

RESUSCITATION FOR BABIES

A guide for new parents.

The most frightening and challenging situation that a new parent can face is a respiratory or cardio-respiratory arrest in their baby. Effective CPR needs to be started immediately and continued without stopping, while awaiting Ambulance arrival. Any baby who is not responsive to vigorous rubbing **and** is not breathing normally should be given CPR immediately. Just remember that if you start CPR and the baby doesn't need it, the process will not disrupt their heart's function.

For babies (i.e. look like they are under 12 months), the breaths (ventilations) can be usually done by placing your mouth over the baby's mouth and nose and providing gentle puffs i.e. just until the chest rises and **no more**) For chest compressions, the best methods, are the 2 thumb techniques.



Two-Thumb Technique

In this technique, the two thumbs are placed over the centre of the chest and the hands wrapped around the baby's chest. The chest can now be compressed from both sides. If the baby is too big or your hands are small, then just make two fists with your thumbs sticking out (i.e. thumbs up sign) and just use your thumbs on the centre of the chest.

A few years ago, a couple of doctors developed a third technique using two crossed fingers and it proved to be clinically superior to the traditional two finger technique.



Crossed-Fingers Technique

In this technique, the index finger is crossed under the thumb so that they cross at the first joint (from the end of each finger). This provides up to 4 times the surface area of the traditional two-finger technique.

The final technique for babies is to do CPR with the child on your arm. In this method, the infant is laid on your forearm face-up with the head cradled in your hand to maintain the neutral head position. The baby's legs should fall each side of your arm i.e. the baby's crutch is up against the inside of your elbow. If your arm isn't long enough then just tuck both legs underneath your armpit and squeeze the legs to hold securely. In this position, the baby can be rolled to clear vomit, compressions using the new two-finger technique

and ventilations (rescue breaths) can be performed. The benefit of this technique is that you are now fully mobile to call for help, go to help while continuing resuscitation or in remote areas, you could even continue CPR while someone else drives to meet the Ambulance en-route.



The baby is placed on the arm to provide a firm platform for compressions.



The baby's head is cradled in the hand to maintain a neutral head position i.e. no or minimal head tilt.



With the head supported the baby can be rolled and vomit cleaned from the mouth.



Compressions can now be applied using the **Crossed-Finger Technique**.



If your forearm is not long enough to support the baby's head, tuck the baby's legs under your arm and squeeze them to hold them in place.

Compressions and ventilations should be continued at a ratio 15 compressions to 2 breaths (or 30:2) until Ambulance arrival. Compression rate should be fast, 120/minute i.e. about two compressions a second and the chest should be compressed approximately 1/3 of the chest depth. This can easily be calculated in young children and babies by measuring across the chest and dividing this measurement into thirds as babies have a chest width that is approximately equal to their chest depth.