



Presented by

Jeff Solheim, MSN, RN, CEN, TCRN, CFRN, FAEN

Jeff brings with him a wealth of nursing background, including clinical nursing in medical-surgical and emergency medicine, cruise-ship nursing, flight nursing, nursing management and administration, and as a state surveyor and nursing educator. Jeff is a well-known motivational and clinical speaker as well as an author. He has written more than 30 books, contributed to dozens more and has served as editor for numerous publications. Jeff, who is a Fellow in both the Academy of Emergency Nursing (AEN) and the American Academy of Nursing, served as president of the Emergency Nurses Association (ENA) in 2018 and as president of the Nursing Organizations Alliance in 2019 and 2020.

Aside from his work in the nursing field, Jeff founded the humanitarian organization Project Helping Hands, which deployed medical teams around the world. He has personally visited over 15 countries and led over 50 teams through his organization. He currently serves as the president of Solheim Enterprises while working part time in an intensive care unit in Portland OR. Jeff is the proud father of Brandon and is an equally proud grandparent of his grandson, Rylee. He combines his sense of humor with stories from his travels around the world to make each seminar a fun and unforgettable experience.

17 Contact Hours | Course Length: 1,029 minutes

Program Description

Certification demonstrates a commitment to specialties in nursing. The Trauma Certified Registered Nurse (TCRN) certification exam is designed to test the nurse's knowledge in the delivery of trauma care across the trauma nursing continuum. This course is designed to prepare the learner to be successful in passing this certification exam.

Program Learning Outcomes

This program prepares the learner to:

1. Have the knowledge necessary to prepare for and pass a trauma nurse certification exam.

Topics Covered

1 Preparing for the Exam

31 minutes

Module Description

The Trauma Certified Registered Nurse (TCRN) Exam is a certification offered by the Board of Certification for Emergency Nursing (BCEN). Exam content was updated in 2020. This certification is meant to provide board certification for nurses dedicated to the care of the traumatically injured patient. Initial certification will require the registered nurse to successfully pass a multiple-choice exam. This session will look at the construct of the exam itself as well as hints to successfully pass the exam.

Module Learning Outcomes

This module prepares the learner to:

1. Describe the purpose of completing a professional nursing certification exam.
2. Verbalize at least two study methods that can be employed to increase success on the exam.
3. List major areas that are tested on the TCRN Exam.

2 Special Considerations: Shock, SIRS, MODS

120 minutes

Module Description

Nearly all patients with significant traumatic injuries will develop some degree of shock. Many of these patients will also develop a systemic inflammatory response syndrome (SIRS), and some will even go on into multi-organ dysfunction syndrome (MODS). Even though each of these syndromes is associated with traumatic injury, they differ from other traumatic injuries in that they do not occur at the time of insult but rather arise in the hours or days after the injury. With early recognition and aggressive treatment, the effects of these syndromes can be minimized or even eliminated. This session will define various forms of shock as well as SIRS and MODS. Symptoms of each will be reviewed, current treatment modalities will be discussed and prevention strategies will be covered.

Module Learning Outcomes

This module prepares the learner to:

1. List four broad classifications of shock.
2. Define systemic inflammatory response syndrome (SIRS) and multi-organ dysfunction syndrome (MODS).
3. List the three components of the trauma triad of death.
4. Describe various blood components used in trauma resuscitation.

3 Special Considerations: Special Patient Populations

66 minutes

Module Description

Traumatic injuries span the lifespan and affect people from all walks of life. Many traumatic injuries are preventable, and some are even caused intentionally. This section will look at trauma in different age groups (eg, pediatric and geriatric trauma) as well as other special patient populations (eg, bariatric patients and patients with mental-health disorders). We will also look at intentional trauma, how to recognize it and special care considerations, including the collection and preservation of forensic evidence.

Module Learning Outcomes

This module prepares the learner to:

1. List unique care considerations for special patient populations, such as the pediatric, geriatric or bariatric patient.
2. Describe the effects of illicit substances on the delivery of trauma care.
3. Define the concept of the chain of evidence.

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4 Special Considerations: Psychosocial Aspects of Trauma

17 minutes

Module Description

Trauma is unique when compared to other illnesses encountered in the healthcare setting in that it is unexpected, sudden and often creates immediate disability and disfigurement, some of which can be permanent. The sudden nature of trauma, combined with the permanence of its effects, can have a profound impact on the trauma patient as well as that patient's support system. On the healthcare team, the nurse typically remains in the closest proximity to the patient and the patient's support system and must be prepared to recognize and intervene in the state of crisis and psychosocial disequilibrium that results after a traumatic injury. This session will cover the assessment and intervention of the psychosocial aspects of caring for the traumatically injured patient.

