed by an antihistamine*
  - use a Sawyer Extractor on the bite to remove the toxin*
  - evacuate him immediately*
  - give him an oral antihistamine*
3. *One of your students has been hit in the head by a falling rock. He is awake and alert, has a cut on his forehead, a mild headache, and feels slightly dizzy and nauseous. He can remember what happened. He has:*
- early increased ICP*
  - a head wound*
  - a concussion*
  - a possible unstable spine*
  - sympathetic (fight or flight) ASR*
  - parasympathetic (rest or digest) ASR*
4. *A person experiencing sympathetic (fight or flight) ASR:*
- will faint*
  - may be unaware of their injuries*
  - have an increased pulse and respirations similar to volume shock*
  - may be anxious*
  - will have flushed skin*

5. *The following distinctions between toxic reactions and allergic reactions are correct:*
- toxic reactions have more swelling associated with them
  - all allergic reactions can effect the whole body
  - acute allergic reactions are caused by "abnormal" (IgE) antibodies
  - all toxic reactions destroy tissue
  - antidotes or antivenin is specific to the toxin
  - treatment for allergic reactions depends on the type of reaction (local or systemic), NOT the mechanism (sting, bite, food, skin contact, etc.)
6. *You should immediately stabilize a person's spine when the MOI is*
- medical
  - environmental
  - minor trauma
  - unknown
  - major trauma
7. *While hiking off trail through thick underbrush one of your students falls and a twig goes into their ear. They experience a mild pain and there is a small amount of blood in their ear canal. You should:*
- thoroughly flush their ear with clean water and then cover it with a clean dressing
  - cover the ear with a clean dressing and consider an evacuation. If a middle ear infection develops begin oral antibiotic therapy immediately
  - apply a few drops of antibiotic solution and cover the ear
  - cover the ear and begin a full course of oral antibiotics
8. *In most cases clinically significant swelling due to the inflammatory response reaches its peak within:*
- 6 hours
  - 48 hours
  - 18 hours
  - 24 hours
9. *You have just finished a long winter climb and are descending a snow filled gully to your basecamp. You are the only climbers in the area and your camp is six miles from the road. In places the snow is deep with a breakable crust. As you watch, your climbing partner takes a step and suddenly plunges her right leg deep into the snow. The weight of her pack combined with the steepness of the slope cause her to fall forward over the trapped leg. She screams and you both hear a popping sound. As you free her leg you can see that her lower leg below the knee is obviously deformed. There is no bleeding and she has distal CSM. A front has been moving in throughout the afternoon and a storm seems imminent. You should:*
- prevent her from getting cold
  - immediately go for help
  - traction her leg into normal anatomical position and improvise an effective splint. Then assist her to camp, and consider waiting till morning to go for help
  - move camp into the gully and then go for help
  - put her in a hypothermia package, improvise a backboard, and begin an immediate evacuation
10. *When checking for a pulse in an unresponsive adult to determine if you should start CPR, you should take the pulse at:*
- the femoral artery located in the groin
  - the radial artery located in the arm
  - the carotid artery located in the neck
  - the brachial artery located in the arm

11. A person who has taken a severe blow to the right side of their chest is alert and anxious with some difficulty breathing. Their right lateral chest wall is tender with some crepitus. They are complaining of pain in their right side and back; their upper right abdominal quadrant is tender. Their pulse and respirations have increased significantly during the past 45 minutes. Your problem list should include:

- a. early increased ICP
- b. concussion
- c. volume shock
- d. respiratory distress
- e. possible broken ribs
- f. possible unstable spine

12. A wound is considered at high risk for developing an infection if it is:

- a. deep and involving underlying structures
- b. dirty with ragged edges
- c. a puncture wound
- d. a clean shallow laceration
- e. animal bite

13. To clean a high-risk wound you should:

- a. high pressure flush the wound with lots of clean (drinkable) water
- b. use only sterile water
- c. flush with a 100% PI (povidone iodine) solution
- d. pick out any foreign debris
- e. remove dead surface tissue
- f. scrub the wound thoroughly with a brush until it begins to bleed freely

