

# TNCC

## Trauma Nursing Core Course



## 9<sup>th</sup> Edition Preparation Packet

This course is sanctioned and overseen by the ENA. Reviewing the textbook and completing the online modules are mandatory prior to entering the class. If you do not have the 9<sup>th</sup> edition textbook and certificate of completion for the modules, you will not be allowed to attend the class. An active RN license is required for certification.

Unfortunately, once registration with EMC is complete, we are unable to issue refunds.

The ENA recommends a 30-day registration cut off time to give participants enough time to prepare. The online modules take approximately 3 – 6 hours to complete.

The following pages will walk you through the procedure for completing the modules and testing. Also included is a course welcome letter, sample agenda, and study guide. The final pages include the trauma nursing process for students. It is requested that you bring a copy to class so that you can follow along with the instructor.

Dear Participant,

Welcome to TNCC. We have a full agenda for our time together. Please ensure you are prepared! Agenda is attached.

**Important information from ENA regarding the online modules and written exam! To ensure successful completion of the course, please be aware of the following:**

- Students will NOT be allowed to attend the class if the pre-course modules are incomplete.
- Technical assistance is available Monday through Friday, 8:30am to 5pm Central Time, from [ENAU@ena.org](mailto:ENAU@ena.org).
- The flipped classroom teaching methodology used REQUIRES that students read the provider manual PRIOR to class. This will greatly enhance your learning experience and chance for success on the examination.
- Use the Study Guide, found in the pre-course modules, to focus your studies. **Not all examination content will be included in the classroom portion of the course.**
- If you wish to use a mobile device to complete pre-course modules and exams, please download the ENA University Mobile App, which is available in the Google Play and Apple App Stores.
- The online examination MUST be completed within 7 days of the course – please make sure your schedule will allow this. If the course ends on a Tuesday, you have until the following Tuesday at 2359 Central Time to complete the exam.
- Email communications about the course will come from [ENAU@ena.org](mailto:ENAU@ena.org).
- Do NOT use Internet Explorer for the online modules or exam – this browser is no longer supported.
- For any technical issues with the online modules, try the following:
  - Clear your browser history/[cache](#)
  - Use another browser (Chrome, Firefox)
  - Use another [computer](#)
  - Contact Course Management (Monday through Friday, 8:30 am to 5pm Central Time)

Examinations are part of the course and are required for provider status verification. You will complete the skills testing of the PNP or TNP during the course with 2 attempts to achieve a score of 70% or greater. You will be able to complete the online written examination at home after you complete skills testing and the online course evaluation. You will have 7 days from the end of the course for two online written exam attempts. You have 2 hours for each attempt. Successful completion of the course requires 80% or greater on the multiple-choice exam. You will be able to print your four-year provider verification card after passing the written exam.

I hope you enjoy the course! *If you have any questions or concerns, please ask them at any time during the course.* Should you have any questions prior to the course, please do not hesitate to contact your Course Director or the EMC office at 772-878-3085.

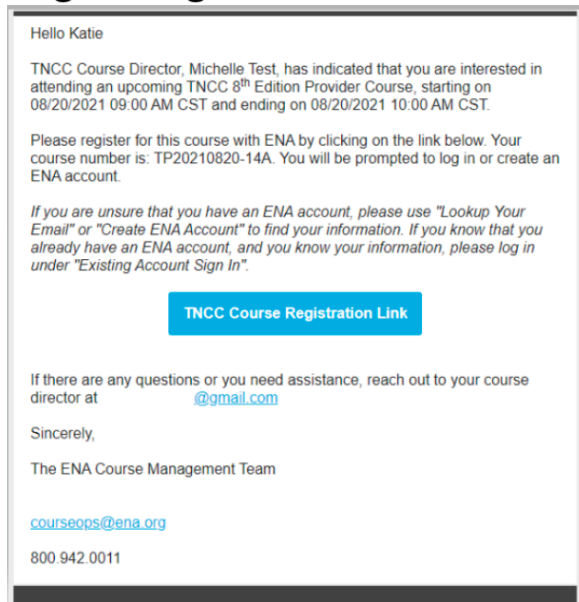
## Student View in the LMS

### TNCC 9<sup>th</sup> Edition COURSE MANAGEMENT DIRECTIONS STUDENT VIEW

Below are screen shots and directions to help you through the features of ENA's new LMS. In this document, you are referred to as a *student*.

Let's get started!

### Registering for the Course:



Your course director will send you a course registration link to the email address you provided them. The email will be 'sent from' the email address ENAU@ENA.org. Click the registration link and you will be prompted to log in. If you do not have an ENA account, you will need to create one.

## Choosing Class Type:

The screenshot shows a web interface for the 'TNCC 8th Edition Provider Course'. At the top, there is a light blue banner with an information icon and the text 'Please select class type below.' Below this, there are four distinct boxes, each representing a different class type. Each box contains a title, a detailed description of the course, and a purple 'Select' button on the right side.

