Most newborns will breathe as soon as they are delivered. However some will not. If you attend deliveries you must know what to do.

You must always be ready as you have only ONE MINUTE to save the child’s life or prevent handicap.

Most babies who are born not breathing can be saved by simple drying and stimulation (rubbing the back).

A few will need basic resuscitation with a bag and mask.

Some of you have, or will attend special trainings such as Helping Babies Breathe, and Essential Newborn Care. Share what you have learned with your colleagues, so that they also know how to save lives.

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### Be Organised: Prepare for Every Delivery

- Ensure suction bag and masks are clean and sterilised and are next to the delivery bed
- Sterile delivery set, sterile gloves, emergency drugs prepared
- Make sure they are working
- Make sure they are the right size
- If you have NO newborn bag and mask or suction, contact the DHMT and ensure that they know and bring or order for you, as this is ESSENTIAL LIFE SAVING EQUIPMENT
- Have your emergency guidelines where you can easily read them
- Have clean towel cloths and cover ready

### Choose The Right Size Bag And Mask

There are many different makes, but they are usually in 3 sizes 250mls - 500mls - 1500mls, for LBW newborn, infant/child and adult.

The mask size should be size 0 or 1

You cannot save a newborn with the wrong size bag and mask

### Be Ready

#### When perineum is bulging with presenting part visible

- Ensure that delivery area is draft-free
- Wash hands with clean water and soap (both you and mother).
- Double glove just before delivery
- When the baby is delivered call out the time
- Dry the baby thoroughly
- If it is not crying, stimulate the baby by rubbing his back
- Remove the wet cloth
- Cover the baby
- Observe if the baby is crying or breathing

#### If breathing

Place skin to skin on the mothers chest, cover and keep warm.

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2. Photos Laedal, Royal Children’s Hospital Melbourne Australia
Not Breathing
Start resuscitation
- If the newborn is gasping after 30 seconds of drying.
- If the baby is completely floppy and not breathing.
Inform the mother that the newborn needs help to breathe.
Transfer the newborn to a dry, clean, warm and flat surface.
Keep the newborn wrapped or under a heat source available.

Open Airway
- Adjust the head so it is in a neutral position.
- Gently introduce the suction device first, into the newborn’s mouth (not more than 2cms) and suck while withdrawing.
- Then into each nostril and suck while withdrawing.
- Repeat ONCE, if necessary taking no more than a total of 20 seconds.
If the Infant is now breathing, place skin to skin on the mother’s chest, cover and keep warm.

Cord Clamping:
A Delay in umbilical cord clamping for at least 1 min is recommended for newborn infants not requiring resuscitation. A similar delay should be applied to premature babies being stabilised.
For babies requiring resuscitation, resuscitation takes priority and the cord should be quickly clamped and cut. (ERCG resuscitation guidelines evidence based update 2010)

Not Breathing
If the infant is still not breathing
- Clamp and cut the cord immediately
- Ventilate using the correct size bag and mask.
- Use mask size 0 or 1 for newborns
- The mask must fit over both the mouth and nose
- Give the baby 5 slow breaths to open the lungs
For the first five inflation breaths maintain the pressure for 2–3 seconds. This will help the lungs expand
Most babies will respond with a rapid increase in heart rate within 30 seconds of lung inflation
If the baby is not breathing adequately, ventilate at a rate of about 30 breaths per minute, allowing approximately 1 sec for each inflation, until there is adequate spontaneous breathing
ASSESS THE BREATHING, COLOUR AND HEART RATE every 30 seconds. If the baby is improving, then stop. If the baby is not responding or getting worse, then further intervention is needed. Almost all babies who do not breathe at birth will only require bag and mask resuscitation.

Note: Do not suction mouth and nose prior to delivery of the shoulders of babies with meconium stained amniotic fluid.
IF TRAINED Start ADVANCED RESUSCITATION and Support Circulation if baby not responding to bag and mask or getting worse

- Circulatory support with chest compressions is effective only if the lungs have first been successfully inflated.
- Give chest compressions if the heart rate is less than 60 per minute, despite adequate ventilation, and **you have been trained**.
- The most effective technique for providing chest compressions is to place the two thumbs side by side over the lower third of the sternum just below an imaginary line joining the nipples, with the fingers encircling the torso and supporting the back.
- An alternative way to find the correct position of the thumbs is to identify the xiphisternum and then to place the thumbs on the sternum, one finger’s breadth above this point.
- The sternum is compressed to a depth of approximately **one-third of the anterior–posterior** diameter of the chest allowing the chest wall to return to its relaxed position between compressions.
- Compress the chest with **3 compressions to one breath** (90 compressions per minute).

After Resuscitation

If **Baby breathing**: Place skin to skin on mothers chest, encourage breast feeding, Keep warm, OBSERVE frequently.

If after 20 minutes of resuscitation, the **baby is Not breathing** and pulse is absent:

- **Stop** resuscitation.
- Explain to the mother that the baby has died, and give it to her to hold if she wishes (according to cultural beliefs and practices)
- Provide Support
- Record the death

Ensure that the death is registered (LEGAL requirement)
Helping Babies Breathe (B)

A

- Look for:
  - Crying or breathing
  - Good muscle tone
  - Color pink

- Check Breathing & Position Airway:
  - Position the head of the baby to open the airway
  - Clear airway, if necessary
  - Check breathing

- If breathing and pink, go to Routine care and observe closely.

- If not breathing / irregular gasping, CALL FOR HELP!

B

- Support Breathing:
  - Use correctly fitting mask and give the baby commences inflations with bag at a rate of 30 per minute
  - Make sure the chest is moving adequately – the most important part of resuscitation is supporting breathing
  - If chest not moving:
    - Check position of airway and mask fit for leaks
    - Consider airway suction if obstruction may be present.
    - Give one larger volume inflation.

- If heart rate < 60/min, Compress the chest with 3 compressions to 1 breath (90 compressions per minute).

C

- Support Circulation:
  - Check the heart rate with a stethoscope or feel for cord pulsation

- If heart rate > 60/min:
  - Continue to ventilate with bag-and-mask at a rate of about 30 breaths per minute.
  - Every 1 – 2 minutes stop and see if the pulse or breathing has improved.
  - Once the heart rate is > 60/min^{10} then stop compressions.
  - Once the baby is breathing adequately then stop ventilating with the bag-and-mask.
  - If resuscitation is prolonged give oxygen if available.