Module Learning Outcomes

This module prepares the learner to:

1. Differentiate between a state of crisis, acute stress disorder and post-traumatic stress disorder (PTSD).
2. Verbalize treatment goals for patients with PTSD..

5 Professional Issues

120 minutes

Module Description

When preparing for the TCRN Exam, the questions surrounding professional issues may create challenges for many test-takers simply because the topics contained in this section are frequently less familiar to the trauma nurse who has not served in an administrative role. Topics that will be covered in this session will include: trauma center designation/verification, legislation affecting trauma care, performance improvement, research- and evidence-based practice, critical incident stress management and ethics.

Module Learning Outcomes

This module prepares the learner to:

1. List three patient dispositions allowed by the Consolidated Omnibus Budget Reconciliation Act (COBRA)/ Emergency Medical Treatment and Labor Act (EMTALA) legislation.
2. Apply the performance improvement loop to a case study exercise.
3. Provide an example of quantitative and qualitative research.
4. List five ethical principles utilized in care of the trauma patient.

6 Clinical Practice: Head and Neck: (Intracranial Trauma)

101 minutes

Module Description

Brain injury remains one of the leading causes of death in traumatically injured patients. Survivors of both brain and spinal-cord trauma often live with long-term sequelae that can impact every aspect of their lives. This session will look at both brain injuries and spinal-cord injuries. Specific injuries and associated signs and symptoms will be covered. Assessment of both types of injuries will be covered in detail. An in-depth look at treatment and monitoring modalities will also be considered.

Module Learning Outcomes

This module prepares the learner to:

1. Select patients who are appropriate for intracranial pressure (ICP) monitoring based on indications and contraindications.
2. Determine if findings during assessment of the pupils in a brain-injured patient are normal or abnormal.
3. List at least five nursing activities that reduce cerebral metabolism in patients with traumatic brain injuries (TBIs).
4. List symptoms associated with a diffuse-axonal injury.
5. Describe the process of assessing for deficits associated with injuries to the anterior and posterior cords.

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7 Clinical Practice: Spinal and Neck

44 minutes

Module Description

Although spinal-cord injuries are fairly uncommon following trauma, the long-term negative sequelae of a spinal-cord injury on a patient's future causes the trauma team to protect the spinal cord from further injury during transport and care. This session will look at various types of spinal-cord injuries, the process of assessing a patient with a spinal-cord injury and a review of treatment modalities specific to the patient with a spinal-cord injury.

Module Learning Outcomes

This module prepares the learner to:

1. Define different types of spinal-cord injury.
2. Describe assessment techniques for various types of spinal-cord injuries.
3. Review care of the patient in neurologic shock.

8 Clinical Practice: Maxillofacial & Ocular Trauma

34 minutes

Module Description

The human face is the very structure of the body that gives us our identity. It also houses the essential structures of the airway. Nearly every one of the five senses is contained here. Therefore trauma to the neck, maxillofacial area and the eyes can have far-reaching impacts to the victim. This session will look at common injuries involving these structures, including: assessment, planning intervention and evaluation of neck, maxillofacial and ocular trauma.

Module Learning Outcomes

This module prepares the learner to:

1. List injuries commonly associated with blunt-cardiac injury.
2. Develop a plan of care for a patient with a pulmonary contusion.
3. Define acute respiratory distress syndrome (ARDS).

9 Trunk: Thoracic Trauma

101 minutes

Module Description

Aside from the brain, the thorax houses the most vital structures in the body, namely the heart, great vessels and lungs. Trauma to these areas can cause both immediate as well as delayed mortality. It is essential for the trauma nurse to recognize and intervene in traumatic injuries to the thorax in a timely manner to reduce both morbidity and mortality. This session will look at common injuries associated with thoracic trauma, as well as the assessment, planning, intervention and evaluation of care for patients with thoracic trauma from both a resuscitation as well as an inpatient standpoint.

Module Learning Outcomes

This module prepares the learner to:

1. List injuries commonly associated with blunt-cardiac injury.
2. Develop a plan of care for a patient with a pulmonary contusion.
3. Define acute respiratory distress syndrome (ARDS).

