

MEET YOUR FACILITATOR
FOR THIS SESSION



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ICSA LEARNING SERIES

MODULE 1 · SESSION 3

Neonatal Resuscitation



Wed 22 July, 2026



10:00 – 11:00 AM WAT



Certificate of Participation

Attend 75% of Module 1 sessions to earn
your certificate.

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**SCAN TO
REGISTER:**



Welcome

PRETEST



Learning Certification Requirement

Attend at least 70% of the Module 1 sessions

Be present for at least 70% of each learning session

Complete both the pre- and post-session assessments for at least 70% of the sessions attended.



NEONATAL RESUSCITATION: SAVING BABIES AT BIRTH

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The Nigerian Newborn Reality

Why This Matters: The Burden of Birth Asphyxia in Nigeria

- Nigeria has one of the highest neonatal mortality rates globally
- **Birth asphyxia** is a leading cause of neonatal death, along with prematurity and infection
- Nigeria loses approximately **280,000 babies annually**
- 30% of infant mortality is caused by delivery problems; 50% of these deaths occur on the **first day of life**
- Up to **85% of facilities in sub-Saharan Africa** lack supplies or skilled personnel for neonatal resuscitation
- Many PHC facilities in Nigeria **lack bag-mask-valve devices** in their delivery rooms



Learning Objectives

By the End of This Session, You Will Be Able To:

1

Identify babies who need resuscitation at birth

2

Prepare for every delivery – even the "routine" ones

3

Perform the "**Golden Minute**" assessment and action

4

Provide effective **bag-mask ventilation**

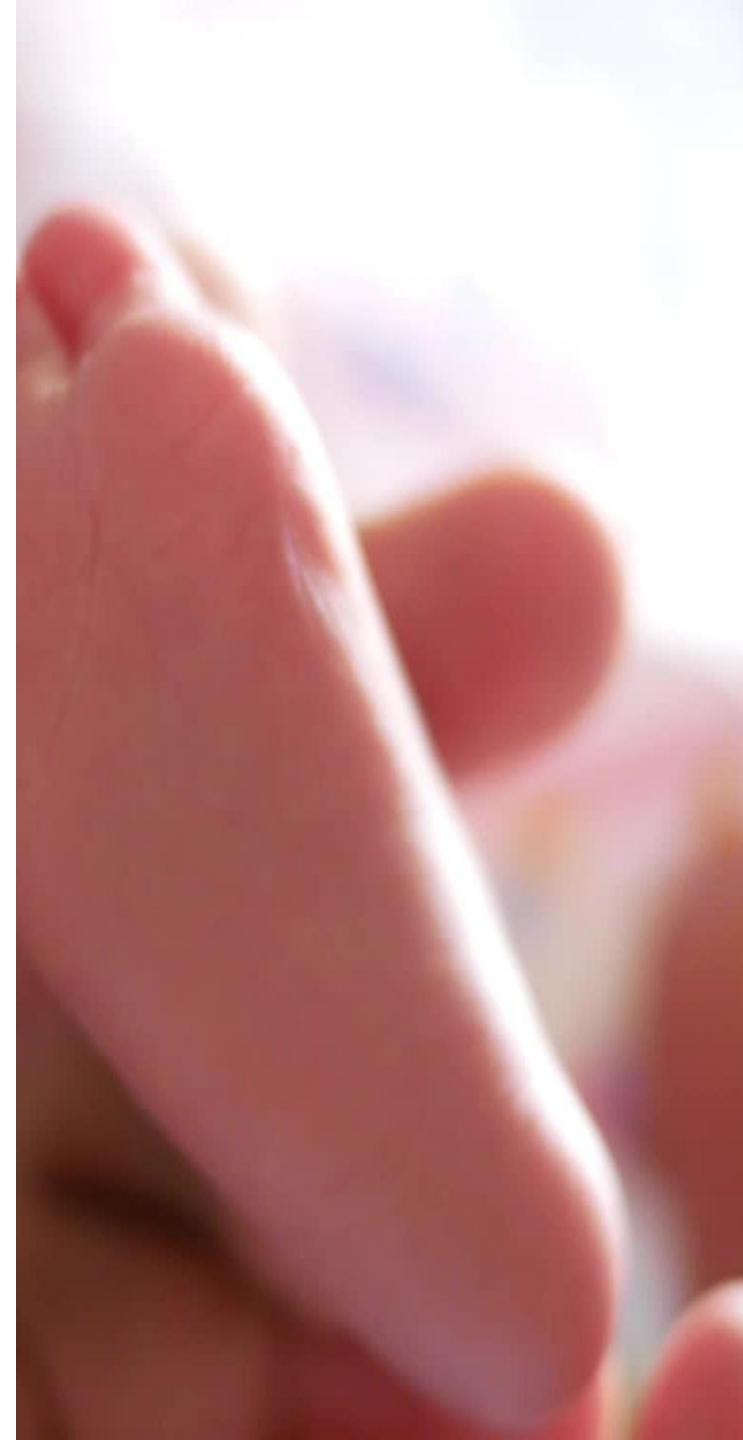
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Recognize when to refer and when to stop resuscitation

Which Babies Need Resuscitation?