14. A female student who has been bitten by a red ant on the top of her right foot initially complains of pain in her groin. She has no history of allergic reactions to red ants. Within a few minutes both her feet are flushed and hives are appearing on her stomach and flanks. She is experiencing:

- a. a local allergic reaction
- b. a toxic reaction
- c. a systemic allergic reaction (anaphylaxis)

You should:

- d. give a .3 cc injection of epinephrine immediately
- e. give an oral antihistamine
- f. evacuate her immediately
- g. use a Sawyer Extractor immediately to remove the toxin
- h. wait to see if she develops respiratory distress before administering epinephrine

15. Circle all true statements about stable and unstable musculoskeletal injuries.

- a. unstable injuries typically have more swelling associated with them
- b. stable injuries never need to be splinted
- c. persons with stable injuries are able to use the injured limb
- d. ROM (range of motion) is intact in most unstable injuries
- e. decreased CSM (circulation, sensation, movement) indicates an unstable injury
- f. if the patient hears/feels a pop, snap, or other "noise" the injury is usually unstable
- g. deformity indicates an unstable injury

16. Unstable joint injuries should be tractioned into mid-range anatomical position:

- a. when the patient requests it
- b. when the joint is severely displaced and it is necessary for safe transport
- c. when the patient's distal CSM is impaired
- d. if the pain gets worse with traction

17. *Your patient is voice responsive from a severe blow to their head. Your problem list should include:*
- a. a concussion
  - b. early volume shock
  - c. increased ICP
  - d. parasympathetic ASR (rest or digest)
  - e. possible unstable spine
18. *A person with early volume shock:*
- a. should be handled very gently because the bleeding may be contained in an organ stuff sack that may rupture with rough handling
  - b. should be moved very quickly to a major hospital capable of surgery
  - c. should be transported with ALS if possible
  - d. is in danger of developing increased ICP over the next 24 hours due to blood loss
19. *In a severe heat challenge any person who exhibits mental status changes should:*
- a. have their temperature taken and then cooled if necessary
  - b. be cooled immediately and then fully evaluated
  - c. be encouraged to rapidly drink lots of water
  - d. be prevented from eating salty foods
20. *Its late February. You are on the second day of a weeklong canoeing trip in the Everglades. The day has been unusually hot, humid, and long. The air temperature is 92oF. The water is also hot and tastes terrible. One member of your party has been complaining of the heat since he flew in from Colorado yesterday. Finally he stops paddling and puts his head between his knees saying he feels hot, sweating, and very dizzy. You should:*
- a. do nothing until you take a core temperature
  - b. begin cooling him immediately by getting him out of the sun and fanning him vigorously; get a core temperature later
  - c. have him drink lots of water
  - d. give him sips of an electrolyte solution
21. *For most people 80% of heat acclimatization takes place during the first 4-5 days with 100% acclimatization occurring within 2-3 weeks. Circle all the physiologic changes that take place with full heat acclimatization:*
- a. sweating increases and starts at a lower core temperature thus enhancing the body's cooling process
  - b. metabolic efficiency increases and more usable energy is produced with less heat
  - c. daily caloric demands increase
  - d. daily water requirements decrease
  - e. electrolyte loss (sodium and potassium) is minimized
22. *Critically important criteria for assessing a patient's current water balance is:*
- a. the amount of water consumed during the previous 24 hours
  - b. their level of activity during the past 24 hours
  - c. their blood pressure
  - d. their urine color and output
  - e. the rate and quality of their respirations
  - f. their skin color and temperature
23. *A full-body sunburn predisposes people to:*
- a. dehydration
  - b. increased ICP
  - c. electrolyte sickness
  - d. Acute Mountain Sickness
  - e. hypothermia

