

Lesson One – Introduction to Bleeding Control and Shock Management

Lesson Overview

In this lesson, students will learn how to identify and manage hypovolemic shock, how to apply a tourniquet to stop an arterial bleed, how to apply a chest seal to a sucking chest wound, how to pack a deep wound using hemostatic dressings, and how to apply a pressure dressing.

Pre-Lesson Knowledge

- Basic anatomy and physiology
- The difference between arteries, veins, and capillaries
- Use of personal protective equipment and BSI procedures
- Proper patient care and documentation

Lesson Objectives

After completing this lesson, participants will be able to:

- Demonstrate how to manage shock
- Demonstrate proper application of a tourniquet
- Demonstrate proper application of a chest seal
- Demonstrate packing a wound using hemostatic dressings
- Demonstrate proper application of a pressure dressing

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS:	<ul style="list-style-type: none"> • <i>Introduction to Bleeding Control and Shock Management (Focus on Empathy)</i> worksheet • <i>Introduction to Bleeding Control and Shock Management (Focus on Empathy) Instructor Resource</i> • <i>Introduction to Bleeding Control and Shock Management Pre-test</i> • <i>Introduction to Bleeding Control and Shock Management Pre-test – Answer Key</i> 	1. Print/photocopy <i>Introduction to Bleeding Control and Shock Management (Focus on Empathy)</i> and <i>Introduction to Bleeding Control and Shock Management Pre-test</i> (one per participant)	20-30 minutes
LEARN	<ul style="list-style-type: none"> • <i>Introduction to Bleeding Control and Shock Management</i> slide presentation • Arm Amputation/Bleeding Model • Trauma Wound Sim Suit • Medical Manikin (if available) 	1. Prepare <i>Introduction to Bleeding Control and Shock Management</i> slide presentation for viewing	20-30 minutes
REVIEW	<ul style="list-style-type: none"> • Arm Amputation/Bleeding Model for student practice and demonstration of skills • Trauma Wound Sim Suit • Medical Manikin (if available) • <i>Introduction to Bleeding Control and Shock Management Post-test – Answer Key</i> 	1. Print <i>Introduction to Bleeding Control and Shock Management Post-test</i> (one per participant)	50-60 minutes

Instructor Note: Focus activities may also be completed prior to class.

Lesson One – Introduction to Bleeding Control and Shock Management

FOCUS: Developing Awareness of Patient-Focused Care

20-30 minutes

Purpose:

To help students develop an awareness of patient-focused care and see what knowledge they already have on the topics of bleeding control and shock management.

Materials:

- *Introduction to Bleeding Control and Shock Management (Focus on Empathy) worksheet*
- *Introduction to Bleeding Control and Shock Management (Focus on Empathy) Instructor Resource*
- *Introduction to Bleeding Control and Shock Management Pre-test*
- *Introduction to Bleeding Control and Shock Management Pre-test – Answer Key*

Facilitation Steps:

1. Distribute the *Introduction to Bleeding Control and Shock Management (Focus on Empathy) worksheets* prior to or at the beginning of class.
2. Have the *Introduction to Bleeding Control and Shock Management (Focus on Empathy) Instructor Resource* available.
3. Pair up students and have them complete the *Introduction to Bleeding Control and Shock Management (Focus on Empathy) worksheet*.
4. Distribute the *Introduction to Bleeding Control and Shock Management Pre-test* and have students complete it.
5. Either collect the pre-test or have students self-correct, using the *Introduction to Bleeding Control and Shock Management Pre-test – Answer Key* as a resource.

Introduction to Bleeding Control and Shock Management (Focus on Empathy)

Skill: Bleeding control of a gunshot victim

READ the following:

Your EMS unit is called to a possible gunshot victim in a well-known part of town. You start responding to the location but wait a few blocks away until the police department clears the scene. Dispatch updates you that you have a 35-year-old male patient who has multiple gunshot wounds and is conscious and alert. Shortly afterwards, the police say the scene is secure and you are cleared to continue responding. When you arrive, you are met by an officer who takes you to the patient inside a residence, telling you that the patient was shot multiple times by an intruder. Your patient is conscious and alert, with gunshot wounds to his shoulder, abdomen, and arm. While your partner is assessing the patient, you apply pressure to the abdominal wound since it is bleeding the most. The fire department arrives shortly afterwards to assist you with your patient. You ask them to apply pressure, dress the other wounds, and administer high flow oxygen. While you are preparing your patient for transport, his wife comes home to see the first responders at their house and is visibly concerned and afraid. You ask the wife if she would like to ride with you in front of the ambulance so she can be with her husband when he arrives at the hospital.

REFLECT on the situation:

What emotions do you think the wife is feeling?

