CPR Health-Care Provider with First Aid

INSTRUCTOR GUIDE
## Contents

CPR: Health Care Provider Course ................................................................. 3  
   Overview ......................................................................................... 3  
   Standards and Procedures ................................................................. 3  
Standards Summary CPR: Health Care Provider ....................................... 4  
Curriculum Subject Areas and Objectives ................................................. 6  
CPR: Health Care Provider Skills and Objectives ....................................... 9  
   Skill: Scene Safety Assessment ......................................................... 12  
   Skill: Donning and Doffing Gloves .................................................... 14  
   Skill: Initial Assessment .................................................................. 16  
   Skill: Recovery Position ................................................................... 20  
   Skill: Chest Compressions ............................................................... 22  
   Skill: Rescue Breathing ..................................................................... 26  
   Skill: Full CPR: Adult, Child, and Infant ......................................... 30  
   Skill: Use of an Automated External Defibrillator (AED) ................... 34  
   Skill: Foreign-Body Airway Obstruction ............................................ 38  
   Skill: Suctioning ............................................................................. 42  
   Skill: Control of External Bleeding .................................................. 44  
   Skill: Applying a Tourniquet ............................................................. 46  
   Skill: Splinting .................................................................................. 50  
   Skill: Shock Management ................................................................. 52  
   Skill: Severe Allergic Reaction or Opioid Overdose ........................... 54  
CPR: Health Care Provider Final Assessment ......................................... 57  
   CPR: Health Care Provider Assessment Key .................................... 63  
   CPR: Health Care Provider Exam Sheet ............................................ 64  
   CPR: Health Care Provider Practical Evaluation Record ..................... 65  
   Quick Reference Chart ..................................................................... 67

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without prior written permission of Divers Alert Network, 6 West Colony Place, Durham, NC 27705-5588.
CPR: Health Care Provider Course

Overview

The primary focus of the CPR: HCP with First Aid course is to develop cardiopulmonary resuscitation (CPR) skills at the health care provider (HCP) level. This includes one and two person CPR for adults, children and infants. Also included is locating a pulse or determining that one does not exist. This is an additional skill that sets apart the HCP level of care from entry level CPR courses. During this course, participants will become familiar with the signs and symptoms associated with cardiovascular diseases such as heart attack, as well as respiratory arrest.

Because a need for rudimentary first-aid skills exists for individuals who may be taking this course, a few of the basic skills that may assist with preventing life threatening conditions are also included. These skills are management of choking and shock, control of external bleeding as well as bandaging and splinting.

The individual skills are outlined for easy delivery based on the skill presentation outline from the CORE instructor Manual. This includes skill objective, rationale, and key points. Key points to be addressed during each skill are referenced in the bold text of the Talk Through Demonstration Skill Description then itemized at the end of each of skill to facilitate the skill debriefing after the skill practice.

Scenarios included in each skill are suggestions only and may be altered to more closely reflect the environment where the course is being conducted and to meet the needs of course participants.

The time needed to teach the course varies and depends on many factors including the number of students and their ability to process the educational components of the program. Instructors who want to include subjects or training beyond the course requirements may do so only before or following the course. Any additional training must not be required for completion of course requirements.

Standards and Procedures

This Instructor Guide is for use of Instructors who are authorized by to conduct the CPR: HCP with First Aid. It is to be used in conjunction with the General Standards and Procedures section found in the Instructor Manual.

This course is intended for anyone who might need to perform cardiopulmonary resuscitation (CPR). It covers CPR for adults, children and infants with one and two rescuers. It is written to meet the Guidelines for Resuscitation as released by the International Liaison Council on Resuscitation (ILCOR) / American Heart Association (AHA) in October 2010 and the guidelines of the U.S. Occupational Safety and Health Administration (OSHA).
Standards Summary CPR: Health Care Provider

Prerequisites: None
Age: No minimum age requirement.

Note: Some countries, states and local municipalities may have minimum age requirement for participation in CPR or training in AED use. Please check your local area for any restrictions that may apply.

Student-to-Instructor Ratio: 12:1 during skill-development sessions

Recommended classroom hours: Four (4) hours
- Review Question Discussion = 0.5 hours
- Skill development (practice) = 3.5 hours

Required student materials:
- CPR: Health Care Provider Student Handbook
- Oronasal resuscitation mask with oxygen inlet (one for each student)

Required instructor materials:
- CORE Instructor Manual
- CPR: Health Care Provider Instructor Guide
- CPR: Health Care Provider Student Handbook
- CPR: Health Care Provider slate

Required audiovisual materials:
- CPR: Health Care Provider Online Module
  - To be completed by students before attending class session

Required equipment and supplies:
- Adult and Infant CPR Manikins
- Non-latex medical gloves
- Oronasal resuscitation mask or other face shield intended for rescue breathing
- AED Trainer
- Suctioning devices for both adults and infants
- Pen and Paper or Dive accident management slate
- First-Aid supplies including dressing and bandaging materials, splints (commercial or improvised)
- Commercial tourniquet or supplies to improvise a tourniquet (i.e., at least two triangular bandages and a couple of pencils or large solid stick)
Final assessment:

- Minimum score of 80% (32 questions correct) or above on the final written assessment.

The instructor must review with each participant any missed questions on the assessment or any information that is unclear to ensure 100 percent understanding of the material.

Retraining required: Every 24 months
Curriculum Subject Areas and Objectives

Students participating in this course will be able to answer the following questions at the end of the knowledge development section.

1. Basic Life Support
   - What is the goal of CPR?
   - Why is asking permission before rendering care necessary?
   - What are the five links in the Chain of Survival in their proper sequence?
   - What is the first step for a rescuer once unresponsiveness has been established?
   - What are the warning signs of heart attack?
   - What is the first step for a rescuer if the injured person is a child, infant or the victim of a drowning incident?
   - What CPR protocol is to be followed for drowning victims?
   - What can a rescuer do to deal with emotional stress?

2. Respiration and Circulation
   - What is hypoxia?
   - Why is oxygen necessary for life?
   - Where does gas exchange occur in the body?
   - What body structures comprise the respiratory system?
   - What body structures are included in the cardiovascular system?

3. Scene Safety Assessment
   - What is S-A-F-E?
   - What are some hazards that need to be assessed before providing first aid?
   - Why is exposure protection critical for rescuers?
   - What are some examples of personal exposure protection equipment?

4. Initial Assessment
   - What are the primary steps to the assessment sequence?
   - How is a pulse checked for an adult, a child, and an infant?
   - What technique assists the rescuer in placing an unresponsive person on their back?
   - What is agonal breathing?
   - When should the recovery position be used?
   - When should the recovery position not be used?
   - Starting CPR: Supporting Circulation
   - What is the recommended depth and rate for compressions on an adult during CPR?
o What is the recommended depth and rate for CPR compressions on a child?
o What is the recommended depth and rate for CPR compressions on an infant?
o When is full CPR always recommended?
o When more than one rescuer is available, how are roles divided?

5. Continuing CPR: Supporting Respirations
   o What barrier devices (exposure protection) are recommended when doing rescue breathing?
   o How long should rescue breaths last?
   o What is the compression/ventilation ratio for single rescuers on an adult? For two rescuers?
   o What is the compression/ventilation ratio for a child?
   o When providing ventilations only, how often should rescue breaths be delivered for an adult? For a Child? For an infant?

6. Use of AEDs during CPR
   o Why are AEDs recommended?
   o What are the considerations for using an AED on children or infants?

7. Foreign Body Airway Obstruction
   o What is the most common cause of choking in adults?
   o How can a partial airway obstruction be identified?
   o How should a rescuer respond to a partial airway obstruction?
   o How can a complete airway obstruction be identified?
   o What action should be taken if a choking victim becomes unconscious?
   o When can a finger sweep be used?
   o What is the maximum time suctioning may be used on an adult? Infant?

8. Control of External Bleeding
   o What is the primary function of blood?
   o What is the body’s response to bleeding?
   o How can the rescuer assist in controlling bleeding?
   o When and how should a tourniquet be placed?

9. Bandaging and Wound Management
   o What is the key role of first aid when a wound is bleeding?
   o When should a bandage be applied?
   o When should impaled objects be removed?
   o What is the purpose of a splint?
10. Shock Management
   o What is shock?
   o What are some causes of shock?
   o What are the signs and symptoms of shock?
   o What is the first aid for shock?