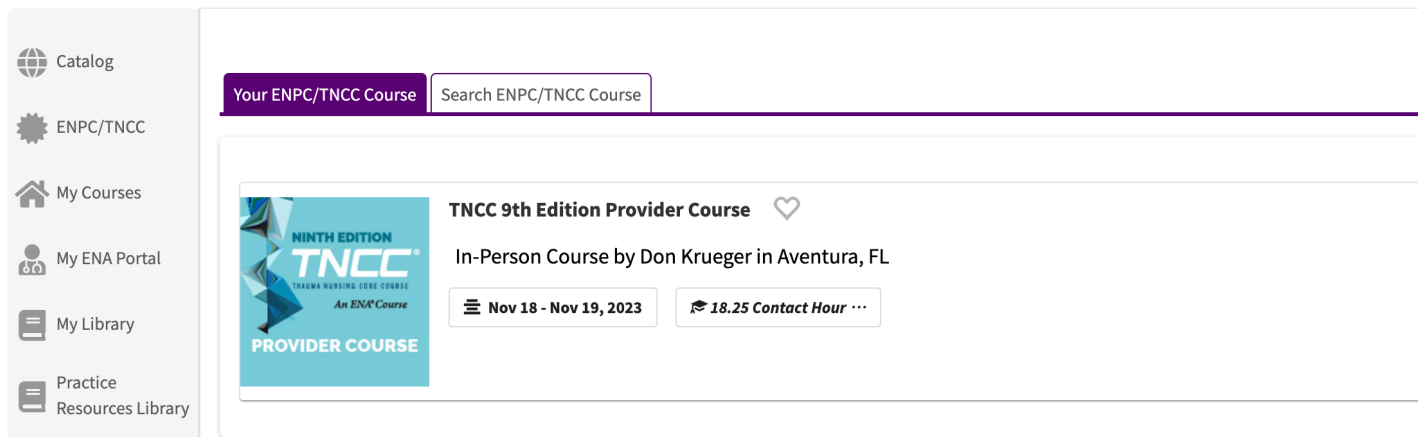
- Full Course (RN)**: This is one and a half days of instructor-led classroom time, skills testing, and an online exam. Requires pre-course work. This option is for registered nurses (or the equivalent as defined by the student's country of practice) and is a good option for RNs taking the course for the first time. Receive 4-year verification.
- Fast Track (RN)**: This is one day of instructor-led classroom time, skills testing, and an online exam. Requires pre-course work. This TNCC only option is for registered nurses (or the equivalent as defined by the student's country of practice). Although not required, prior experience with the Trauma Nursing Process is ideal. Receive 4-year verification.
- Challenger (RN)**: No classroom time. This option includes skills testing and online exam only. Does not require pre-course work other than reading the manual. It is for registered nurses (or the equivalent as defined by the student's country of practice) with ENPC or TNCC experience and who are comfortable with self-study. Receive 4-year verification.
- Full Course (NON-RN)**: This is one and a half days of instructor-led classroom time, skills testing, and an online exam. Requires pre-course work. This option is for healthcare professionals interested in trauma patient care who are not registered nurses. No verification received.

You will then be prompted to choose your class type. The options listed are Full Course (RN), Challenger (RN) and Full Course (Non-RN). Please check with your course director if you are unsure what class type to choose.

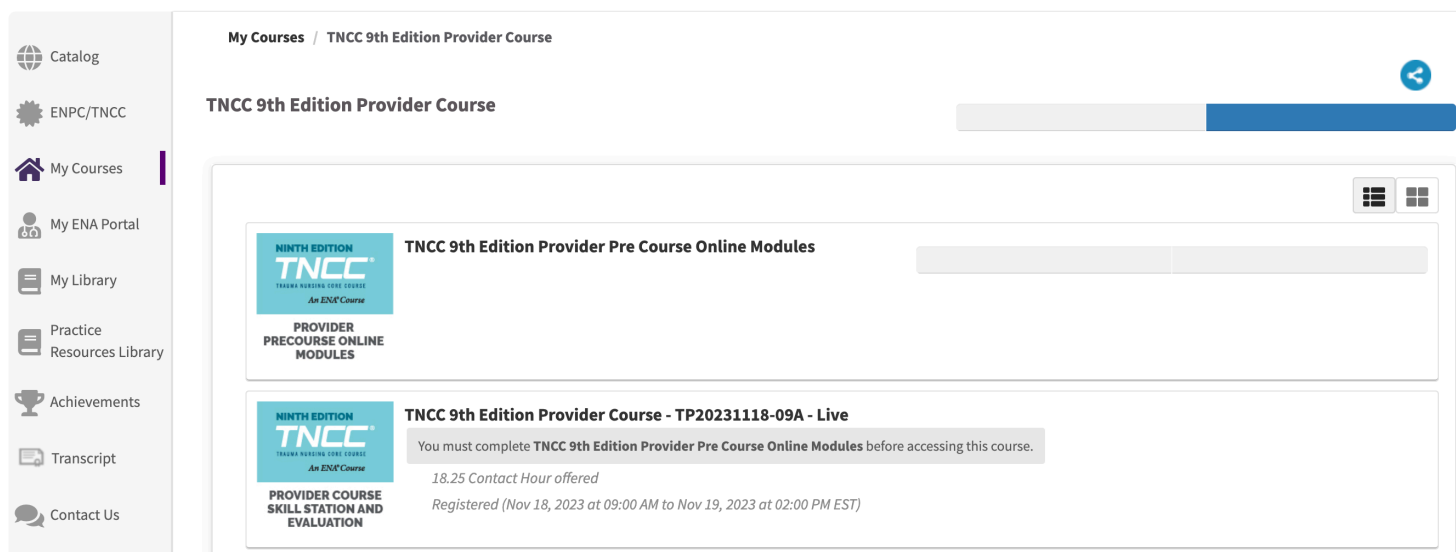
## Logging Back in After Registration:

