

## Chapter Review Questions

### Chapter 1

1. True or false: As a First Responder, your first priority when responding to any emergency scene is patient care.
2. True or false: The first step in the EMS response to a medical emergency is the arrival of a First Responder at the scene.
3. True or false: A person with chronic illness being treated by a personal physician may need emergency care from a First Responder.
4. True or false: A physician within the EMS system oversees the care given by First Responders.
5. True or false: First Responders are not responsible for requesting additional EMS resources when an emergency requires specialized personnel or equipment.

### Chapter 2

1. True or false: As a result of stress, one patient may react to you with anger, while another patient may be depressed.
2. True or false: If you discover that you are unable to manage the stresses of emergencies, including coping with critical incident stress such as dealing with the family members of a child who has died, it would be better to seek a different form of employment.
3. True or false: As long as you wear medical exam gloves whenever providing emergency patient care and wash your hands well afterward, as a First Responder you have little risk of “catching” a bloodborne disease from a patient.
4. True or false: If you are exposed to a patient’s blood or other body fluids while providing emergency care, you should report this to your supervisor as soon as possible.
5. True or false: Allow family members to enter an unsafe emergency scene to retrieve an injured patient only if they first understand and accept the risks involved.
6. True or false: If a hostile person you are trying to care for threatens you, be patient, stay with the person, and explain who you are and that you are there to help.

### Chapter 3

1. True or false: When giving a patient emergency care, you are legally expected to provide the same care as a reasonable, prudent First Responder with similar training would give a patient in similar circumstances.

2. True or false: To obtain a person's consent for you to give him or her emergency care, you need only identify yourself to the patient and state your level of training.
3. True or false: If you are giving CPR to a patient with a terminal illness, and a family member tells you that the patient has said she does not want to be resuscitated, you should honor the patient's refusal of care and stop the CPR.
4. True or false: If you assess and release a patient before EMTs arrive and the patient later dies, you can be sued for abandonment even if you saw no evidence that the patient had a serious condition.
5. True or false: Because of ethical considerations for patient confidentiality, and to meet the requirements of the HIPAA law, you should not share information you learn about the patient, even with EMTs who take over care.

#### **Chapter 4**

1. True or false: The primary cause of cardiac arrest in infants and children is an uncorrected respiratory problem, such as a foreign body airway obstruction.
2. True or false: If external bleeding is not spurting or pulsing from a patient, the bleeding is not life threatening.
3. True or false: Cells begin to die in vital organs such as the brain after only a few minutes without oxygen.
4. True or false: Abnormal brain functioning, such as altered mental status, occurs only with injuries directly to nervous system tissue, including the brain or spinal column.
5. True or false: Heavy sweating means the patient is experiencing heatstroke.

#### **Chapter 5**

1. True or false: To use good body mechanics when lifting a weight, position your feet about a foot apart.
2. True or false: An unresponsive patient who is breathing and who is not suspected to have a spinal injury should be put in the recovery position.
3. True or false: With all emergency moves, try to keep the patient's head and neck in line with the spine as much as possible.
4. True or false: The direct ground lift is an emergency move for patients with a suspected neck or spinal injury.

5. True or false: A long backboard is used for patients with suspected spinal injuries found lying down.

## Chapter 6

1. True or false: When you arrive at the emergency scene, begin the scene size-up even before you exit your vehicle and while approaching the patient, including consideration of appropriate BSI precautions to take.
2. True or false: One of the considerations of scene safety is environmental threats, such as temperature extremes, from which the patient may need to be protected.
3. True or false: When assessing a trauma patient, it is not important to consider the mechanism of injury because your treatment is based only on signs and symptoms that you can directly observe.
4. True or false: When you arrive at an emergency scene where you see an unresponsive trauma patient, you should consider whether there may be additional patients before you begin care for the patient you see.
5. True or false: Always perform the initial assessment first, before forming an initial impression of the patient.
6. True or false: Unresponsiveness may be a sign of a serious injury or illness, but in itself responsiveness is not a serious problem.
7. True or false: To assess an apparently unresponsive patient using the AVPU scale, first shake the patient's shoulders.
8. True or false: Use the jaw thrust to open the airway of any trauma patient, not just one with clear signs of a spinal injury.
9. True or false: To perform the initial assessment and check the ABCs, first put the patient in a supine position.
10. True or false: Inadequate breathing in an adult is characterized by diminished mental status and a respiratory rate slower than 8 or greater than 30 breaths a minute.
11. True or false: The "C" step in checking the ABCs stands for "Cardiac" — this stage involves only checking for a pulse.
12. True or false: In your physical examination of a responsive patient, begin with the area of the chief complaint and examine other body areas only as appropriate.
13. True or false: When you take the patient's vital signs and check the pulse, a finding of a very weak and fast pulse (thready pulse) may indicate shock.

14. True or false: There is little value in checking capillary refill in your assessment of a patient's circulatory status.
15. True or false: When you assess a patient's pupils, either dilated or constricted pupils may indicate drug use, poisoning, or a nervous system condition.
16. True or false: The patient's history should focus only on signs and symptoms, allergies, and any medications taken.
17. True or false: If your patient is stable, you should repeat an ongoing assessment of the ABCs and physical examination every 15 minutes while waiting for EMTs to arrive.

## **Chapter 7**

1. True or false: In an unresponsive patient lying on the back, the epiglottis prevents vomit from flowing back down the throat. The only concern for First Responders is keeping the tongue from blocking the airway.
2. True or false: Perform a finger sweep to check the patient's mouth for a foreign object or other substances in any unresponsive patient in whom breathing is accompanied by gurgling or stridor.
3. True or false: To maintain the recovery position for an infant, hold the infant facedown over your arm with his or her head slightly lower than the body.
4. True or false: An adult with altered mental status and other signs of inadequate breathing should be given ventilations even if that patient is breathing slowly on his or her own.
5. True or false: For an unresponsive, nonbreathing patient whose mouth cannot be opened or is injured or if you cannot get a good seal with your mouth over the patient's mouth, insert an oral airway and then give ventilations through it.
6. True or false: In the initial assessment you open the patient's airway and give two ventilations. If your first breath does not go in, if you feel resistance, or if you do not see the patient's chest rise, then you must blow harder.
7. True or false: If your adult patient has a pulse but is not breathing, give ventilations at a rate of 1 breath every 3 to 5 seconds.
8. True or false: When giving a nonbreathing patient ventilations, blowing in too forcefully or for too long is ineffective and may put air in the stomach, which may cause vomiting.
9. True or false: Cricoid pressure is a technique used to keep the airway open and ensure ventilations reach the lungs.

10. True or false: It is not necessary to assess whether a patient's foreign body airway obstruction is mild or severe, because the emergency care is the same either way.
11. True or false: A foreign body airway obstruction is assessed in an unresponsive patient by trying to open the airway and giving two ventilations.
12. True or false: If you give abdominal thrusts to a responsive adult patient with a foreign body airway obstruction, and the patient coughs out the object and then is breathing easily and naturally, no additional medical care is needed.
13. True or false: The emergency care for an unresponsive, nonbreathing adult patient with a severe foreign body airway obstruction is exactly the same as for a medical patient in cardiac arrest as the result of a heart attack.
14. True or false: Emergency care for a severe foreign body airway obstruction in a responsive infant begins with positioning the infant and giving up to 5 back slaps between the shoulder blades.

## **Chapter 8**

1. True or false: Most suction units provide enough suction to remove solid objects like teeth, foreign bodies, and food as well as liquids.
2. True or false: Do not suction an adult more than 15 seconds at a time.
3. True or false: Always suction an infant's nostrils before the mouth.
4. True or false: An oral airway is generally a more effective way to open a trauma patient's airway than the jaw thrust.
5. True or false: To choose the correct oral airway size, measure the patient from the corner of the lips to the tip of the earlobe or angle of the jaw.
6. True or false: The primary advantage of using a bag mask to ventilate a nonbreathing patient is to prevent the rescuer from becoming fatigued by giving one's own breaths in ventilations.
7. True or false: When using a bag mask to ventilate a nonbreathing patient, give ventilations at the same rate as when giving ventilations through a resuscitation mask.
8. True or false: Supplemental oxygen should be used only to ventilate patients who have significant signs of low blood oxygen levels and poor perfusion, such as cyanosis or delayed capillary refill.

9. True or false: If available, a nonrebreathing mask should be used as an oxygen delivery device rather than a resuscitation mask with an oxygen port.

## **Chapter 9**

1. True or false: A very fast pulse is seldom a concern in emergency care; a First Responder should be concerned only with a slow pulse or a pulse that is irregular or very weak.
2. True or false: Knowing the cause of a patient's cardiac arrest helps you decide how best to perform CPR.
3. True or false: For any patient who is found unresponsive, not breathing, and pulseless, the highest and most immediate priority is to immediately begin CPR.
4. True or false: Usually an electric shock from an AED or another ACLS medical procedure is needed to restore a patient's heartbeat—and CPR alone only sometimes leads to resuscitation of the patient.
5. True or false: In CPR you should compress the chest hard and fast at a rate of 100 compressions per minute.
6. True or false: When compressing, keep your elbows straight and keep your hands in contact with the patient's chest at all times.
7. True or false: Be careful never to give the chest compressions of CPR to any patient with a pulse.
8. True or false: After circulation of blood stops with cardiac arrest, brain damage becomes irreversible in 8 to 10 minutes.
9. True or false: When two rescuers together give CPR to an adult patient, they use a ratio of 15 ventilations and 2 breaths.

## **Chapter 10**

1. True or false: Ventricular fibrillation is common following heart attack and is the most common cause of cardiac arrest.
2. True or false: Without exception, use an AED immediately on any patient if there is no response, no breathing, and no pulse.
3. True or false: If the AED advises giving the patient a shock, after giving the shock you should wait about 30 seconds for the unit to analyze the patient's heart rhythm again.

4. True or false: If the AED unit says not to shock a patient, this means the patient's heart will not benefit from defibrillation, but you should continue CPR because the patient may still survive.
5. True or false: For an unresponsive, nonbreathing child without a pulse, when a pediatric AED unit is not available, using a unit with adult pads is better than not using the AED at all.
6. True or false: If the patient has a medication patch or paste on the chest, do not place an AED pad directly over this area but instead place it at least one or more inches away.

## **Chapter 11**

1. True or false: For any medical emergency, administer oxygen to the patient if it is available and you are so trained (follow local protocol).
2. True or false: The signs and symptoms of heart attack vary considerably, and the patient may have no signs and symptoms at all before suddenly collapsing.
3. True or false: Cardiac arrest and death from heart attack usually occur within a few minutes after symptoms begin.
4. True or false: Suspect a respiratory problem in a patient only if the respiratory rate is faster and shallower than normal.
5. True or false: Before helping a patient with asthma to use an inhaler to treat an asthma attack, be sure that the patient identifies the inhaler as his or her own asthma medication.
6. True or false: The most effective way to determine the cause of a patient's altered mental status is to take the patient's vital signs.
7. True or false: When assessing a potential stroke patient, it is important to find out when the signs and symptoms first occurred, because the time may affect medical treatment.
8. True or false: The emergency care for a patient having a seizure is to help administer the patient's epilepsy medication by positioning the tablet under the patient's tongue.
9. True or false: Because both hypothermia and heatstroke develop gradually and worsen with continued exposure, it is important to recognize the signs and symptoms of a developing problem early to correct the condition before it becomes life threatening.
10. True or false: For a patient with severe hypothermia, because time is critical, you must act quickly to raise the patient's body temperature by any means at hand, such as immersion of the patient in hot water or the use of hot water bottles or a heat lamp.