11. Lifting and Moving
   o What are the general considerations for a rescuer when attempting to move an injured or ill person?
   o When should an injured or ill person be moved?

12. Emergency Assistance Plan
   o Why should you have an emergency assistance plan?
   o Where should an emergency assistance plan be kept?
   o What information should be included in an emergency assistance plan?
CPR: Health Care Provider Skills and Objectives

Students who have participated in the skill-development portion of this course will be able to perform the following skills:

1. Scene Safety Assessment
   - List the steps in performing a scene safety assessment.
   - Perform a scene safety assessment in a scenario.
   - Use appropriate first-aid barrier devices in a scenario.

2. Gloves
   - Demonstrate donning of gloves without tearing or compromising the glove integrity
   - Demonstrate removal of gloves without contaminating exposed skin

3. Initial Assessment
   - Demonstrate technique for establishing unresponsiveness in an adult or child.
   - Demonstrate technique for establishing unresponsiveness in an infant.
   - Demonstrate appropriate technique for determining the presence of a pulse in an adult or child.
   - Demonstrate appropriate technique for determining the presence of a pulse in an infant.

4. Recovery Position
   - Demonstrate rolling a simulated injured or ill person from their back into the recovery position keeping the spine aligned.

5. Adult, Child, and Infant Chest Compressions for CPR
   - Demonstrate proper hand positioning for chest compressions on a manikin for both an adult and a child.
   - Utilize proper body mechanics to accomplish chest compressions consistently to a depth of 2-2 ½”/5-6 cm on an adult CPR manikin at a rate of 100-120 per minute.
   - Utilize proper body mechanics to accomplish chest compressions consistently to 1/3 the chest depth for a child using one hand on a CPR manikin (adult or child) at a rate of 100-120 per minute.
   - Demonstrate proper finger/thumb placement for infant chest compressions.
   - Utilize proper body mechanics to accomplish chest compressions consistently to 1/3 the chest depth on an infant CPR manikin at a rate of 100-120 per minute.

6. Rescue Breathing
   - Demonstrate proper rescue-breathing technique for an adult and child on a CPR manikin.
   - Demonstrate proper rescue-breathing technique on an infant manikin.
7. Full CPR: Adult, Child, Infant
   o Perform two minutes of full CPR as a single rescuer on adult and infant CPR manikins, completing at least five cycles of 30:2 compressions/ventilations.
   o Perform four minutes of full CPR as a two person rescue team on an adult CPR manikin, completing at least ten cycles of 30:2 compressions/ventilations.
   o Perform four minutes of full CPR as a two person rescue team on an infant CPR manikin, completing at least 20 cycles of 15:2 compressions/ventilations.

8. Automated External Defibrillator (AED)
   o Demonstrate proper AED pad placement for adults, children and infants on CPR manikins.
   o Follow the prompts of an automatic external defibrillator (AED) training unit to simulate care for a non-breathing person on an adult CPR manikin.
   o Utilize an AED training unit as part of CPR on an adult CPR manikin.

9. Foreign Body Airway Obstruction
   o Demonstrate proper management of an obstructed airway in a responsive adult and responsive infant.
   o Demonstrate proper infant positioning and the use of back blows with chest compressions to clear an obstructed airway for an infant.

10. Suctioning
    o Demonstrate appropriate technique and duration for suctioning on an adult or child manikin and an infant manikin

11. Control of External Bleeding
    o Demonstrate applying direct pressure to control bleeding on a simulated injured person.
    o Demonstrate bandaging to secure a dressing in place once bleeding has stopped on a simulated injured person.

12. Applying a tourniquet
    o Demonstrate applying a tourniquet to control bleeding on a simulated injured person.

13. Splinting
    o Apply a splint to a simulated injured limb, immobilizing the joints on either side of the injury. Use of either a professional splint or improvised splint is acceptable.
14. Shock Management
   o Demonstrate proper technique for managing shock by placing the victim in a position of comfort and taking steps to maintain normal body temperature in a scenario.

15. Severe Allergic Reaction or Opioid Overdose
   o Demonstrate the proper technique for assisting with an epinephrine and/or a naloxone auto-injector in a scenario
Skill: Scene Safety Assessment

Equipment:
1. Non-latex medical gloves
2. Oronasal resuscitation mask

Objectives:
1. List the steps in performing a scene safety assessment.
2. Perform a scene safety assessment in a scenario.
3. Use appropriate first-aid barrier devices in a scenario.

Rationale:
Protecting yourself is always your first responsibility. You can’t help anyone else if you are injured. You should decide if the scene is safe for you to enter and determine if there are any threats that may cause an injury/illness to you, bystanders, or the individual while preparing yourself to lend assistance.

Conduct Real time Demonstration

Talk Through Demonstration Skill Description:
The rescuer should go through the following steps observing the environment and assessing the safety of the situation

Use the mnemonic S-A-F-E to address each concern.

**S - Stop**
- Stop.
- Think.
- Act.

**A — Assess scene.**
- Is the scene safe?
- Is it safe to approach the injured person?
- Is the ventilation adequate for oxygen?
- Any other hazards present?

**F — Find and secure AED unit (plus first-aid kit and oxygen)**
- First-aid kits contain critical supplies such as barriers.

**E — Ensure exposure protection.**
- Use barriers such as gloves and mouth-to-mask barrier devices.
Set up practice groups and provide scenario

You are at a large social gathering when a woman cries for help. The middle-aged man with her has collapsed. You respond.

Instructor: What is the first thing you should do?
Students: Perform a scene safety assessment

Debrief skill.

Scene Safety Assessment Key Points:

Stop.
Assess scene.
Find and secure oxygen unit, first-aid kit and AED.
Ensure exposure protection.
Skill: Donning and Doffing Gloves

Equipment:
1. Non-latex medical gloves

Objective:
1. Demonstrate donning of gloves without tearing or compromising the glove integrity
2. Demonstrate removal of gloves without contaminating exposed skin

Rationale:
Rescuer protection while providing care is essential to the provider’s long term health. Nor does provider safety end once care has been rendered. Exposure to blood borne pathogens is still possible until the entire cleanup and disposal has occurred.

Conduct Real Time demonstration.

Talk Through Skill Demonstration Skill description:
- Before donning gloves, remove rings or other jewelry that may puncture gloves during use.
- To remove gloves, grasp the first glove at the outside of the wrist and pull the glove toward the fingers of that hand. At the same time pull the first gloved hand out of the glove. Avoid snapping the glove off. The dual action should facilitate smooth removal.
- Turn the glove inside out.
- Use your protected hand to crumple the removed glove into a ball (making a fist with the gloved hand).
- When the removed glove is in the palm of the still protected hand (fist), place an “unprotected” finger inside the second glove (between wrist and glove) and pull the glove toward the fingers as before.
- This glove will also turn inside out, and the first glove will be inside the second.
- Avoid touching the outside of the glove with your unprotected hand as you remove it whether you can see contaminates or not.
- Place the gloves in a “hazardous waste” bag to avoid others having contact with the gloves. This bag can also be used for the disposal of all other infected materials after use.
Set up practice groups and provide scenario

The children at the gathering were playing a game of tag that got a little rough. One of the kids fell and scraped her knee. You have just finished assisting her. You were wearing protective gloves to avoid personal contact with the blood. The bleeding has now been stopped and a bandage placed. You have finished cleaning up and are ready to remove your gloves.

**Instructor:** How should your gloves be removed?
**Students:** Remove gloves without contaminating exposed skin

**Teaching Tip:**
Place a little canned shaving or whipped cream in each student’s gloved hands. Ask them to work it over their hands a little. Once they have removed the gloves, have them check their hands and finger tips for ‘contamination’.

Debrief skill.

**Donning and Removing Gloves Key Points:**
1. Remove jewelry that may puncture gloves and place in a secure place for retrieval later.
2. Do not touch the outside of the gloves whether or not you can see contaminates.
3. Avoid snapping the gloves off. Use smooth dual action motion to remove gloves.
4. Ball the gloves up together once removed and dispose of them in a hazardous waste bag.
Skill: Initial Assessment

Equipment:
1. Non-latex medical gloves

Objectives:
1. Demonstrate the technique for establishing unresponsiveness in an adult or child.
2. Demonstrate the technique for establishing unresponsiveness in an infant.
3. Demonstrate the technique for determining the presence of a pulse in an adult or child.
4. Demonstrate the technique for determining the presence of a pulse in an infant.

Rationale:
Determining an individual’s level of responsiveness and the presence of a pulse dictates subsequent care.