The screenshot shows the 'Login to ENA' page. At the top left, there are links for 'HOME' and 'LOGIN'. The main heading is 'Login to ENA'. Below this, there are two input fields: 'Email / Username' and 'Password'. To the right of each field is the word 'REQUIRED' in red. At the bottom right, there is a purple 'LOG IN' button with a yellow key icon.

If you are looking to access your modules, evaluation, or exam after registration, you will need to log back into our website. You can access your courses from your registration confirmation email, the Access Your Courses link on our website, or directly from this [link here](#).



After logging in, then click on the TNCC/ENPC button located on the left side bar. This will show you any of your past or upcoming TNCC or ENPC courses and will access to your pre-course modules, course evaluation, and exam.



The student view consists of three tiles to illustrate course progression. Completion of all tiles is required to successfully pass the course.

1. Pre-course Modules
2. Skills Station/ Course Evaluation Survey
3. Course Exam

Catalog  
 ENPC/TNCC  
 My Courses  
 My ENA Portal  
 My Library  
 Practice Resources Library

Your ENPC/TNCC Course

Search ENPC/TNCC Course

**TNCC 9th Edition Provider Course**

In-Person Course by Don Krueger in Aventura, FL

Nov 18 - Nov 19, 2023

18.25 Contact Hour ...

Continue →

The pre-course modules consist of a 20 question 'pre-exam' followed by the course material. The 'pre-exam' is required to continue however, there is no required score to achieve and it will not be viewable to the course director.

**Please note:** There is no evaluation to complete after the pre-course modules.

Course Material

Pre Course Study Guide

Pre Course Study Guide Fillable Answer Sheet

TNCC - Shock

TNCC Shock Video Transcript

TNCC Effective Communications and Team Dynamics

TNP step-by-step

Initial Assessment Systematic Process and TNP Video

Trauma Nursing Process One Page Reference

TNP for Students

Provider Manual Errata

Appendix 13-2

Click on the pre-course module button and the content will appear. Items with a red asterisk are required.

#### TNCC 9th Edition Provider Pre Course Online Modules

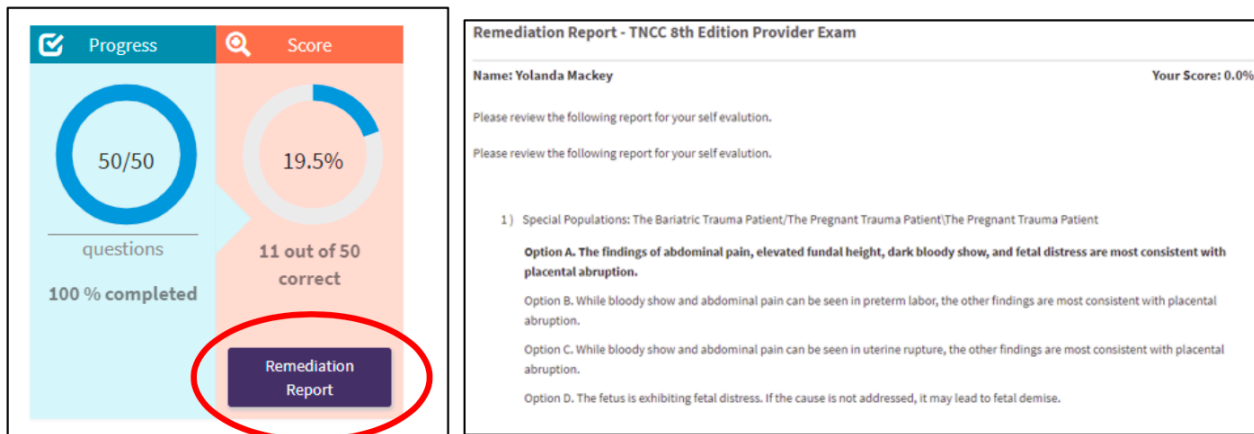
As skills station scores are entered by the course director, the first bar will turn green indicating that the student has passed the skill testing with a score of 70% or higher. Once the bar is green, the student has access to the required course evaluation. This evaluation must be completed before the exam can be accessed.



After the live course, the student must complete a course and instructor evaluation. When the required evaluation has been completed, the second bar will turn green indicating that the exam is available.