Who Needs Help to Breathe?

- **~90% of babies** breathe spontaneously at birth without assistance
- **~10% of newborns** need some assistance to begin breathing
- **~1%** require extensive resuscitative measures
- **High-risk deliveries** require extra preparedness:
 - Preterm births (<37 weeks)
 - Meconium-stained amniotic fluid
 - Fetal distress
 - All Caesarean sections
 - Multiple births
 - Known congenital malformations



Prepare for Every Delivery



Be Ready – Every Time

Key Preparation Steps:

- **Check your equipment** before every delivery – don't assume it's there
- **Take a detailed history** – ask about antepartum and intrapartum risk factors
- **Ensure a clean surface** and **close windows/doors** to prevent drafts
- **Wash hands** and follow standard infection prevention precautions

Essential Equipment Checklist (Minimum):

- ☒ Radiant warmer or clean, warm towels
- ☒ Suction device (Penguin suction or mechanical suction)
- ☒ **Self-inflating bag (250–400 ml)** with appropriate masks (size 0 for preterm, size 1 for term)
- ☒ Oxygen source (if available)
- ☒ Clock or timer

The "ABC" of Resuscitation

The Resuscitation Sequence: A-B-C

A = Airway – Open, clear, and properly positioned

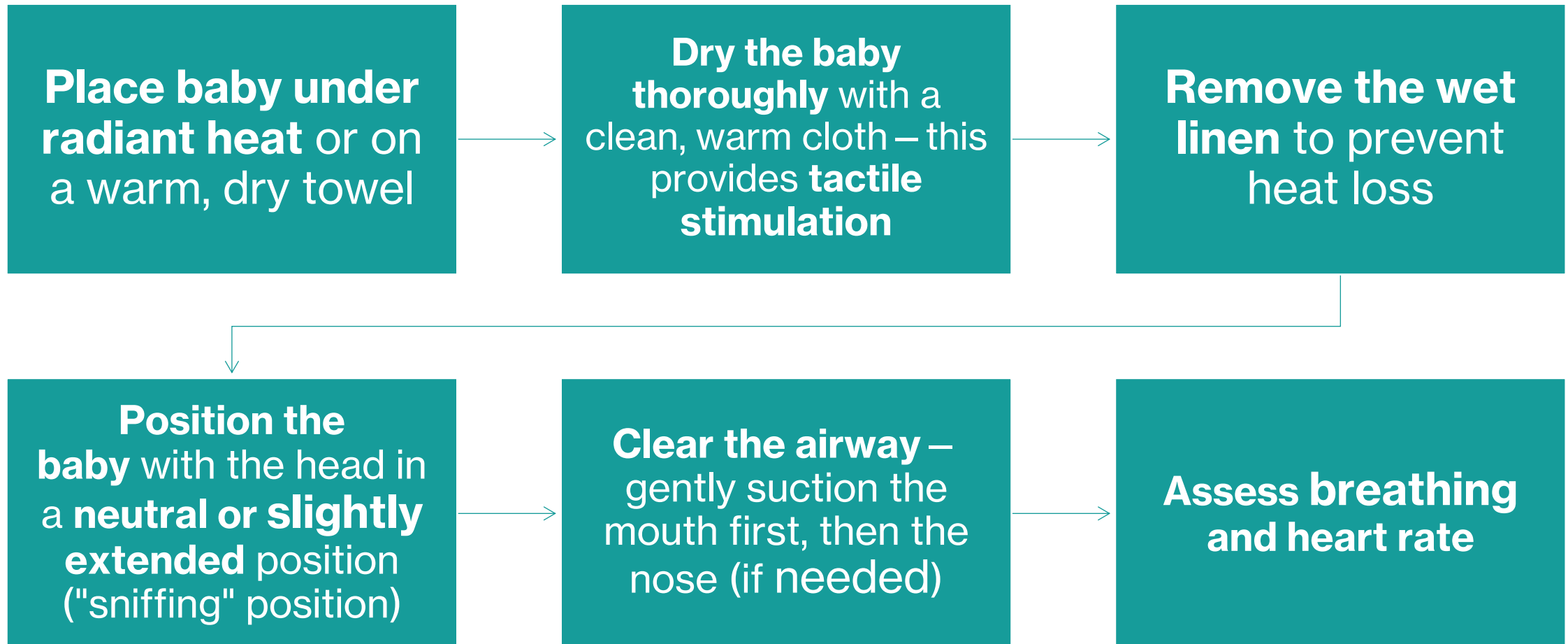
B = Breathing – Spontaneous or assisted within **60 seconds** of delivery – the "**Golden Minute**"

C = Circulation – Adequate circulation of oxygenated blood

The First 30 Seconds - Initial Steps

The First 30 Seconds: Warm, Dry, Stimulate, Position

Step-by-Step:



Assessment and Decision Point

After 30 Seconds—Assess and Decide

Assessment	Action
Breathing well, HR >100	 Routine care: skin-to-skin, breastfeeding, monitoring
Not breathing or gasping, OR HR <100	 START VENTILATION – Golden Minute!
HR <60	 Start ventilation AND prepare for chest compressions

If the baby is **not breathing** or the **heart rate is below 100** after the initial steps, **do not wait**—start positive-pressure ventilation immediately.