Conduct Real Time Demonstration.

Talk Through Demonstration Skill Description:
- **Remember S-A-F-E**
  - Assess Responsiveness (Adult or Child)
    - State your name, training and desire to help
    - Ask permission to help
    - Tap the adult or child on the collar bone and say or shout, “Are you all right?”
  
If he responds:
- Have him remain where he is unless urgent evacuation to avoid further danger is necessary
- Try to find out what is wrong; activate EMS if indicted.
- Reassess frequently until circumstance resolves or EMS arrives.
- The individual may be placed in recovery position if there is no reason to suspect, neck, spine or pelvic injury.

If he does not respond:
- Shout for help; activate EMS
- Turn the individual on his back if not already supine.
  - **Check for a pulse and normal breathing**
    - Place tips of index and middle fingers on the person’s “Adam’s apple”
    - Slide finger towards you and slightly upward into the groove between the muscles of the neck
    - Apply gentle pressure
o Adjust position of your fingers slightly if necessary to access the pulse.
o **Check for at least 5 seconds but not more than 10 seconds.**

**NOTE:**
Normal adult pulse rates are between 60-100 beats per minute. Athletes may have lower rates.

- If the person does not have a pulse or is not breathing normally, send someone for help. If you are alone, leave him and alert emergency medical services; return and start CPR.

**Assess Responsiveness (Infant)**
- State your name, training
- **Ask for the parent or guardian’s permission to help**
- Tap or rub the infant’s feet and speak or shout, **“Are you all right?”**

**If he responds:**
- Move the infant to safety if required
- Try to find out from the parent or guardian what is wrong, and get help if needed
- Monitor for changes.

**If he does not respond:**
- Shout for help
- **Check for a pulse and normal breathing**
  - Place tips of index and middle fingers in the groove between the muscles of the inner arm just below the armpit
  - Apply gentle pressure
  - Adjust position of your fingers slightly if necessary to access the pulse.
  - **Check for at least 5 seconds but not more than 10 seconds.**

**NOTE:**
Normal infant pulse rates are between 100-120 beats per minute.

- If the person does not have a pulse or is not breathing normally and someone else is available, send them immediately to call EMS. If you are alone, conduct CPR for two (2) minutes then go to call EMS.
Set up practice groups and provide scenario

You have assured the scene is safe and approach the man who has collapsed.

**Instructor:** What is your next step?  
**Students:** Identify yourself as a first aid provider, tap the man on the collarbone and ask if he is OK. Ask “may I help you?”  
**Instructor:** The man does not respond. What should you do?  
**Student:** Check for a pulse while doing a quick visual assessment for normal breathing.

A mother checked on her infant son who had been sleeping in his carrier. She couldn’t get him to respond and called for help.

**Instructor:** What is your next step?  
**Students:** Identify yourself as a first-aid provider and ask the mother if you may help. Tap the infant on his feet and ask if he is OK.  
**Instructor:** The infant does not respond. What should you do?  
**Student:** Check for a pulse while doing a quick visual assessment for normal breathing.

**Teaching Tip Reminder:**  
The entire process of initial assessment including checking for a pulse and normal breathing should take no more than 10 seconds.

**Teaching Tip:**  
When checking for the carotid pulse, it may help to slide the finger slightly upward in the groove on the neck towards the corner of the jaw.

Debrief skill.

**Initial Assessment Key Points:**
1. Always ask permission to assist  
2. Tap and shout to establish unresponsiveness  
   - Tap collarbone on adults and children  
   - Tap bottom of feet for infants  
3. Activate EMS  
4. Visually assess for normal breathing while checking for a pulse  
   - Use carotid pulse for adults and children  
   - Use brachial pulse for infants  
5. Initial assessment should last no longer than 10 seconds.
Skill: Recovery Position

Equipment:
1. Non-latex medical gloves

Objectives:
1. Demonstrate rolling a simulated injured or ill person from their back into the recovery position keeping the spine aligned.

Rationale:
A person who is breathing but unresponsive cannot protect their own airway. Placing the individual into the recovery allows vomitus or other liquids to drain from the mouth without aspiration. The individual should be continuously monitored for changes in their condition.

Conduct Real Time Demonstration

Talk Through Demonstration Skill Description:
- Kneel beside the person and make sure that both of their legs are straight.
- Place the arm nearest to you at right angles to the body, elbow bent and palm facing upward.
- Bring the far arm across the chest, and place their hand against the person’s cheek nearest to you. Hold their hand in place with your hand.
- With your other hand, pull the knee up by either placing your hand under the leg just above the knee or grab the pant leg of the person’s clothing keeping the foot on the ground.
- Keeping the hand pressed against the cheek, gently press on the far leg at the knee to roll the individual toward you onto his side.
- Adjust the top leg so 90° angles are formed at both the hip and knee.
- Tilt the head back to ensure the airway remains open.
- Adjust the hand under the cheek, if necessary, to keep the head tilted.
- Check breathing regularly.
- Continually monitor the person for any other changes.
**Teaching Tip:** The order in which the individual’s hand is secured against their cheek and the far leg is raised into a bent position is not critical. Individuals with a short reach may find one easier to do first that the other.

**Teaching Tip:** Pairing the class up so a larger student is with a smaller student emphasizes the ease of this technique.

**Set up practice groups and provide scenario.**

The man who collapsed is not responding but has a pulse and appears to be breathing.

**Instructor:** What is your next step?

**Students:** Place him in the recovery position. Continue to monitor.

**Debrief skill.**

**Recovery Position Key Points:**

1. Straightening limbs initially facilitates necessary actions
2. Adjust the person’s arm and leg farthest from the rescuer into position to facilitate the body roll.
3. The rescuer should keep their hand on the person’s hand keeping it secure at their face.
4. Gentle pressure on the knee is typically all that is required to roll the individual into the recovery position
5. The recovery position should not be used on a person with suspected neck, spine or pelvic injuries.
6. Continually monitor the individual for changes while waiting on EMS.
Skill: Chest Compressions

Required equipment:
1. Non-latex medical gloves
2. Adult CPR manikin
3. Infant CPR manikin

Objectives:
1. Demonstrate proper hand positioning for chest compressions on a manikin for both an adult and a child.
2. Utilize proper body mechanics to accomplish chest compressions consistently to a minimum depth of 2-2 1/2”/5-6 cm on an adult CPR manikin at a rate of 100-120 per minute.
3. Utilize proper body mechanics to accomplish chest compressions consistently to 1/3 the chest depth for a child using one hand on a CPR manikin (adult or child) at a rate of 100-120 per minute.
4. Demonstrate proper finger/thumb placement for infant chest compressions.
5. Utilize proper body mechanics to accomplish chest compressions consistently to 1/3 the chest depth on an infant CPR manikin at a rate of 100-120 per minute.

Rationale:
Hand placement and depth are critical to the effectiveness of CPR. While CPR will not restart a heart, effective compressions can sustain life until advanced care is available.

Conduct Real Time Demonstration

Talk Through demonstration Skill Descriptions:

Adult CPR

- Kneel by the side of the person
- Place heel of one hand in the center of the chest between the nipples
- Place the heel of your other hand on top of the first hand interlocking the fingers of your hands.
  - Do not apply pressure on the bottom end of the sternum (breastbone) or the upper abdomen
- Position yourself vertically over the chest with your arms straight and shoulders directly above elbows and hands
- Using your hips as a pivot point and the weight of your whole body, forcefully but smoothly press down vertically on the sternum at least 2-2 1/2 inches/5-6 cm
• After each compression, release all the pressure on the chest without losing contact between your hands and the sternum; repeat at a rate of 100-120/minute
  o Do not lean on chest during recoil.
• Compression and release should take equal amounts of time

**NOTE:** The same technique for chest compressions on adults and children is used for both one- and two-person CPR.

**Child CPR**
• The same technique applies as for adult except that one hand may be all that is required to achieve adequate depth
  ▪ Compression depth on a child (up to puberty) should be 1/3 the depth of the chest.

**NOTE:**
The size of the child (not their age) and the rescuer’s ability to achieve adequate compression depth should guide the decision to use one or two hands for CPR.

**Infant CPR Single Rescuer**
• Position yourself to the side of the infant
• Place two or three fingers side by side in the center of the infant’s chest perpendicular to the nipple line.
• Using vertical force from your shoulder through your fingertips, compress the chest 1/3 the depth of the infant’s chest.
• After each compression, release all the pressure on the chest without losing contact between your fingers and the sternum; repeat at a rate of 100-120 per minute.
• Compression and release should take equal amounts of time.