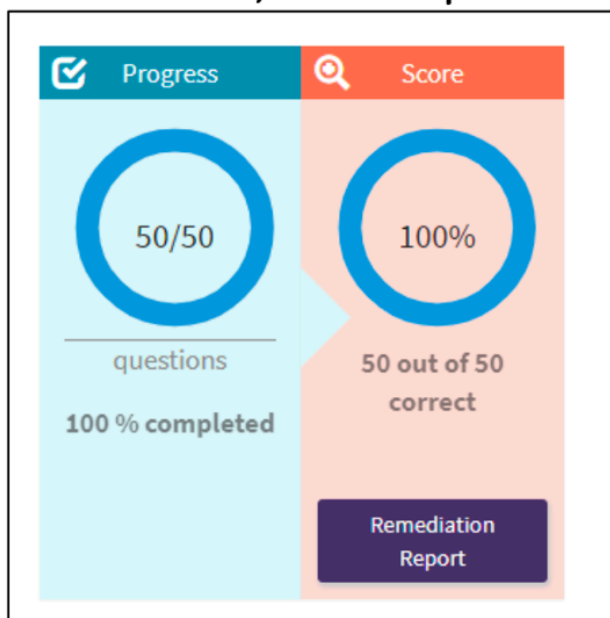
The student has two attempts to pass the exam. The two halves of the exam bar represent each attempt. The exam bar is color coded. Red indicates the exam was failed. Green indicates that the exam was passed with a score of 80% or higher.

## Failed Exam, Next Steps:



If the student fails their first attempt, they will be able to view their Remediation Report. They will then have access to the 2<sup>nd</sup> attempt or 'make-up exam'. This 2<sup>nd</sup> attempt needs to be completed within the seven-day exam window. If the student fails their 2<sup>nd</sup> attempt, they will need to enroll in a new provider course if they require the verification.

## Passed Exam, Next Steps:



Once the student has passed the exam, they will again be able to view their Remediation Report. At this time, they will also have access to their provider card.

## Accessing CE Certification and Provider Card:

| Course Name  | Contact Hours | Completion Date | Certificate              |
|--|---------------|-----------------|--------------------------|
| ENPC 5th Edition Provider Course - PP20210509-14A - Live | 7.75          | May 10, 2021    | <a href="#">Download</a> |
| Total Credits  |               | 7.75            |                          |

Students can access their CE Certification and Provider Card at any time. Click 'Transcript' on the left side toolbar and all past certificates and provider cards will be available for download.

Please contact ENA's Course Management Team at [ENAU@ENA.org](mailto:ENAU@ENA.org) or 847-460-4120 if you have any questions.



| Day 1   |            |            |
|---|------------|------------|
| Topic   | Time       | Instructor |
| Registration and sign in  | 30 minutes |            |
| Welcome   | 10 minutes |            |
| Initial Assessment  | 40 minutes |            |
| Shock   | 35 minutes |            |
| <b>Break</b>  | 15 minutes |            |
| Abdominal and Pelvic Trauma   | 40 minutes |            |
| Intro to the TNP  | 20 minutes |            |
| TNP Skills Stations <b>1 and 2</b><br>#1: Normal TNP<br>#2: Minimal Abnormalities | 60 minutes |            |
| <b>Lunch</b>  | 60 minutes |            |
| Head Trauma   | 40 minutes |            |
| Thoracic and Neck   | 35 minutes |            |
| Spinal and Musculoskeletal Trauma   | 45 minutes |            |
| <b>Break</b>  | 15 minutes |            |
| TNP Skills Station <b>3 and 4</b><br>#3 Older Adult TNP<br>#4 Blast TNP           | 60 minutes |            |
| Surface and Burn Trauma   | 35 minutes |            |
| Pediatric Trauma  | 30 minutes |            |

| Day 2  |             |            |
|--|-------------|------------|
| Topic  | Time        | Instructor |
| Questions and Study Guide  | 10 minutes  |            |
| TNP Skills Stations <b>5 and 6</b><br>#5 Burn TNP<br>#6 Pediatric TNP  | 60 minutes  |            |
| TNP Skills Station Transition  | 5 minutes   |            |
| TNP Skills Stations <b>7 and 8</b><br>#7 Thoracic TNP<br>#8 Spinal TNP | 60 minutes  |            |
| Disaster   | 45 minutes  |            |
| Traumaready game   | 35 minutes  |            |
| <b>Lunch</b>   | 30 minutes  |            |
| Testing Instructions   | 5 minutes   |            |
| TNP Testing  | 120 minutes | ALL        |