Why do you think the EMT asked the wife if she wanted to ride with them to the hospital?

What could the EMT say to the wife that could be helpful in this situation?

What should the EMT say to the wife if she asks if her husband is going to die?

SHARE your thoughts with a peer when it's discussion time.

Introduction to Bleeding Control and Shock Management (Focus on Empathy) Instructor Resource

Skill: Bleeding control of a gunshot victim

READ the following:

Your EMS unit is called to a possible gunshot victim in a well-known part of town. You start responding to the location but wait a few blocks away until the police department clears the scene. Dispatch updates you that you have a 35-year-old male patient who has multiple gunshot wounds and is conscious and alert. Shortly afterwards, the police say the scene is secure and you are cleared to continue responding. When you arrive, you are met by an officer who takes you to the patient inside a residence, telling you that the patient was shot multiple times by an intruder. Your patient is conscious and alert, with gunshot wounds to his shoulder, abdomen, and arm. While your partner is assessing the patient, you apply pressure to the abdominal wound since it is bleeding the most. The fire department arrives shortly afterwards to assist you with your patient. You ask them to apply pressure, dress the other wounds, and administer high flow oxygen. While you are preparing your patient for transport, his wife comes home to see the first responders at their house and is visibly concerned and afraid. You ask the wife if she would like to ride with you in front of the ambulance so she can be with her husband when he arrives at the hospital.

REFLECT on the situation:

What emotions do you think the wife is feeling?

Pain, anguish, uncertainty, helplessness, doubt, confusion.

Why do you think the EMT asked the wife if she wanted to ride with them to the hospital?

The EMT wanted to help comfort the wife in this scary situation. By going to the hospital with them, the EMT can explain what they are doing to help her husband, and the wife can ask questions and not be alone during this emergency.

What could the EMT say to the wife that could be helpful in this situation?

The EMT can explain what injuries her husband has and what they are doing to help him. The EMT can honestly answer any questions the wife has to help her have peace of mind.

What should the EMT say to the wife if she asks if her husband is going to die?

It is not good to give false hope to a patient or a loved one. The best answer is to say that you are doing everything you can, the patient is in good hands, and you'll be at the hospital soon. I would explain the procedures we are doing to help her husband, so she has an idea of what help we are administering.

SHARE your thoughts with a peer when it's discussion time.

Name: _____ Class: _____

Introduction to Bleeding Control and Shock Management Pre-test

Select the correct answer to the following multiple-choice questions:

1. What is the definition of hypovolemic shock?
 - a. Shock due to loss of body heat
 - b. Shock due to an allergic reaction
 - c. Shock due to blood or fluid loss
 - d. Shock due to an infection
2. What does the NREMT recommend for bleeding control and shock management?
 - a. Apply direct pressure to a wound
 - b. Apply a tourniquet if indicated
 - c. Administer high-flow oxygen
3. What are the three main methods to control bleeding, in order of priority?
 - a. Pressure points, tourniquets, bandaging
 - b. Elevate, hemostatic dressings, pressure dressings
 - c. Direct pressure, elevate, pressure points
 - d. Pressure dressings, tourniquets, hemostatic dressings
4. Tourniquets are used on what body part?
 - a. Neck
 - b. Torso
 - c. Extremities
 - d. Head
5. When applying a pressure dressing, what do you never want to do?
 - a. Apply pressure
 - b. Remove the first bandage before applying a new one
 - c. Use sterile dressings
 - d. Elevate a limb above the heart

Introduction to Bleeding Control and Shock Management Pre-test – Answer Key

1. What is the definition of hypovolemic shock? *Refer to slide 3*
 - a. Shock due to loss of body heat
 - b. Shock due to an allergic reaction
 - c. **Shock due to blood or fluid loss**
 - d. Shock due to an infection
2. What does the NREMT recommend for bleeding control and shock management? *Refer to slide 5*
 - a. Apply direct pressure to a wound
 - b. Apply a tourniquet if indicated
 - c. Administer high flow oxygen
 - d. **All of the above**
3. What are the three main methods to control bleeding, in order of priority? *Refer to slide 6*
 - a. Pressure points, tourniquets, bandaging
 - b. Elevate, hemostatic dressings, pressure dressings
 - c. **Direct pressure, elevate, pressure points**
 - d. Pressure dressings, tourniquets, hemostatic dressings
4. Tourniquets are used on what body part? *Refer to slide 7*
 - a. Neck
 - b. Torso
 - c. **Extremities**
 - d. Head
5. When applying a pressure dressing, what do you never want to do? *Refer to slide 12*
 - a. Apply pressure
 - b. **Remove the first bandage before applying a new one**
 - c. Use sterile dressings
 - d. Elevate a limb above the heart