TIME ESTIMATES FOR CLASS COMPONENTS
- Preparation: time varies
- Class: 30 to 60 minutes
- After-class cleanup and recording training numbers: 10 minutes

CURRICULUM CONNECTIONS (Health, Physical Education)

HEALTH NATIONAL STANDARDS
- Learn concepts related to health promotion and disease prevention to enhance health
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks

LEARNING OBJECTIVES
By the end of the class, all students will be able to
- Recognize that performing CPR saves lives
- Recall the two easy steps of Hands-Only CPR: call 9-1-1, and push hard and fast in the center of the chest
- Perform Hands-Only CPR at a rate of 100 to 120 compressions per minute, pushing down at least 2 inches on the chest
- Demonstrate how to use an AED

Supplementary Materials
- Print the pre- and post-test for students (optional).
- Review the Hands-Only CPR Fact Sheet and Frequently Asked Questions at www.heart.org/cprfaqs.
- Watch the webinar “Implement CPR Training in Your School” at www.heart.org/cprinschools. (time 43:40)
- Watch the video “Using the CPR in Schools Training Kit” at www.heart.org/cprinschools. (time 02:13)

Equipment
- CPR in Schools Training Kit™ materials, including
  - 10 individual Mini Anne® Plus manikins, each with kneel mat and carrying bag
  - Practice-while-watching training DVDs
  - Hand pump for manikin inflation
  - 10 AED simulators
  - 2 mesh collection bags for storage after the lesson
  - Facilitator binder with laminated resource pages
  - Facilitator Guide with instructions for setting up and storing the materials
- TV with DVD player or computer with DVD player and projector (a remote may help with pausing and replaying but is not required)

Setup
- Before class begins, unpack and set up the CPR in Schools Training Kit.
- If you are teaching more than 20 students, consider purchasing or borrowing additional kits.
- Fully inflate the manikins, and pull the tab at the bottom of the manikin’s chest plate to “Hard” or “Soft” for the clicking sound to function.
- Move desks to the walls so that students can be seated comfortably, arm’s length apart, on the floor.
- Make copies of the pre- and post-tests for all students.
- Start the DVD. Select English or Spanish. Select “Learn Adult Hands-Only CPR.”
- Pause the DVD while students assemble.
- Know location of the AED(s) in your school.
Facilitation Points

- Ask students to sit down.
- Remind students not to touch the manikins, or keep manikins in mesh collection bags until needed for the hands-on practice.
- Administer the pre-test. It can be administered the day before training. Make sure students write their names on the tests so pre- and post-test scores can be recorded.
- Take a head count of number of students, and record the training numbers.
- If you have more than 10 students in your class, put them in groups of 2 or 3. Pass out 1 manikin and 1 AED simulator to each group.

Facilitation Points

- For more information, refer to the Hands-Only CPR Fact Sheet and Frequently Asked Questions at www.heart.org/cprfaqs or the Facilitator Toolkit at www.heart.org/cprinschoolstoolkit.

Ask

Discuss the following key points with students before the video lesson:

Q: Who has heard the term cardiac arrest? What do you think that means?
A: Cardiac arrest is when the heart malfunctions and suddenly stops beating.

Q: How would you know when someone has had a cardiac arrest?
A: When cardiac arrest occurs, the victim collapses and becomes unresponsive when you tap him and shout. The person stops breathing normally and may be gasping.

Q: What is Hands-Only CPR?
A: Hands-Only CPR consists of pushing hard and fast on the chest at a rate of 100 to 120 compressions per minute. It is the most important part of CPR. When you push on the chest, you pump blood to the brain and heart.

Q: How much can CPR improve the chances of survival?
A: CPR can double or even triple a person’s chance of surviving.

Q: What are some reasons people do not want to do CPR?
A: Many don’t know how to give CPR, or they’re afraid to hurt the victim—they panic. But the truth is that you shouldn’t be afraid, and your actions can only help. People often don’t push hard enough because they are afraid of hurting the person. An injury is unlikely, but it is better than death. It’s better to push too hard than not hard enough.

Q: What is an AED?
A: An automated external defibrillator, or AED, is a device that analyzes a heart rhythm and prompts the user to deliver an electric shock through the chest to the heart when necessary.

Q: Can an AED be used on children?
A: Yes, AEDs can be safely used on children.

Q: Why are AEDs important?
A: Defibrillation is a process in which an electronic device gives an electrical shock to the heart. Defibrillation stops ventricular fibrillation by using an electrical shock and allows the return of a normal heart rhythm. A victim’s chance of survival decreases by 7% to 10% for every minute that passes without defibrillation.