**Note: Final end times will depend on the size of the class and group of students.**

**Participants have up to 7 days from the class date to do the online exam at home.**

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

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

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

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

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

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?<br>3. What is the difference between an airway adjunct and a definitive airway?<br>4. Is there a difficult airway care at your facility? If so, where is it located?<br>5. What is the difference between normoxia and hyperoxia? Why does it matter?   |
| <b>Chapter 6: Shock</b>   |
| 1. What is the most common type of shock in trauma patients? What are possible interventions to manage uncontrolled external hemorrhage?<br>2. What are causes of obstructive shock?<br>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?<br>4. What are some possible interventions for cardiogenic shock?<br>5. What is damage control resuscitation?<br>6. What type of rapid fluid infuser is used at your facility? Where is the equipment located?<br>7. Why is it critical to rapidly recognize and intervene during the compensatory stage of shock?  |
| <b>Also see:</b><br>Shock pre-course module   |
| <b>Chapter 7: Head Trauma</b>   |
| 1. What two physiologic abnormalities should be avoided to prevent secondary brain injury in a patient with a traumatic brain injury?<br>2. What are early indications of increasing intracranial pressure?<br>3. What are the 3 signs of Cushing's Triad and why is it ominous when these 3 signs are present?<br>4. Which focal brain injury is typically caused by arterial bleeding versus venous bleeding?   |
| <b>Chapter 8: Thoracic and Neck Trauma</b>  |
| 1. What MOI is associated with major injuries to the thorax?<br>2. What injuries are associated with fractures to the thorax? What is the significance of a flail chest and what intervention should be anticipated?<br>3. What are the 3 signs of Beck's triad? What are the limitations when assessing for these signs when the patient is hypovolemic?<br>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?<br>5. What are the differences between a simple (closed) pneumothorax and a complex or communicating (open) pneumothorax? What causes progression to a tension pneumothorax?<br>6. What interventions should the nurse anticipate for a patient with a massive hemothorax?<br>7. What are the indications for a resuscitative thoracotomy? |
| <b>Chapter 9: Abdominal and Pelvic Trauma</b>   |
| 1. What injuries are common with blunt abdominal trauma?<br>2. What are some examples of hollow abdominal organs? Solid abdominal organs?<br>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.<br>4. What equipment or intervention may be used to stabilize a suspected or known pelvic fracture?<br>5. Does your facility have pelvic binders available? Where are they located?<br>6. What assessment finding is a contraindication to inserting an indwelling urinary catheter?<br>7. How can a FAST exam be used to help direct appropriate interventions?<br>8. Is resuscitative endovascular balloon occlusion of the aorta (REBOA) performed at your facility? When is REBOA used?   |
| <b>Chapter 10: Spinal and Musculoskeletal Trauma</b>  |
| 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?

Use this section to record your answers to the questions.

## Chapter 1: Trauma Around the World

1.

2.

3.

## Chapter 2: Preparing for Trauma

1.

2.

3.

4.



### Chapter 3: Biomechanics and Mechanisms of Injury

1.

2.

3.

4.

5.

### Chapter 4: Initial Assessment

1.

2.

3.

4.

5.

6.

7.

8.

9.

## Chapter 5: Airway and Ventilation

1.

2.

3.

4.

5.

## Chapter 6: Shock

1.

2.

3.

4.

5.

6.

7.

## **Chapter 7: Head Trauma**

1.

2.

3.

4.

## **Chapter 8: Thoracic and Neck Trauma**

1.

2.

3.

4.

5.

6.

7.

## Chapter 9: Abdominal and Pelvic Trauma

1.

2.

3.

4.

5.

6.

7.

8.

## Chapter 10: Spinal and Musculoskeletal Trauma

1.

2.

3.

4.

5.

6.

## Chapter 11: Surface and Burn Trauma

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

## **Chapter 12: The LGBTQ+ Trauma Patient**

1.

2.

3.

4.

## Chapter 13: The Pediatric Trauma Patient

1.

2.

3.

4.

5.

6.

## Chapter 14: The Obese Trauma Patient

1.

2.

3.

4.

5.



## Chapter 15: The Older Trauma Patient

1.

2.

3.

4.

5.

6.

7.

8.

9.

## Chapter 16: The Pregnant Trauma Patient

1.

2.

3.

4.

5.

6.

## **Chapter 17: Interpersonal Violence**

1.

2.

3.

## **Chapter 18: Psychosocial Aspects of Trauma Care**

1.

2.

3.

4.

5.

6.

## Chapter 19: Disaster Management

1.

2.

3.

4.

5.

6.

7.

## Chapter 20: Transition of Care for the Trauma Patient

1.

2.

3.

## Chapter 21: Post Resuscitation Care Considerations

1.

2.

3.

4.

5.

6.