24. *The primary criteria for distinguishing between superficial tissue freezing (frostnip) and full thickness tissue freezing (frostbite) in a field setting before re-warming is:*
- tissue is numb or has no feeling and movement
  - in frostbite ice crystals can be seen within the skin layers
  - the frozen tissue is either hard if frostbite or pliable if frostnip
  - blisters are present in frostbite
  - the skin is bruised in frostnip
25. *Your patient is high voice responsive with no signs of trauma. She is shivering with frostbite on her feet, hands, nose and ears. You do not have a thermometer. Your problem list should include:*
- mild hypothermia (core temperature is above 90° F)
  - moderate/severe hypothermia (core temperature may be below 90° F)
  - normal cold response (core temperature is above 96° F)
  - volume shock
  - increased ICP
26. *The heart of a hypothermic patient whose core temperature is below 90° F is extremely irritable and predisposed to ventricular fibrillation (cardiac arrest). During treatment, you should:*
- handle them very gently
  - submerge them in warm (102° F) water
  - avoid chest compressions
  - begin mild exercise ASAP
  - assist their breathing if needed
  - add heat slowly to their core by warming the layers of their packaging
27. *You are canyoneering in a remote canyon in the desert southwest when a Mojave rattlesnake bites one of your friends. She is extremely pale and scared. Her pulse and respirations are high. The snake is gone. There are two small fang marks above her left ankle. After twenty minutes her mental status is normal and she says her ankle hurts a little; there is no swelling or bruising at the site. She has:*
- a systemic toxic reaction from the snakebite
  - a local toxic reaction from the snakebite
  - a systemic allergic reaction from the snakebite
  - a local allergic reaction from the snakebite
  - not been envenomated
- You should:*
- splint and elevate her left leg and begin an immediate evacuation
  - take a few deep breaths, relax, heighten your awareness, and continue your trip
  - administer .3 cc of epinephrine by injection into her thigh or deltoid
  - apply a constriction band above the fang marks and begin an immediate evacuation
  - give an oral antihistamine
28. *An internal burning pain with urination in a female usually indicates:*
- dehydration
  - clearing of a toxin
  - ectopic (tubal) pregnancy
  - a urinary tract infection (UTI) or urinary tract condition (UTC)
  - a vaginal infection

29. *You have a client who is pale, short of breath, sweating, and experiencing a crushing chest pain. Although he has a history of angina and carries his nitroglycerin tablets with him, he has not had an angina attack in three years. You are two miles from the trail-head and your vehicles. It is a half hour further by driving to a hospital. You should:*
- administer nitroglycerin tablets according to his prescription
  - stop hiking and begin an immediate evacuation (limit exercise and carry him if possible).
  - if he does not respond to his medication send a runner to notify ALS; request that they meet you at the trail head.
  - if the pain stops continue with the trip
  - improvise a backboard and evacuate him
30. *You have successfully rescued and resuscitated a drowning victim. Trauma is NOT a MOI. She currently has a normal pulse and respirations. She is pain responsive. Your primary anticipated problem is:*
- volume shock
  - respiratory distress
  - increased ICP
  - concussion
31. *Respiratory distress due to chest trauma may be caused by:*
- swelling of the lower airway
  - constriction of the lower airway
  - delamination of the pleura and subsequent "collapse" of the injured lung
  - fluid in the alveoli (air sacs)
  - bruised lung tissue
32. *It's 112° F on a clear sunny day in the desert southwest. You meet a female hiker in the canyon you are hiking in. She complains of being extremely hot. She is pale with a core temperature of 103° F, has a headache, and is slightly nauseous. She last urinated five hours ago and said it was very dark and concentrated. Her major problem is:*
- heat stroke
  - electrolyte sickness
  - heat exhaustion
  - a flu
33. *Seizures are commonly caused by:*
- severe heat stroke
  - volume shock
  - increased ICP
  - severe hypoglycemia in an insulin dependant diabetic
  - severe hypothermia
  - neurotoxins
  - local allergic reactions
  - systemic allergic reactions
  - local proteolytic toxins
34. *Circle the signs and symptoms that indicates an abdominal problem serious enough to require immediate evacuation:*
- generalized abdominal pain with nausea and vomiting that resolves within 12 hours
  - abdominal pain & tenderness associated with a fever without nausea, vomiting, or diarrhea
  - abdominal pain associated with a black tarry stool
  - abdominal pain associated with a "coffee grounds" like vomitus
  - abdominal pain associated with a blow to the stomach; normal pulse and respirations
  - generalized abdominal pain that becomes specific
  - persistent abdominal pain associated with cramps and abnormal vaginal bleeding
  - heart burn associated with a big meal.