**Two Rescuers**
• Position yourself at the infant’s feet
• Circle the infant’s chest with both hands placing the thumbs in the center of the chest at the nipple line.
  o Thumbs may be side by side or stacked on top of each other.
  o Use the fingers to support the infant’s back.
• Forcefully but smoothly squeeze the infant’s chest compressing it to 1/3 the depth of the chest being careful to not squeeze the sides of the chest wall.
• After each compression, release all the pressure on the chest without losing contact between your thumbs and the sternum; repeat at a rate of at least 100 per minute.
• Compression and release should take equal amounts of time.

Set up practice groups and provide scenario.

The man in the previous scenario has now quit breathing. You can no longer detect a pulse.

Instructor: What should you do?  
Students: Place him on his back and begin chest compressions

The infant in the previous scenario is not breathing nor can you detect a pulse.

Instructor: What should you do?  
Students: Begin chest compressions

EMS has been called and a second rescuer is available.

Instructor: What should you do?  
Students: Adjust position to accommodate the second rescuer.

Teaching Tip Reminder:  
The size of the child (not their age) and the rescuer’s ability to achieve adequate compression depth should guide the decision to use one or two hands for CPR.

Teaching Tip Reminder:  
Continuous chest compressions are critical to the effectiveness of CPR. Compressions should not be interrupted unnecessarily except when an AED is in use.

Debrief skill.
Chest Compressions Key Points:

1. Hand positions:
   - For adult CPR, stack hands on top of each other in the center of
     the chest along the nipple line
   - For child CPR, use one hand in the center of the chest along the
     nipple line
   - For infants, use 2-3 fingers in the center of the chest along the
     nipple line
2. Use vertical pressure to compress chest
   - For adults, compress 2-2.5 inches/5-6 cm
   - For children and infants, compress about 1/3 of the chest depth
3. Use body weight for effective depth.
   - Arms should remain straight when performing CPR on adults
     and children
   - Do not allow hands/fingers to lose contact with chest wall
     between compressions but do allow for full recoil of the chest.
     ▪ Do not lean on chest during recoil.
4. Rate of compressions for all ages is 100-120 per minute.
5. Techniques do not change for adults and children when two
   rescuers are available.
   - Rescuer position shifts for two person CPR on an infant.
Skill: Rescue Breathing

Required Equipment:
1. Non-latex medical gloves
2. Adult CPR Manikin
3. Infant CPR manikin
4. Oronasal resuscitation mask (one for each student or clean chimney for each student to use on a circulating mask)

Recommended equipment:
1. Child CPR manikin

Objectives:
1. Demonstrate proper rescue-breathing technique for an adult and child on a CPR manikin. (Adult manikin may be used for both adult and child although a child manikin is preferred.)
2. Demonstrate proper rescue-breathing technique on an infant manikin

Rationale:
Proper rescue breathing technique is an integral part of full CPR. In addition, rescue breathing may be all that is required in some situations. The heart continues to beat for a short while after breathing ceases. Providing rescue breaths may pre-empt the need for CPR.

Conduct Real Time Demonstration.

Talk Through Demonstration Skill Description:

Adult and Child
- Remain at the side of the person.
- Place the face shield or resuscitation mask on the person’s face using the bridge of the nose as a guide for correct positioning.
- Seal the mask by placing your index finger and thumb of the hand closest to the top of the person’s head along the border of the mask.
- Use the thumb and first finger of the other hand to pinch the lower border of the mask to the chin. (Other techniques are acceptable just avoid pressing on the soft tissue under the chin.)
- Press firmly and completely around the outside margin of the mask to form a tight seal.
• Tip the head back and pull the chin up into the mask so the chin is pointing up. (head tilt-chin lift)
  o Keep fingers on bony structures of the jaw.
• Seal your lips around the one way valve and blow through it. Each breath should last about one second. Watch for the chest to rise.
• Take your mouth away from the mask and watch for the chest to fall as the breath is exhaled. (about 1 second)
• Deliver a second breath as before:
• If rescue breaths do not make the chest rise,  
  o reposition the head using a head tilt-chin lift technique and reattempt to ventilate  
  o check the person’s mouth and remove any obstruction  
  o do not attempt more than two breaths each time before returning to chest compressions

NOTE:
When in doubt, do not keep trying to ventilate. Compressions should not be interrupted for more than 10 seconds.

Infants
• When using an oronasal mask on an infant, place the mask on the infant’s face so the narrow portion of the mask covers the chin (placement is 180° to placement on an adult.)
  o For infant rescue breathing, use of an oronasal mask is optional. When using mouth to mouth resuscitation on an infant, it may be necessary to cover both the mouth and nose.
• Seal the mask tightly with downward pressure along all edges and gently tipping the infant’s head back, simulating a ‘sniffing’ position.
  o Avoid overextending the head and collapsing the airway
• Use gentle puffs of air from your cheeks to ventilate an infant.
  o Allow the chest to fall with the exhale before ventilating again.
Set up practice groups and provide scenario.

You have completed 30 chest compressions.

Instructor: What is your next step?
Students: Rescue breathing

Debrief skill.

Rescue Breathing Key Points:
1. Open the airway by tipping the head back with the head tilt chin lift technique
   o Avoid overextending an infant’s head as their airway is easily collapsed.
2. Secure a tight mask seal against the person’s face.
   o Avoid contact with the soft tissue under the chin.
   o Keep fingers and hands on the face and bony features
3. Blow into the ventilation barrier just enough to make the chest rise
   o For infants, light puffs of air from the rescuers cheeks are usually sufficient.
4. Allow 1 second for each breath with one second in between
5. Do not attempt more than 2 breaths before returning to chest compressions
Notes:
Skill: Full CPR: Adult, Child, and Infant

**Required Equipment:**
1. Non-latex medical gloves
2. Adult CPR Manikin
3. Infant CPR manikin
4. Oronasal resuscitation mask (one for each student or clean chimney for each student to use on a shared mask)

**Recommended equipment:**
1. Child CPR manikin

**Objectives:**
1. Perform two minutes of full CPR as a single rescuer on adult and infant CPR manikins, completing at least five cycles of 30:2 compressions/ventilations.
2. Perform four minutes of full CPR as a two person rescue team on an adult CPR manikin, completing at least ten cycles of 30:2 compressions/ventilations.
3. Perform four minutes of full CPR as a two person rescue team on an infant CPR manikin, completing at least 20 cycles of 15:2 compressions/ventilations.

**Rationale:**
Full CPR is strongly recommended for incidents involving scuba diving injuries or immersion (drowning).

**Conduct Real Time demonstrations.**

**Talk through demonstration Skill Description:**
Once unresponsiveness in adults has been established, immediately call EMS.

**Adult**
- **Activate EMS upon establishing unresponsiveness**
- **Single Rescuer:**
  - Using the compression and rescue breathing techniques from the previous skills, deliver chest compressions at a rate of 100-120 per minute to a depth of 2-2 1/2 inches/5-6 cm followed by rescue breaths using a ratio of 30:2 as a single rescuer for a minimum of 5 cycles/two minutes.
Two Rescuers:
- Using the compression and rescue breathing techniques from the previous skills, deliver chest compressions at a rate of 100-120 per minute to a depth of 2-2½ inches/5-6 cm followed by breaths using a ratio of **30:2 as a two rescuer team** for two minutes.
- **Switch roles and re-assess. Continue for an additional 2 minutes of CPR.**

Children and Infants
- **Perform 2 minutes of CPR before activating EMS if alone.**

Single Rescuers:
- Using the compression and rescue breathing techniques from the previous skills, **deliver chest compressions at a rate of 100-120 per minute to 1/3 the chest depth** followed by breaths using a **ratio of 30:2 as a single rescuer** for a minimum of two minutes.

Two Rescuers:
- Using the compression and rescue breathing techniques from the previous skills, deliver chest compressions at a rate of 100-120 per minute to 1/3 the chest depth followed by breaths using a **ratio of 15:2 as a two rescuer team** for two minutes.
- **Switch roles and re-assess. Continue for an additional 2 minutes of CPR.**

Set up practice groups and provide scenario.

---

**SCENARIO**

You continue to provide care for the man who has collapsed and he does not have a pulse nor is he breathing on his own.