| Skill Steps   | Potential Interventions   | Demonstrated |    |
|---|---|--------------|----|
|   |   | Yes          | No |
| Preparation and Triage  |   |              |    |
| 1. Activate the team and assign roles.  |   |              |    |
| “Is there any specific equipment that you would prepare?”   |   |              |    |
| 2. Prepare the trauma room.   | May include, but not limited to, the following: <ul style="list-style-type: none"><li>• Bariatric equipment</li><li>• Difficult airway or IV equipment</li><li>• Fluid warmer</li><li>• Pediatric equipment</li></ul>   |              |    |
| 3. Don personal protective equipment (PPE).   | Consider potential safety threats to the team or the need for decontamination.  |              |    |
| “The patient has just arrived.”   |   |              |    |
| General Impression  |   |              |    |
| 4. Assess for obvious uncontrolled external hemorrhage or unresponsiveness/apnea and the need to reprioritize to C-ABC.   | When alterations are identified, intervene as appropriate and reassess.<br>May include, but not limited to, the following: <ul style="list-style-type: none"><li>• Assess for a pulse</li><li>• Control external hemorrhage</li><li>• Initiate chest compressions</li><li>• Initiate IV resuscitation for significant blood loss with signs of very poor perfusion</li></ul>  |              |    |
| Primary Survey  |   |              |    |
| Alertness and Airway with Simultaneous Cervical Spinal Stabilization  |   |              |    |
| 5. Assess level of consciousness using AVPU.  | NOTE: If unresponsiveness was identified in Step 4, credit is also given here.  | **           |    |
| 6. Open the airway.   | May include, but not limited to, the following: <ul style="list-style-type: none"><li>• If cervical spinal injury is suspected, state the need for a second person to provide manual cervical spinal stabilization AND demonstrate manual opening of the airway using the jaw-thrust maneuver.</li><li>• When the patient is alert and can cooperate, it is acceptable to ask the patient to open their mouth to assess the airway.</li></ul> |              |    |
| 7. Assess the patency and protection of the airway (identify at least FOUR): <ul style="list-style-type: none"><li>• Bony deformity</li><li>• Burns</li><li>• Edema</li><li>• Fluids (blood, vomit, or secretions)</li><li>• Foreign objects</li><li>• Inhalation injury (burns, singed facial hair, soot)</li><li>• Loose or missing teeth</li><li>• Sounds (snoring, gurgling, or stridor)</li><li>• Tongue obstruction</li></ul> | When alterations are identified, intervene as appropriate and reassess.<br>May include, but not limited to, the following: <ul style="list-style-type: none"><li>• Anticipate the need for intubation</li><li>• Insert an oral or nasopharyngeal airway</li><li>• Remove any loose teeth or foreign objects</li><li>• Suction the airway</li></ul>  | **           |    |

| Skill Steps   | Potential Interventions   | Demonstrated |    |
|---|---|--------------|----|
|   |   | Yes          | No |
| • Vocalization  |   |              |    |
| <b>Breathing and Ventilation</b>  |   |              |    |
| 8. Assess breathing effectiveness (identify at least FOUR): <ul style="list-style-type: none"> <li>Breath sounds</li> <li>Depth, pattern, and general rate of respirations</li> <li>Increased work of breathing</li> <li>Open wounds or deformities</li> <li>Skin color</li> <li>Spontaneous breathing</li> <li>Subcutaneous emphysema</li> <li>Symmetrical chest rise and fall</li> <li>Tracheal deviation or jugular venous distention</li> </ul> | When alterations are identified, intervene as appropriate and reassess.<br>May include, but not limited to, the following: <ul style="list-style-type: none"> <li>Anticipate the need for a chest tube.</li> <li>Anticipate the need for drug-assisted intubation.</li> <li>Anticipate the need for decompression of pneumothorax.</li> <li>Anticipate the need for oxygen.</li> <li>Provide bag-mask ventilations.</li> </ul>  | **           |    |
| 9. If intubated, assess endotracheal tube placement (must identify ALL THREE): <ol style="list-style-type: none"> <li>Attach a CO<sub>2</sub> detector device. After 5 to 6 breaths, assess for evidence of exhaled CO<sub>2</sub>.</li> <li>Simultaneously observe for rise and fall of the chest with assisted ventilations.</li> <li>Auscultate over the epigastrium for gurgling AND lungs for bilateral breath sounds.</li> </ol>              | NOTE: If the learner chooses a capnography sensor instead of the one-time-use detection device, credit is given in Step 22.   | **           |    |
| 10. If intubated, assess ETT position by noting the number at the teeth or gums AND secure the ETT.   |   |              |    |
| 11. If intubated, begin mechanical ventilation or continue assisted ventilation.  |   |              |    |
| <b>Circulation and Control of Hemorrhage</b>  |   |              |    |
| 12. Assess circulation (must identify BOTH): <ul style="list-style-type: none"> <li>Inspect AND palpate the skin for color, temperature, and moisture.</li> <li>Palpate a pulse.</li> </ul>   | When alterations are identified, intervene as appropriate and reassess.<br>May include, but not limited to, the following: <ul style="list-style-type: none"> <li>Anticipate goal-directed therapy for shock.</li> <li>Apply a cardiac monitor—credit given in #20.</li> <li>Apply a pelvic binder.</li> <li>Apply a traction splint.</li> <li>Assess patency of prehospital IV line.</li> <li>Compare central and peripheral pulses.</li> <li>Consider sources of internal hemorrhage.</li> <li>Control external hemorrhage.</li> <li>Draw labs—credit given in Step 19.</li> <li>Facilitate FAST and/or radiographs to identify source of internal hemorrhage.</li> <li>Initiate chest compressions and advanced life support</li> <li>Obtain IV or IO access (two sites).</li> <li>Palpate central pulse if peripheral pulse is absent.</li> </ul> | **           |    |

