

## Appendix A

University of Colorado School of Medicine – Department of Emergency Medicine

# Disaster Response Advanced First Aid

## Northern Marianas Islands

*Schedule Subject to Change Due to Learning Progression, Weather, and/or Conditions*

### Day One

#### **Introduction**

- Faculty and Students
- Overview of DRAFA
- Schedule

#### **Disaster Overview**

- Definition
- Types
- Epidemiology

#### **DRAFA Overview**

##### **Assessment**

- Disaster Safety
- Scene Assessment
- Primary Assessment
- Secondary Assessment
- Patient Assessment
- Anticipated Problems
- SOAP Notes

##### **Lunch**

##### **Head Injuries and Level of Consciousness**

- TBIs
- ICP
- Lowered Levels of Consciousness

##### **Spinal Issues & Patient Movement**

- Spinal Assessment
- Improvised Spinal Protection
- Patient Movement Leadership and Communication
- Log Rolls
- Beaming
- Awkward Moves

##### **Wounds and Burns**

- Stopping Bleeding
- Wound Cleaning
- Wound Types
- Pressure Dressings
- Tourniquets
- Burns
- Pain management

## Day Two

### Skills Review

#### Musculoskeletal Injuries

- Assessment
- Splinting

#### Circulatory and Chest Issues

- Shock
- Benign chest pain
- Acute coronary syndrome
- Trauma

#### Leadership, Teamwork, Scenarios and Review of Patient Assessment

- Leadership
- Teamwork
- Scenarios
- Patient assessment

### Lunch

#### Respiratory Issues

- Trauma
- Illnesses

#### Abdominal Issues

- Trauma
- Illnesses

#### Drowning

- Assessment
- Treatment

#### Heat Related Illnesses

- Heat exposure and non-life-threatening illnesses
- Heat stroke
- Dehydration

#### Cold Injuries

- Assessment
- Treatment

### Water Treatment

### Scenarios

## **Day Three**

### **Review**

### **Triage**

- Overview
- START

### **Litters and Carries**

### **Lunch**

### **Special Populations**

- Children
- Elderly
- Disabled
- Homeless

### **Mental Health**

- Stressors and Risks
- Epidemiology
- Recognition
- Psychological First Aid and Treatment
- First Responders

### **Final Scenarios**

### **Final Exam**

### **Summary, Resources, and Conclusion**

- Resources
- Summary
- Conclusions
- Graduation

**Appendix B**

**University of Colorado School of Medicine**

**First Aid Skills Checklist**

**Class** \_\_\_\_\_ **Date** \_\_\_\_\_ **Evaluator** \_\_\_\_\_ **Group** \_\_\_\_\_

**Articulated Scene Assessment**

Scene safety     \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

MOI             \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

Numbers        \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

**Patient Communication**

Introduced self/level of training     \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

Obtained permission to treat \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

**Used Personal Protective Equipment**   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

**Primary Assessment** – Checked or confirmed out loud

Airway     \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

Breathing   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

Checked for massive bleeding   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

Considered/held head stable   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

Protected patient from environment   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

**Patient Movement**

Moved patient into appropriate position   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

Movement safe and efficient   \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes \_\_\_\_\_

**Secondary Assessment**

Physical

Complete     \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

Correct \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

SAMPLE history

Complete     \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

Recorded     \_\_\_ Yes \_\_\_ No \_\_\_ Not Sure   Notes: \_\_\_\_\_

Vitals (HR, RR, Mental Status)

Took all 3     \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Recorded  $\geq 2$  set   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

**Supportive Care**

Called patient by name   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Told patient what was going on   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Used warm, friendly tone   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Offered to treat pain   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Other: \_\_\_\_\_

**SOAP Notes**

Accurate Patient Assessment   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Accurate list of Anticipated Problems   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

Reasonable Plan   \_\_ Yes \_\_ No \_\_ Not Sure   Notes: \_\_\_\_\_

## Appendix C

### Disaster Response Advanced First Aid

#### Pre-Test

Circle the Best Answer

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Upon arriving on the scene of a medical emergency the first thing to do is
  - a. Conduct a primary survey
  - b. Check scene safety
  - c. Ensure patient's airway is clear
  - d. Put on gloves
  
2. Which of the following questions about shock are true
  - a. It is a life-threatening condition
  - b. It can be caused by a variety of causes including significant blood loss, spinal cord injury, sepsis, anaphylaxis
  - c. Treatment in the field is limited but includes lying the victim down and keeping her or him warm
  - d. All of the above
  
3. What is the best treatment for a mild TBI (concussion)
  - a. Prevent the patient from sleeping
  - b. At night awaken every two hours to assess condition
  - c. Let rest with minimal stimulation and ideally sleep
  - d. Both A and B
  