11. True or false: If you know your patient has diabetes but you cannot determine whether the patient's signs and symptoms in a diabetic emergency are due to high or low blood sugar, you should give the patient a sugary substance.
12. True or false: When treating a responsive patient who swallowed a poison, and you know what that poisonous substance is, the Poison Control Center is your best source of information for how to treat the patient.
13. True or false: Your assessment of an injured responsive patient who is intoxicated with alcohol is the same as with any other trauma patient.
14. True or false: If your patient who is allergic to wasp stings becomes unresponsive after being stung, you should position this patient in the shock position if the patient is still breathing.
15. True or false: When providing emergency care for an upset patient who is having a behavioral emergency, it helps calm the patient if you get close to the patient and maintain as much physical contact as you reasonably can.

## **Chapter 12**

1. True or false: When assessing a patient's external bleeding, estimate the severity of blood loss based on the patient's signs and symptoms and your general impression of the amount of blood loss, but do not delay patient care for a more specific blood volume assessment.
2. True or false: Because you cannot maintain sufficient pressure to control severe bleeding through a dressing that has become saturated with blood, quickly replace that dressing with a fresh one and renew direct pressure.
3. True or false: Control internal bleeding with a wide pressure bandage over the injury site.
4. True or false: Early in shock, the patient may have increased pulse and breathing rates.
5. True or false: Because a patient in shock is likely thirsty and has depleted body fluids, give a patient fluids to drink but only if the patient is responsive.

## **Chapter 13**

1. True or false: If a patient's wounds involve only minor bleeding, complete your patient assessment before caring for and dressing the wounds.
2. True or false: For a minor wound such as an abrasion, irrigate the wound under running water for at least 5 minutes or until there appears to be no foreign matter in the wound.

3. True or false: With what seems to be a minor wound or laceration, you may release the patient because further medical care will be unnecessary.
4. True or false: A ring dressing helps control bleeding in a wound when a bone fragment is protruding from the skin.
5. True or false: A pressure bandage should be just tight enough to control bleeding in an extremity wound by cutting off circulation to the area.
6. True or false: If the patient has an amputated body part, the highest priority in your emergency care is care of the amputated part so that it may be surgically reattached.
7. True or false: If your patient has a chest wound in which you see air bubbling in the blood from the wound, apply an occlusive bandage firmly taped in place to prevent air from exiting the lungs through the chest wall.
8. True or false: If the patient has an abdominal wound with internal organs exposed, you should cover the wound and exposed organs with a dry, non-adherent dressing or a sterile, moist dressing, but do not pack the wound with dressings.
9. True or false: Signs of a possible skull injury include eyelids swollen shut or becoming discolored (bruising) and bruising under the eyes (raccoon eyes).
10. True or false: If a patient's injuries require bandaging one eye, if possible leave the other eye open because having both eyes covered or bandaged is frightening for the patient.
11. True or false: To control a patient's nosebleed, pinch, or have the patient pinch, the nostrils together just below the bridge of the nose for at least 10 minutes.
12. True or false: For any serious heat burn, flush the area with cold water until the patient no longer feels pain.
13. True or false: The first action to take for a patient with an electrical burn is to immediately move the patient away from contact with the source of electricity.

## **Chapter 14**

1. True or false: Emergency care for most patients with a musculoskeletal injury is the same regardless of the type of injury.
2. True or false: All musculoskeletal injuries should always be splinted.
3. True or false: Splint an injury only if it does not cause more pain.
4. True or false: Secure the splint on an open wound because that is the area most in need of support.

5. True or false: If you splint an arm or shoulder injury in the position found and this makes using a sling impossible or difficult, do not use a sling.
6. True or false: To splint an elbow injury, the splint should extend from the upper arm to the forearm.
7. True or false: When splinting an upper leg injury with an anatomic splint, pad between the legs, move the injured leg beside the uninjured one, and carefully tie the legs together.

## **Chapter 15**

1. True or false: With any patient with a head injury, assume the patient may also have a spinal injury and immobilize the head and neck to prevent movement.
2. True or false: With an unresponsive patient with a possible head injury, always perform a complete physical examination to search for other potential injuries.
3. True or false: In a patient with a head injury, even if the patient's signs and symptoms seem mild, swelling and/or bleeding in the brain may continue and the patient's condition may rapidly deteriorate and become life threatening.
4. True or false: The signs and symptoms of a brain injury may include nausea and vomiting and breathing problems or irregularities.
5. True or false: The emergency care for a skull fracture includes putting direct pressure on an open wound to control bleeding.
6. True or false: To support the spine of a patient with the signs and symptoms of a spinal injury, gently move the head and neck in line with the spine and immobilize the head in that position.

## **Chapter 16**

1. True or false: Childbirth usually requires specialized care of the mother and/or newborn.
2. True or false: Once the pregnant woman begins having contractions, childbirth will likely occur very soon.
3. True or false: The emergency care for vaginal bleeding in a pregnant woman includes positioning the patient lying on her left side.
4. True or false: Crowning is the most definite sign that childbirth will occur soon.
5. True or false: Once the infant begins to emerge from the birth canal, you should do nothing (except prepare to support the infant) until the infant has completely emerged.

6. True or false: If maternal bleeding does not stop soon after childbirth, massaging the mother's abdomen below the level of the navel will help control bleeding.
7. True or false: If a newborn is not crying immediately after childbirth, check for a pulse and start CPR immediately.
8. True or false: If you see a segment of the umbilical cord protruding through the birth canal before childbirth, position the woman either in the knee-chest position, to reduce pressure on the cord, or lying on the left side.

## **Chapter 17**

1. True or false: When caring for a young child, always maintain close personal touch to help calm and reassure the child.
2. True or false: Because infants are mouth breathers, suctioning secretions from the mouth can improve a breathing problem.
3. True or false: Putting a folded towel under the shoulders of an infant or young child helps better position the airway open.
4. True or false: As with an adult patient, CPR should be used only for a child who is unresponsive and who is not breathing and does not have a pulse.
5. True or false: A patient who is breathing at a rate of less than 20 breaths/minute (an infant) or less than 10 breaths/minute (a child) is considered to be in respiratory arrest.
6. True or false: Shock may be delayed in children, who compensate well at first but then suddenly decompensate.
7. True or false: If you suspect child abuse to have occurred in a patient to whom you are giving emergency care, you should not say anything to anyone because EMTs may act on your suspicion rather than performing an objective assessment.

## **Chapter 18**

1. True or false: Wait until you arrive at the patient's side before considering what body substance isolation precautions are needed and whether to call for additional help.
2. True or false: Special training is required for all but simple forms of patient extrication.
3. True or false: If you are the First Responder on the scene of a hazardous material spill, try to identify the specific hazardous material present if you can do so safely.

4. True or false: If you are called to a scene where you find an unresponsive patient in the water, get the person out of the water as quickly as possible so that you can give emergency care.

## **Chapter 19**

1. True or false: In a mass-casualty incident in which the Incident Command System is in operation, you should perform in your usual role as a First Responder.
2. True or false: In triage systems, a responsive patient with serious burns but without an airway problem is categorized as priority 2, urgent care needed, rather than as priority 1, immediate care needed.
3. True or false: The first step in the START triage assessment is the same as the first step of the initial assessment: assess for responsiveness.
4. True or false: The JumpSTART triage system for pediatric patients differs from the START system for adults in that while a respiratory rate faster than 30 breaths/minute indicates a high-priority problem in an adult, this rate may not be a problem in an infant or young child.

## Chapter Review Questions Answers and Explanations

### Chapter 1

1. False

Your first and highest priority is always safety—for yourself, bystanders, and the patient. Do not enter a hazardous scene in order to provide patient care, but wait for additional rescuers with the appropriate skills and equipment who will make the scene safe or remove the patient for care. Patient care is the second highest priority.

2. False

Before the First Responder can be called and then go to the emergency scene, someone (usually a lay citizen) has to activate EMS (usually with a call to 911). The first step is actually the occurrence of the emergency, followed by recognition of the emergency and activation of EMS. An additional step may occur if a citizen at the scene provides first aid before the First Responder arrives.

3. True

A person who receives regular treatment for a chronic illness, such as diabetes or asthma, may suddenly experience an emergency situation as a result of that illness. Such emergencies happen at home, at work, or anywhere in public. When the person is not present in a healthcare setting and such an emergency occurs, EMS provides emergency care the same as for an injured victim, typically with a First Responder beginning care.

4. True

Your local or regional EMS system is overseen and directed by a designated physician, usually called the Medical Director. This individual has ultimate responsibility for the medical care given by First Responders, EMTs, and others in the EMS system.

5. False

As the first EMS responder on the scene, a First Responder must contact EMS to request additional specialized personnel or equipment when needed. For example, if a citizen calls 911 about what seems a routine traffic accident with a minor injury, only First Responders and EMTs in an ambulance may be dispatched to the scene. If the First Responder observes a hazardous material spilled from one of the vehicles in the accident, he or she must immediately alert dispatch so that a trained haz-mat team can be sent to the scene.

### Chapter 2

1. True

Reactions to the stress of an emergency situation vary widely depending on the individual. In addition to anger and depression, other stress reactions may include fear, pain, panic, guilt, and confusion or delusion. Never take personally such stress reactions of patients or family members.

2. False

Everyone experiences stress in many aspects of life, and emergencies and especially critical incidents are particularly stressful. You can learn to manage stress, however, and to minimize its effects. Lifestyle changes can be helpful, and EMS programs such as critical incident stress management programs help further with a professional approach to stress management. Almost everyone can learn to cope with stresses.

3. False

Although wearing gloves and handwashing are important precautions to take with all patients, they alone do not provide total protection in all situations. You require additional personal protection in situations when a patient's blood may splash in your face or on any other exposed skin. Because some bloodborne pathogens live a long time on surfaces, an infection may also be transmitted to you hours after patient care from dried blood on your uniform or equipment. For these and other reasons, follow all the guidelines for preventing disease transmission—gloves are not enough.

4. True

The OSHA Bloodborne Pathogens Standard requires employers to have and follow a plan for occupational exposures to body fluids. Actions may include testing contaminated objects or the patient for pathogens, medical follow-up, and potential changes in procedures or equipment.

5. False

Safety is your highest priority as a First Responder. When the emergency scene is unsafe, do not enter it, nor should you allow family members, bystanders, or other rescuers without appropriate training and equipment to take this risk. Remember that any untrained person who enters a hazardous scene, even with the best intentions, may become another patient requiring rescue and treatment by the rescuers who will arrive soon, thus further complicating the initial situation.

6. False

If the person is hostile and threatening, you should retreat from the scene and call for help from law enforcement personnel. You can try to explain the care you would like to provide to someone who may be reacting to the emergency with hostility or anger, but if that person threatens you, you must make personal safety your highest priority. Wait for law enforcement personnel to manage the scene and any potential violence. But stay nearby to be able to offer care when the situation is under control.

### **Chapter 3**

1. True

This is the definition of the First Responder standard of care. When you give care as you have been taught, you cannot be held legally liable for a negative patient outcome.

2. False

While it is true that you should identify yourself to the patient and state your level of training, this is not all that is needed to obtain consent. You must also explain what you think may be wrong, describe the care you plan to give and its benefits, and explain any risks related to the care.

