

Pre-course Study Guide

Answer each of the questions in the study guide before you come to class. The expectation is that you will be prepared to discuss when called upon.

Chapter 1: Trauma Around the World
<ol style="list-style-type: none"> 1. What injury prevention strategies are used in your community? 2. Is your facility involved in community injury prevention programs? If so, what injuries are targeted? 3. What are the most common causes of injury related death in your country? Your community? Are there mitigation interventions in place in your community?
Chapter 2: Preparing for Trauma
<ol style="list-style-type: none"> 1. When preparing to receive a seriously injured patient, what are some examples of equipment you would anticipate needing? 2. Who responds to the arrival of a trauma patient at your facility? What are their roles? 3. At your facility are there clear, predetermined responsibilities for each member of the team that responds to a trauma patient? 4. When caring for a seriously injured patient, what communication challenges between team members have you experienced at your facility? What steps are being taken to address those challenges?
Also see: Communication pre-course module
Chapter 3: Biomechanics and Mechanisms of Injury
<ol style="list-style-type: none"> 1. Why is it important to understand biomechanics as it relates to types of energy forces and mechanism of injury (MOI)? 2. What are common MOIs that result in trauma? 3. Do you have criteria for trauma activation at your facility? Do the criteria include clear guidelines for identifying activations for the following conditions: falls, motor vehicle crashes, and penetrating injuries? 4. What is the most common mechanism of blunt trauma seen at your facility? Penetrating trauma? 5. What injuries can be anticipated for each stage associated with an explosion (blast) injury?
Chapter 4: Initial Assessment
<ol style="list-style-type: none"> 1. Why is it important to use a systematic approach to the initial assessment of a trauma patient? 2. What is included in the preparation for a trauma patient? 3. What information is obtained during the general impression? 4. What does the A-J mnemonic stand for? 5. Why is alertness included with the airway assessment? 6. When an intervention is taken during the primary survey, what must the nurse do after the intervention? 7. What are the components of the secondary survey? 8. What laboratory tests are commonly utilized for trauma patients? 9. What should the nurse reevaluate while the patient is in their care?
Also see: Trauma Nursing Process (TNP) and Initial Assessment pre-course modules
Chapter 5: Airway and Ventilation
<ol style="list-style-type: none"> 1. What are the differences between ventilation, diffusion, and perfusion?

2. What are possible causes of airway obstruction in the trauma patient? What interventions address these causes of airway obstruction?
3. What is the difference between an airway adjunct and a definitive airway?
4. Is there a difficult airway care at your facility? If so, where is it located?
5. What is the difference between normoxia and hyperoxia? Why does it matter?

Chapter 6: Shock

1. What is the most common type of shock in trauma patients? What are possible interventions to manage uncontrolled external hemorrhage?
2. What are causes of obstructive shock?
3. What type of shock may occur following a spinal cord injury in which there is loss of sympathetic innervation below the level of injury?
4. What are some possible interventions for cardiogenic shock?
5. What is damage control resuscitation?
6. What type of rapid fluid infuser is used at your facility? Where is the equipment located?
7. Why is it critical to rapidly recognize and intervene during the compensatory stage of shock?

Also see:

Shock pre-course module

Chapter 7: Head Trauma

1. What two physiologic abnormalities should be avoided to prevent secondary brain injury in a patient with a traumatic brain injury?
2. What are early indications of increasing intracranial pressure?
3. What are the 3 signs of Cushing's Triad and why is it ominous when these 3 signs are present?
4. Which focal brain injury is typically caused by arterial bleeding versus venous bleeding?

Chapter 8: Thoracic and Neck Trauma

1. What MOI is associated with major injuries to the thorax?
2. What injuries are associated with fractures to the thorax? What is the significance of a flail chest and what intervention should be anticipated?
3. What are the 3 signs of Beck's triad? What are the limitations when assessing for these signs when the patient is hypovolemic?
4. What is the most important intervention for a patient in acute respiratory distress with tachycardia, hypotension, jugular vein distention, and unilateral absence of breath sounds?
5. What are the differences between a simple (closed) pneumothorax and a complex or communicating (open) pneumothorax? What causes progression to a tension pneumothorax?
6. What interventions should the nurse anticipate for a patient with a massive hemothorax?
7. What are the indications for a resuscitative thoracotomy?

Chapter 9: Abdominal and Pelvic Trauma

1. What injuries are common with blunt abdominal trauma?
2. What are some examples of hollow abdominal organs? Solid abdominal organs?
3. List concurrent injuries that may occur with abdominal and/or pelvic injuries. Describe why trauma to the abdomen and/or pelvis can result in significant hemorrhage.
4. What equipment or intervention may be used to stabilize a suspected or known pelvic fracture?
5. Does your facility have pelvic binders available? Where are they located?
6. What assessment finding is a contraindication to inserting an indwelling urinary catheter?
7. How can a FAST exam be used to help direct appropriate interventions?
8. Is resuscitative endovascular balloon occlusion of the aorta (REBOA) performed at your facility? When is REBOA used?

Chapter 10: Spinal and Musculoskeletal Trauma

1. What interventions can be anticipated for suspected compartment syndrome?

2. What are the indications for use of a tourniquet? What are the steps to applying a tourniquet?
3. What is the policy at your facility for the care of amputated body parts such as a digit or limb?
4. When is spinal motion restriction (SMR) indicated? What is the proper technique for the measurement and application of a cervical collar?
5. What is the difference between a primary and secondary injury in spinal cord trauma?
6. What is the difference between spinal and neurogenic shock?