4. In the field a suspected heart attack, with a conscious patient, should be treated by
  - a. Aspirin
  - b. Epinephrine
  - c. CPR
  - d. None of the above
  
5. A good splint
  - a. If done right, should not need adjustments
  - b. Minimizes the need for padding to ensure security
  - c. Has CSM checked before and after application
  - d. All of the above
  
6. The most effective way of treating most serious lacerations is
  - a. Direct pressure
  - b. Tourniquet
  - c. Appropriate dressing and bandage
  - d. Stiches
  
7. Which of the following is true about burns
  - a. The first treatment is water or other liquids on the burn
  - b. Burns over more than 10% of body surface area can lead to hypothermia and dehydration
  - c. Burns are easily infected
  - d. All of the above

8. Treatment for heat stroke includes
  - a. Aspirin to reduce patient's temperature
  - b. Immediately douse the patient with water and fan
  - c. Placing patient horizontal and raising legs to increase blood flow to head and reduce cardiac work load
  - d. All of the above
  
9. In terms of abdominal pain, which of the following would be a reason for emergency evacuation
  - a. Localized pain with guarding and rigidity
  - b. Diarrhea and cramping for 6-8 hours
  - c. Moderate pain without fever
  - d. All of the above
  
10. In a triage situation, which patient should receive immediate care (red tagged)
  - a. A woman with a compound tib-fib break and concussion, AOx3, pulse 84, respirations 18
  - b. A child found with burns over both legs (~10% of body surface), AOx4, pulse 80, respirations 16
  - c. A man found U on the AVPU scale, pulse 120, respirations 32
  - d. A woman with fractured skull, found U on AVPU scale, not breathing; when airway opened, still no breathing

## Appendix D

### Disaster Response Advanced First Aid

#### Final

Circle the Best Answer

*You can cross out one question you'd like to skip, it will automatically be correct (a "freebie")*

Name/Number \_\_\_\_\_

Date \_\_\_\_\_

1. Which of the following is not true. Natural disasters
  - a. Include incidents in which 10+ are killed, 100+ are affected, or there is a declared state of emergency
  - b. Kill on average 100,000 people a year and affect 200 million worldwide
  - c. Occur in the US more than any other country, save one
  - d. Are declining over the last decade, due to better early warning and preparation
  
2. Disaster medicine is different than street medicine due to:
  - a. Being more than a half hour from definitive care
  - b. Environmental dangers (hypo/hyperthermia, smoke inhalation, drowning, etc.)
  - c. Austere environments, extended care times, limited resources, etc.
  - d. Actually, there is very little difference
  
3. Upon arriving on the scene of a medical emergency the first thing to do is
  - e. Conduct a primary survey
  - f. Check scene safety
  - g. Ensure patient's airway is clear
  - h. Put on gloves
  
4. For an individual volunteer implied consent means
  - a. You can treat an underage minor if parent/guardian is not present
  - b. You can treat someone who is intoxicated
  - c. You can treat someone who is unconscious
  - d. All of the above
  
5. Parts of the secondary survey include
  - a. A head-to-toe physical exam
  - b. SAMPLE history
  - c. Taking vitals
  - d. All of the above

SAMPLE stands for

6. S \_\_\_\_\_

7. A \_\_\_\_\_

8. M \_\_\_\_\_

9. P \_\_\_\_\_

10. L \_\_\_\_\_

11 E \_\_\_\_\_



12. SOAP notes are important for all of the following reasons except:
  - a. Good documentation helps when you hand the patient off to higher medical care
  - b. SOAP notes help protect you from legal issues and/or getting sued
  - c. SOAP notes help track changes in a patient's condition
  - d. SOAP notes help a rescuer develop a plan
13. AVPU
  - a. Is a way to measure and record mental status
  - b. Stands for Alert, Verbal, Pain, Unresponsive
  - c. Can be further measured by Alert and Oriented (AO) by four parameters
  - d. All of the above
14. A patient who has suffered a TBI, who was unconscious for 5 minutes, but is now fully responsive other than not remembering the accident is
  - a. AOx1
  - b. AOx2
  - c. AOx3
  - d. AOx4
15. Questions that are part of the SAMPLE history include
  - a. Allergies
  - b. Medications (prescription, over the counter, natural, recreational, etc.)
  - c. Last ins and outs (food, water, bathroom, etc.)
  - d. All of the above
16. What are likely causes of chest pain
  - a. Dehydration
  - b. Acid reflux
  - c. Hyper or hypothermia
  - d. All of the above
17. Which of the following questions about shock are true
  - a. It is a life-threatening condition
  - b. It can be caused by a variety of causes including significant blood loss, spinal cord injury, sepsis, anaphylaxis
  - c. Treatment in the field is limited but includes lying the victim down and keeping her or him warm
  - d. All of the above

