

WEBINAR ON NEONATAL CARE GUIDELINES CHAPTERS: IMMEDIATE AND ROUTINE CARE OF A NEONATE

HELPING BABIES TO BREATHE



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OUTLINE OF THE PRESENTATION



- BACKGROUND
- PREPARATION FOR BIRTH .
- DELIVERY ROOM PREPARATION
- NEONATAL RESUSCITATION EQUIPMENT
- IMMEDIATE CARE OF THE NEWBORN
- ROUTINE CARE
- GOLDEN MINUTE
- IMPROVE VENTILATION
- **NORMAL HEART RATE AND SLOW HEART RATE**



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BACKGROUND



- 10 percent of newborn require some respiratory assistance
- Good communication between obstetrics and neonatal teams is crucial
- All deliveries attendees require skills in providing immediate newborn care and basic resuscitation with focus on golden minute.
- All delivery teams including the mother and her birth companion should adhere to hand washing protocols



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BACKGROUND



- In all delivery facilities anticipate the need for neonatal resuscitation
- All facilities should have emergency plan to mobilize resources to get additional assistance
- Prepare for delivery environment and prepare for resuscitation areas and equipment



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PREPARATION FOR BIRTH



- Ensure respectful maternity care:
 - Promote good communication
 - Promote birth companionship
- Identify Risk Factors on the mother
- Assess current labour progress and fetal wellbeing.
- Identify a nurse or helper to assist with care



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PREPARATION FOR BIRTH



- Review emergency plan
- Prepare area for delivery
- Wash hands
- Prepare area for ventilation and check equipment
- Check that uterotonics is prepared for the mother



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DELIVERY ROOM PREPARATION



- Make sure is well lighted, clean free from draughts and temperature at 23- 25 degrees Celsius (preterm babies may require > 25 degrees)
- The resuscitation area should have a flat warm surface with prewarmed radiant warmer.
- Monitors' and general equipment
 - IPC measures – gloves, D-germ, wipes, chlorhexidine solution
 - Saturation monitor with neonatal probes
 - Timer, scissors, cord clamps, baby hat
 - Oxygen source and transport incubator





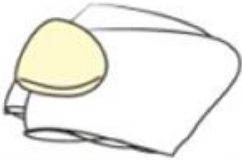


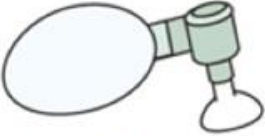



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Equipment

 <p>Gloves</p>	 <p>Timer (clock, watch)</p>	 <p>Cloths and head covering</p>
 <p>Ties/Clamps</p>	 <p>Scissors</p>	 <p>Ventilation bag-mask</p>
 <p>Suction device</p>	 <p>Stethoscope</p>	 <p>Uterotonic for mother</p>

NEONATAL RESUSCITATION EQUIPMENT



AIRWAY AND BREATHING

- Self inflating neonatal resuscitation bag with removable oxygen reservoir and tubing.
- Medical air/oxygen connection
- Flow meter set at 10l/minute
- Face mask sizes 00,0 and 1
- Laryngoscope straight blades with size 0,1, spare batteries and light bulb



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NEONATAL RESUSCITATION



- **INTRAVENOUS IV ACCESS**

- IV cannula 24G (yellow) and 26G (violet/purple)
- Alcohol antiseptic wipes x 3
- Strapping /tape: Tegaderm
- Syringes sizes 3mls, 5mls and 10mls
- 0,9% normal saline size 10mls ampoules to flush
- basic sterile packs



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NEONATAL RESUSCITATION EQUIPMENT



Emergency Medications and Fluids

- Adrenaline 1:10 000 ampoules
- 0,9% Sodium chloride solution 500mls bag
- 10% Neonatalyte
- Emergency O blood to be available in theatre



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NEONATAL RESUSCITATION EQUIPMENT



- **OTHER**

- Intercoastal drain sizes, 8F, 10F and 12F
- Umbilical catheter surgical
- Blunt needles sizes: 22 and 24 gauges
- Blood gas syringes or capillary tubes
- Chloromycetin eye ointment and vit K (intramuscular preparation)



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IMMEDIATE CARE OF THE NEWBORN



- Rapidly assess the need for resuscitation at birth
- Resuscitation is according to Helping Babies to Breathe (HBB) algorithm
- Routine suction is not recommended
- If resuscitation is not required delay cord clamping is crucial for at least 60seconds.
- In all newborns mothers should practice skin to –skin to prevent hypothermia and promote breastfeeding.