3. False

It is true that competent adult patients have the right to refuse care, and refusal is often indicated by an advance directive such as a Do Not Resuscitate (DNR) order. That order must be present, however—you must never act simply on a family member's wishes or hearsay. Follow your local protocol when you encounter a DNR order.

4. True

Once you have begun emergency care for a patient, including simply assessing that patient, you have a legal obligation to continue care until another person with equal or higher training takes over. Your First Responder training is not at a high enough level to determine whether a patient's condition is serious or minor. In any situation in which EMS was called for an injured or ill patient, wait for EMTs to arrive.

5. False

Although it is true that you should not share patient information with people in general, because of the principle of confidentiality, it is usually important to provide information to EMTs who take over patient care. The law allows such transfer of information without violating confidentiality.

## Chapter 4

1. True

Airway obstructions are common in children and infants because their airway is much smaller than in an adult and is more easily obstructed (and because small children are more likely to put things in their mouths). In adults, heart attack is the most common cause of sudden cardiac arrest. Understanding such differences will also help you understand differences in some assessment and treatment priorities.

2. False

Although it is true that arterial bleeding (which may spurt or pulsate from a wound under pressure) is generally more serious than the slower, more even flow of bleeding from veins, venous bleeding too can be serious or life threatening if it continues. Controlling external bleeding is a significant responsibility for First Responders.

3. True

Once breathing or the heart beat stops in an injured or ill person, vital organs such as the brain and heart are no longer receiving oxygen, and cells begin to die within minutes. Irreversible brain damage may begin to occur soon after. For these reasons, it is critical to address immediately any threats to a patient's respiratory or cardiovascular systems.

4. False

Altered mental status may result from many types of injuries and illnesses. Any condition that affects blood oxygen levels may cause altered mental status, such as respiratory distress. The brain is also affected by toxins in the bloodstream caused by poisoning or a drug overdose, and by other imbalances such as the insulin-glucose imbalance that occurs with a diabetic emergency. Altered mental status usually signals *something* is wrong—but seldom will this one symptom be enough to identify the patient's problem.

5. False

Although it is true that heavy sweating may occur early in heat emergencies, it also occurs with other conditions (and will stop as heatstroke becomes more severe). Sweating may occur with any condition that causes shock, and sweating may also occur with heart attack and other sudden illnesses. Like altered mental status, sweating (except appropriate sweating in a warm environment) usually signals something is wrong but does not identify the nature of the problem by itself.

## Chapter 5

1. False

The best lifting position involves placing your feet about shoulder width apart. In addition, lift with your legs, not with your back. Bend your knees and keep your back straight, then straighten your legs as you lift. Keep the weight as close to your body as possible, and try to lift straight up and avoid twisting your back during the lift.

2. True

Advantages of the recovery position include helping keep the airway open, allowing fluids to drain from the mouth, and preventing the patient from inhaling stomach contents if the patient vomits.

3. True

By definition, an emergency move is used when the patient must be moved for lifesaving care or to escape a hazard when you cannot take the time to assess, treat, and package the patient for a safe move. Nonetheless, you can still try to maintain inline stabilization of the head and neck during emergency moves. If the patient does have a spinal injury, keeping the head and neck in line with the spine will help prevent further injury.

4. False

The direct ground lift is a nonemergency move used to lift and carry a supine patient from the ground to a stretcher when the patient is not suspected to have a spinal injury. It is used, for example, to move a medical patient onto a stretcher for transport after assessment and emergency care have been carried out.

5. True

The long backboard is a conventional way to support the head and spine of a patient after assessment and treatment. Usually a cervical collar is used to prevent head movement, and the patient is strapped to the long board, which is then moved onto a stretcher for transport.

## Chapter 6

1. True

Start your scene size-up immediately as you arrive. In addition to BSI precautions appropriate for the patient, also look for any hazards at the scene and observe for any clues that may help

you better understand the nature of the emergency. Because factors in the emergency scene may change, or later become apparent, continue to size up the scene even as you begin patient assessment and care.

2. True

Temperature extremes and other conditions such as rain or ice may pose threats to an injured or ill patient. Scene safety involves protecting the patient from these conditions as well as other potential hazards at the scene. Bystanders also should be protected from scene hazards. Remember: If the scene is unsafe, make it safe or stay away.

3. False

Although it is true that emergency care is based primarily on your assessment of the patient's signs and symptoms, the mechanism of injury nonetheless may suggest the likelihood of serious injury or the presence of internal injuries that you cannot directly observe. For example, an unresponsive patient who fell from a height is likely to have both internal injuries and a spinal injury: and even without first observing signs of such injuries, you should treat the patient for shock and support the head and neck to prevent worsening of a potential spinal injury. Therefore, always consider the mechanism of injury during your scene size-up.

4. True

In your initial scene size-up, always consider whether there may be multiple patients, even if you do not see others at first. It is critical to alert EMS immediately about the presence of multiple patients—even before you begin assessment and treatment of a known patient. Additional help may be required to provide emergency care to multiple patients.

5. False

You should begin forming an initial impression of the patient even as you approach, because information gathered at this time may guide your assessment and treatment. Do not delay the initial assessment to take time to form an initial impression, however, because the initial assessment will reveal threats to life that require immediate treatment. But while moving to the patient, take note of appearance, injuries, bleeding, responsiveness, and so on. This principle involves using time wisely for patient assessment, even the short time it takes to walk to the patient.

6. False

Unresponsiveness is considered a life-threatening emergency, regardless of its cause. In an unresponsive patient who is lying on the back, the tongue may block the airway, preventing breathing. An unresponsive patient who vomits may choke on the vomit. Therefore unresponsiveness is always treated as a critical emergency, even in a patient who is breathing adequately and has a strong pulse.

7. False

To assess unresponsiveness, first speak to the patient. If the patient does not respond, tap him or her gently on the shoulder to elicit a response. Do *not* shake the patient's shoulders because this movement could worsen a potential spinal injury. If the patient still does not respond, assess for a response to a painful stimulus: rub the patient's sternum, if there is no chest injury, or gently

pinch the skin between the neck and shoulder to try to elicit a response. If there is no response even to pain, the patient is considered U on the AVPU scale, or unresponsive to all stimuli.

8. True

Assume an unresponsive trauma patient may have a spinal injury, and use the jaw thrust technique to open the airway when checking the ABCs. If the jaw thrust does not successfully open the airway, then switch to the head tilt–chin lift method.

9. False

A trauma patient who may have a spinal injury should not be moved unless necessary. First try to determine if the patient is breathing adequately by checking the patient in the position found: look, listen, and feel for breathing for up to 10 seconds. If the patient is not breathing, or you cannot be sure, then you may move the patient into a supine position in order to open the airway, but support the head and neck if possible when doing so.

10. True

In an adult it is important to check for adequacy of breathing, not just the presence or absence of breathing (as in a child), because an adult with inadequate breathing is given ventilations. In addition to diminished mental status and a respiratory rate that is too slow or too fast, other signs of inadequate breathing include difficult or labored breathing, wheezing or gurgling sounds with breathing, and pale skin (ashen skin in a dark-skinned patient) or a blue (cyanotic) color of the lips and nail beds.

11. False

The “C” step in checking the ABCs stands for “Circulation.” This means checking for an adequate pulse (a measure of heart beat) and for severe bleeding. Blood loss also threatens the patient’s circulation and thus can be a life-threatening problem also. Any severe bleeding therefore should be found and controlled during the initial assessment. (Minor bleeding does not threaten circulation and can be controlled later.)

12. True

With an unresponsive patient or a patient with a significant mechanism of injury, however, complete a rapid trauma assessment—a physical examination from head to toe in a systematic manner. With a responsive medical patient or a trauma patient with only a minor injury, perform a focused physical examination.

13. True

In addition to counting the pulse, assess the strength of the pulse (strong or weak) and the rhythm of the pulse (regular or irregular). A very weak and fast pulse (thready pulse) may indicate shock, or an irregular rhythm may indicate a cardiac problem. Either way, the patient should be considered unstable, and his or her condition may change.

14. False

Check the capillary refill of a child as part of your assessment of a child’s skin condition. A capillary refill time longer than 2 seconds may indicate shock or diminished blood flow. This patient should be considered unstable, and his or her condition may change.

15. True

The pupil assessment may provide valuable information about the patient's condition. Either dilated or constricted pupils may indicate drug use, poisoning, or a nervous system condition. In addition, unequal pupils may indicate a brain injury, stroke, or other conditions, and nonreactive pupils may result from medication or a brain injury.

16. False

While it is true that the history should include signs and symptoms, allergies, and medications, it should also include pertinent past medical history, the patient's last food or drink, and events that led to the current situation. The memory aid SAMPLE should remind you of these six elements of the history.

17. True

With a stable patient repeat these assessments every 15 minutes. With an unstable patient, repeat them every 5 minutes.

## Chapter 7

1. False

In an unresponsive person, the swallowing reflex involving the epiglottis may not function, allowing liquids or solids to flow back down the throat and into the trachea and lungs, blocking or limiting respiration and possibly causing a severe lung infection. Airway maintenance therefore includes clearing the mouth and airway of any substances, as well as preventing the tongue from obstructing the airway.

2. False

Perform a finger sweep only if you see material in the mouth or airway. Never perform a blind finger sweep, which could force an object deeper in the airway.

3. True

This is the recovery position for unresponsive breathing infants and helps maintain the airway open. Unresponsive breathing children not suspected to have a spinal injury are, like adults, placed in the HAINES recovery position.

4. True

Do not wait for respiratory arrest to occur in an adult with inadequate breathing before starting to provide ventilations. Inadequate breathing is defined as a condition in which the patient is not getting enough oxygen because of breathing too slowly (less than 10 breaths per minute) or too weakly. The patient will likely have altered mental status and may have a cyanotic appearance. In a child or infant, however, look only for the presence or absence of breathing, because a child may be breathing slowly but still adequately.

5. False

If the patient's mouth cannot be opened or is injured, or if you cannot get a good seal with your mouth over the patient's mouth, give ventilations through the nose. Do not delay ventilations by measuring for and inserting an oral airway (which is impossible to insert anyway, if the mouth

cannot be opened). Hold the patient's mouth closed, seal your mouth over the nose to blow in, and then allow the mouth to open to let the air escape.

6. False

If your breath does not go in, you feel resistance, or you do not see the patient's chest rise, then try again to open the airway. Blowing harder will not correct for not having successfully opened the airway, nor is this an effective way to ventilate past an airway obstruction. If you were attempting to use the jaw thrust technique, you may switch to the head tilt–chin lift method to open the airway.

7. False

For an adult, give ventilations at a rate of 1 breath every 5 to 6 seconds. For an infant or child, give ventilations at a rate of 1 breath every 3 to 5 seconds.

8. True

If an unresponsive patient vomits, you have to roll the patient onto the side to drain the mouth and clear the airway before continuing ventilation. Vomiting also increases the risk of aspiration. To prevent vomiting when giving ventilations, open the airway before giving each breath, blow steadily over 1 second, watch the chest rise as you give each breath, stop each breath when the chest rises rather than continuing to blow, and let the chest fall between breaths.

9. False

Cricoid pressure on the trachea squeezes the esophagus closed, preventing air from traveling to the stomach during ventilations. Cricoid pressure does not open the airway—but it helps ensure air moving through the airway stays in the trachea rather than some entering the esophagus.