Q: Who can use an AED?
A: Nonmedical personnel such as police, fire service personnel, flight attendants, security guards, and other lay rescuers who have been properly trained can use AEDs.

Q: Are AEDs safe to use?
A: AEDs are safe to use by anyone who’s been trained to operate them. Studies have shown that 90% of the time, AEDs are able to detect a rhythm that should be defibrillated. And 95% of the time, they are able to recommend not shocking when the computer shows defibrillation is not indicated.

Q: Can I get in trouble for using an AED?
A: All 50 states and the District of Columbia now include using an AED as part of their Good Samaritan laws, which limit the liability of rescuers.
**Facilitation Points**

- **Play the DVD at “Learn Adult Hands-Only CPR.”**
  - Introduction (3 minutes)
  - Hands-Only CPR instruction (5 minutes)
- **Pause the DVD at “AED Information.”**
  - Hands-Only CPR practice (10 minutes)
    - Each student should practice pushing on the chest hard and fast, at a rate of 100 to 120 compressions per minute.
    - The manikins will click when the right chest compression depth of 2 inches is reached (as long as the tab at the bottom of the manikin’s chest plate is pulled out to “Hard” or “Soft”).
    - If there is more than 1 student per manikin, have each student perform 2 minutes of Hands-Only CPR and then switch, so that all students are able to complete the practice session.
- **Resume the DVD at “AED Information.”**
  - AED information (2 minutes)
  - Hands-On AED practice (10 minutes)
    - Students will remain paired or grouped, but each student will perform steps 1 through 9 below individually. After completion, students will switch roles and perform steps 1 through 9.
    - Lead students by first reviewing all 9 steps below, before students begin the practice.
    - The facilitator says, “You have retrieved the AED. Now we will begin steps 1 through 9.”
      1. Turn on the AED.
      2. Correctly attach the pads to the manikin’s bare chest.
      3. Pause to let the AED analyze.
      4. Loudly state, “Clear.”
      5. At this point, the facilitator says, “Shock needed.”
      7. Press the button to deliver a shock.
      8. At this point, the facilitator says, “Shock delivered.”
      9. The student immediately resumes compressions.
    - Repeat the practice as many times as needed for all students to practice with the AED simulator.
- **Eject the DVD or, if time permits, continue to “Other Lifesaving Techniques,” which includes Child CPR (16 minutes), Choking Adult (2½ minutes), and Choking Child (2½ minutes).**

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**Facilitation Points**

- Have students complete the post-test.
- Collect post-tests from students.
Facilitation Points

- Use the answer key to review post-test answers, and address additional questions from students.
- Review calling 9-1-1, pushing hard and fast in the center of the chest at a rate of 100 to 120 compressions per minute, and pushing down at least 2 inches on the chest.
- Review steps to take once you get the AED (turn it on, apply pads, and listen to instructions).

Facilitation Points

- Deflate the manikins. Place the manikins and DVD back in the CPR in Schools Training Kit, or store the inflated manikins in the mesh collection bags.
- Compile your training numbers and enter your trainings into the American Heart Association's Community CPR Tracker at www.heart.org/communitycprtracker.
- For more information on submitting your training numbers, visit www.heart.org/cprinschoolstoolkit.

OPTIONAL ADDITIONAL CLASSROOM ACTIVITIES

- Have students visit www.heart.org/handsonlycpr to watch CPR videos and read survivor stories.
- Have students research songs with at least 100 beats per minute (like the Bee Gees’ “Stayin’ Alive”) to help them remember the correct rate of compressions during CPR.

OPTIONAL HOMEWORK ASSIGNMENTS

- Have students ask the adults in their lives if they know the simple steps to save a life in a cardiac arrest emergency: call 9-1-1, and push hard and fast in the center of the chest to the beat of the Bee Gees’ “Stayin’ Alive” until professional help arrives. Have students write a persuasive 1- to 2-page essay to promote CPR training.

FOR MORE INFORMATION

- CPR in Schools DVD: The DVD in your CPR in Schools Training Kit also includes approximately 25 minutes of “Other Lifesaving Techniques” with instructions on child CPR, helping a choking adult, and helping a choking child.
- Online Toolkit for Teachers website: www.heart.org/cprinschoolstoolkit
- CPR in Schools website: www.heart.org/cprinschools
- Heartsaver Hero website: http://www.heart.org/heartsaverheroaward
- CPR & First Aid websites: www.heart.org/cpr (in English) or www.heart.org/rcp (Spanish-language resources)
- Be the Beat® website: bethebeat.heart.org
- Frequently asked questions about Hands-Only CPR: www.heart.org/cprfaqs
- “Heart Attack or Sudden Cardiac Arrest: How Are They Different?” article: www.heart.org/heartattackvscardiacaress