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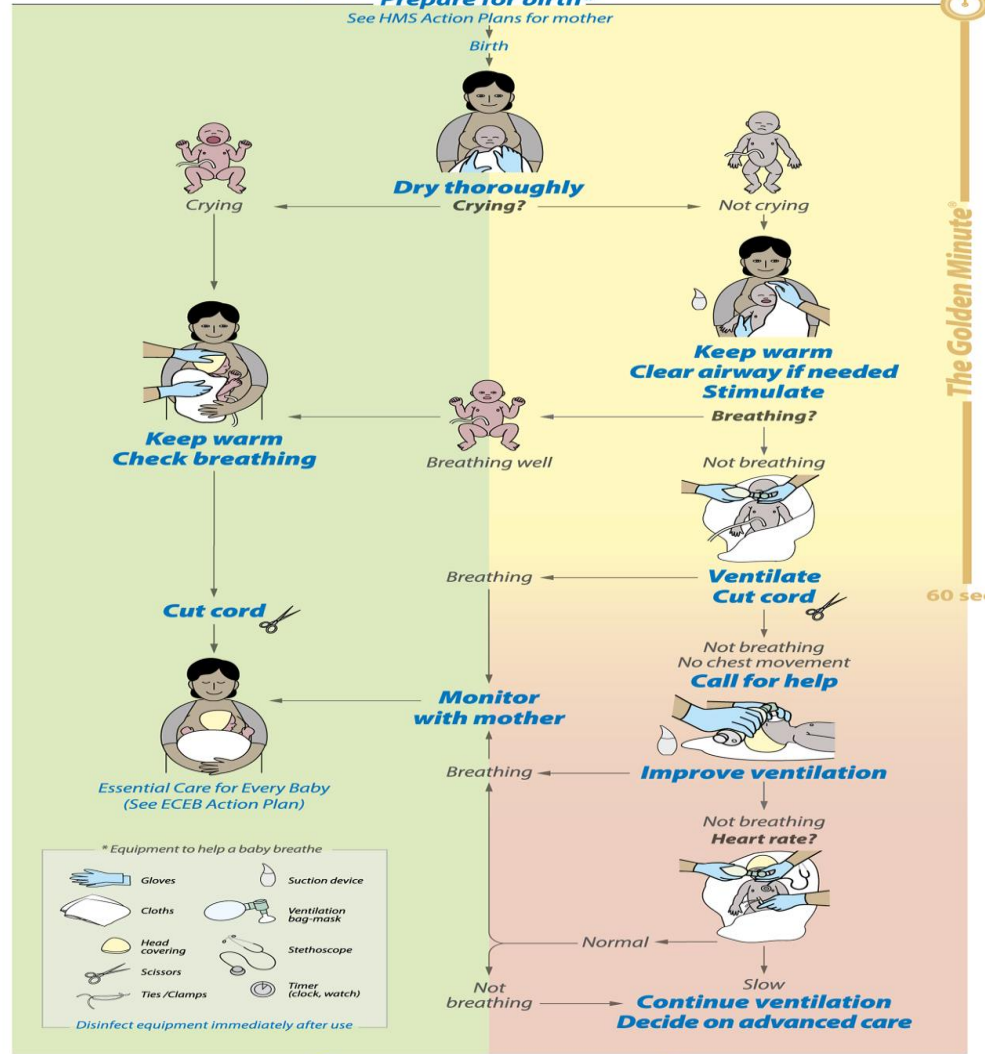
Second Edition