10. False

In a mild foreign body airway obstruction the patient is getting some air into the lungs, and the patient may be able to cough forcefully enough to clear the obstruction. You should encourage coughing while monitoring the patient's status. In a severe foreign body airway obstruction, however, the patient is getting no air at all into the lungs and needs immediate emergency care (abdominal thrusts for a responsive patient, or CPR for an unresponsive patient).

11. True

These are the first two steps of the ABCs, performed in the initial assessment of any patient determined to be unresponsive. If your ventilations do not go into the patient and make the chest rise, assume that the patient has an obstructed airway and begin CPR.

12. False

Abdominal thrusts sometimes cause internal injury, so the patient should be examined by a healthcare provider. As always, wait for arriving EMTs and explain what happened and the emergency care you gave, and they will take appropriate action.

13. False

Both of these patients should receive CPR, with alternating chest compressions and ventilations, but there is one difference in how the CPR is performed. With the patient with an airway obstruction, each time you open the mouth to give ventilations, check inside the mouth for a foreign body, and remove it if seen. This is important because the chest compressions of CPR may force the obstructing object out of the airway where you can remove it. In CPR for a heart attack victim, typically there is no obstruction and you need not check the mouth when giving ventilations.

14. True

If the initial set of back slaps does not result in the obstructing object being expelled, then roll the infant over and give up to 5 chest thrusts. If the obstruction remains, alternate back slaps and chest thrusts until the obstruction clears or the infant becomes unresponsive; as with an adult, provide CPR for an unresponsive infant with a foreign body airway obstruction.

## Chapter 8

1. False

Most suction units are inadequate for removing solid objects like teeth, foreign bodies, and food. They were designed for liquids and small semisolids. To remove solid objects, vomit, and large amounts of fluid, first turn the head (supporting the neck and spine in a trauma patient) and drain or sweep out the mouth before suctioning.

2. True

Because prolonged suctioning can decrease the amount of air reaching the patient's lungs, do not suction more than 15 seconds at a time in an adult, 10 seconds at a time in a child, or 5 seconds at a time in an infant.

3. False

Always suction an infant's mouth before the nostrils, because suctioning the nose may stimulate the infant to breathe in and thereby inhale fluid or secretions from the mouth.

4. False

An oral airway does not open the patient's airway but helps maintain it open after you have positioned the patient properly to open the airway. If you have difficulty opening a patient's airway with the jaw thrust, switch to the head tilt–chin lift technique.

5. True

Choose the correct size oral airway by holding it along the patient's jaw from the corner of the lips to the tip of the earlobe or angle of the jaw. An airway that is either too long or too short will not keep the airway open and may actually contribute to blocking the airway.

6. False

The primary advantage of using a bag mask to ventilate a nonbreathing patient is that the patient receives air with a higher percentage of oxygen (21%) than the air exhaled by a rescuer (16% oxygen). The bag mask may also be connected to an oxygen source, providing up to

100% oxygen to the patient. The higher the percentage of oxygen given a nonbreathing patient, the better his or her chances are for full recovery.

7. True

When using a bag mask, give a ventilation every 5 to 6 seconds in an adult (or every 3 to 5 seconds in an infant or child), the same as with ventilating by mouth or resuscitation mask.

8. False

Supplemental oxygen should always be used for ventilation of nonbreathing patients when available. In addition, breathing patients with heart attack, stroke, seizures, and other illnesses and injuries also will benefit from receiving oxygen.

9. True

A nonbreathing mask with an oxygen reservoir provides a higher concentration of oxygen to the patient (80% to 95%) than a regular resuscitation mask (an oxygen concentration of 30% to 60%).

## Chapter 9

1. False

Pulse rate is affected in different ways by different injuries and illnesses, and either a very fast or very slow rate may be a signal of a problem. For example, the body may increase heart rate as a way to compensate for a low blood oxygen level, but the patient's condition may then rapidly grow worse. Pay attention to any deviation in pulse rate, strength, or regularity.

2. False

CPR is performed with the same technique regardless of the cause of the cardiac arrest. The only differences in CPR depend on the patient's age and number of rescuers performing CPR. All patients in cardiac arrest have the same need for oxygen to enter the blood (from ventilations) and for chest compressions to circulate the blood to vital organs.

3. False

Although it is true that any patient who is found unresponsive, not breathing, and pulseless needs CPR as soon as possible, in many circumstances it is a higher priority to ensure EMS is responding with an AED unit. In situations in which the patient's heart is likely to be in fibrillation, a delay in defibrillation lowers the patient's chances for survival. Call EMS first for a patient of any age seen to collapse suddenly, who is more likely to have a dysrhythmia and to require defibrillation. For unresponsive patients in cardiac arrest because of a likely asphyxial arrest, such as a drowning patient or a child likely to have an airway obstruction, give 5 cycles of CPR (about 2 minutes) before stopping to call for help.

4. True

Although sometimes a patient's heart may start again spontaneously with CPR, in most cases an AED or other medical procedure is needed to resuscitate the patient. Importantly, CPR can often keep the patient viable until then.

5. True

Although you do not actually give 100 compressions in a minute, because you pause after each set of 30 compressions (except in two-rescuer CPR of an infant or child) to give 2 ventilations, that is the rate at which compressions are given. Remember “fast and hard” are the key words for compressions.

6. True

Keeping your elbows straight allows you to exert more force downward on the chest with your body weight. Keeping your hands in contact with the chest prevents losing time moving your hands on and off the chest or finding the correct location for compressions. Do not, however, keep pressure on the chest between compressions, but allow the chest to recoil fully.

7. False

It is true that an adult with a pulse should not receive chest compressions, but an infant or child does receive chest compressions if the pulse is less than 60 beats/minute (bradycardia) and the infant or child has signs of poor systemic perfusion (such as poor skin color).

8. True

Brain damage begins 4 to 6 minutes after the patient suffers cardiac arrest, and becomes irreversible in 8 to 10 minutes. This is why it is critical to begin CPR (and use an AED) as soon as possible.

9. False

Two-rescuer CPR for an adult uses the same ratio of 30 compressions and 2 breaths as single-rescuer CPR. For an infant or child, however, two-rescuer CPR does use the ratio of 15 compressions and 2 breaths. Remember this difference applies only to infants and children and only when two rescuers perform CPR together.

## **Chapter 10**

1. True

Because ventricular fibrillation is so common in patients without a pulse, it is crucial to use an AED as soon as possible. If you do not have one with you, notify EMS to ensure one is on the way. CPR will help keep a patient in cardiac arrest viable but will seldom restart a heartbeat. Remember: With every minute that passes before defibrillation, the patient’s chances for survival drop by about 10%.

2. False

Although this is the general rule, there are two exceptions in which you provide CPR before using the AED. For a pulseless child who was not observed to have collapsed suddenly, or for an adult found pulseless on your arrival when more than 4–5 minutes have passed since you were called to respond, provide 5 uninterrupted cycles of CPR (about 2 minutes) before using the AED.

3. False

After the shock, immediately give CPR for 5 cycles (about 2 minutes). Do not check for a pulse. Then the AED will analyze again and advise giving another shock, if needed, or continuing CPR.

4. True

Ventricular fibrillation is not the only condition that leads to cardiac arrest, and CPR can keep many patients viable even if the AED will not restore a normal heartbeat. In some cases a patient may spontaneously regain a normal heartbeat while being given CPR, or the patient can be kept alive until arriving EMTs or Emergency Department personnel can give lifesaving medical treatment.

5. True

Although it is better to use a pediatric unit or pads with a child, the lower energy level is more appropriate for a child; if only an adult AED unit is available, use it. If the unit finds the child's heart to be in ventricular fibrillation, the shock may successfully restore a normal heartbeat.

6. False

If the patient has a medication patch or paste on the chest, remove it and then wipe the chest before applying the AED pads. But if the patient has a bulge or lump beneath the skin indicating an implanted pacemaker or defibrillator, then do not place a pad directly over this area but instead place it at least one or more inches away.

## Chapter 11

1. True

This is standard patient care for any medical emergency. In addition to the standard care for all patients, for all medical patients also help the patient rest and avoid getting chilled or overheated, do not give the patient anything to eat or drink, watch for changes, and be prepared to give Basic Life Support (BLS).

2. True

Common signs and symptoms include persistent pressure, tightness, ache, or pain in the chest, which may spread to the neck, shoulders, or arms; shortness of breath; dizziness, lightheadedness, a feeling of impending doom; pale, moist skin or heavy sweating; and nausea. A patient may have any combination of these signs and symptoms or none at all before suddenly collapsing. Therefore, consider the possibility with a wide range of symptoms rather than expecting a clearly defined situation.

3. False

While cardiac arrest can occur suddenly or without any signs and symptoms at all occurring first, commonly cardiac arrest and death occur within an hour or two. Nonetheless, time is a crucial factor in preventing death from heart attack, and any patient suspected of having a heart attack needs advanced medical care as soon as possible.

4. False

A patient in respiratory distress may be breathing either faster or slower than normal, and breathing may be either deeper or shallower than normal. Additional signs and symptoms are breathing sounds such as wheezing or gurgling, dizziness or lightheadedness or other signs of altered mental status, and skin that may look pale or ashen and be cool and moist.

5. True

This is one of three conditions that should be met before a First Responder can assist a patient with using an asthma medication. In addition to the patient identifying the inhaler as his or her own asthma medication, be sure that the patient confirms that it is an asthma attack and assist only if the patient cannot self-administer the medication.

6. False

Altered mental status may result from many types of injuries and illnesses, and there is no simple way to determine the cause. Assess the patient for any other conditions or factors that may lead to altered mental status. Remember that any condition that affects the patient's blood oxygen levels may result in altered mental status. Common causes of altered mental status include seizures, stroke, head injury, poisoning or drug use or overdose, high fever, infection, diabetic emergencies, and psychiatric conditions.

7. True

When you have this information, alert dispatch or responding EMTs and provide this information. The amount of time that has passed since signs and symptoms began may affect how EMTs provide care, help emergency department personnel prepare to treat the patient after transport, and may affect the choice of medical site to which the patient is transported.

8. False

Although many people with epilepsy do take a medication to help prevent seizures, there is not a common medication used this way once a seizure occurs. If you answered True to this question, you may have been thinking about glucose paste that may be administered to a patient in a diabetic emergency, or patients who take nitroglycerine tablets that dissolve under the tongue. Trying to put anything in the mouth of a patient having a seizure would be a dangerous act.

9. True

Although in some instances the patient's heat or cold emergency may have already become life threatening by the time of your arrival on scene, it is important always to prevent any continuing exposure to temperature extremes. This is the first step in emergency care for both heat exhaustion/heatstroke and hypothermia.

10. False

Rapid rewarming of a hypothermic patient is dangerous because a heart dysrhythmia may develop. Therefore, do not immerse the patient in hot water or use direct heat (hot water bottle, heat lamp, heating pad). Instead, protect the patient from any further heat loss. Move the patient out of the cold environment, remove any wet clothing, and cover with a blanket.

11. True

If you cannot judge whether the patient has hypoglycemia or hyperglycemia, give sugar as for low blood sugar (following your local protocol). If it happens that the patient has hyperglycemia (high blood sugar), this additional sugar will not worsen the condition, but it could solve the problem if the patient has low blood sugar.

12. True

The Poison Control Center (PCC) generally has the most comprehensive and up-to-date information on the effects of poisons and the best way to treat them. For an unresponsive patient, ensure EMS is activated and provide emergency care while waiting for EMTs to arrive. But with a responsive patient, the PCC may be able to direct you to provide other patient treatments before EMTs arrive. Follow your local protocol.