35. *The effectiveness of an inhaler in the treatment of an asthma attack is increased when:*
- you remove the irritant or trigger
  - a spacer is used correctly
  - the patient lies down
  - you reassure the patient and encourage them to take deeper slower breaths
36. *Severe asthma attacks accompanied by a decrease in the patient's level of consciousness and not relieved by the maximum prescribed dose of patient's inhaler may be treated with:*
- an oral antihistamine
  - .3 cc of epinephrine given by IM injection in the thigh or deltoid and repeated as necessary for a maximum of three doses
  - two aspirin
  - two tablets of nitroglycerin placed under the patient's tongue
37. *Circle all that apply when moving and packaging a spine-injured patient:*
- if the spine injury can be localized in the patient's lower lumbar spine you do not have to immobilize the patient's neck
  - you should secure the patient's head and neck to the backboard before their body
  - a cervical collar is considered a splint and replaces a "head sandwich"
  - move the patient as little as possible to get the job done
  - carefully move the patient's weight center(s) into alignment while supporting the others
  - use large rapid movements
  - horizontal loading is preferable to axial loading
38. *Stable musculoskeletal injuries should be treated in the field in the following manner:*
- local rest or splint
  - pain and anti-inflammatory medications
  - ice: 20-30 minutes on followed by 90 minutes off to permit reperfusion
  - elevate above the heart
  - after 24 hours the limb may be used normally
  - an elastic wrap may be used to reduce inflammation if it is applied distal to and continues past the injury site
39. *A friend is thrown from his mountain bike after missing a sharp turn and crashing into a log. He is pain responsive and bleeding from a head laceration. You can hear crepitus in his left ribs and his left forearm is bent at an unusual angle. His breathing is 18 and easy and his pulse is 84 and regular. His problem list should include:*
- concussion
  - increased ICP
  - volume shock
  - respiratory distress
  - possible spine injury
  - unstable left forearm
  - stable left forearm
  - head laceration
  - broken ribs
40. *In the absence of new stress, a steadily increasing pulse in a major trauma patient indicates:*
- increased ICP
  - internal bleeding (volume shock)
  - sympathetic ASR (fight or flight)
  - parasympathetic ASR (rest or digest)
  - anxiety

41. *One of your students has been stung by a ground bee on his right wrist. He has no history of allergic reactions to ground bees. Within a half hour his entire right arm is swollen. You should:*
- monitor his respirations and wait until he develops respiratory distress before administering epinephrine
  - apply heat and elevate his right arm
  - administer an oral antihistamine
  - immediately give .3 cc shot of epinephrine and evacuate him immediately
42. *Circle all statements that are true regarding the spine ruling out process designed by Dr. Peter Goth, endorsed by the National Association of EMS Physicians (NAEMSP), and taught by WMTTC:*
- the motor and sensory exams must be done in the same manner on each extremity
  - if a local injury limits movement in a patient's hand or foot the exam may be considered normal if the patient is able to successfully perform one normal motor test with the injured limb
  - the sensation for pain is carried in different spinal tracts than the sensation for light touch
  - if a patient reports weakness, numbness, tingling, electric, or shooting pains the sensory exam is considered abnormal
  - in the presence of a localized foot or ankle injury, the patient's big toe may be used for the motor exam
  - it is unusual to have an abnormal sensory exam without an abnormal motor exam
  - when examining a patient's spine, pain or tenderness at a specific site indicates potential instability at that site
43. *Unstable musculoskeletal injuries should be treated in the field in the following manner:*
- with unstable long bones, align the limb by tractioning it into anatomical position unless the patient's pain is increased or physical resistance is encountered
  - joints may be aligned by moving them into mid-range anatomical position if the distal CSM is compromised or the joint severely angulated
  - apply a strong, lightweight, and multidimensional splint
  - all dislocations should be reduced in the field and splinted
  - pain and anti-inflammatory medications may be given
  - the injured area should be well supported during the splinting process
  - once the splint is in place the distal CSM should be continually monitored
  - once splinted, the limb may be used normally
  - wounds associated with an unstable injury are considered at high risk for infection, should be cleaned within two hours, and the patient evacuated ASAP
44. *When administering antibiotics within the United States you should:*
- finish the entire course
  - stop when the patient feels better
  - have written permission from a licensed physician
  - use them prophylactically on a regular basis to prevent diseases from becoming established
  - double the dose after four days if they are not working
45. *People unacclimatized to a heat challenge are predisposed to:*
- electrolyte sickness
  - dehydration
  - heat exhaustion
  - heat stroke
  - sun burn