**Instructor:** What care should be provided?
**Students:** Provide 2 minutes of continuous CPR

---

**Teaching Tip:**
*Demonstrate 2 full minutes of CPR to illustrate initial care and re-assessment.*

**Teaching Tip Reminder:**
*After the 2 minute reassessment, CPR should not be interrupted until the individual’s condition obviously changes or EMS takes over care. CPR should not be interrupted unnecessarily.*
Debrief skill.

**Full CPR Key Points:**

1. Call for assistance (EMS) immediately upon determining unresponsiveness.
   - For infants and children, provide two minutes of CPR (if alone) before calling EMS.

2. Compression rate is 100-120 per minute at a depth of 2-2 ½ ”/5-6 cm deep for adults.
   - Compression depth for children and infants is 1/3 chest depth.

3. Rescue breathing ratio is 2 for every 30 compressions for a single rescuer in all cases.
   - Ratio for infants and children with 2 rescuers is 15:2
   - Breaths should only last 1 second each for adults and children and should make the chest visibly rise. Puffs of air from the rescuer’s cheeks is all that is needed for infants.
   - If ventilations do not make the chest rise, reposition the head to open the airway. Do not make more than two attempts to provide breaths before returning to chest compressions

4. Continue CPR for 2 minutes then reassess the individual.

5. For two person CPR, switch roles every 2 minutes.
Notes:
Skill: Use of an Automated External Defibrillator (AED)

Equipment:
1. Adult CPR Manikin
2. Non-latex medical gloves
3. Oronasal resuscitation mask or other face shield intended for rescue breathing
4. AED Trainer (select scenario to be used from AED Trainer program before beginning this skill.)

Objectives:
1. Demonstrate proper AED pad placement for adults, children and infants on CPR manikins.
2. Follow the prompts of an automatic external defibrillator (AED) training unit to simulate care for a non-breathing person on an adult CPR manikin.
3. Utilize an AED training unit as part of CPR on an adult CPR manikin.

Rationale:
Early access to defibrillators greatly increases an individual’s chances of survival if the heart is in fibrillation. AEDs are the only method available to reset a fibrillating heart. With every minute that passes until defibrillation, there is a 7-10 percent decrease in the likelihood of survival from sudden cardiac arrest.

Conduct Real Time Demonstration

Talk Through Demonstration Skill Description:

Remember S-A-F-E
If unresponsive
- Shout for help or call EMS
If not breathing normally
- Send someone or go for an AED
  - **Do not delay CPR waiting for an AED.**
- Perform CPR 30:2 continuously until AED begins analysis.
- **Turn on the AED and follow the prompts of the specific unit**
- Attach the defibrillator pads to the individual’s chest as illustrated on the pads and plug the cord into the AED (this order may be reversed on some units)
  - For adults and children, pads should be placed on the upper right chest wall below the shoulder and on the lower left chest extending onto the lateral surface.
For infants, pads should be placed in the center of the chest and in the center of the back.

Water and heavy chest hair may need to be removed before pad placement to assure good contact.

NOTE:
Use pediatric AED pads for children and infants if available. If they are not available, it is OK to use adult pads. Pediatric pads, however, should not be used on adults.

Allow the AED to analyze the heart rhythm

Do not touch the individual during this analysis

If shock required: Follow the AED unit’s prompts.
- Visually and physically clear the individual
- State: “I’m clear, you’re clear, all clear”.
- Administer shock
- Immediately resume CPR beginning with chest compressions for 2 minutes

If no shock required, resume CPR until the person starts to breathe normally or EMS arrives.

Set up practice groups and provide scenario.

An AED has been brought to the scene.

Instructor: What should you do?
Students: Perform CPR until the AED is set up and ready then follow the prompts of the AED after it has been turned on.

Instructor: An AED shock has been delivered to the individual. What is your next step?
Students: Resume CPR after the shock, beginning with compressions, for 2 minutes or until the AED prompts to reassess the person.
**Teaching Tips:**
1. Choose a scenario from your AED trainer in advance for your role model demonstration. Perform CPR while waiting on the AED to be provided. Demonstrate proper use of an AED following the unit’s prompts.
2. Continue demonstration for 2 minutes after the shock allowing for the full cycle of care. At this time, the AED trainer should be prompting a reassessment. Follow AED scenario prompts.
3. Vary scenarios between students so they are exposed to a variety of circumstances. Understanding that not all situations are identical will be helpful should the student be presented with the need to respond.

**Debrief skill.**

**Use of an AED Key Points:**
4. Do not delay or interrupt CPR while waiting on an AED unit to arrive at the scene or for it to be set up by another rescuer.
5. Turn the unit on and follow the specific unit’s prompts.
   • Pads are marked for placement but can be switched and still work.
   • Water on the skin and chest hair may need to be removed to facilitate good pad contact.
6. Verbally and physically (wave arms) clear the individual during analysis and shock delivery.
   • Do not touch the person during analysis or shock.
7. Resume CPR immediately once the shock has been delivered beginning with compressions.
Skill: Foreign-Body Airway Obstruction

Equipment:
1. Non-latex medical gloves

Objectives:
1. Demonstrate proper management of an obstructed airway in a responsive adult and a responsive infant.

Rationale:
In just a few minutes a blocked airway can cause a person to lose consciousness. It can also cause cardiac arrest from hypoxia as the body tissues become starved of oxygen.

Conduct Real Time Demonstrations

Talk Through Demonstration Skill Description:

Adult
In the case of a mild airway obstruction, encourage the choking victim to cough, but do nothing else.

If the person shows signs of a severe airway obstruction and is conscious, ask permission to assist. Perform abdominal thrusts if permission is granted.

- Stand behind the person and put both arms around the upper part of the abdomen.
- With one hand locate the person’s navel
- Clench your other hand into a fist and place it just above your first hand between the navel and bottom tip of the sternum with the thumb end of your fist against the choking person’s abdomen. Grasp it with your other hand.
  - Keep your hands off the person’s rib cage.
- Pull sharply inward and upward repeatedly.
  - Thrusts should be into the soft abdominal tissue and off the person’s ribs.
- Repeat until the object is expelled or the person loses consciousness.
• If you cannot reach around the individual’s abdomen or the choking victim is a pregnant woman, do chest thrusts instead.

**If the person at any time becomes unconscious:**
• **Lower the individual carefully to the ground**
• Activate EMS
• **Begin CPR** (chest compressions followed by rescue breaths)
• Look in the mouth for the obstruction before giving rescue breaths
  o Remove object with a finger sweep only if visible

**Infant**
• Hold the infant face down on your lower arm with your hand **supporting the infant’s head** and the infant’s legs straddling your arm. **The head should be lower than the body.**
  o Use your thigh to help support your arm with the infant if desired
• Deliver five back blows between the infant’s shoulder blades.
• Place your other forearm over the infant along its back cupping its head with your hand, “sandwiching” the infant between your arms.
• Turn the infant over and quickly check for the obstruction. If visible, remove with a finger sweep.
• If the obstruction is not visible, deliver five chest compressions using the same technique as for CPR.
• Check for the obstruction. If visible, remove with a finger sweep.
• Repeat steps as necessary until obstruction is relieved.
• If infant becomes unconscious, begin CPR

Always encourage the person who was choking to seek medical evaluation afterwards.
Set up practice groups and provide scenario.

You are at a family picnic when your cousin stands up from the table grasping his throat.

**Instructor:** What is your first action?
**Students:** Ask if he is OK, can he speak?

**Instructor:** If he can’t answer, what should you do?
**Student:** Perform abdominal thrusts and back blows until the object is dislodged.

**Instructor:** What should you do if your cousin becomes unconscious?
**Students:** Assist him to the floor gently. Begin CPR

**Teaching Tip:**
1. Demonstrate abdominal thrusts on an assistant or student. **Do NOT** use full force but simulate force during the demonstration.
2. Have students practice self-rescue by using a chair to simulate removing an airway obstruction. Have them lean over a chair from behind placing the area between their navel and rib cage on the chair back. They should then grasp either the chair arms or seat and pull themselves into the chair back with simulated force.