13. False

Because alcohol may keep the patient from feeling pain or may distort the patient's perception of other symptoms, do not rely on patient's reported perceptions or sensations when you are assessing or treating the patient. Instead, base your judgments more on observed signs than on subjective symptoms.

14. False

As usual, position an unresponsive breathing patient without a suspected spinal injury in the HAINES recovery position on his or her side. This helps maintain the airway and allows fluids to drain from the mouth. Although a severe allergic reaction may become anaphylactic shock, the shock position is not used for an unresponsive breathing patient because the airway may be obstructed by the patient's tongue. While the patient is in the recovery position, monitor breathing and vital signs, and give BLS as needed.

15. False

An emotional patient in a behavioral emergency may react negatively or feel threatened if you get uncomfortably close or touch him or her too often or unnecessarily. Therefore, maintain a comfortable distance, and avoid unnecessary physical contact. Do not make quick moves. Your goal is to help calm and reassure the patient while providing care.

## **Chapter 12**

1. True

Controlling bleeding and other patient care is more important than trying to make a specific blood loss volume determination. The emergency care you provide does not depend upon estimating the amount of blood lost.

2. False

Do not remove a dressing that becomes saturated with blood. Doing so would take time away from maintaining pressure on the wound, and removing the dressing may allow the wound to bleed more forcefully than it was. Instead, if bleeding soaks through the dressing, put a fresh dressing on top of it and continue to apply pressure.

3. False

You cannot control internal bleeding. Treat the patient for shock and give supportive care until additional EMS resources arrive. Keep the patient in a position of comfort, and keep the patient warm. Follow local protocol to administer high-flow oxygen if it is available and you are so trained.

4. True

The body attempts to compensate in shock by increasing the heart and breathing rates. In late shock, the pulse may become weak and blood pressure falls.

5. False

Do not give a shock patient anything to eat or drink. Provide care for specific injuries, and follow local protocol to administer high-flow oxygen if it is available and you are so trained.

## Chapter 13

1. True

If bleeding is not serious, complete the patient assessment before attending to the wounds. You may discover a more serious injury for which emergency care has a higher priority. Then give care for minor wounds.

2. True

Irrigate the wound under running water to flush out any debris and clean the area to prevent infection. But do this only with a minor wound; with a more serious wound, apply a sterile dressing and control bleeding, leaving wound cleaning to the medical personnel who will assume patient care.

3. False

Even with a minor wound, stitches may be needed or the patient may not have a current tetanus vaccination and therefore be at risk for serious infection. Therefore, ensure the patient receives medical attention.

4. True

A ring dressing is used when pressure should not be put on the center of a wound, such as with a skull fracture, a fractured bone protruding from a wound, or an object impaled in a wound.

5. False

A pressure dressing or bandage works by maintaining pressure directly on the wound site, not by cutting off circulation to the area (and therefore to the extremity). After bandaging the wound, always check the fingers or toes for color, warmth, and sensation to ensure circulation has not been cut off.

6. False

Your first priority is to care for the patient and the wound. Control any severe bleeding first and dress the wound. Then care for the amputated part.

7. False

For a sucking chest wound, use an occlusive dressing (or improvise with a plastic wrap or bag) that is taped in place on three sides, leaving one side untaped. This allows air to escape from the wound but prevents air from being sucked into the chest cavity (which may draw blood into the lungs).

8. True

With an open abdominal wound, do not push protruding organs back inside the abdomen or apply direct pressure on the wound. Cover the wound and exposed organs with a dry, non-adherent dressing or a sterile, moist dressing. Do not pack the wound with dressings. Then cover the dressing with a large, occlusive dressing or plastic wrap, taped loosely in place. Cover the area with a blanket or towel to help maintain warmth.

9. True

These are signs of a possible skull fracture. Other possible signs include a deformed area of the skull, a depressed or spongy area in the skull, blood or fluid from the ears or nose, bruising behind the ears (Battle's sign), unequal pupils, or an object impaled in the skull.

10. False

With most eye injuries, movement of the eye will continue to worsen the injury, so it should be bandaged. The unaffected eye must also be covered, because its movement will cause the injured eye also to move. To minimize the patient's fear and discomfort, explain what you are doing and why before covering the good eye.

11. True

Also ask the patient to breathe through the mouth and not speak, swallow, cough, or sniff. After 10 minutes, release the pressure slowly. If bleeding continues, pinch the nostrils again for another 10 minutes.

12. False

While the emergency care for many heat burns includes cooling the burn with cold water, do not flush large, full-thickness burns (over 20% of body surface area, or 10% in a child), because of the risk of hypothermia and shock.

13. False

Do not touch (or try to move) the patient until you know the area is safe. Unplug or turn off the electrical power. Do not approach a downed power line. Only after you are sure there is no risk of electricity continuing to flow should you approach the patient to care for the burn.

## Chapter 14

1. True

You do not need to know the exact type of injury in order to provide emergency care for the patient. The principles of emergency care are the same for most musculoskeletal injuries. Prevent movement of the injured area, perform standard patient care, allow the patient to remain in a position of comfort, cover open wounds with a sterile dressing, and put a cold pack on an area of painful, swollen, deformed extremity to reduce swelling and pain, except on an open fracture.

2. False

Splint an injured extremity if there is a risk for movement of the injured area unless help is expected within a few minutes. If movement of the area can be prevented and help is expected soon, there may be no reason to apply a splint before EMTs arrive.

3. True

If the patient complains of pain when you are applying a splint, stop the splinting and manually immobilize the area until additional EMS personnel arrive.

4. False

Do not secure the splint on an open wound but tie the bandages or other materials on both sides of the wound. Securing the splint directly on the wound could cause additional injury.

5. True

Splint any injury in the position you find it. Trying to straighten out an extremity or joint or bending it in a position for use of a sling could worsen the injury.

6. True

Always apply a splint to immobilize the entire injured area from the area or joint above the injury to the area or joint below the injured area.

7. False

Never move the injured extremity or body area when applying a splint (unless necessary for lifesaving emergency care). Instead, with an anatomic splint, move the uninjured leg beside the injured one.

## Chapter 15

1. True

The forces involved in head trauma may also result in a spinal injury. Assume the patient may have a spinal injury and act accordingly, including immobilization of the head and neck and use of the jaw thrust technique if necessary to open the patient's airway.

2. False

If your initial assessment does not reveal a life-threatening condition for which you must care, perform a limited physical examination for other injuries in an unresponsive patient. Look for serious bleeding, but do not move the patient or palpate the entire body to check for other injuries. Monitor the patient's breathing and pulse, maintain the airway open, and prevent movement while waiting for EMTs to perform a more complete assessment.

3. True

Because you cannot know the severity of a potential brain injury or predict the course of a patient's condition, continue your ongoing assessment of the patient and be prepared for changes and to give basic life support if needed.

4. True

Other signs and symptoms of a brain injury may include severe or persistent headache; altered mental status, confusion, unresponsiveness; lack of coordination or movement problems; weakness, numbness, loss of sensation, or paralysis of body areas; seizures; unequal pupils; or problems with vision or speech.

5. False

Do not put direct pressure on the wound if there may be a skull fracture, because pressure could push bone fragments into the brain. Instead, control bleeding with pressure around the edges of the wound, using a ring dressing.

6. False

Do not move the head or neck of a patient with a potential spinal injury, or any trauma patient, because movement could worsen the injury. Instead, support the head and neck in the position found.

## **Chapter 16**

1. False

Childbirth is a natural process that only rarely requires emergency care or specialized medical care. If you encounter a situation in which you are caring for a woman about to give birth outside a planned birth setting, your role is primarily supportive; only rarely will emergency care be needed before EMTs arrive. Nonetheless, be prepared for those rare cases by knowing how to care for a difficult birth, maternal bleeding, or a newborn requiring care.

2. False

In most instances, contractions last for several hours before childbirth occurs, although in a woman who has given birth before, childbirth may occur much sooner. Contractions initially are usually 10 to 15 minutes apart and shortly before childbirth may be only 2 to 3 minutes apart. In any case, help the woman relax and avoid panicking, because contractions in themselves are not a sign that childbirth is imminent.

3. True

This position reduces pressure on the woman's vena cava (compared to lying on her back) and thus improves circulation. In addition, emergency care includes standard patient care, giving the patient a towel or sanitary napkins to absorb the blood (but do not try to pack the vagina), saving any expelled material to give to arriving medical personnel, following local protocol to administer oxygen if available and you are trained, and treating the patient for shock.

4. True

Assessing childbirth imminence includes assessing the frequency and timing of contractions and asking the woman whether she feels a strong urge to push or feels like she is having a bowel movement. Although these may suggest that delivery is approaching, if the infant's head is crowning, this is the strongest sign that delivery will occur very soon. Prepare to assist with delivery in this case.

5. False

After the infant's head is out, have the woman stop pushing and breathe in a panting manner. If there is a delay before the shoulders emerge, you can suction the newborn's mouth and nose at this time. Then support the infant as its body emerges. Complications may also occur during the emergence that require your emergency care, such as if the umbilical cord is wrapped around the infant's neck when the head emerges; try to slip it over the head or shoulder to allow the infant to emerge without strangling.

6. True

Massaging the mother's abdomen helps stimulate the uterus to contract and thereby reduce bleeding. Massage the abdomen with your palms below the level of the navel, where you should feel the uterus as a mass about the size of a softball, using a kneading motion. Explain to the mother that this will help stop the bleeding.

7. False

If a newborn is not crying immediately after childbirth, first gently flick the bottom of its feet with a finger or gently rub its back—this may stimulate breathing. If it is still not crying, check for breathing. If the infant is not breathing, provide two ventilations and then assess breathing and pulse. If the pulse is between 60 and 100 breaths/minute, continue to give ventilations if needed. If the pulse is less than 60 beats/minute, start CPR.

8. True

Follow your local protocol to position the woman to reduce pressure on the cord. This situation is an emergency because the cord will be compressed as the infant begins to move through the birth canal, cutting off blood flow.

## Chapter 17

1. False

While some children may be comforted by touch, others may be fearful of a stranger's touch. Observe the child for clues about how best to be reassuring.

2. False

Infants generally breathe through the nose more than the mouth. Suctioning the nose is usually more important to improve breathing.

3. True

Because of the relatively larger head of an infant or young child, the chin is closer to the child's chest when lying supine, making it more difficult to maintain an open airway. Placing a folded towel under the shoulders helps prevent this problem.

4. False

In an infant or child, begin CPR if the pulse is less than 60 beats/minute if there are signs of poor circulation. Do not wait for an infant or child with a circulation problem to become pulseless before beginning chest compressions.

5. True

For an infant or child breathing at this slow rate, provide ventilations by mouth or mask just as you would for an infant or child not breathing at all. Do not wait for breathing to stop completely before beginning ventilations. Follow your local protocol to administer oxygen if it is available and you are so trained, and provide CPR if needed.

6. True

The signs and symptoms of shock in a child with injuries or bleeding may not be as dramatic or as quick to occur as in an adult, but this does not mean the child does not have a life-threatening problem. The child's condition may very rapidly deteriorate. Treat for shock, ensure transport as soon as possible, and be prepared to give basic life support if needed.

7. False

If you suspect child abuse, do not confront the parents or caretakers, but tell arriving EMTs in private about anything you have observed as evidence of child abuse. In addition, file a report as required by state law and your local protocol; state what you saw and heard, but do not comment on what you think.

