

# RESCUE BREATHING (as part of CPR)

## An Information sheet for staff in education and care

This sheet is to be attached to the individualised first aid chart for children who have resuscitation plans **where CPR is identified** as a first aid response.

This information sheet is developed for staff who have accessed first aid training and is meant to complement staff knowledge and is not to be used as an alternative to formal training.

### RESCUE BREATHING

Rescue breathing is the positive ventilation component of cardio pulmonary resuscitation, while chest compressions provide circulation. Those who are trained and willing to give rescue breaths do so for all persons who are unresponsive and not breathing normally.

If the unconscious victim is not breathing 'normally' (i.e. abnormal breathing is absent breathing or 'agonal gasping' - gasps with significant gaps in between) after the airway has been opened and cleared, the rescuer must immediately commence Rescue Breathing. When giving the breaths allow about one second per inspiration. If the unconscious victim is not breathing commence CPR (30 chest compressions at a rate of 100-120 compressions per minute followed by 2 rescue breaths – and repeat).

#### A. MAINTAIN OPEN AIRWAYS FOR RESCUE BREATHING

Kneel beside the victim's head. Open their airway by placing the palm of your hand on their forehead and tilt the head backwards (45 degrees for adults, approximately half that for young children and keep a neutral head position for infants), while applying jaw lift to open the mouth.

#### B. PROVIDE RESCUE BREATHS

Take a breath, open your mouth and create a seal on the person's mouth (with your mouth), close the nostrils (by pinching them closed or by your cheeks blocking them completely). Blow to inflate the victim's lungs.

#### C. LOOK, LISTEN AND FEEL

Look for a slight rise of the victim's chest during each inflation. If the chest does not rise, possible causes are:

- Obstruction in the airway (inadequate head tilt, chin lift, tongue or foreign material);
- Insufficient air being blown into the lungs;
- Inadequate air seal around mouth and or nose.

Look and monitor for stomach distention (this would look bloated and protruding). If this is occurring reduce the amount of pressure during the rescue breaths.

If the chest does not rise, ensure correct head tilt, adequate air seal and that there is no obstructions to the airways.

Once the two rescue breaths have been completed return to applying chest compressions immediately (30 chest compressions followed by 2 rescue breaths – and repeat).

### MOUTH TO NOSE/MOUTH TO MOUTH AND NOSE RESCUE BREATHING

The mouth to nose method may be used where the rescuer chooses, the victim's jaws' are tightly clenched, or when resuscitating infants and small children (mouth to mouth and nose).

The technique for mouth to nose is the same as for mouth to mouth except for sealing the airway. Tilt the head back. Close the victim's mouth with the hand supporting the jaw and push the lips together with the thumb. Take a breath and place your opened mouth over the victim's nose (or mouth and nose in infants with their head in a neutral position) and blow to inflate the victim's lungs. Look for slight rise and fall of the chest; listen and feel for the escape of air from the nose and mouth.

If the chest does not move, there may be an obstruction, an ineffective seal, inadequate head tilt or insufficient air being blown into the lungs.

### MOUTH TO MASK/FACE SHIELD RESCUE BREATHING

Mouth to mask/rescue shield is a method of rescue breathing which avoids mouth to mouth contact by the use of personal protective equipment such as a mask or face shield.

If performing single person CPR place yourself beside the casualty and apply the same technique as regular rescue breathing, with the addition of a protective barrier

If performing two responder CPR, position the narrow head of the mask to the bridge of the nose ensuring even support around the mask to provide adequate seal around the casualty's mouth and simultaneously push the mask and elevate jaw. Maintain backward head tilt and chin lift.

### **CHEST COMPRESSIONS**

Chest compressions provide circulation of the oxygen that is provided by rescue breaths around the body.

No matter the age or size of the casualty, chest compressions should be at least  $1/3^{\text{rd}}$  depth of chest and delivered at a rate of 100-120 compressions per minute, followed by 2 rescue breaths. Because of the depth of chest compressions, it is possible to crack or break ribs and cause bruising.

Interruptions to chest compressions must be minimised.

Apply AED if available.