ACTION PLAN Helping Babies Breathe

Prepare for birth*

See HMS Action Plans for mother

Birth



**Keep warm
Check breathing**

**Keep warm
Clear airway if needed
Stimulate**

Cut cord

**Ventilate
Cut cord**

**Monitor
with mother**

**Not breathing
No chest movement
Call for help**

Improve ventilation

**Not breathing
Heart rate?**

**Continue ventilation
Decide on advanced care**

The Golden Minute

60 sec

* Equipment to help a baby breathe

- Gloves
- Clths
- Head covering
- Scissors
- Ties /Clamps
- Suction device
- Ventilation bag /mask
- Stethoscope
- Timer (clock, watch)

Disinfect equipment immediately after use

Helping Babies Breathe™ THE GOLDEN MINUTE™

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ROUTINE CARE



- Dry the baby Thoroughly at birth
 - Remove wet towel and remove wet towel
 - Assess if the baby is crying or breathing

Keep baby warm and Check Breathing

- Position baby skin to skin on mother's abdomen with the head turned and neck slightly extended.
- Always cover the baby head and body with warm cloth.
- Look, listen, and feel for chest movements



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ROUTINE CARE



CLAMP AND CUT UMBILICAL CORD

- Delayed clamping of the cord for 1-3 minutes
- Clamp and cut cord with sterile scissors or blade
 - Place 2 fingers from abdomen along the umbilical cord put first clamp and 3 fingers from the first clamp and put the second umbilical clamp.
 - With a sterile scissors or blade cut in between the 2 ties and leave the cut end open to dry.
 - Check for any bleeding or loosening of the clamped umbilical cord.



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ROUTINE CARE



CONTINUE SKIN TO SKIN WITH THE MOTHER.

- Help mother sit with semi reclining position and continue skin to skin contact with the mother to promote bonding.
- Early breastfeeding without interruption for the first hour after birth.
- Monitor babies' temperature and breathing every 15 minutes for the first hour after birth.



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GOLDEN MINUTE



GOLDEN MINUTE: Clear airway , stimulate

Check breathing, if not breathing well:

- Keep warm
- Clear airway and stimulate
- Check breathing if breathing
- Clamp and cut the cord after 1-3 minutes
- Keep skin to skin with the mother.



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GOLDEN MINUTE



GLODEN MINUTE: VENTILATE WITH BAG AND MASK

- If baby not breathing
- Clamp and cut cord
- Ventilate with bag and mask
- Give 40-60 breaths per minute
- Check for chest movement
- Continue ventilating until the baby starts breathing well.



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IMPROVE VENTILATION



- If baby is still not breathing
- Call for help
- Improve ventilation Reapply mask
 - Reposition head
 - Clear mouth and nose of secretions
 - Open mouth slightly
 - Squeeze bag
- Always assess for chest movement
- If the chest is moving well, continue to ventilate until baby is crying or breathing regularly.
- If baby is breathing regularly, stop ventilation and monitor baby with the mother



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CONTINUED VENTILATION



CONTINUED VENTILATION

- If baby is not breathing well or gasping or having irregular respiratory rate
- Monitor respiratory rate, heart rate, colour, muscle tone.

CHECK HEART RATE

- Ask helper to feel for umbilical cord or using stethoscope
- A normal heart rate is:
 - >100 beats per minutes
- A slow heart rate is:
 - < 100 beats per minute



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NORMAL HEART RATE



NORMAL HEART RATE AND SLOW HEART RATE

- If heart rate is NORMAL and baby not breathing:
 - Continue ventilation
 - Re -evaluate breathing continuously
 - Check heart rate every 3-5 minutes
 - Seek consultation to decide on advanced care
- If heart rate is SLOW and baby not breathing
 - Improve and continue ventilation
 - Re-evaluate breathing continuously
 - Check heart rate every 3-5 minutes
 - Seek consultation to decide on advanced care



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SLOW HEART RATE



SLOW HEART RATE AND BABY NOT BREATHING AFTER 20 MINUTES

- Discuss with parents
- Consider stopping ventilation

WHEN TO STOP RESUSCITATION

- If there is no heart rate from birth and up to 15 minutes of resuscitation stop resuscitation
- If gasping but no regular breathing after 20 minutes of bag and mask ventilation stop resuscitation



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THANK YOU



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