## **Chapter 18**

1. False

Even as you approach the scene you should be thinking about a number of different considerations, including the need for body substance isolation precautions, any need to move the patient because of hazards, the mechanism of injury or nature of a medical emergency, the possible need for additional help, and the number of patients. Do not wait with these considerations until you reach the patient and begin your assessment.

2. True

Never attempt patient extrication in a situation for which you do not have adequate training. Most extrication situations do require special training and tools. If you can access the patient safely, provide emergency care for the patient without attempting extrication, and unless the

patient's life is at risk and you can do so safely, never move or extricate a patient while waiting for other trained rescuers.

3. True

If you can identify the material safely from a distance (using binoculars) without entering the scene, do so and report this information to dispatch. This will speed the appropriate response by the hazmat team. Look for identifying placards. Then stay away and help manage the emergency scene: isolate the area and keep unnecessary people away.

4. False

Do not automatically remove an unresponsive person from the water. An unresponsive patient found in the water should be assumed to have a potential spinal injury, and you should stabilize the patient's head and neck before removal from the water, if possible. If the patient in the water is breathing, do not attempt removal from the water alone. If the patient is not breathing and you are alone, quickly float the patient into shallow water where you can provide rescue breathing.

## **Chapter 19**

1. False

In an MCI, your role may be different from what you are used to, depending on the needs of the particular situation and other personnel present. The Incident Commander and Section Chiefs determine the specific responsibilities for various personnel. Report to the staging section, if one is present, or the command post. Follow directions from the Section Chief or the Incident Commander, and perform only the tasks you are assigned, regardless of your usual role as a First Responder.

2. True

Priority 1 patients, for whom immediate care is needed, include patients with airway and breathing difficulties, uncontrolled or severe bleeding, or decreased mental status. Priority 2 patients additionally include those with major or multiple painful, swollen, deformed extremities; back injuries; and other serious injuries without threats to breathing or circulation.

3. False

The first step of the START assessment is to assess breathing, followed by assessing circulation and then mental status. This order of assessments more quickly allows for categorization of multiple patients into different priorities for treatment.

4. True

Because of differences such as these, the JumpSTART triage system is somewhat different for pediatric patients. When assessing breathing, for example, the Priority 1 category is used for a patient breathing slower than 15 or faster than 45 breaths/minute or breathing irregularly.

## Practice Course Examination

Note: This practice exam is the same as what appears on the Instructor's DVD.

1. For which of the following viruses is a vaccine available for First Responders?
  - A. HIV
  - B. HBV
  - C. HCV
  - D. TB
  
2. If a severely injured victim refuses your care, you should
  - A. Wait for the patient to become unresponsive and then provide care.
  - B. Assume the victim is under the influence of a drug and give care anyway.
  - C. Ask a law enforcement official for legal permission to give treatment.
  - D. Inform the victim again why care is needed and what may happen if care is refused.
  
3. What emergency is an infant more likely than an adult to experience because of anatomical differences?
  - A. Anaphylaxis
  - B. Skull fracture
  - C. Choking
  - D. Asthma
  
4. With three other EMS personnel you are about to use the log roll method to move a patient onto a backboard. Who gives the signal for you to begin the movement all together?
  - A. The rescuer at the patient's feet
  - B. The rescuer at the patient's head
  - C. The rescuer with the most experience
  - D. The rescuer holding most of the patient's body weight
  
5. When it is necessary to use an emergency drag to move a patient from a hazard at the scene, which of the following is the most important consideration?
  - A. Make every effort to pull or drag the patient in the direction of the long axis of the body.
  - B. Control all external bleeding before moving the patient.
  - C. First insert an oral airway to ensure patency of the airway before moving the patient.
  - D. Wait for arriving EMTs to assist with moving the patient.
  
6. Which statement best reflects the principle of scene safety?
  - A. Enter an unsafe scene only briefly to remove an injured patient.
  - B. With an unsafe scene, make a judgment about the specific risks versus the benefit for the patient.
  - C. Enter an unsafe scene only when multiple patients need rescue.
  - D. Never enter a scene that is unsafe.
  
7. Why is it important to consider the mechanism of injury?
  - A. You record it in your documentation as the patient's chief complaint.

- B. It is considered the patient's diagnosis.
  - C. It may provide clues about the patient's injuries.
  - D. It determines the order of steps in your initial assessment of the patient.
8. You respond to a scene where a man has been injured in an accident. As you approach, you see him lying on the floor, motionless. A coworker comes up to you before you reach the patient and starts to tell you what happened. What is the first thing you should do?
- A. Perform an initial assessment of the patient.
  - B. Listen to everything the coworker says because this will guide your assessment.
  - C. Perform a focused physical exam.
  - D. Ask only for a quick summary of the mechanism of injury, and then assess the patient.
9. Which is the correct order of actions to take in the initial assessment of an unresponsive patient?
- A. Open the airway with the head tilt–chin lift or jaw thrust, and then check breathing.
  - B. Look and listen for breathing while feeling for the carotid pulse.
  - C. Check the pulse first if you have an AED with you; otherwise, check the airway and breathing first.
  - D. First check for breathing, and if the patient is not breathing, open the airway.
10. When is the jaw thrust used instead of the head tilt–chin lift to open the airway?
- A. Always try the jaw thrust first, and switch to the head tilt–chin lift if it does not work.
  - B. Use the jaw thrust if you will be inserting an oral airway.
  - C. Use the jaw thrust if another rescuer is present to assist with using a bag mask.
  - D. Use the jaw thrust with any patient with a possible spinal injury.
11. What primary information are you seeking when you check a patient's pulse in the initial assessment?
- A. The pulse rate
  - B. How regular the pulse is
  - C. The presence or absence of a pulse
  - D. The pulse strength
12. You are performing a physical examination of a responsive trauma patient. Your partner is providing head and neck support. There is no evidence of musculoskeletal injuries of the lower extremities. How should you assess the motor function of the legs?
- A. Touch the patient lightly on the toes and ask what he feels.
  - B. Ask the patient to wiggle the toes of both feet.
  - C. Help the patient to his feet to see if he can stand unassisted.
  - D. Raise each foot one at a time, bending the leg at the knee, and ask the patient about any pain felt.
13. When you check the vital signs of a patient, which of the following breathing rates would be normal in an adult without a respiratory problem?
- A. 10 breaths a minute
  - B. 14 breaths a minute

- C. 22 breaths a minute
  - D. 25 breaths a minute
14. When you are performing ongoing assessments of a patient to whom you have provided emergency care, which of the following is it unnecessary to do?
- A. Reassess mental status.
  - B. Check pulse quality and rate.
  - C. Repeat the SAMPLE history.
  - D. Check breathing rate.
15. You are caring for a patient in an office who reportedly became unresponsive after saying that she felt ill and dizzy. There are no signs of trauma. In your initial assessment you observe that she is breathing very slowly and shallowly, and her pulse is weak. In addition, her skin is pale and cool, and cyanotic in appearance in areas. What should you do?
- A. Give her CPR if her pulse is below 40 beats/minute.
  - B. Put her in the recovery position, and prepare to give basic life support if her breathing stops.
  - C. Start giving artificial ventilations.
  - D. Take her blood pressure and base your treatment on the results.
16. When you give one ventilation through a pocket mask to a patient discovered not to be breathing, and that breath does not seem to go in and the patient's chest does not rise, what action is appropriate?
- A. Open the airway again and try to give another breath.
  - B. Insert an oral airway.
  - C. Perform a finger sweep to remove a possible foreign body obstructing the airway.
  - D. Give chest compressions the same as in CPR.
17. At what rate do you give ventilations to a child who has a pulse but is not breathing?
- A. One breath every 5 to 6 seconds
  - B. One breath every 3 to 5 seconds
  - C. Two breaths every 5 to 6 seconds
  - D. Two breaths every 3 to 5 seconds
18. When giving ventilations, air may enter the stomach and cause vomiting unless you perform the actions correctly. Which of the following actions will NOT help prevent air from going into the stomach?
- A. Using a bag mask to provide ventilations
  - B. Opening the airway correctly before giving ventilations
  - C. When using a resuscitation mask, blowing steadily over 1 second
  - D. Watching the chest rise with each ventilation

19. You are on the scene where an adolescent suddenly seems to have a foreign body airway obstruction. You ask “Are you choking?” and the teenager nods frantically while clutching her throat. She apparently cannot speak, and she is able to cough only very weakly. What should you do?
- A. Move behind her and give back slaps midway on the upper back.
  - B. Have her lie down and administer chest compressions.
  - C. Move behind her and give thrusts inward and upward in her abdomen.
  - D. Administer oxygen if available and you are trained.
20. In the initial assessment of an unresponsive patient you try to give two ventilations after opening the airway, but neither goes into the patient. You assume therefore that the patient has a foreign body airway obstruction. What should you do?
- A. Roll the patient into a prone position and give back slaps midway on the upper back.
  - B. Position the patient supine and give chest thrusts.
  - C. Position the patient supine and give abdominal thrusts.
  - D. Start CPR, and check the mouth for a foreign body each time you open it to give a ventilation.
21. You are providing ventilations to a nonbreathing, unresponsive adult patient without suspected spinal injury in the supine position, when the patient vomits. Which of the following actions is most appropriate?
- A. Insert a nasal airway.
  - B. Immediately suction the airway.
  - C. Turn the patient’s head to one side to drain the mouth, then suction the airway.
  - D. Insert an oral airway.
22. For which of the following patients is it appropriate to insert an oral airway?
- A. An unresponsive patient who has a severe foreign body obstruction
  - B. An unresponsive patient being given CPR by two rescuers, using a bag mask connected to oxygen
  - C. An unresponsive patient being ventilated with a bag mask when you are having difficulty sealing the mask to the patient’s face
  - D. An unresponsive breathing patient with other injuries requiring care
23. You and your partner are giving ventilations with a bag mask to a nonbreathing, unresponsive patient who has a pulse. What are generally the most effective actions you both should be taking?
- A. One rescuer opens the airway and seals the mask to the patient’s face using both hands, while the second rescuer squeezes the bag.
  - B. One rescuer opens the airway and ventilates the patient with the bag mask while the second rescuer applies cricoid pressure.
  - C. One rescuer opens the airway and ventilates the patient with the bag mask while the second rescuer goes to get oxygen equipment.
  - D. One rescuer holds the airway open while the second rescuer seals the mask in place and squeezes the bag.

24. If you are alone with a nonbreathing adult patient without a pulse, who just collapsed suddenly, and you do not have an AED, what is your first priority?
- A. Start CPR immediately.
  - B. Ensure additional EMS personnel are responding with an AED.
  - C. Set up oxygen equipment and begin chest compressions and ventilations.
  - D. Give about 2 minutes of CPR and then call for additional EMS resources.
25. How deep should the chest compressions of CPR be for a child?
- A. One-third to one-half the depth of the chest
  - B. 1 to 1½ inches
  - C. 1½ to 2 inches
  - D. 2 to 2½ inches
26. During CPR for an adult, after each chest compression, what should you do with your hands?
- A. Momentarily take your hands from the chest, allowing the chest to return to its normal height.
  - B. Do not take your hands from the chest but release pressure completely to let the chest return to its normal height.
  - C. Keep a little pressure on with your hands on the chest.
  - D. Keep enough pressure with your hands on the chest that the chest comes about halfway back to its normal height.
27. You and another rescuer are giving two-rescuer CPR to an adult patient. What is the correct pattern of chest compressions and ventilations?
- A. After you give 15 chest compressions, the other rescuer gives 2 ventilations.
  - B. After you give 30 chest compressions, the other rescuer gives 2 ventilations.
  - C. After you give 30 chest compressions, the other rescuer gives 1 ventilation.
  - D. After you give 15 chest compressions, the other rescuer gives 1 ventilation.
28. You respond to an adult patient who was seen to have collapsed suddenly. Your initial assessment shows the patient is unresponsive, is not breathing, and has no pulse. You immediately apply the AED pads, and the AED unit advises administering a shock to the patient. You administer the shock. What should you do now?
- A. Wait for the AED to analyze the heart rhythm again.
  - B. Take the patient's pulse.
  - C. Give CPR for 5 cycles, starting with two ventilations.
  - D. Give CPR for 5 cycles, starting with chest compressions.
29. You respond to a teenager found unresponsive. Your initial assessment shows the patient is unresponsive, is not breathing, and has no pulse. You immediately apply the AED pads, and the AED unit advises not to give a shock. You begin providing CPR. What should you do next?
- A. After 2 cycles of CPR, allow the AED to analyze the patient's rhythm again.
  - B. After 5 minutes of CPR, remove the AED pads if the unit again says not to administer a shock.

