

How to Perform CPR: A Guide for Lifeguards

Background

CPR stands for cardiopulmonary resuscitation and is a technique that combines chest compressions and rescue breathing to maintain a heartbeat and airway until EMS (Emergency Medical Services) arrives. CPR is performed on a person who is suspected of being in cardiac arrest (the heart has stopped beating). Rescue breathing is required when a victim has a pulse but is not breathing. CPR is required when a victim has no pulse and is not breathing. As a lifeguard, you may encounter various scenarios that may or may not involve the water, and therefore you need to be prepared for any emergency situation. This guide was created for a professional rescuer (lifeguard) and therefore may have different features compared to other CPR certifications.

Introduction

CPR and the other steps outlined in this guide should be performed on a flat, hard surface if possible. The instructions will guide you on how to check the scene for safety, check the vital signs of the victim, and guide you on how to perform CPR. The tasks involved may take a short amount of time or a longer amount of time depending on the victim and when help arrives. These steps are very specific and need to be done properly in order to help the victim. If the steps are followed properly, you could save your victim's life. The guide is organized into categories: Materials Needed, First Steps, ABC's, CPR and Appendices. The pink color highlights the steps for adults age 8 and older, the blue color highlights the steps for children age 1-8 and the green color highlights the steps for infants 1 year and younger.

Materials Needed

There are no specific materials required to perform CPR except you, the lifeguard, and the victim. Although, it would be helpful to have the following:

- **A phone** - to dial 911
- **A CPR mask** – a precautionary item for you and the instructions for its use are not discussed in this guide
- **Another person** - to assist you with delivering breaths to the victim since you will tire quickly if one person is performing CPR – instructions for two-person CPR are not discussed in this guide

First Steps

- 1) Survey the scene – make sure the scene is safe for you and your victim (make sure there are no dangerous threats in the area such as a fire, tornado, wires etc)
- 2) Check for unresponsiveness
 - a. **Adults age 8 and older** and **children age 1-8**: Tap the victim on the shoulder and loudly ask “ARE YOU OKAY?”
 - b. **Infants 1 year and younger**: Pinch or tickle the infant – **DO NOT SHAKE THEM**
- 3) If there is no response or if you suspect an emergency, call **911** or tell a specific person to go call 911 and come back
- 4) Gently roll the victim onto their back while supporting their head
- 5) Begin **ABC**'s (detailed in the next section)
 - A** = Airway
 - B** = Breathing
 - C** = Circulation

ABC's

A – Open the Airway

- 1) Tilt the victim's head by placing one hand on the victim's forehead and two fingers on the bony part of the chin (see Fig.1)



- DO NOT TILT THE HEAD IF YOU SUSPECT A SPINAL INJURY



Fig. 1 - Opening the airway (Picture from [EmcareTraining](#))

B – Check for Breathing

- 1) Look at the victim's chest to see if it is rising and falling
- 2) Listen and feel for air coming out of the victim's mouth by putting your cheek next to their mouth (see Fig. 2)
- 3) Check for 10 seconds
- 4) If the victim is not breathing deliver rescue breaths:
 - a. **Adults age 8 and older and children age 1-8**
 - i. Pinch the nostrils closed and give 2 slow, continuous breaths (see Fig. 3)
 - ii. Make sure you keep the head tilted
 - b. **Infants 1 year and younger**
 - i. Seal your mouth around the infant's nose and mouth and give 2 small breaths (See Fig. 4)
 - ii. Make sure you keep the head tilted
- 5) If the breaths do not go into the victim, follow the Airway Obstruction Procedures (located in the appendix at the end of this guide)
- 6) If the breaths go into the victim, proceed to part C



Fig. 2 – Checking for breathing (Picture from [How Stuff Works](#))



Fig. 4 – Delivering rescue breaths to infants (Picture from [Medline Plus](#))

C – Check for Signs of Circulation

- 1) **Adults age 8 and older and children age 1-8**
 - a. Check for a pulse using the carotid artery (the artery on either side of the neck, a little below the chin) – slide your fingers from the center of the neck into the groove on the side of the neck closest to you (see Fig. 5)
 - b. Check for a pulse for 10 seconds
 - c. Make sure you keep the airway open while checking for a pulse
- 2) **Infants 1 year and younger**
 - a. Check for a pulse using the brachial artery (the artery on the inside of the upper arm) – use two fingers and check for a pulse on the inside of the upper arm right below the armpit (see Fig. 6)
 - b. Check for a pulse for 10 seconds
 - c. Make sure you keep the airway open while checking for a pulse



Fig. 3 – Delivering rescue breaths to adults and children (Picture from [UWHealth](#))

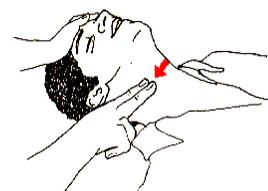


Fig. 5 – Checking for a pulse on adults and children (Picture from [First Aid](#))



Fig. 6 – Checking for a pulse on infants (Picture from [FotoSearch](#))

- 3) If there is a pulse but the victim is not breathing, you should perform Rescue Breathing (located in the appendix at the end of this guide)
- 4) If no pulse can be found, start CPR