## *Case Study Patient 1*

*Name* \_\_\_\_\_

A 28 year old male was thrown from his mountain bike when his bike's front tire slammed into a rock as he was speeding down a long single track hill. He was found unresponsive on his right side against a tree 15 feet downhill from his bike. The day is clear with a light breeze from the south. The temperature is 62° F. After a few minutes he is able to answer your questions. He doesn't remember the crash and is complaining of a headache and nausea. He is bleeding from a two inch laceration above his left temple. His right shoulder is painful and tender with good ROM and good CSM. His right wrist is also painful and tender with good CSM but he is unable to move it. He has a history of local reactions to ground bees, is taking no medications, and has no significant medical history. He has been drinking water all day but noticed his urine was darker than usual the last time he peed. He is currently awake and alert and reports a stiff neck with tenderness at C-7. The motor and sensory exams in his feet are normal; however, there is a noticeable weakness in the motor exam on his right hand and he reports a mild tingling pain shooting down his right arm from his neck.

### *Vital Signs at 16:10*

P: 88 R

R: 20 E

BP: Not Taken

S: slightly flushed, moist, and warm

T: Not Taken

AVPU: Awake and Cooperative

Twenty minutes later he reports that his headache is getting worse and that he is very tired and becoming cold.

### *Vital Signs at 16:30*

P: 62 R

R: 14 E

BP: Not Taken

S: normal

T: Not Taken

AVPU: Awake and Lethargic

What is your problem list, your anticipated problem list, and your treatment plan at 16:10 *and* 16:30? What level of evacuation is required?

# SOAP for Case Study Patient 1

Name \_\_\_\_\_

Assessment = What you think is wrong

Plan = What you are going to do

POSSIBLE P X	TIME	CURRENT P X	ANTICIPATED P X	FIELD TREATMENT	MONITOR
<b>TRAUMA</b> ICP / Concussion Respiratory Distress Volume Shock Unstable Spine Trunk Injury Unstable Extremity Injury Stable Extremity Injury Wounds					
<b>ENVIRONMENTAL</b> 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					
<b>MEDICAL S/SX</b> Circulatory Respiratory Nervous Endocrine Digestive Genitourinary Musculoskeletal Skin / Soft Tissue Ears / Eyes / Nose / Throat Teeth / Gums				EVACUATION Level 1 2 3 4 Request ALS: Yes / No	

Rule out Possible P  
X first by MOI and then by S/Sx. Draw a line through each Possible P  
X as you rule it out. Circle all the remaining problems and transfer them to your Current P  
X list. The S/Sx of each Current P  
X should be completely documented in the Subjective and Objective sections of your patient's SOAP Note. List any Anticipated P  
X that you cannot successfully treat or prevent in your Anticipated P  
X list. List any Anticipated P  
X and their primary S/Sx under Monitor. Write a detailed treatment plan under Field Treatment. Write your evacuation plan including how you plan to transport your pt under Evacuation.

## *Case Study Patient 2*

*Name* \_\_\_\_\_

A 40 year old male was caught in a strainer after being swept from his feet during a river crossing in strong current. He is recovered unconscious with no pulse and no respirations within five minutes. After a minute of CPR both his pulse and respirations return and he vomits. He is still unresponsive. The day is cool (60° F) with a light wind and cloudy. A storm is imminent. There is snow on the ground and the water temperature is 40° F. After a ten minutes he wakes up and is able to answer your questions. He doesn't remember being swept away and is complaining of a headache and nausea. He is shivering and says that he is very cold. He is bleeding from a two inch laceration behind his right ear. The ribs on his left side are tender and beginning to bruise. He has a history of hay fever, is taking no medications, and has no significant medical history. He does not remember the last time he drank or urinated. He is currently awake and alert with a stiff neck. He has no spine tenderness; the motor and sensory exams in his hands and feet are normal.