- C. After 5 cycles of CPR, allow the AED to analyze the patient's rhythm again.
  - D. Disconnect the AED and continue CPR until EMTs arrive and take over.
30. Since not all heart attack patients feel chest pain, it is important to recognize other signs and symptoms as well. Heart attack may cause all of the following EXCEPT which?
- A. Shortness of breath
  - B. Nausea
  - C. Lightheadedness
  - D. Headache
31. You respond to a scene where a patient has an unidentified medical emergency. The patient is responsive but seems slightly disoriented. You should consider that the patient is in respiratory distress if he has any of the following signs and symptoms EXCEPT
- A. His breathing is faster and shallower than normal.
  - B. His breathing is slower and deeper than normal.
  - C. His skin is warm and flushed.
  - D. His skin is cool and pale.
32. You respond to a patient who is responsive but who is confused and somewhat incoherent. There are no signs of trauma, and he does not have signs and symptoms suggestive of heart attack or respiratory distress. A family member tells you his symptoms occurred fairly quickly just a few minutes ago. You decide to assess him for a possible stroke. Which of the following observations might you find if this patient has had a stroke?
- A. The patient seems to be smiling all the time.
  - B. The patient's eyebrows are twitching.
  - C. When asked to raise his arms, one arm drifts down lower than the other.
  - D. The patient can repeat your words without difficulty but is confused about your meaning.
33. You are treating a patient lying on the floor when she suddenly has a seizure. Her arms and legs are jerking, and her head is thrashing side to side. Your emergency care for this patient should include
- A. Protecting her from further injury.
  - B. Restraining her arms and legs.
  - C. Putting something malleable in her mouth to protect her teeth.
  - D. Putting her in the shock position.
34. In cold weather you respond to an outdoor scene where a worker was found unresponsive in a shallow pool of water. There are no signs of injury. The patient's breathing is slow and shallow, and his skin is very cold and pale. EMTs are on the way. Since this patient has the signs and symptoms of hypothermia, what should your emergency care include in addition to removing wet clothing and wrapping the patient in a blanket?
- A. Try to wake up the patient so that he can be kept moving.
  - B. Handle the patient gently while covering him with the blanket.

- C. Give him a warm drink such as coffee or cocoa.
  - D. Vigorously massage his body to “get the blood flowing.”
35. You respond to a scene where a warehouse worker is feeling very ill after hours of strenuous work in a hot warehouse. He is sitting on the floor and is responsive, but is breathing fast and seems very confused. He has stopped sweating and his skin is flushed and hot to the touch. EMTs are on the way. As part of your emergency care you should
- A. Rub his skin with rubbing alcohol to cool his body.
  - B. Give him salt tablets dissolved in water.
  - C. Put him into a bath to immerse him fully in cold water.
  - D. Cool him with ice bags or cold packs beside his neck, armpits, and groin.
36. You respond to a scene where an employee is bleeding severely from a thigh wound after an incident with a power tool. You quickly cut away his pants leg to expose the wound, which is a laceration about 2 inches long and gaping open about an inch. How should you control the bleeding pulsing from this wound?
- A. Put a dressing on the wound and apply direct pressure with your hand on the point of bleeding.
  - B. Find the femoral pulse site in the groin crease and firmly press the artery against the bone until bleeding stops.
  - C. Apply a tourniquet above the wound, tightening it just enough to slow the bleeding to a manageable level.
  - D. Apply a broad pressure bandage around the thigh about two inches above the wound, using roller gauze.
37. You respond to a scene outdoors where a woman has fallen from a ladder and lies unresponsive on the ground. Your initial assessment reveals the patient is breathing and has a fast, weak pulse. Her skin is cool and clammy. One leg is severely deformed, but there is only minor external bleeding. As part of your emergency care, you should
- A. Cover her with several blankets and coats to keep her as warm as possible.
  - B. Cover her with a blanket, if appropriate to maintain a normal body temperature.
  - C. Elevate her legs about 12 inches and cover her with a blanket.
  - D. Move her into the recovery position and cover her with a blanket.
38. You respond to a patient with an upper arm wound with arterial bleeding. You control the bleeding with direct pressure, then apply a pressure bandage around the upper arm to maintain pressure on the wound. Because the bleeding is severe and pulsing, your pressure bandage is tight to control the bleeding. You are concerned that the bandage may cut off circulation to the arm. Therefore you should frequently check the patient’s fingers for warmth, color, and
- A. Sensation.
  - B. Ability to move.
  - C. Swelling.
  - D. Capillary refill.

39. When should you remove an impaled object from a patient's wound?
- A. An impaled object is never removed from a wound but is bandaged in place
  - B. When the object makes it difficult for you to apply direct pressure on the wound to control bleeding
  - C. When the object is rusty or dirty and likely to cause infection
  - D. When it interferes with chest compressions or ventilations
40. You respond to a home where a man was injured when a set of shelves fell over on him. He is responsive but in obvious pain when you arrive, and his ankle is pinned under the heavy metal shelves. In addition to his minor wounds and a likely musculoskeletal injury, you see a dry powdery substance from a broken container on his pants and the skin of his lower leg. The container does not have an identifying label. The patient tells you his leg feels like it's burning. EMTs are on the way. What should you do about this substance on his skin?
- A. Brush the substance off his skin with a cloth or piece of cardboard, then flush the area with water.
  - B. Leave the substance untouched until EMTs arrive.
  - C. Immediately hose off his leg with running water.
  - D. Carefully touch this substance with the tip of one finger to see if it is what is causing the burning sensation on his leg rather than the traumatic injury.
41. You and your partner respond to a scene of a motorcycle accident. The driver is lying on the ground, unresponsive. Your initial assessment reveals he is breathing adequately and has a good pulse. Your partner stabilizes his head and neck while you attend to specific injuries. His left lower arm has an open fracture, with the end of one bone fragment protruding about an inch from the wound. Which of the following actions should you not take in your emergency care for this musculoskeletal injury?
- A. Cover the open wound with a sterile dressing.
  - B. Gently replace the bone end back inside the skin.
  - C. Support above and below the injury.
  - D. Follow local protocol to administer oxygen if available and you are trained.
42. You respond to the scene of a patient with an injury caused by a blow to the head. She is lying on the ground and is responsive although groggy and in pain. Her open wounds are minor. EMTs are on the way. Your emergency care for this patient should include
- A. Bandaging her head tightly using gauze roller bandage to prevent further swelling.
  - B. Keeping her awake and talking until EMTs arrive.
  - C. Manually stabilizing her head and neck.
  - D. Putting her in the recovery position in case she vomits.
43. You are alone giving emergency care to an unresponsive patient injured in a diving incident. The patient is not bleeding, but a closed wound on the forehead apparently caused by striking the bottom of the pool leads you to assume a spinal injury. The patient is breathing adequately and has a good pulse. EMTs are on the way. Although the patient is not responsive or moving at this time, you decide to manually support the patient's head in the position found. You should continue this support
- A. Until the patient regains responsiveness and you can assess for other symptoms by performing a physical examination.

- B. Unless your AVPU assessment of mental status reveals the patient is unresponsive even to pain and therefore is very unlikely to move.
  - C. Until you see the EMTs arriving on the scene.
  - D. Until the patient is secured on a backboard with head stabilized or EMTs have taken over.
44. With your partner you respond to a scene where a woman obviously late in pregnancy has been injured. She is lying flat on her back on the ground. She is unresponsive and is breathing shallowly and has a weak pulse. She has signs of possible internal bleeding. Depending on the situation and scene, and your ability to support her head and neck, what is the ideal position for this patient?
- A. Leave her flat on her back.
  - B. Raise her left side.
  - C. Put her in the recovery position.
  - D. Raise her right side.
45. You and your partner respond to a rural scene where a pregnant woman's labor has advanced very quickly. The woman has given birth to four children previously. An ambulance is on the way but may not arrive in time, so you prepare for childbirth. You assist the woman into position, and very soon childbirth begins. The newborn emerges into your supportive hands without incident, while your partner supports the woman and then attends to maternal bleeding. The infant is not moving much in your hands, and its skin is bluish. It is not crying. What should you do first?
- A. Ask your partner to get the oxygen equipment from your vehicle, and begin giving ventilations immediately.
  - B. First gently flick the bottom of the newborn's feet to try to stimulate breathing.
  - C. With your partner begin two-rescuer CPR using the chest-encircling method for chest compressions.
  - D. Begin vigorously massaging the newborn's arms and legs.
46. You and your partner respond to a scene where a 2-year-old girl has been found unresponsive on the floor. In your initial assessment you determine she is not breathing but has a pulse, and you are beginning ventilations. What action by your partner would help keep her airway open as you provide ventilations?
- A. Hold the child's head tilted back as far as possible.
  - B. Put the child in the recovery position.
  - C. Put a folded towel under the child's shoulders.
  - D. Put a folded towel under the child's head.
47. You respond to a scene where an injured child has lost a lot of blood. You have controlled the external bleeding, but the child may have internal injuries also. EMTs are on the way. At first his pulse and skin color were good, but now his pulse is slowing, his skin is pale and cool, and there is delayed capillary refill. What change should you expect in his condition?
- A. The signs of shock may rapidly worsen because decompensation often occurs very quickly in children.

- B. His condition will change only very gradually because children generally compensate very well for even significant blood loss.
  - C. His breathing may stop, but as long as you provide ventilations, he will not experience cardiac arrest.
  - D. It is unlikely that his condition will change further, because children can tolerate a greater blood loss than adults.
48. You receive a call for an emergency involving a collision between an automobile and what was described as “a large truck,” and you are now en route in your vehicle. At what point in your response to this emergency should you check for hazards and radio dispatch if a hazard is found?
- A. Stop your vehicle temporarily a block or two away, and inspect the scene for hazards through binoculars.
  - B. Park in a safe place and check the scene for hazards before and while approaching the patient’s vehicle.
  - C. Park in a safe place and go to the patient’s side, then check the scene for hazards.
  - D. Park in a safe place, access the patient and check for immediate threats to life, and then check the scene for hazards.
49. You are alone and are the first responder to reach the site of an industrial accident. An injured man is trapped beneath fallen equipment, but a nearby storage tank has been damaged and is leaking an unidentifiable fluid. Because fumes could be trapped in this confined space, you have radioed this in as a potential hazardous materials emergency. While waiting for the hazmat team to arrive, what should you do?
- A. Manage the scene and keep bystanders away.
  - B. Enter the scene quickly to inspect the storage tank for a hazardous substance placard, then check your DOT handbook for what action to take.
  - C. If you feel safe doing so, give emergency care to the patient without moving him.
  - D. Ask a bystander to keep everyone away, and go find the foreman or plant manager to inquire whether the site has preplanned for emergencies like this.
50. According to NIMS procedures, in a mass-casualty terrorist incident or a wide-scale natural disaster, what tasks are First Responders always assigned to perform?
- A. Patient triage
  - B. Patient basic life support
  - C. Assisting EMTs in all ways they request
  - D. Whatever tasks are assigned by the ICS

## Answers to Practice Exam with Rationales

1. B

A vaccine is available to protect emergency care providers and healthcare workers against infection by the hepatitis B virus (HBV). Because vaccines are not available against hepatitis C (HCV), tuberculosis (TB), HIV (the virus that causes AIDS), or other bloodborne pathogens, it is critical for First Responders to protect themselves against transmission of disease.