**Debrief skill.**

**Foreign-Body Airway Obstruction Key Points:**
1. Do not interfere with a person’s attempts to clear their airway if they can cough but do stay ready to assist if they need help.
2. Keep your hands/fist off the person’s ribcage. Thrusts should be into the soft abdominal area above the navel.
3. Pull forcefully upwards and backwards repeatedly to assist with releasing the obstruction.
4. If you cannot reach around the individual’s abdomen, perform chest thrusts
5. If the individual becomes unconscious, assist them to the ground as gently as possible and begin CPR (chest compressions).
6. For infants, assure that the head is constantly supported and lower than the rest of their body.
**Skill: Suctioning**

**Equipment:**
1. Non-latex gloves
2. Manual vacuum pump
3. Suction bulb
4. Adult and infant CPR manikins

**Objective:**
1. Demonstrate appropriate technique and duration for suctioning on an adult or child manikin and on an infant manikin.

**Rationale:**
When fluids or soft solids are present in the upper airway, suctioning may aid in clearing the airway so effective rescue breaths can be accomplished.

**Conduct Real Time demonstration.**

**Talk through Demonstration Skill Description:**

**Adult or Child**

**Use a manual vacuum pump with a size appropriate, rigid suction catheter for adults and children.**
- Place the person on their side
- Estimate the distance from the front of the mouth to the throat
  - Hold the catheter along the side of the face from corner of mouth to ear lobe. Tip of the catheter should be towards the ear lobe.
  - Use fingers to mark the catheter at the corner of the mouth. This is the maximum allowable distance for insertion.
- Use a cross finger technique to open the person’s mouth if needed.
  - Using one hand, place one or more fingers on the front teeth of one jaw and the thumb on the front teeth of the other jaw.
  - Push the teeth apart with a scissor-like action.
  - Hold the mouth open with this method while suctioning takes place
- Insert the suction tip along the roof of the mouth to the back of the mouth/top of the throat.
  - **Insert no farther than estimated**
SCENARIO

previously
• Activate suctioning mechanism
  o Limit suctioning to no more than 15 seconds for adults
  o Limit suctioning on children to more than 10 seconds
• Visually inspect mouth/airway for visible obstructions
• Remove visible obstructions with gloved finger or repeat suctioning.
• Attempt to ventilate the person.

Infant
Use a suction bulb for infants.
✓ Open the infant’s mouth with a similar technique as for adults and children or use a jaw thrust as with two person infant CPR
✓ Depress the suction bulb before inserting in the infant’s mouth.
  o Suction mouth then nose
  o Limit suctioning to no more than 5 seconds
• Remove suction bulb from mouth/nose and depress away from infant to clear it
• Visually inspect mouth/airway for visible obstructions
  o Removed visible obstructions with gloved finger or repeat suctioning
• Attempt to ventilate infant

While performing CPR, the individual in the previous scenario vomits.

Instructor: What steps should you take?
Students: Roll the person onto their side and clear the airway using an appropriate suctioning device.

Debrief skill.

Suctioning Key Points:
1. Choose an appropriate size and length of suction tip when suctioning an adult or child. Avoid over insertion of the tip.
   o Use a suction bulb for infants
2. Limit time of suctioning to 15 seconds for adults, 10 seconds for children and 5 seconds for infants
3. Remove visible obstructions not removed by the suction device with a finger sweep.
4. Attempt rescue breaths.
Skill: Control of External Bleeding

Equipment:
1. Non-latex gloves
2. Gauze dressings or pads, bandages, tape
3. Splinting material, such as SAM® splints, magazines, triangular bandages, and roller bandages

Objective:
1. Demonstrate applying direct pressure to control bleeding on a simulated injured person.
2. Demonstrate bandaging to secure a dressing in place once bleeding has stopped on a simulated injured person.

Rationale:
Direct pressure successfully controls most external bleeding. In some settings you may be required to bandage a wound or splint a limb in such a way as to prevent further injury while the injured person is being moved to emergency medical care.

Conduct Real Time Demonstration

Talk Through Demonstration Skill Description:

To control bleeding:

- **Cover the wound completely** with a sterile or clean dressing and apply pressure until the bleeding stops.
  - Use additional layers of dressing if the dressing becomes soaked.
  - Do not remove any layers of dressing materials as it may disrupt the clotting mechanism of the body.

- **Bandage dressings in place once bleeding has stopped.**
  - Wrap extremity bandages towards the heart.

- **Monitor the pulse and motor function** distal to the bandage before and after bandage application
  - Check capillary refill on appendage nail beds to assure adequate circulation
  - Ask the injured person if any tingling or numbness is present.
  - Adjust bandage if necessary to assure circulation

- For Small Wounds: Bandage several inches on either side to ensure coverage and even pressure distribution.
- For wounds around or involving joints: apply the bandage in a comfortable position
- Keep the joint immobilized after bandage application. Splint the injury only if EMS will be delayed (see next skill)

**Set up practice groups and provide scenario.**

During a pick up baseball game, one player slides into home but scraped her arm and wrist badly. She is bleeding heavily from one cut.

**Instructor:** How should you manage the wounds?  
**Students:** Apply a dressing and bandage it in place.

**Teaching Tip:**
Unrolling a bandage so the roll is on top of the bandage instead of under it helps keep the roll under control and minimizes the risk of dropping it.

**Debrief skill.**

**Bandaging Key Points:**
1. Dressings should completely cover bleeding wounds.
2. Use direct pressure to stop bleeding.
3. Apply additional layers of dressing material (gauze) if the dressing becomes soaked. Do not remove soaked layers.
4. Bandage dressings in place once bleeding has been stopped.
5. Wrap extremity bandages towards the heart.
Skill: Applying a Tourniquet

Equipment:
1. Commercial tourniquet (preferred) or materials for an improvised tourniquet.

Objective:
1. Demonstrate applying a tourniquet to control bleeding on a simulated injured person.

Rationale:
Severe, life-threatening bleeding from extremities may require bleeding control measures beyond direct pressure and cold therapy. For these kinds of injuries application of a tourniquet may save a life. Major arterial bleeding from an extremity may require quick and immediate tourniquet application.

Conduct Real Time demonstration.

Talk Through Demonstration Skill Description:
- Inspect the wound to ensure direct pressure was being applied directly to the site of the bleeding. If not, attempt direct pressure once more.
- Place the tourniquet 1-2 inches (2.5-5 cm) proximal to the wound with the windlass over the bleeding artery.
- Secure the tourniquet.
- Turn the windlass device to stop bleeding.
- Verify absence of pulse in the distal portion (see Critical Note below) of the extremity.
- Secure the windlass.
- Note on the injured person’s forehead a ‘T’ or ‘TK’ (indicating the use of a tourniquet) and time of placement.
- Monitor bleeding as the tourniquet may need to be tightened as blood vessel relax.
- A tourniquet used in an actual injury in place should be left in place until the injured person is under medical care.
- Counsel the injured person that the tourniquet will be painful but is being used as a life saving measure.
  - Provide verbal support.
CRITICAL NOTE:
When applying a tourniquet as part of skill practice for course requirements, the tourniquet does not need to be tightened to the point of distal pulse absence. Advise students tourniquets are painful when placed appropriately but it will be released promptly. It may also cause temporary bruising.

**For safety and to prevent localized injury, do not tighten a tourniquet during practice beyond the point your practice partner starts to feel changes in sensation. **

Set up practice groups and provide scenario.

Continued - The bleeding on her arm is not responding to direct pressure and you have verified you are using pressure directly over the wound.

Instructor: What is the next step?
Students: Apply a tourniquet and immediately seek medical assistance.

Teaching Tip:
- Use of dressings impregnated with hemostatic agents may still be required in some cases.

Improvised tourniquet:
- Fold a triangular bandage so it is 2 inches wide.
- Wrap it around the limb and tie an overhand knot.
- Place a large stick (a couple of pencils, dowels, or similar large object) over the knot and tie a second overhand knot on top of the stick.
- Turn the stick to tighten the tourniquet.
- Secure it with a second bandage so it does not come loose.
Debrief skill.

Tourniquet Key Points:
1. Verify direct pressure was being applied over the wound.
2. If so, then apply tourniquet 1-2 inches (2.5-5 cm) above the wound.
3. Secure the windlass after tightening so it will not come loose.
4. Verify distal pulse and/or bleeding has been stopped.
5. Note ‘T’ or ‘TK’ along with the time the tourniquet was applied on the injured person’s forehead with marker.
6. Monitor injury site as tourniquet may need to be tightened as blood vessels relax.
7. Leave a tourniquet in place until under advanced medical care.
8. Provide verbal support to injured person.
Notes:
**Skill: Splinting**

**Equipment:**
1. Non-latex gloves
2. Dressing and bandaging materials
3. Various splints (commercial or improvised)
4. Elastic bandages

**Objective:**
1. Apply a splint to a simulated injured limb immobilizing the joints on either side of the injury. Use of either a professional splint or improvised splint is acceptable.

