

# CPR Unit



## Lesson Plans:

1. **Introduction:** Introduce the unit with visuals and discussion.
2. **"Class Speakers"**. Call the local firemen & police community outreach officers. Arrange dates for them to visit your class and discuss: CPR, fire prevention, fire safety, etc.
3. **Introduction Discussion:** Make a transparency of pg. 2 and have ss work in pairs to answer and discuss the questions.
4. **"CPR Reading/Discussion"**, p 2-5. Ss work in pairs, then discuss together.
5. **"CPR Reading Questions and Discussion"**, pg. 6. Make a transparency and have ss discuss their answers with the whole class.
6. **"Reading: Test Your First Aid Knowledge"**, pg. 7-9. Read in pairs/groups. Answer the questions and discuss.
7. **"Impromptu Role-Playing"**, have ss role-play emergency situations. Write different scenarios for them to act out. Put them in groups of 3-5 people. Give them time to write out or develop a scene. Then, have the ss perform their skits in front of class.
8. **"CPR Officer Interviews"**, pg. 10. Ss fill out while listening to the talks.

## CPR: Introduction Questionnaire

Students: Please answer the following questions in pairs or groups of three:

1. Do you know what CPR is? If so, what? \_\_\_\_\_
2. Have you ever studied CPR? Where? When? \_\_\_\_\_
3. Have you ever studied fire safety? \_\_\_\_\_
4. Do you know much about First Aid? Have you ever had a class? \_\_\_\_\_
5. Do you have first aid material in your home? Where? \_\_\_\_\_
6. In the United States it is a law that any residential or outdoor public pool must have a fence around it. Why? What could happen to children?  
\_\_\_\_\_
7. What would you do if you saw your child floating head down in neighbor's pool? What if the child wasn't breathing? \_\_\_\_\_
8. What is 911? What public services can you reach with 911? \_\_\_\_\_  
\_\_\_\_\_
9. Do you have a 911 in your country? Have you ever phoned 911? Why?  
\_\_\_\_\_
10. If a family member or friend were choking or stopped breathing, what would you do? Why? \_\_\_\_\_  
\_\_\_\_\_

## GRCC First Aid/CPR Unit

Name \_\_\_\_\_ Date \_\_\_\_\_

### CPR Training

» **CPR** is a first aid procedure for an unconscious person whose breathing and/or pulse have stopped because of a heart attack, drowning, electrocution, drug overdose or other reason.

It was created in the 1950s by Peter Safar, and first described in the book ABC of Resuscitation, in 1957. The "**ABC**" is **Airway, Breathing and Circulation**. Standards were set by the American Heart Association and the Heart and Stroke Foundation of Canada.

### A. History Reading

#### Targeting the training

About 100 people a day have a cardiac arrest. Ninety-five of them die. There are **three key steps** for responding to a sudden cardiac arrest:

**ONE:** Call 9-1-1

**TWO:** Start CPR (mouth-to-mouth resuscitation and chest compressions)

**THREE:** Defibrillation (once the paramedics arrive they will shock the heart with a machine called a defibrillator).

According to a recent study, **the second step, cardiopulmonary resuscitation (CPR)**, is the most crucial. Dr. Ian Stiell at the Ottawa Hospital co-authored the study.

Seattle has been called 'the best place on earth to have a cardiac arrest.' That's because in Seattle, bystanders perform CPR 50 per cent of the time. A good number of Seattle's residents are trained and the city's health programmers make a point of targeting older people with public service campaigns that outline the importance of CPR.



*Dr. Ian Stiell says CPR training should be targeted at "folks that are likely to be around when there's a cardiac arrest being treated"*

At a typical CPR training course, the participants are young. Often they're not taking the course because of a personal need, but because it's part of their workplace safety program.

But statistics show most cardiac arrests happen at home, not at work. Most victims are men in their 60's or 70's, which means the most likely people to give them CPR are their wives.