CPR

Adults age 8 and older

- 1) Kneel on one side of the victim and place the heel of your hand on the breastbone at the nipple line (make sure the heel of your hand is in the groove of the breastbone)



- AVOID PLACING YOUR HANDS TOO LOW ON THE STERNUM (CENTER BOTTOM OF RIB CAGE) AS THIS CAN CAUSE DEATH

- 2) Place the other hand on top and lock your fingers together (making sure your arms are perpendicular to the victim – see Fig. 7)
- 3) Press straight down onto the victim about 1.5 to 2 inches 30 times
- 4) Tilt the head back and give 2 breaths
- 5) Make sure you are giving chest compressions at about 100 compressions per minute
- 6) Repeat until the victim regains consciousness/has a pulse (recheck ABC's every 3 cycles of CPR to determine this) or until help arrives



Fig. 7 – Proper CPR position for an adult (Picture from [Singapore Civil Defense Force](#))

Children age 1-8



Fig. 8 – Proper CPR position for a child (Picture from the [Children's Hospital at Westmead](#))

- 1) Kneel on one side of the victim and place the heel of your hand on the breastbone at the nipple line (make sure the heel of your hand is in the groove of the breastbone)
- 2) Place the other hand on the victim's forehead (see Fig. 8)
- 3) Press straight down onto the victim about 1/3 to 1/2 (about 1 to 1.5 inches) the depth of the chest 30 times
- 4) Tilt the head back and give 2 breaths
- 5) Make sure you are giving chest compressions at about 100 compressions per minute
- 6) Repeat until the victim regains consciousness/has a pulse (recheck ABC's every 5 cycles of CPR to determine this) or until help arrives

Infants 1 year and younger

- 1) Bring the infant to a place that is easiest for you to perform CPR (such as a table or desk to bring the infant to a comfortable and appropriate height)
- 2) Place two fingers on the breastbone slightly below the nipple line
- 3) Place the other hand on the victim's forehead (see Fig. 9)
- 4) Press straight down onto the victim 1/3 to 1/2 (about .5 to 1 inch) the depth of the chest 30 times
- 5) Tilt the head back and give 2 small breaths
- 6) Make sure you are giving chest compressions at about 100 compressions per minute
- 7) Repeat until the victim regains consciousness/has a pulse (recheck ABC's every 5 cycles of CPR to determine this) or until help arrives



Fig. 9 – Proper CPR position for an infant (Picture from [UWHealth](#))

Appendices

Appendix 1: Airway Obstruction

When you check for breathing (the victim is not breathing) and you deliver rescue breaths that DO NOT go in, you should do the following:

Adults age 8 and older

- 1) Look to see if an object is in the victim's mouth, if so remove the object, if no object, proceed to steps below
- 2) Place the heel of your hand on the breastbone at the nipple line (make sure the heel of your hand is in the groove of the breastbone)
- 3) Place the other hand on top and lock your fingers together making sure your arms are perpendicular to the victim
- 4) Press straight down onto the victim about 1.5 to 2 inches 30 times
- 5) Look to see if there is an object inside the victim's mouth
- 6) If there is an object, remove it
- 7) Give 2 breaths, if breaths did not go in, re-tilt the head and try giving 2 breaths again
- 8) If breaths did not go in, repeat the steps

Children age 1-8

- 1) Look to see if an object is in the victim's mouth, if so remove the object, if no object, proceed to steps below
- 2) Place the heel of your hand on the breastbone at the nipple line (make sure the heel of your hand is in the groove of the breastbone)
- 3) Place the other hand on the victim's forehead

- 4) Press straight down onto the victim about 1/3 to 1/2 (about 1 to 1.5 inches) the depth of the chest 30 times
- 5) Look to see if there is an object inside the victim's mouth
- 6) If there is an object, remove it
- 7) Give 2 breaths, if breaths did not go in, re-tilt the head and try giving 2 breaths again
- 8) If breaths did not go in, repeat the steps

Infants 1 year and younger

- 1) Look to see if an object is in the victim's mouth, if so remove the object, if no object, proceed to steps below
- 2) Place two fingers on the breastbone slightly below the nipple line
- 3) Place the other hand on the victim's forehead
- 4) Press straight down onto the victim 1/3 to 1/2 (about .5 to 1 inch) the depth of the chest 30 times
- 5) Look to see if there is an object inside the victim's mouth
- 6) If there is an object, remove it
- 7) Give 2 breaths, if breaths did not go in, re-tilt the head and try giving 2 breaths again
- 8) If breaths did not go in, repeat the steps

Appendix 2: Rescue Breathing

If you have a victim with a pulse but is not breathing, you should do the following:

Adults age 8 and older

- 1) Tilt the victim's head to maintain an open airway
- 2) Pinch the nostrils closed and give 1 breath every 5 seconds
- 3) Continue for 1 minute
- 4) Re-check the victim to see if they are breathing on their own
- 5) Repeat steps if victim is not breathing

Children age 1-8 and Infants 1 year and younger

- 1) Tilt the victim's head to maintain an open airway
- 2) Pinch the nostrils closed and give 1 breath every 3 seconds
- 3) Continue for 1 minute
- 4) Re-check the victim to see if they are breathing on their own
- 5) Repeat steps if victim is not breathing

Reference:

CPR. [Ursus Lifesavers and Aquatics](#).

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