### *Vital Signs at 12:50*

P: 82 R

R: 18 E

BP: Not Taken

S: pale, cool, moist

T: Not Taken

AVPU: Awake and Cooperative

Twenty minutes later he reports that his headache is getting better and that he is warm and very tired. He says his neck feels better and is no longer stiff.

### *Vital Signs at 13:20*

P: 62 R

R: 14 E

BP: Not Taken

S: normal

T: Not Taken

AVPU: Awake and Tired

What is your problem list, your anticipated problem list, and your treatment plan at 12:50 and 13:20? What level of evacuation is required?

# SOAP for Case Study Patient 2

Name \_\_\_\_\_

Assessment = What you think is wrong

Plan = What you are going to do

POSSIBLE PX	TIME	CURRENT PX	ANTICIPATED PX	FIELD TREATMENT	MONITOR
<b>TRAUMA</b> ICP / Concussion Respiratory Distress Volume Shock Unstable Spine Trunk Injury Unstable Extremity Injury Stable Extremity Injury Wounds					
<b>ENVIRONMENTAL</b> 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					
<b>MEDICAL S/SX</b> Circulatory Respiratory Nervous Endocrine Digestive Genitourinary Musculoskeletal Skin / Soft Tissue Ears / Eyes / Nose / Throat Teeth / Gums					
EVACUATION Level 1 2 3 4 Request ALS: Yes / No					

Rule out Possible Px first by MOI and then by S/Sx. Draw a line through each Possible Px as you rule it out. Circle all the remaining problems and transfer them to your Current Px list. The S/Sx of each Current Px should be completely documented in the Subjective and Objective sections of your patient's SOAP Note. List any Anticipated Px that you cannot successfully treat or prevent in your Anticipated Px list. List any Anticipated Px and their primary S/Sx under Monitor. Write a detailed treatment plan under Field Treatment. Write your evacuation plan including how you plan to transport your pt under Evacuation.

## *Case Study Patient 3*

*Name* \_\_\_\_\_

A 34 year old female was stung multiple times on her right arm, shoulder, and neck while leading a thin 5.12 finger crack. She let go with her left hand and fell 12 feet before being caught by her protection. Her belayer immediately lowered her to the ground. She has numerous scrapes on her arms and legs from passing contact with the rock. You witnessed her fall; she did not hit anything hard and was awake the entire time. She initially complains of severe pain in the fingers of her right hand, nausea, and dizziness. The first two fingers of her right hand are already swollen, blue, and deformed. She reports no history of allergies, is taking birth control pills, and has no significant medical history. She drank one half liter of water during the approach about three hours ago and hasn't urinated since early morning. She doesn't remember the color of her urine. Minutes later small hives appear on her flanks and she begins to scratch. Her skin is slightly flushed and her abrasions are slightly tender and painful. Her fingers are now throbbing. She is currently awake and alert with no spine pain or tenderness; her motor and sensory exams are normal.

### *Vital Signs at 15:32:*

P: 92 R

R: 22 E

BP: Not Taken

S: slightly flushed, warm, and moist

T: Not Taken

AVPU: Awake and Cooperative

At 15:32 what is your problem list, your anticipated problem list, and your treatment plan? What level of evacuation is required?