2. D

A competent adult's consent is required before you give care. Consent is based on the person fully understanding why care is needed, what care you want to give and its benefits, and what may result if the person does not get care. No one else can give consent for a competent adult, and you cannot assume the adult is under the influence of drugs (and therefore incompetent) without evidence. Finally, while you can give care to an unresponsive patient (implied consent), you should not simply wait for the person to become unresponsive.

3. C

An infant's airway is significantly smaller than an adult's and more easily obstructed by food or other foreign objects. While an infant may experience the other conditions listed, these are not more likely to occur because of anatomical differences from adults.

4. B

The rescuer at the patient's head has the responsibility for keeping the head and neck in line with the body. It is crucial that other rescuers do not move the patient's body until this rescuer is ready to keep the head stabilized. Therefore, the rescuer at the head signals the beginning of the move once everyone is ready.

5. A

Even when you must move a patient away from a hazard before completing assessment and treatment, try to prevent worsening a potential spinal injury by keeping the head and neck in line with the spine as much as possible. Remember: an emergency move is used *only* when necessary to give lifesaving care or to escape an imminent threat to life on the scene—in this case, do not delay by controlling all bleeding, inserting an airway, or waiting for other rescuers.

6. D

If you determine that a scene is unsafe during your scene size-up, do not enter under any circumstances. Stay at a safe distance and ensure EMS resources are en route. If you were to enter an unsafe scene and become injured, you would be one more patient that the arriving rescuers would also have to care for.

7. C

The mechanism of injury can suggest the likelihood of certain types of injury and thus help you provide patient care. For example, it may suggest the potential for internal injuries without external signs. The mechanism of injury is not the same as the patient's chief complaint (why EMS was called) or the medical diagnosis (made only by a physician). The steps of the initial assessment are always performed in the same order, regardless of the mechanism of injury or other factors.

8. A

Do not delay your initial assessment of the patient to talk with the coworker or gather additional information—you must first check for any immediate threats to life and care for them. If the patient is breathing and has a pulse, you can then gather the history while continuing to assess the patient. Likewise, the physical examination always comes after the initial assessment.

9. A

The initial assessment steps are always taken in the same order. First, check for responsiveness. Then check the ABCs, always beginning with opening the airway. The one exception to first opening the airway of an unresponsive patient is a patient with a potential spinal injury who would have to be moved in order to open the airway: if you can detect adequate breathing without moving the patient, you should not automatically move the patient into a supine position, but check the pulse and then support the patient's head and neck in the position found (if breathing and a pulse are present).

10. D

The jaw thrust should be used with any patient with a possible spinal injury, because this technique does not move the patient's spine. Because the jaw thrust is more difficult to perform, however, use the head tilt–chin lift with patients not suspected of having a spinal injury. Use of an oral airway or bag mask does not influence which method is used to open the airway.

11. C

Remember that the purpose of the initial assessment is to check for (and correct) any immediate threats to life. At this point, you are checking for a pulse's presence or absence in order to determine whether the patient may need CPR or an AED. You should not, at first, take the time to count the pulse. You may note the pulse's strength and regularity, but do not take the time now to make this assessment. You need to continue your assessment to check for severe bleeding, and may need to provide airway support or provide other immediate care rather than spending additional time assessing characteristics of the pulse.

12. B

Assessment of motor function is a check of the patient's ability to move a body part or area. Asking the patient to wiggle his toes will show whether motor function is present in the leg without risking aggravating an unseen injury. If the patient cannot wiggle the toes on either side, he may have a spinal injury. Note that assessment of motor function is different from assessment of sensation (touching the toes). Since this is a trauma patient, he should not stand, and you should not bend the legs at the knees.

13. B

The normal adult respiratory rate is 12–20 breaths a minute. A child's normal respiratory rate at rest is 18–30 breaths per minute. An infant's normal respiratory rate at rest is 20–30 breaths per minute.

14. C

The ongoing assessment continues to reassess the patient's mental status, airway and breathing, pulse, skin condition, and physical examination as appropriate. Repeat the initial assessment every 15 minutes for a stable patient or every 5 minutes for an unstable patient. There is no reason to repeat the history—although you may *complete* the history if a new source of information (such as a family member) becomes available.

15. C

This patient has the signs of inadequate breathing. Inadequate breathing is defined as a condition in which the patient is not getting enough oxygen because of breathing too slowly (less than 10 breaths per minute) or too weakly. In an adult who is not breathing adequately, do not wait for respiratory arrest before beginning to provide ventilations. It is not appropriate, however, to give CPR while she has a pulse, and you do not need to check her blood pressure to recognize that she needs ventilations.

16. A

Remember that in the ABCs of the initial assessment, you open the airway and give *two* breaths before moving on to check the pulse. If your first breath does not go in, the patient may have an obstructed airway—but you also may have failed to open the airway properly. Therefore open the airway again and try to give a second breath. If the second breath still does not go in, then you can assume the patient has an airway obstruction and give care for that (CPR with checks of the mouth for a foreign body). Do not insert an oral airway at this point, and never perform a blind finger sweep (without seeing an object in the mouth).

17. B

Ventilations are given to children at a rate of one every 3 to 5 seconds, and to adults at a rate of one every 5 to 6 seconds. *Two* breaths are given together only during the initial assessment and in alternation with chest compressions when providing CPR.

18. A

Using a bag mask to provide ventilations is not different from using a resuscitation mask or giving mouth-to-mouth ventilations when it comes to preventing air from entering the stomach. What is important is to open the airway correctly, to blow slowly and evenly over 1 second for each ventilation, and to see the chest rise (and stop blowing when it does) with each ventilation.

19. C

The appropriate care for a responsive choking adult or child is to give abdominal thrusts from behind the patient. (Chest thrusts are used from behind for a pregnant patient or one you cannot get your arms around.) Back slaps are used for a responsive infant, alternating with chest compressions. CPR is used for an airway obstruction in an adult, child, or infant when the patient is unresponsive.

20. D

CPR with a check for a foreign body is the correct procedure for an unresponsive patient of any age with a foreign body airway obstruction. The chest compressions of CPR may dislodge the object, which can be removed if you see it when you open the mouth to give ventilations. Back slaps, abdominal thrust, and chest thrusts are not used for an unresponsive patient.

21. C

Suction will help clear the patient's airway so that you can continue ventilations, but you should drain the mouth as much as possible before suctioning. Neither the oral nor nasal airway will open the airway, especially with vomit in the mouth—you may use an airway later after stabilizing the patient.

22. D

An oral airway helps keep the patient's airway open without having to support the patient's head in the head tilt–chin lift or jaw thrust position. Therefore it is effective for an unresponsive breathing patient when you need to give care for other injuries and wish to keep the tongue from blocking the airway. An oral airway should not be inserted in a patient with a foreign body airway obstruction because the device may push the foreign object deeper into the airway and would not open the airway around the object. When you are giving CPR, do not delay the chest compressions or ventilations in order to insert an airway. The airway will not make it easier to seal a mask to the patient.

23. A

Because it can be very difficult for one person to hold the patient's head in a position to keep the airway open and seal the mask to the patient's face with one hand, while using the other hand to squeeze the bag, it is better for both rescuers to work together to give ventilations with the bag mask. One opens the airway and seals the mask to the patient's face using both hands, while the other squeezes the bag. The effectiveness of ventilations is more important than the use of cricoid pressure or leaving the patient to get oxygen equipment.

24. B

For a victim seen to collapse suddenly, the highest priority is to ensure an AED is on its way to the scene, because every minute counts before using an AED. Start CPR as soon as you have contacted EMS to ensure an AED is coming. Do not delay CPR to set up oxygen equipment.

25. A

Chest compressions should be one-third to one-half the depth of the chest for an infant or child. For an adult, compressions should be 1½ to 2 inches deep. In all cases, it is critical to ensure compressions are deep enough to circulate some blood to vital organs.

26. B

For chest compressions to be effective, it is important for the chest wall to rise completely to its normal height. Removing your hands completely, however, would slow down the rate of compressions, so you should keep your hands on the chest between compressions, without applying any pressure.

27. B

The ratio of compressions to ventilations should always be 30 to 2 in single-rescuer CPR. When there are two rescuers, the same 30:2 ratio is used for adults, but for an infant or child, two-rescuer CPR uses a ratio of 15 compressions and 2 ventilations.

28. D

As a general principle, always give CPR immediately after administering a shock with the AED. Do not check for a pulse first. Even when the shock does successfully restore a normal heartbeat, the heart initially may not be effectively circulating the blood—and compressions can help maintain blood flow to vital organs.

29. C

Use the AED again after 5 cycles of CPR (about 2 minutes), regardless of whether the AED initially prompts for a shock or not. Follow the unit's prompt after this analysis. If the patient recovers, stop CPR and use of the AED; if the patient does not recover, continue to alternate CPR with AED analysis. Never remove the AED pads from the patient, even if the patient recovers, because fibrillation may occur again and require use of the AED again.

30. D

In addition to chest pain or pressure, heart attack often causes other signs and symptoms such as shortness of breath, nausea, and lightheadedness. Chest pain may spread to the neck, shoulders, or arms. The patient may have pale, moist skin or be sweating heavily. Headache is not generally associated with heart attack.

31. C

A patient in respiratory distress may have a variety of signs and symptoms, including breathing that is either faster or slower than normal, and shallower or deeper than normal. In addition the skin may be cool, moist, and pale (or ashen)—not warm and flushed. In addition, the patient may have shortness of breath, and breathing may involve sounds such as wheezing or gurgling. Any signs or symptoms of altered mental status may be present. As well, the patient may be sitting and leaning forward, hands on knees, in the tripod position.

32. C

Using the Cincinnati Prehospital Stroke Scale (CPSS), you would ask him to close his eyes and raise his arms in front of his body; one arm generally drifts down in patients with stroke. Other assessments would reveal facial droop on one side and an inability to speak, speak clearly, or repeat your words. Stroke is *not* characterized by smiling continuously or muscular twitching, and confusion or other signs of altered mental status may result from many different conditions (as well as stroke).

33. A

The emergency care for a seizure patient is primarily supportive: protect the patient from being injured by moving nearby objects away and putting something soft under the patient's head. The airway needs support if the patient vomits. On the other hand, do not try to restrain the patient or control muscle contractions; and do not put anything in the patient's mouth in a misguided attempt to protect the teeth. The shock position is not used for a seizure patient. After the seizure, if the patient is unresponsive or vomits, use the recovery position to help maintain the airway.