# CPR skills (for baby or child)



The following instructions are best suited for able-bodied learners. You may need to adapt them to the needs of people with diverse needs to achieve the aim of chest compressions and rescue breaths (to pump blood and oxygen around the body). If adapting, the ideal technique should allow the first aid provider to perform the principles of the method safely and effectively, be safe for the baby or child and be quick to start.

## **Performing rescue breaths**

**Aim**: To blow air into the baby or child's lungs. The air you breathe into their lungs is loaded with oxygen which can help to keep their vital organs alive.

## For a baby younger than one year of age

- 1. Open the baby's airway by gently moving their head into a neutral position and lifting their chin.
- 2. Take a breath and cover the mouth and nose of the baby with your mouth, making sure you have a good seal.
- **3.** Blow steadily into the baby's mouth and nose for about one second; sufficient to make the chest or abdomen visibly rise. Avoid excessively providing rescue breaths as the air will enter their stomach. If the chest does not rise, you may need to adjust the baby's head position.
- **4.** Maintaining the head position and chin lift, take your mouth away from the baby's mouth and nose and watch their chest fall as air comes out. If the chest rises and falls that is an effective rescue breath.
- **5.** Take another breath and repeat this sequence.

## For a child over one year of age

- 1. Open their airway by gently tilting the child's head back and lifting their chin.
- 2. Pinch the soft part of the child's nose (using the hand from the forehead).
- **3.** Allow their mouth to open while maintaining the chin lift.
- 4. Take a breath and place your lips around the child's mouth making sure you have a good seal.
- **5.** Blow steadily into their mouth for about one second and watch their chest rise. If their chest does not rise, you may need to adjust the child's head position.
- **6.** Maintaining the head tilt and chin lift, take your mouth away from the child's mouth and watch the chest fall. If the chest rises and falls that is an effective rescue breath.
- 7. Take another breath and repeat this sequence.



### **Performing chest compressions**

**Aim**: To press down in the middle of their chest at a regular rate. You are acting as the heart, pumping blood around the body to vital organs including to the brain. This will buy time until the heart can have an electric shock from a defibrillator, which may help it to re-start.

#### For a baby younger than one year of age

Either technique can be performed, however, the two-thumb technique is preferred if there are two first aid providers.

#### Two thumb encircling hands technique

- 1. Encircle the baby's chest with both hands; spread your fingers around the thorax and place your thumbs together over the lower half of the sternum. Forcefully compress the sternum with your thumbs as you squeeze the thorax with your fingers for counter pressure.
- 2. Depress the sternum by at least one third the depth of the baby's chest.
- **3.** Release the pressure without taking the thumbs off the chest. Allow the chest to come back up fully (recoil) before doing the next compression.
- **4.** Compress the chest at a rate of between 100 to 120 compressions per minute. The time taken for compression and release should be the same.

#### **Two-finger technique**

- 1. Place the tips of two fingers of one hand in the middle of their chest (just below the nipples).
- 2. Press down vertically on the chest by at least one-third of the depth of the baby's chest.
- **3.** Release the pressure without taking the tips of fingers off the chest. Allow the chest to come back up fully (recoil) before doing the next compression.
- **4.** Compress the chest at a rate of between 100 to 120 compressions per minute. The time taken for compression and release should be the same.

#### For a child over one year of age

- 1. Kneel by the child and place the heel of one hand in the middle of their chest. (One or two hands can be used depending on the height and weight of the child. If using two hands, place the heel of the other hand on top of the first hand and interlock the fingers of your hands.)
- 2. Lean over the child and with a straight arm press down vertically on their chest. Push hard to depress the chest 1/3 of its depth.
- **3.** Release the pressure without taking the hand off the chest. Allow the chest to come back up fully (recoil) before doing the next compression.
- **4.** Compress the chest at a rate of between 100 to 120 compressions per minute. The time taken for compression and release should be the same.

## Put the skills together to perform CPR

Following two to five initial rescue breaths, a compression-to-rescue-breath ratio of 30:2 (30 compressions and 2 rescue breaths) may be used on a baby or child who is unresponsive with abnormal breathing.