### **CPR: Why aren't some people using their skills?**

Paramedic Paul Baeumler works with Toronto's (Canada) Emergency Medical Service (EMS). He thinks most people are afraid to take action when confronted with an emergency situation like a sudden cardiac arrest:

"They're afraid of what's happening with the person ... They're afraid of doing anything that's going to damage that person ... Even if they're trained in first aid, they're not using that skill every single day."

## **B. Cardiopulmonary Resuscitation (CPR)**

### **What is CPR?**

Cardiopulmonary resuscitation (CPR) is a combination of **rescue breathing** and **chest compressions** delivered to victims thought to be in cardiac arrest. When cardiac arrest occurs, the heart stops pumping blood. CPR can support a small amount of blood flow to the heart and brain to "buy time" until normal heart function is restored.

Cardiac arrest is often caused by an abnormal heart rhythm called ventricular fibrillation (VF). When VF develops, the heart quivers and doesn't pump blood. The victim in VF cardiac arrest needs CPR and delivery of a shock to the heart, called defibrillation. Defibrillation eliminates the abnormal VF heart rhythm and allows the normal rhythm to resume. Defibrillation is not effective for all forms of cardiac arrest but it is effective to treat VF, the most common cause of sudden cardiac arrest.

### **AHA Recommendation**

The American Heart Association adopted new CPR science guidelines in September 2000. These guidelines are the basis for teaching CPR.

## The new guidelines recommend the following:

1. Rescuers should phone 9-1-1 for unresponsive adults before beginning CPR. Exceptions: Provide CPR first for adult victims of submersion, trauma and drug intoxication.
2. Rescuers should provide about one minute of CPR for infants and children up to age 8 before calling 9-1-1.
3. The compression rate for adult CPR is increased to about 100 per minute.
4. The compression-to-ventilation ratio for CPR for victims age 8 or older is 15 compressions to 2 breaths for one or two rescuers.
5. Chest-compression-only CPR is recommended ONLY when the rescuer is unwilling or unable to perform mouth-to-mouth rescue breathing.

Most of these changes have been developed to improve the victim's chances of recovery and to simplify teaching CPR skills.

More than 6 million people each year receive CPR training from instructors taught by the American Heart Association. The timely application of CPR and use of automated external defibrillators (AEDs) helps save thousands of lives each year in the United States. Better understanding of CPR can help save more lives. People interested in learning CPR should visit [www.cpr-ecc.americanheart.org](http://www.cpr-ecc.americanheart.org) or contact their nearest American Heart Association office.

## B. CPR Practice: How To Administer CPR

The following is intended to supplement information learned in CPR courses and should not be considered a complete resource. For more information about CPR courses in your area, please [contact](#) your local Heart and Stroke Foundation office.

1. **Check the scene for safety**  
Ensure the area is safe for you and the person you are rescuing.
2. **Determine unresponsiveness**  
Gently tap the person's shoulder and ask loudly in each ear, "Are you okay?" See whether they respond to sound or touch.
3. **Phone first!**  
If the person does not respond, phone 911 or your local emergency medical services number before attempting to assist the person in distress, or, if possible, have someone make the call for you.





**4. Open the airway**

Use the head-tilt/chin-lift manoeuvre but only if there are no indications of a head, neck or spinal injury.



**5. Check breathing**

Place your ear close to the person's mouth.

**Look** at the chest and stomach for movement (rise and fall).

**Listen** for the sound of breathing.

**Feel** for exhaled breath on your cheek.



**6. Perform rescue breathing**

If the person is not breathing normally begin mouth to mouth resuscitation.

**7. Check for visible normal breathing, rescue breaths. Take assessment.**



**signs of circulation** Look for coughing, or movement in response to no more than 10 seconds to perform the

**8. Administer chest compressions**  
If there are no visible compressions

**compressions**  
signs of circulation, administer chest followed by rescue breaths.



Adult:



Child:

**9. Reassess for visible signs of circulation**

### C. Review Questions

Students-please answer the following questions from the above reading:

1) What kind of procedure is this?