What are the four questions, in order, of a focused spine assessment (“clear the spine”) to avoid use of a cervical collar

- 18.
- 19.
- 20.
- 21.
22. What is the best treatment for a mild TBI (concussion)
  - a. Prevent the patient from sleeping
  - b. At night awaken every two hours to assess condition
  - c. Let rest with minimal stimulation and ideally sleep
  - d. Both A and B

23. When should a patient be immediately evacuated after a head injury?
  - a. The patient is unconscious for more than 5 minutes
  - b. The patient has persistent vomiting and a worsening headache
  - c. The patient doesn't remember the event and is nauseous
  - d. All of the above
24. STOPHEATS is an acronym to help consider why a patient is
  - a. Hypothermic
  - b. Unconscious or is lowered on the AVPU scale
  - c. Going into shock
  - d. All of the above
25. In the field a suspected heart attack, with a conscious patient, should be treated by
  - a. Aspirin
  - b. Epinephrine
  - c. CPR
  - d. None of the above
26. A good splint
  - a. If done right, should not need adjustments
  - b. Minimizes the need for padding to ensure security
  - c. Has CSM (Circulation, Sensation, and Movement) checked before and after application
  - d. All of the above
27. After stopping bleeding, the most important part of treating a wound is
  - a. Properly cleaning the wound
  - b. Applying an appropriate dressing
  - c. Applying an appropriate bandage
  - d. Ensuring the wound is closed
28. The most effective way of treating most serious lacerations is
  - a. Direct pressure
  - b. Tourniquet
  - c. Appropriate dressing and bandage
  - d. Stiches
29. Which kinds of the following burns would cause you the least concern?
  - a. Partial thickness burn on the hand, larger than a credit card
  - b. Partial thickness burn on the foot, larger than a credit card
  - c. Partial thickness burns around the mouth and nose
  - d. Partial thickness burns on the dominant arm, larger than a credit card
30. Which of the following is true about burns
  - a. The first treatment is water or other liquids on the burn
  - b. Burns over more than 10% of body surface area can lead to hypothermia and dehydration
  - c. Burns are easily infected
  - d. All of the above
31. The most telling symptom of mild hypothermia is
  - a. The "umbles"
  - b. Increased respiration and heart rate
  - c. Loss of consciousness
  - d. Hyperactivity
32. Which of the following is true about hypothermia
  - a. The most effective treatment for severe hypothermia is to get the patient to exercise vigorously
  - b. The most effective treatment for mild hypothermia is have the patient drink hot liquids (tea, coffee, etc.)
  - c. The challenging part of hypothermia is that the patient doesn't know it is happening
  - d. All of the above

33. Treatment for heat stroke includes
  - a. Aspirin to reduce patient's temperature
  - b. Immediately douse the patient with water and fan
  - c. Placing patient horizontal and raising legs to increase blood flow to head and reduce cardiac work load
  - d. All of the above
34. You find a neighbor who is diabetic and is acting groggy and confused. You should
  - a. Help her administer her insulin
  - b. Feed her sugary foods
  - c. Ensure she is properly hydrated
  - d. All of the above
35. Which of the following is not true about carrying a patient in an improvised litter
  - a. Ideally there are at least 6-8 rescuers
  - b. The group will move no more than 1 mile an hour, and likely far slower
  - c. Carrying a patient out involves risk to the rescuers and the patient
  - d. It is almost impossible to build an improvised spine-stable litter
36. In terms of abdominal pain, which of the following would be a reason for emergency evacuation
  - a. Localized pain with guarding and rigidity
  - b. Cramping and gas for 6-8 hours
  - c. Diarrhea and cramping for 6-8 hours
  - d. Moderate pain without fever
37. A likely cause of diarrhea and/or GI complaints is
  - a. Dirty pots and pans
  - b. Dirty hands
  - c. Food spoilage
  - d. Typhoid
38. The most fool-proof way to treat water for drinking is
  - a. Filters
  - b. Iodine
  - c. UV
  - d. Boiling
39. Mild to moderate asthma should be treated by
  - a. Antihistamines
  - b. Decongestants
  - c. Epinephrine
  - d. Inhaler
40. Symptoms of respiratory distress include all of the following except
  - a. Patient's inability to speak in paragraphs or even full sentences
  - b. Patient not wanting to lay supine or prone
  - c. Patient demanding water or other fluids
  - d. Patient wanting to "tripod"
41. Which of the following is true about anaphylaxis
  - a. More than one dose of epinephrine is dangerous
  - b. Benadryl is helpful as a follow up to epinephrine
  - c. Signs and symptoms include slowing heart and respiratory rates, intense sweating, and muscle spasms
  - d. Without epinephrine it is fatal almost 100% of the time