| Skill Steps  | Potential Interventions   | Demonstrated |    |
|--|---|--------------|----|
|  |   | Yes          | No |
|  | <ul style="list-style-type: none"> <li>Tilt pregnant patient or manually displace the uterus.</li> </ul>  |              |    |
| <b>Disability (Neurologic Status)</b>  |   |              |    |
| 13. Assess neurologic status using the GCS: <ul style="list-style-type: none"> <li>Best eye opening</li> <li>Best verbal response</li> <li>Best motor response</li> </ul>  | When alterations are identified, intervene as appropriate and reassess.<br>May include, but not limited to, the following: <ul style="list-style-type: none"> <li>Anticipate the need for a head CT.</li> <li>Anticipate the need for drug-assisted intubation.</li> <li>Assess bedside glucose (* with altered mental status).</li> </ul> NOTE: The GCS is documented as nontestable if there is a factor, such as sedation or paralytics, interfering with communication. | **           |    |
| 14. Assess pupils.   |   |              |    |
| <b>Exposure and Environmental Control</b>  |   |              |    |
| 15. Remove all clothing AND inspect for obvious injuries   | When newly identified life-threatening alterations are identified, intervene as appropriate and reassess.<br>If a transport device is in place, it may be removed as soon as possible.<br>If there are no contraindications, the patient may be turned to quickly assess the posterior. This is deferred until after the head-to-toe assessment and imaging if needed to evaluate spinal and pelvic stability.  | **           |    |
| 16. Provide warmth (identify at least ONE): <ul style="list-style-type: none"> <li>Blankets</li> <li>Room temperature increase</li> <li>Warmed fluids</li> <li>Warming lights</li> </ul>   |   |              |    |
| NOTE: During testing, if the learner did not intervene to correct life-threatening findings in the primary survey and/or did not complete all double-starred criteria, the instructor will review the primary survey and notify the course director. |   |              |    |
| <b>Full Set of Vital Signs and Family Presence</b>   |   |              |    |
| 17. Obtain a full set of vital signs.  | BP: / mm Hg MAP: mm Hg<br>HR: beats/minute<br>RR: breaths/minute<br>T: °F ( °C)<br>SpO <sub>2</sub> : %   |              |    |
| 18. Facilitate family presence.  |   |              |    |
| <b>Get Adjuncts and Give Comfort (LMNOP)</b>   |   |              |    |
| 19. L – Consider the need for laboratory analysis.   | May include, but not limited to, the following: <ul style="list-style-type: none"> <li>Blood gases</li> <li>Blood cross/type and screen</li> <li>Coagulation studies</li> <li>Complete blood count</li> <li>Lactate</li> <li>Metabolic panel</li> <li>Pregnancy</li> </ul>  |              |    |



| Skill Steps   | Potential Interventions   | Demonstrated |    |
|---|---|--------------|----|
|   |   | Yes          | No |
|   | <ul style="list-style-type: none"> <li>Toxicology screen</li> </ul>   |              |    |
| 20. M – Attach patient to a cardiac monitor.  | Set monitor to record frequent blood pressures.<br>Consider the need for a 12-lead ECG—credit is given in Step 44.  |              |    |
| 21. N – Consider the need for insertion of a nasogastric or orogastric tube.  |   |              |    |
| 22. O – Assess oxygenation and continuous end-tidal capnography (if available).   | May include, but not limited to, the following: <ul style="list-style-type: none"> <li>Increase or decrease the rate of assisted ventilation.</li> <li>Wean oxygen (consider parameters other than oximetry due to hypothermia, vasoconstriction, and skin color's effect on pulse oximetry measurements).</li> </ul> NOTE: Capnography is highly recommended for all patients and is vital for sedated or ventilated patients. |              |    |
| 23. P – Assess pain using an appropriate pain scale   |   | *            |    |
| 24. Give appropriate nonpharmacologic comfort measures (identify at least ONE): <ul style="list-style-type: none"> <li>Distraction</li> <li>Family presence</li> <li>Placing padding over bony prominences</li> <li>Repositioning</li> <li>Splinting</li> <li>Verbal reassurance</li> <li>Other as appropriate</li> </ul> | NOTE: Applying ice to swollen areas may be appropriate, but consider hypothermia risk for major trauma and pediatric patients.  |              |    |
| 25. Consider obtaining order for analgesic medication.  |   |              |    |
| <b>Consideration of Need for Definitive Care</b>  |   |              |    |
| <i>"At this time, is there a need to consider transfer to a trauma center, surgery, or critical care?"</i>  |   |              |    |
| <b>Secondary Survey</b>   |   |              |    |
| <b>History and Head-to-Toe</b>  |   |              |    |
| 26. Obtain pertinent history (identify at least ONE): <ul style="list-style-type: none"> <li>Medical records/documents</li> <li>Prehospital report</li> <li>SAMPLE</li> </ul>   |   |              |    |
| NOTE: The learner describes and demonstrates the head-to-toe assessment by describing appropriate inspection techniques and demonstrating appropriate auscultation and palpation techniques.  |   |              |    |
| 27. Inspect and palpate head for injuries.  |   |              |    |
| 28. Inspect and palpate face for injuries.  |   |              |    |
| 29. Inspect and palpate neck for injuries.  | Demonstrate removal AND reapplication of cervical collar for assessment (if indicated).   |              |    |
| 30. Inspect and palpate chest for injuries.   |   |              |    |
| 31. Auscultate breath sounds.   |   |              |    |