# SOAP for Case Study Patient 3

Name \_\_\_\_\_

Assessment = What you think is wrong

Plan = What you are going to do

POSSIBLE Px	TIME	CURRENT Px	ANTICIPATED Px	FIELD TREATMENT	MONITOR
<b>TRAUMA</b> ICP / Concussion Respiratory Distress Volume Shock Unstable Spine Trunk Injury Unstable Extremity Injury Stable Extremity Injury Wounds					
<b>ENVIRONMENTAL</b> 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					
<b>MEDICAL S/Sx</b> Circulatory Respiratory Nervous Endocrine Digestive Genitourinary Musculoskeletal Skin / Soft Tissue Ears / Eyes / Nose / Throat Teeth / Gums				EVACUATION Level 1 2 3 4 Request ALS: Yes / No	

Rule out Possible Px first by MOI and then by S/Sx. Draw a line through each Possible Px as you rule it out. Circle all the remaining problems and transfer them to your Current Px list. The S/Sx of each Current Px should be completely documented in the Subjective and Objective sections of your patient's SOAP Note. List any Anticipated Px that you cannot successfully treat or prevent in your Anticipated Px list. List any Anticipated Px and their primary S/Sx under Monitor. Write a detailed treatment plan under Field Treatment. Write your evacuation plan including how you plan to transport your pt under Evacuation.

## Case Study Patient 4

Name \_\_\_\_\_

On a late winter ski expedition in the northern Rockies a 22 year old male is caught in a soft snow avalanche and carried 300 feet before being deposited completely buried against a large tree. The approximate time he was under the snow before recovery was six minutes. He is recovered with no pulse and no respirations. After about a minute of CPR his pulse returns. His respirations also return shortly thereafter; however, he continues to remain unresponsive. After an additional ten minutes, he is able to answer your questions. He doesn't remember the avalanche and is complaining of a headache, nausea, and the cold. He is bleeding from a two inch laceration above his left temple. His right shoulder is painful and tender with poor range of motion and his right wrist is painful and tender with good range of motion. He has good circulation, sensation, and motor function in his right hand. His childhood history reveals a severe systemic allergy to penicillin. He is taking no medications and has no additional significant medical history. He has been drinking throughout the day but noticed his urine was darker than usual the last time he peed. He is currently awake and alert and reports a stiff lower back with tenderness at L-4 and L-5. The motor and sensory exams in his hands are normal; however, there is a noticeable weakness in the motor exam at his left ankle and he reports a mild electric-like pain shooting down his left leg; the pain originates in his lower lumbar area.

### *Vital Signs at 11:15*

P: 88 R

R: 20 E

BP: Not Taken

S: slightly pale, cool, and moist

T: 97.5° F

AVPU: Awake and Cooperative

Twenty minutes later he reports that his headache is getting worse and that he is very tired and becoming colder; he is beginning to shiver. He vomits at 11:35 and again at noon. He is noticeably shivering.

### *Vital Signs at 12:00 noon*

P: 62 R

R: 14 E

BP: Not Taken

S: pale, cold, and damp

T: 96.2° F

AVPU: Awake and Lethargic

What is your problem list, your anticipated problem list, and your treatment plan 11:15 and 12:00? What level of evacuation is required?

# SOAP for Case Study Patient 4

Name \_\_\_\_\_

Assessment = What you think is wrong

Plan = What you are going to do

POSSIBLE PX	TIME	CURRENT PX	ANTICIPATED PX	FIELD TREATMENT	MONITOR
<b>TRAUMA</b> ICP / Concussion Respiratory Distress Volume Shock Unstable Spine Trunk Injury Unstable Extremity Injury Stable Extremity Injury Wounds					
<b>ENVIRONMENTAL</b> 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					
<b>MEDICAL S/SX</b> Circulatory Respiratory Nervous Endocrine Digestive Genitourinary Musculoskeletal Skin / Soft Tissue Ears / Eyes / Nose / Throat Teeth / Gums					
EVACUATION Level 1 2 3 4 Request ALS: Yes / No					

Rule out Possible Px first by MOI and then by S/Sx. Draw a line through each Possible Px as you rule it out. Circle all the remaining problems and transfer them to your Current Px list. The S/Sx of each Current Px should be completely documented in the Subjective and Objective sections of your patient's SOAP Note. List any Anticipated Px that you cannot successfully treat or prevent in your Anticipated Px list. List any Anticipated Px and their primary S/Sx under Monitor. Write a detailed treatment plan under Field Treatment. Write your evacuation plan including how you plan to transport your pt under Evacuation.