**Rationale:**
In some settings where EMS is more than 10 minutes away, you may find it helpful to splint a limb to prevent further injury while the injured person is being moved to emergency medical care.

**Conduct Real Time demonstration.**

**Talk Through Demonstration Skill Description:**
- **Preform the splint to adapt to the injured site.** Shaping it during placement may be painful to the injured person.
- Apply a splint keeping the injured limb in the position it was found. Do not straighten the limb.
- Place splinting material either along or on each side of the injured limb.
- Place splint so **the joints both above and below the site of injury are immobilized.**
- **Use padding** (gauze, towels, clothing, etc.) to fill in voids under the splint and provide additional support to the injured limb.
- **Check for adequate circulation** by pressing nail beds with enough gentle pressure to cause them to blanch then observe capillary refill (return of pink color to nail beds). Adjust bandaging if necessary to ensure circulation.
- After the splint is in place, continually reassess the injured person and monitor for signs of shock.
- Activate EMS if not already completed
Set up practice groups and provide scenario.

You have stopped the baseball player’s bleeding, now you notice her wrist is swelling and she is complaining of pain when she tries to move it.

**Instructor:** How should you handle the injury?
**Students:** Apply splint, padding the injured site for comfort and to aid in restricting movement.

Debrief skill.

**Splinting Key Points:**
1. Adjust and form splint material to fit before placing on injured site.
2. Be sure joints above and below injury are immobilized.
3. Pad injured site for comfort and to minimize movement.
Skill: Shock Management

Equipment:
1. Non-latex gloves
2. Blanket or other aids to assist with controlling body temperature

Objective:
1. Demonstrate proper technique for managing shock by placing the victim on their back or in a position of comfort and taking steps to maintain normal body temperature in a scenario

Rationale:
Shock is a life threatening condition. Death may result if steps are not taken to reverse the effects of shock. Maintaining an open airway, ensuring adequate breathing and circulation, and controlling bleeding are the most effective methods of preventing shock.

Conduct Real Time demonstration.

Talk Through Demonstration Skill description:
- Assess scene safety
- Support the airway and breathing if indicated
- Activate EMS
- Control external bleeding if present
- Provide comfort and reassurance
- **Place the victim on their back or in a position of comfort.**
- **Maintain normal body temperature by adjusting body coverings for cold or heat.**
- **Do not give anything by mouth.**
- Provide comfort and reassurance.
- **Monitor the level of responsiveness**

Set up practice groups and provide scenario

You have bandaged and splinted the player’s injured limbs but she now looks pale. Her skin is cool and clammy.

**Instructor:** What is the next step for providing first aid?
**Students:** Monitor injured person for shock. Take preventive steps.

**Instructor:** Should you provide any food or drinks?
**Students:** No.
Debrief skill.

Shock Management Key Points:

1. Have the victim lay down on their back or in a position of comfort. Do not force a person (especially with a heart condition or breathing problem) to lie down. Place him in the most comfortable (IE. sitting) position.
2. Monitor the injured person for thermal control and adjust body coverings as indicated.
3. Do not give anything by mouth.
4. Continuously monitor level of consciousness.
Skill: Severe Allergic Reaction or Opioid Overdose

Required equipment:
1. Epinephrine or Naloxone auto-injector trainer

Objective:
1. Demonstrate the proper technique for assisting with an epinephrine and/or a naloxone auto-injector in a scenario.

Rationale:
Some individuals experience extreme reactions to specific exposures such as bee stings or certain foods. The speed of the reaction may inhibit the individual’s ability to respond on their own. Assistance from another individual may be necessary. Opioid overdoses also lead to impairment and often require the assistance.

Conduct Real Time demonstration.

Talk Through Demonstration Skill Description:
- Assist the individual only if they are unable to administer the medication themselves,
  - Begin by removing the auto-injector from its case.
- Remove the protective cap. Follow prompts if utilized by the device.
- Grasp the epinephrine auto-injector in the palm of your hand keeping fingers and thumb from covering either end.
- With either auto-injector use a firm grasp and jab the indicated end against the mid-thigh of the individual experiencing the reaction.
- Hold the injector in place for at least 10 seconds.
- Massage the area where the injection was administered to assist with dispersion of medication.
- Return the auto-injector to its case and give to EMS personnel when they arrive.
- Note the time the medicine was administered.

Set up practice groups and provide scenario.

A group of your friends are out for dinner one evening. One of the diners suddenly starts itching and complaining of irritated eyes and fullness in his throat. He has shared earlier that he is allergic to shellfish. The dish he ordered has a clam sauce on it he overlooked on the menu.

Instructor: What is your immediate response?
Students: Ask if he carries anything to take for allergic reactions. If so, secure it and assist as may be required to administer it.
Debrief skill.

Severe Allergic/Opioid Overdose Reaction Key Points:

1. Assist the individual only if they are unable to administer the medication themselves.
2. Avoid covering either end of the epinephrine auto-injector with your fingers or thumb.
3. Hold the injector in place for at least 10 seconds to assure full administration of medication.
4. Turn used auto-injector over to medical personnel.
CPR: Health Care Provider Final Assessment

The following questions have only one correct answer unless otherwise directed.

1. What is the first link in the chain of survival:
   a. Rapid initiation of CPR
   b. Early recognition and rapid activation of EMS
   c. Post cardiac arrest care
   d. Advanced Life Support

2. The goal of CPR is to maintain adequate circulation of oxygenated blood to vital organs.
   a. True
   b. False

3. Chest compressions temporarily take over the function of the heart.
   a. True
   b. False

4. Personal safety is your number one priority when providing care.
   What are possible concerns?
   a. Traffic at the scene of a collision
   b. Animals
   c. Toxic Gas, such as Carbon Monoxide
   d. All of the above

5. Personal protective equipment which can help prevent infection while providing care includes:
   a. Gloves
   b. Mask or face shield for CPR
   c. Protective eyewear
   d. All of the above

6. During initial assessment, you should:
   a. Identify yourself and your training as a first-aid provider
   b. Tap and shout “are you OK?”
   c. Determine if there is normal breathing and a pulse present
   d. All of the above

7. The recovery position should not be used on someone with a suspected spine injury.
   a. True
   b. False
8. While walking your dog at a local park you observe a nearby adult clutch his chest then collapse. You are alone. You should:
   a. perform CPR for 2 minutes then call EMS
   b. call EMS then wait for their support
   c. Call EMS, then return to the individual and initiate CPR until assistance arrives
   d. perform CPR for 1 minute then reassess the individual

9. With adult drowning victims, if you are alone
   a. perform CPR for 2 minutes then call EMS
   b. call EMS then wait for their support
   c. use the same protocols as with any unresponsive person
   d. perform CPR for 1 minute then reassess the person

10. Chest compressions on an adult should be delivered to a depth of
    a. No more than 1 ½ inches (3 cm).
    b. Depth is not important as long as compressions are being done.
    c. 2-2 ½” (5-6 cm).
    d. 3-3 ½” (7-8 cm).

11. Compression to rescue breaths ratio in single rescuer CPR is 30:2 for an adult. What is the rate per minute for chest compressions?
    a. As fast as you can push
    b. 100-120 per minute
    c. 70-80 per minute
    d. 150-160 per minute

12. Doing chest compressions too rapidly results in
    a. decreased blood flow
    b. decreased effectiveness of compressions
    c. rapid rescuer fatigue
    d. all of the above

13. During two rescuer CPR on an adult, the compression to rescue breaths ratio is
    a. 30:2
    b. 30:1
    c. 15:2
    d. 5:1

14. Chest compressions in a child should be delivered to a depth of:
    a. No more than 1 inch (2.5 cm) to avoid injury.
    b. Approximately 2” (5 cm) or approximately 1/3 the depth of the child’s chest
    c. At least 4” (10 cm).
    d. Depth is not important as long as compressions are being done.
15. What is the compression to rescue breaths ratio in two rescuer CPR for a child?
   a. 30:2
   b. 30:1
   c. 15:2
   d. 5:1

16. Chest compressions on an infant should be delivered to a depth of
   a. No more than ½ " (1 cm) to avoid injury to the infant
   b. Approximately 2" (5 cm) depending on the size of the infant.
   c. At least 4" (10 cm).
   d. At least 1/3 the depth of the infant’s chest.