10 Trunk: Abdominal Trauma

60 minutes

Module Description

The abdominal compartment contains both solid and hollow organs. Trauma to solid organs tends to cause rapid and severe blood loss. Trauma to hollow organs tends to cause delayed but infectious processes. Either way, the effects of abdominal trauma can provide numerous challenges for the trauma nurse. This session will review types of abdominal trauma, complications related to abdominal trauma, assessment of the abdomen and common diagnostic tests used to identify abdominal trauma. Symptoms, treatment and complications for each abdominal organ will also be reviewed.

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Module Learning Outcomes

This module prepares the learner to:

1. Describe the components of an abdominal assessment on a traumatically injured patient.
2. List common complications associated with splenic trauma.
3. Prioritize treatments for patients with rectal trauma.

11 Trunk: Genitourinary Trauma

47 minutes

Module Description

Although there are fewer organs in the genitourinary system when compared with the rest of the abdomen and injuries to the genitourinary organs do not have the immediate life-threatening effects of the thoracic cavity, trauma to the genitourinary system can have significant and long-term consequences for trauma patients. This session will look at trauma to the various genitourinary structures as well as signs, symptoms and interventions. Complications of genitourinary trauma will also be discussed.

Module Learning Outcomes

This module prepares the learner to:

1. Determine if catheterization is indicated after urethral trauma based on patient symptoms.
2. Recognize which complications of renal trauma are early onset and which are late onset.
3. List advantages and disadvantages of hemodialysis vs. continuous renal replacement therapy (CRRT) in the treatment of acute kidney injury (AKI).

12 Trunk: Obstetrical Trauma

44 minutes

Module Description

Few things strike fear in the heart of the trauma nurse more than learning that a traumatically injured patient is also pregnant. The pregnant patient is physiologically different than her nonpregnant counterpart, and the physiological changes can have significant impact on assessment and care of the traumatically injured patient. The trauma nurse must also consider the fact that there may be two patients requiring care – the mother and the unborn child, both with unique needs. This session will look at the changes that occur in the body during pregnancy and how they impact care of the trauma patient. Unique needs of the unborn child will also be discussed. Injuries and interventions specific to pregnancy will also be handled.

Module Learning Outcomes

This module prepares the learner to:

1. List injuries that are unique to traumatically injured patients who are pregnant.
2. Describe the procedure for assisting with a perimortem cesarean delivery.

13 Continuum of Care for Trauma

94 minutes

Module Description

Too many times, trauma care is thought of as something that occurs in the emergency department. Nothing could be further from the truth. Trauma care occurs along a continuum and involves players from the government level through prehospital personnel all the way to rehabilitation and home care. Countless people will ultimately make up the entire trauma team that provides comprehensive care to a traumatically injured patient. This session will look at the various aspects of trauma care from initial prehospital contact through rehabilitation and discharge.

Module Learning Outcomes

This module prepares the learner to:

1. Differentiate and define the three types of injury prevention (primary, secondary and tertiary).
2. Define the roles of each of the members of the rehabilitation team.
3. List the goals of effective prehospital trauma care.
4. Describe the process of performing a hypercarbia test to determine brain death.

14 Clinical Practice: Extremity and Wound (Burns)

71 minutes

Module Description

Burns may occur from heat, electricity, radiation and chemicals. In this section, we will look at various types of burns and how to care for them. We will also look at complications associated with burns and how to minimize those complications.

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Module Learning Outcomes

This module prepares the learner to:

1. Recognize various depths of burns.
2. Utilize the Modified Parkland Burn Formula to estimate fluid replacement after a burn.
3. Describe the process of chemical decontamination.
4. List treatments for unique burn situations.

15 Clinical Practice: Extremity and Wound (General)

79 minutes

Module Description

The skin is the largest organ on the human body. It has numerous functions ranging from maintenance of body temperature to prevention of infection to the creation of our individualized appearance. Damage to this organ can have far-reaching effects. Listeners will be introduced to various types of wounds, as well as treatments and special considerations for each one. Learners will also be introduced to wound care techniques and various types of dressings for different types of wounds.

Module Learning Outcomes

This module prepares the learner to:

1. Describe care of amputations and amputated body parts.
2. Define components of an effective dressing.
3. Match various types of dressings to wounds for which they would be appropriate.

Accreditation

RN/LPN/LVN/Other: 17.25 Contact Hours

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