Chapter 11: Surface and Burn Trauma

1. Does your facility have a specific location for burn supplies such as a burn cart? Does your facility have wound protocols?
2. Is there a burn center in your city? If not, how far away is the closest burn center? What does your burn center request for treatment or interventions prior to transfer?
3. What are the levels of burn depth (e.g., superficial)
4. Describe methods to estimate the extent of burn injuries.
5. What is capillary leak syndrome, and what is the clinical significance of this disorder?
6. What are airway considerations specific to burns?
7. What is the initial treatment for known or suspected carbon monoxide poisoning?
8. What is the difference between an abrasion and an avulsion injury?
9. What are the signs and symptoms of mild injury related to frostbite? To deep injury?
10. What are the interventions for frostbite?

Chapter 12: The LGBTQ+ Trauma Patient

1. What is the difference between cultural competence and cultural humility?
2. Why is it important to use a person's correct pronoun?
3. What are some physiologic considerations for the trauma patient who is undergoing gender reassignment procedures?
4. What are opportunities to improve the care provided to a patient from the LGBTQ+ community at your facility?

Also see:

Communication pre-course module

Chapter 13: The Pediatric Trauma Patient

1. What is the pediatric assessment triangle? How is it used to help form a general impression of physiologic stability when a pediatric patient arrives at the emergency department?
2. What are some anatomic or physiologic differences in the pediatric patient that can affect the components of the primary survey? What are some cognitive and developmental considerations that increase risk for injuries?
3. What are some steps your facility can implement to improve pediatric readiness?
4. What are some differences in pediatric compensatory mechanisms compared to adults?
5. What special considerations are needed for pediatric fluid volume and medication administration and pediatric pain assessment?
6. What are possible signs of child maltreatment? What is the TEN-4 mnemonic?

Chapter 14: The Obese Trauma Patient

1. What injuries are more common and should be anticipated in the obese patient?
2. What airway and ventilation differences should be considered when caring for the obese patient?
3. What differences in equipment or its use might be necessary?
4. What considerations may be appropriate to keep the patient and staff safe?
5. What are some ways to provide sensitive care for obese patients?

Chapter 15: The Older Trauma Patient

1. What are some anatomic or physiologic differences in the older adult that can affect the components of the primary survey and should be considered when caring for these patients?
2. What are the most common MOIs in older adults? Why?
3. How does your facility define “older”?
4. What comorbidities or other factors should be considered when providing care for the older trauma patient?
5. Why are older patients at risk for pulmonary complications especially when there is tenderness in the chest area and pain on movement or inspiration?
6. What considerations are there when evaluating vital signs in the older trauma patient?
7. Why is it critical to perform frequent reevaluation and reassessment of the primary survey in the older adult?
8. What are signs of elder maltreatment?
9. What are reporting requirements for suspected elder maltreatment in your region?

Chapter 16: The Pregnant Trauma Patient

1. What is the team activation process at your facility when a pregnant trauma patient arrives?
2. What resources are available to help at your facility (e.g., labor and delivery staff)?
3. What equipment or supplies may be needed for a pregnant trauma patient? Where are these supplies located at your facility?
4. What intervention specific to pregnancy with gestation of greater than 20 weeks should you consider if the patient is in shock? How is this accomplished?
5. Why are signs of hypovolemic shock especially significant in the pregnant patient?
6. What injuries specific to pregnancy may occur? What signs or symptoms would you anticipate for these injuries?

Chapter 17: Interpersonal Violence

1. What is the process at your facility when a patient presents who has been sexually assaulted?
2. Is there a Sexual Assault Nurse Examiner (SANE) who responds to your department?
3. What are the mandated reporting laws in your area?

Chapter 18: Psychosocial Aspects of Trauma Care

1. What is trauma-informed care? How is it integrated into the care of trauma patients at your facility?
2. What is the RESPOND mnemonic? How have you used these approaches when caring for trauma patients in the past?
3. What are some examples of stress disorders?
4. What is the policy for family presence during resuscitation or invasive procedures at your facility? Is this approach supported by the staff?
5. What are some interventions you can use to prevent escalation of negative behaviors in patients or visitors?
6. What are some possible consequences for the staff after repeated exposure to suffering and trauma? How can you support a colleague who may be experiencing one of these consequences? How can you care for yourself if you do?

Chapter 19: Disaster Management

1. Which disaster triage tool is used in your facility? Is the same tool used by the local emergency medical services?
2. How often are disaster drills or exercises carried out at your facility? Have you participated in one?
3. What are the four phases of disaster management?
4. What is a key component of each phase of disaster management?
5. What are considerations or concerns regarding family reunification?
6. What natural disasters are likely in your area of practice?

- | |
|--------------------------------------------------------------------------------|
| 7. What potential disasters have been prioritized/identified by your hospital? |
|--------------------------------------------------------------------------------|

Chapter 20: Transition of Care for the Trauma Patient

1. What are the guidelines that should be considered when determining whether a patient should be transferred to a higher level of care?
2. Is your facility an American College of Surgeons (ACS) designated trauma center? What level?
3. If your facility is not a designated trauma center, what types of patients do you transfer to a higher level of care? What transport considerations are necessary to address before a patient is transferred?

Chapter 21: Post Resuscitation Care Considerations

1. What is the length of time goal for transfer of a seriously injured patient from your emergency department (interfacility transfer, inpatient admission, operating theater)? What are some of the challenges at your facility in meeting this goal?
2. What are some injuries that can affect the patient's ability to oxygenate and ventilate in the post resuscitation period?
3. What type of shock can occur in the post resuscitative period due to infection?
4. What is abdominal compartment syndrome, and what body systems can it affect?
5. What is the difference between missed injuries and delayed injuries?
6. Does your facility have an established process for reviewing missed injuries? Are nursing staff involved in this review process?