17. What is the compression to rescue breath ratio for one rescuer performing CPR on a six-month old?
   a. 30:2
   b. 30:1
   c. 15:2
   d. 5:1

18. For 2 rescuer CPR on an infant, what adjustments should be made in CPR?
   a. Use the same stacked-hand position and force as with a child or an adult
   b. Use two-thumbs on the chest with hands encircling the chest for compressions
   c. Do not pause compressions to deliver breaths
   d. Administer compressions : ventilations at a 5:1 ratio

19. Rescue breaths for an adult should be given for about ____ using a ___________ breath sufficient to make the chest rise.
   a. 2 seconds, deep
   b. 1 second, normal
   c. 1 second, deep
   d. 2 seconds, normal

20. What is the most effective way to open the airway for rescue breathing in an adult or a child?
   a. Keep the head still and open the mouth
   b. Tilt the head back while lifting the chin
   c. Tilt the head back while flexing the neck with your hand
   d. They all work just fine
21. What is the most effective way to open the airway for rescue breathing in an infant?
   a. Tuck the chin down toward the chest and open the mouth
   b. Gently tip the head into a “sniffing position” to create a neutral airway position
   c. Tilt the head back while flexing the neck with your hand
   d. They all work just fine
22. For rescue breaths in an infant:
   a. Blow normally, as you would in an adult
   b. Seal your mouth over the infant’s mouth and nose, or use a barrier device covering the mouth and nose
   c. Administer only enough air to cause chest rise
   d. Both b and c
23. The chance of survival in cardiac arrest can decrease by _______ for each minute defibrillation is delayed.
   a. 50%
   b. 15%
   c. 7-10%
   d. 20-25%
24. AED pad placement on an adult
   a. Does not matter
   b. Should ensure the left pad extends over onto the side slightly
   c. Should be placed just under the right clavicle (collarbone)
   d. Both b and c
25. In a circumstance where CPR is ongoing and an AED becomes available after four minutes of care, when should you use the AED?
   a. Immediately apply pads and follow AED prompts
   b. Continue with CPR until the two minute cycle is up and then apply AED
   c. Wait a little while and see if CPR alone is sufficient
   d. There is no point in using the AED. It has been too long.
26. When using AEDs on children and infants:
   a. An AED should never be used on an infant
   b. AEDs may be used on infants and children, but only if a pediatric adapter is available
   c. If a pediatric adapter is not available, use adult pads
   d. For a small child, it is acceptable for adult pads to overlap
27. When using an AED on an infant, pads should be placed in the center of their chest and the center of their back.
   a. True
   b. False

28. You apply an AED and it advises to deliver a shock. After pressing the shock button, what is the next appropriate step in providing care?
   a. Turn off the AED so it will not interfere with CPR
   b. Check for breathing
   c. Immediately resume CPR beginning with compressions
   d. Place the individual in recovery position

29. With a mild airway obstruction (choking):
   a. The person can speak and move air (breathe). Encouraged him to cough
   b. The person should be stimulated to vomit to clear his airway
   c. Heimlich maneuver (abdominal thrusts) should be immediately initiated, regardless of whether the person can cough.
   d. It does not matter if the choking is mild or severe, the treatment is the same.

30. If a choking victim loses consciousness you should:
   a. Begin CPR
   b. Activate EMS if not already done
   c. Try to remove objects from throat with a blind finger sweep
   d. a & b only

31. Choking infants should be treated
   a. With five back blows alternating with five chest thrusts
   b. By supporting the head at all times
   c. Keeping the infant sandwiched between the rescuers forearms when turning the infant
   d. All of the above

32. Suctioning can be used to clear the airway but should be limited to 15 seconds for adults and 5 seconds for infants
   a. True
   b. False

33. What is the initial treatment for controlling external bleeding?
   a. Direct pressure
   b. Pressure points
   c. Tourniquet
   d. Raise the affected area above the head
34. What is the best way to handle impaled objects?
   a. Gently remove the object, then let bleed to flush contaminants from the skin
   b. Secure the object in place to prevent further harm unless in the cheek or mouth
   c. Remove the object and immediately apply direct pressure to control bleeding
   d. Shake the limb so that the object will fall out without manipulation

35. Splints should be applied so they:
   a. restrict movements of the points above and below the injury
   b. restrict the circulation of blood to the affected limb
   c. do not need padding for comfort around the site of the injury
   d. force the limb into a normal position

36. When splinting a possible fracture or dislocation, you should:
   a. Manipulate the injury site to a normal position
   b. Apply a very tight fitting splint so no movement is possible
   c. Splint in the position found and only if medical care not readily available
   d. Apply heat packs and then splint on top of them

37. Which statement best describes shock?
   a. Life threatening condition
   b. Inadequate circulation and oxygenation to tissues
   c. Emergency requiring immediate first aid
   d. All of the above

38. Which are not a common sign/ symptom of shock that resulted from severe bleeding?
   a. Cool, sweaty skin
   b. Rapid and weak pulse
   c. Weakness or feeling faint
   d. Hyperactivity

39. Injured persons should not be moved unless there is a threat of further harm to themselves or the rescuers.
   a. True
   b. False

40. CPR and first-aid training should be refreshed regularly to assure your ability to respond in an emergency.
   a. True
   b. False
CPR: Health Care Provider Assessment Key

Final examination may be administered in written or oral form. Each question must be reviewed with each student so that 100 percent comprehension of materials is assured. Questions have only one correct answer.

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2 | T | F |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3 | T | F |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 6 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 7 | T | F |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

I have reviewed this examination with the course instructor. I understand the correct response as indicated by my initials. Any questions regarding this examination and the contents of this course have been answered to my satisfaction.

________________________________________     ____________________
Student signature                                      Date
CPR: Health Care Provider Exam Sheet

Final examination may be administered in written or oral form. Each question must be reviewed with each student so that 100 percent comprehension of materials is assured. Questions have only one correct answer.

I have reviewed this examination with the course instructor. I understand the correct response as indicated by my initials. Any questions regarding this examination and the contents of this course have been answered to my satisfaction.

________________________________________     __________________
Student signature                                      Date
CPR: Health Care Provider Practical Evaluation Record

CPR: Health Care Provider Skills Development

<table>
<thead>
<tr>
<th>Skill</th>
<th>Student Initials</th>
<th>Instructor Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scene Safety Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donning and Doffing Gloves After Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest Compressions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rescue Breathing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full CPR: Adult, Child and Infant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automated External Defibrillator (AED)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign-Body Airway Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suctioning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of External Bleeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applying a Tourniquet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Splinting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe Allergic Reaction or Opioid Overdose</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am comfortable with the performance of my skills as a CPR: Health Care Provider.

I have reviewed this examination with the course instructor. I understand the correct response as indicated by my initials. Any questions regarding this examination and the contents of this course have been answered to my satisfaction.

Student Signature ________________________________ Date ______________
Home Emergency Plan

When you recognize that an emergency exists, dial:

__________________________
(Write your area's EMS number above.)

The EMS dispatcher will ask you: “What is the emergency?”

Stay on the line, keep calm, and follow instructions.

Your street address:
__________________________

Your phone number:
__________________________

If possible, send someone outside to meet emergency personnel.

Additional Information

National Poison Control Center
Contact: ______________________

Family doctor
Name: ______________________
Contact: ____________________

Neighbor
Name: ______________________
Contact: ____________________

Family member
Name: ______________________
Contact: ____________________
Quick Reference Chart

1. Student completion of CPR: Health Care Provider online module before attending class

2. Introductions and Registration (if not completed previously)
   a. Course registration forms
   b. Statement of Understanding

3. Review Question Discussion

4. Skills Development Session
   a. Scene Safety Assessment
   b. Doffing and Donning Gloves
   c. Initial Assessment
   d. Recovery Position
   e. Chest Compressions
   f. Rescue Breathing
   g. Full CPR: Adult, Child, Infant
   h. Use of an AED
   i. Foreign Body Airway Obstruction
   j. Suctioning
   k. Control of External Bleeding
   l. Applying a Tourniquet
   m. Splinting
   n. Shock Management
   o. Severe Allergic Reaction or Opioid Overdose

5. Final Assessment and Review

6. Approve successful course participants via the eLearning platform under My Students.

7. Remind students to download their completion card through their eLearning account when they receive their email notification and to complete the online feedback survey (link included in email).

8. Schedule time for knowledge and skill remediation for individuals requiring additional practice.