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2) How many people a day die from cardiac arrest? \_\_\_\_\_

3) Why is Seattle “the best place” to have a cardiac arrest?

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4) Where do most cardiac arrests happen, and who are most of the victims?

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5) What is the explanation for CPR?

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6) What are some of the guidelines to know about CPR?

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7) What is the first step you should do before you administer CPR?

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8) What are the ABCs of CPR?

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9) Have you ever performed CPR? Where? When? On who?

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10) Do you have a CPR card? Why/why not?

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11) In your country do most people study CPR? Why/why not?

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## Quiz: Test your first aid knowledge

How many of us are prepared to deal with common mishaps and injuries?

**1. Your son is playing with a BB gun and he is struck in the eye. What should you do?**

- ✚ Try to remove the pellet with tweezers and seek immediate medical attention
- ✚ Place a small cup over his eye to protect it and seek immediate medical attention
- ✚ Rinse his eye with cool water and seek immediate medical attention

**2. It's dinnertime. In her rush to get it ready, your sister scalds her hand with a pot of boiling water. What's the best thing you can do to help?**

- ✚ Grab some ice and rub the burn
- ✚ Spread some butter on it like Grandma used to
- ✚ Run cool water over the affected area

**3. You're on your way to work and suddenly the woman sitting next to you on the bus begins having a seizure. Should you:**

- ✚ Start performing CPR
- ✚ Place something in her mouth so that she doesn't swallow her tongue
- ✚ None of the above

**4. Some old friends have dropped by for drinks and some munchies. You're having a good time until suddenly one of your friends starts freaking out ... It seems he's choking on a piece of food. Should you...**

- ✚ Give him a glass of water
- ✚ Tell him to cough hard
- ✚ Slap him on the back between the shoulder blades five times

**5. You're helping your father do some home renovations. While cutting some wood his hand slips and his index finger makes contact with the saw blade. He's bleeding badly. What do you do?**

- ✚ Apply direct pressure to the wound
- ✚ Wrap a tourniquet around his finger
- ✚ Put the wound under running water

**6. It's lunchtime at the office. A co-worker has swallowed something and it's obstructed her airway. She can't speak, cough or breathe. This is a life-threatening emergency and you must take immediate action. Should you:**

- ✚ Reassure her by calmly telling her that help is on the way
- ✚ Insert your fingers in her mouth and pull the object out
- ✚ Use abdominal thrusts until the object is expelled

**7. Your young daughter's nose is bleeding. Do you:**

- ✚ Have her tip her head slightly back
- ✚ Have her tip her head forward
- ✚ Place ice on the bridge of her nose

**8. You're granddaughter has swallowed an unidentified poison. What should you do?**

- ✚ Induce her to vomit
- ✚ Have her drink three glasses of water, then induce vomiting
- ✚ Call your local poison control center

**9. You're enjoying a camping trip with your family, sitting by the fire roasting marshmallows. Your brother leans towards the fire to stoke the flames -- and he slips. He burns his arm pretty badly. What do you do?**

- ✚ Remove any material from his shirt that's stuck to his skin
- ✚ Cover the burn loosely with a soft, clean dressing
- ✚ Break any blisters that have formed on the wound

**10. Your uncle cut his hand badly while slicing a bagel. You've bandaged the wound and are applying direct pressure to it, but your uncle has lost a lot of blood and has gone into shock. What's the best thing you can do for him?**

- ✚ Have him lie down, elevate his legs, and cover him with a blanket to keep him warm
- ✚ Give him something to drink, preferably alcohol to dull the pain
- ✚ Give him a hot water bottle

(Answers: 10 a 9 b 8 c 7 b 6 c 5 a 4 b 3 c 2 c 1 b)

<http://ww2.heartandstroke.ca/Page.asp?PageID=1613&ContentID=14913&ContentTypeID=1>

<http://www.cbc.ca/consumers/market/files/health/firstaid/cpr.html>

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