42. In a triage situation, which patient should receive immediate care (red tagged)
- A woman with a compound tib-fib break and concussion, AOx3, pulse 84, respirations 18
  - A child found with burns over both legs (~10% of body surface), AOx4, pulse 80, respirations 16
  - A man found U on the AVPU scale, pulse 120, respirations 32
  - A woman with fractured skull, found U on AVPU scale, not breathing; when airway opened, still no breathing
43. Which of the following is true of at-risk populations
- They are a small percentage of the overall population, but they are important to consider given special needs
  - A priority in terms of dealing with children is to reunite them with family
  - The elderly are more at risk for almost all mental health issues
  - All of the above
44. In terms of disaster and mental health which of the following is true
- Most disaster survivors cope fairly well and do not have mental health issues
  - Mental health issues peak a day or two after a disaster and then start to get better
  - Males and the elderly are most at risk from mental health issues
  - All of the above
45. In terms of disaster and mental health which of the following is true
- Mental health assistance should come before helping with social or physical needs
  - An important role for first responders in disasters is to de-brief and discuss traumatic events with survivors
  - Psychological First Aid is recommended as the preferred intervention
  - All of the above
46. In an earthquake your best bet is to
- If indoors get under a sturdy desk or table or close to an interior wall
  - If outdoors stay away from exterior walls, power lines, trees, or signage
  - If trapped in debris, not light matches and try to avoid shouting
  - All of the above
47. Which of the following is true in regards to tsunamis
- If unable to get to higher ground, seek refuge in concrete reinforced building, higher than the 3<sup>rd</sup> floor
  - Get outdoors to avoid entrapment
  - Stay put as travel is the most dangerous option
  - Once the first and main wave passes, it is safe to start rescue operations
48. If caught in a wildfire what should you not do is
- Cover behind or near rock outcroppings, boulders, large downed trees, etc. to protect from radiant heat
  - Pass quickly through the flames at their least wide location to get to burned over area
  - Move uphill to reach high(er) ground
  - Protect your airway by staying low and holding a dry bandana or cloth over mouth
49. Which of the following is true about severe thunderstorm, typhoon, or tornado
- Avoid interior rooms with no doors or windows as you can be trapped
  - A hard-topped vehicle offers adequate protection
  - If caught in a car try to outrun the storm
  - If in a high-rise building, get to the lowest floor possible, as higher floors are more dangerous
50. Which of the following is true about floods
- A hard-topped vehicle offers relative safety
  - While there are few fatalities, injuries are numerous
  - In the US floods kill more people than any other type of disaster
  - All of the above

Appendix E

DISASTER FIRST AID SELF-EFFICACY SCALE

The following statements list different activities related to providing first aid and emergency care during or immediately after a disaster. In the column Confidence, rate how confident you are that you can do them as of now.

Please rate your degree of confidence by recording a number from 0 to 100 using the scale given below.

0 10 20 30 40 50 60 70 80 90 100
Cannot do at all Moderately certain can do Highly certain can do

Confidence (0-100)

- 1. Make decisions and solve problems about a person's emergency care
2. Assess a scene to ensure it is safe and secure
3. Rapidly assess if a person has a life-threatening condition
4. Care for a person with life-threatening injuries for more than two hours
5. Perform high quality CPR
6. Treat a person with severe bleeding
7. Manage a person with a spinal injury
8. Monitor a person's condition, heart rate, respiratory rate, temperature, and level of consciousness
9. Help someone who has a diabetic emergency as well as another chronic illness
10. Recognize and treat a person with a mental health emergency
11. Lead the evacuation of an unconscious person with help from untrained people
12. Help respond to a scene that involves more victims than responders
13. Provide care for self and other responders after an emergency incident is over
14. Know how to take steps to prevent common injuries and illnesses
15. Treat a person in difficult conditions or weather

Please turn over and complete other side

## Willingness to Provide First and Emergency Care Scale

The following statements ask about your willingness to provide first aid and emergency care, knowing what you know right now, during or immediately after a disaster. In other words, how likely is it that you would provide first aid and emergency care? In the column *Willingness*, record how willing you would be to provide help, assuming you and your immediate family or household are safe.

Please rate your willingness by recording a number from 0 to 100 using the scale given below.

0	10	20	30	40	50	60	70	80	90	100
<i>Not at all</i>					<i>Moderately</i>					<i>Totally</i>
<i>willing</i>					<i>Willing</i>					<i>willing</i>

*Willingness*

1. How willing would you be to help an injured stranger during or immediately after a disaster \_\_\_\_\_
2. How willing would you be to help an injured neighbor during or immediately after a disaster \_\_\_\_\_
3. How willing would you be to help an injured close friend during or immediately after a disaster \_\_\_\_\_

*Please turn over and complete other side*