| Skill Steps   | Potential Interventions  | Demonstrated |    |
|---|--|--------------|----|
|   |  | Yes          | No |
| 32. Auscultate heart sounds.  |  |              |    |
| 33. Inspect the abdomen for injuries.   |  |              |    |
| 34. Auscultate bowel sounds.  |  |              |    |
| 35. Palpate all four quadrants of the abdomen for injuries.   |  |              |    |
| 36. Inspect and palpate the flanks for injuries.  |  |              |    |
| 37. Inspect the pelvis for injuries.  |  |              |    |
| 38. Apply gentle pressure over iliac crests downward and medially.  |  |              |    |
| 39. Apply gentle pressure on the symphysis pubis (if iliac crests are stable).  |  |              |    |
| 40. Inspect the perineum for injuries.  |  |              |    |
| 41. Consider how to measure urinary output.   | <ul style="list-style-type: none"> <li>• Assess for contraindications for an indwelling urinary catheter.</li> <li>• Use an external catheter.</li> <li>• Weigh diapers (pediatrics and adults).</li> </ul>  |              |    |
| 42. Inspect and palpate all four extremities for neurovascular status and injuries.   |  |              |    |
| <b>Inspect Posterior Surfaces</b>   |  |              |    |
| <p>NOTE: If the patient has a suspected spinal or pelvic injury, imaging is obtained PRIOR TO turning the patient. The log roll maneuver may cause secondary injuries including spinal injury or hemorrhage.</p> <p>Instructor prompt: <i>"Imaging has been performed, it is safe to turn the patient."</i> or <i>"It is not safe to turn the patient."</i></p> |  |              |    |
| 43. Inspect and palpate posterior surfaces.   | Not required if suspected spinal or pelvic injury  | *            |    |
| NOTE: Summarize injuries identified throughout the scenario and listed below. If the learner has not already identified them all, the instructor will ask for any additional noted at this time.  |  |              |    |
| <i>"What interventions or diagnostics can you anticipate for this patient?"</i>   |  |              |    |
| 44. Identify at least THREE interventions or diagnostics.   | <p>May include, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Antibiotics</li> <li>• Consults</li> <li>• Head CT for any alterations in mental status</li> <li>• Imaging (other radiographs, CT, US, interventional radiology as indicated)</li> <li>• Law enforcement</li> <li>• Mandatory reporting</li> <li>• Psychosocial support</li> <li>• Social services</li> <li>• Splinting</li> <li>• Tetanus immunization</li> <li>• Wound care</li> </ul> |              |    |
| <b>Just Keep Reevaluating</b>   |  |              |    |
| <i>"What findings will you continue to reevaluate while the patient is in your care?"</i>   |  |              |    |
| 45. Reevaluate vital signs.   |  |              |    |
| 46. Reevaluate all identified injuries and  |  |              |    |

| Skill Steps   | Potential Interventions | Demonstrated |    |
|---|-------------------------|--------------|----|
|   |                         | Yes          | No |
| effectiveness of interventions.                                     |                         |              |    |
| 47. Reevaluate primary survey.                                      |                         |              |    |
| 48. Reevaluate pain.  |                         |              |    |
| <b>Definitive Care or Transport</b>                                 |                         |              |    |
| <i>"What is the definitive care for this patient?"</i>              |                         |              |    |
| 49. Consider the need for transfer to a trauma center or admission. |                         |              |    |
| <i>"Is there anything you would like to add at this time?"</i>      |                         |              |    |

Double-starred (\*\*) criteria to be done in order—assessments and interventions must be completed before moving to the next step:

- \*\*Alertness and airway
- \*\*Breathing
- \*\*Circulation
- \*\*Disability
- \*\*Exposure

Single-starred (\*) criteria to be done, sequence not critical:

- \*Reassessment of primary survey interventions
- \*Blood glucose if any alterations noted in Disability
- \*Pain assessment using an appropriate scale
- \*Inspect posterior surfaces (unless contraindicated by suspected spine or pelvic injury)

## Skills Performance Results Evaluation Form

- ☐ Station successfully completed
- All \*\* critical steps demonstrated in order
  - All \* demonstrated
  - Demonstrated at least X of X points (70%)
- ☐ Incomplete. Needs minimal instruction before reevaluation
- ☐ Incomplete. Needs considerable instruction before reevaluation

Potential instructor (must achieve 90%) ☐ Yes ☐ No

| Demonstrated points    |   | Number                            | Percentage                        |
|------------------------|---|-----------------------------------|-----------------------------------|
| • Total possible       | = | <div><div></div><div></div></div> | 100%                              |
| • Learner demonstrated | = | <div><div></div><div></div></div> | <div><div></div><div></div></div> |