Bag-Mask Ventilation - Technique

- Bag-Mask Ventilation: The Life-saving Skill

Key Steps:

- **Select correct mask size:**
 - **Size 0** for preterm/low birth weight babies
 - **Size 1** for term babies
- **Position the mask** – cover the mouth, nose, and tip of the chin, **but not the eyes**
- **Gently press the mask** to create a seal
- **Ventilate at 40–60 breaths per minute**
- **Squeeze the bag** with enough pressure to see **chest wall movement**
- **Watch for chest rise** with each ventilation – this is your primary indicator of effectiveness





Special Considerations

Special Situations

Preterm Babies:

- Higher risk of needing resuscitation
- Use **size 0 mask**
- Be extra gentle – preterm skin is fragile
- Maintain **strict thermal care** (wrap in plastic bag if <32 weeks)
- Lower threshold for initiating ventilation



Meconium-Stained Fluid:

- If baby is **not vigorous** (poor tone, not breathing, HR <100):
 - Suction the **mouth and trachea** (if trained and equipment available)
- If baby is **vigorous** (strong tone, crying, HR >100):
 - **Do not** routinely suction – proceed with routine care

No Oxygen Available:

- **Room air is acceptable** for positive-pressure ventilation
- Do not delay ventilation waiting for oxygen

Chest Compressions



When Ventilation Isn't Enough: Chest Compressions

Indication: Heart rate **<60** despite 30 seconds of effective ventilation

Technique:

- **Two-thumb technique** (preferred) or two-finger technique
- Compress the **lower third of the sternum**
- Depth: **one-third of the anterior-posterior diameter**
- Rate: **3 compressions : 1 ventilation** (90 compressions + 30 breaths per minute)
- Coordinate: **"One-and-two-and-three-and-breathe"**

When to Stop and When to Refer

Knowing Your Limits: Stop and Refer

When to Consider Stopping Resuscitation:

- No heart rate after **10 minutes** of continuous, adequate resuscitation
- No signs of life after **10 minutes**
- **Note:** Decisions to stop should involve the most senior clinician available

When to Refer:

- Any baby who required resuscitation **must be referred** to a higher level of care
- **Stabilize before transport** – do not move an unstable baby
- Transport in **Kangaroo Mother Care (KMC) position** whenever possible
- Maintain **communication** with the receiving facility
- **Document** everything: resuscitation steps, time, response, and referrals



Post-Resuscitation Care

After Resuscitation: What Next?

Immediate Post-Resuscitation Care:

- **Monitor** vital signs closely – temperature, heart rate, breathing, color
- **Maintain warmth** – skin-to-skin with mother if stable
- **Check blood glucose** early – resuscitated babies are at risk of hypoglycemia
- **Observe for seizures** or abnormal movements
- **Initiate feeding** as soon as possible (breast milk first)
- **Monitor for complications** – apnoea, respiratory distress, infection

Referral Criteria:

- Any baby who required **bag-mask ventilation** should be **referred** to a secondary or tertiary facility for ongoing monitoring

Common Harmful Practices to Avoid

What NOT to Do: Stop These Harmful Practices

Practices to AVOID:

- ✗ **Spanking the baby** while held upside down
 - ✗ **Slapping or flicking** the baby's feet
 - ✗ **Hot compresses** or balms on the baby's body
 - ✗ **Herbal concoctions**
 - ✗ **Injections** of hydrocortisone or penicillin as "stimulants"
 - ✗ **Delaying resuscitation** to wait for oxygen or equipment
-

These practices:

Cause **pain and injury**

Delay effective resuscitation

Increase mortality and morbidity

Key Takeaways

Remember These 5
Key Points

Be prepared for every delivery – check your equipment

The Golden Minute – assess and act within 60 seconds of birth

Warm, dry, stimulate, position – the first 30 seconds

Bag-mask ventilation saves lives – master this skill

Stabilize and refer – know your limits

Every Baby Deserves a Chance

"The day of birth is the riskiest day of life. With your hands and your skills, you can change that. Every baby deserves a chance to breathe. Every baby deserves a chance to live."



Q & A



POST TEST



Next Session - Overview of Module 1

covers the critical first days of life, equipping frontline health workers with expert-led, practical knowledge on newborn care, from birth through the first weeks of life.

PERIOD	TOPIC	PRESENTER	DATE
1	Essential Newborn Care Thermal care, cord care, breastfeeding, infection prevention, danger signs	Assoc. Prof. Ezenwa Beatrice	Wed, 24 Jun 2024
2	Newborn Danger Signs Recognition drills, triage exercises, caregiver counselling	Prof. Zubaida Farouk	Wed, 8 Jul 2026
3	Neonatal Resuscitation Bag-and-mask simulation, team scenarios, equipment readiness	Assoc. Prof. Ezenwa Beatrice	Wed, 22 Jul 2026
4	Birth Asphyxia Stabilization simulation, referral decision-making, case review	Prof. Zubaida Farouk	Wed, 5 Aug 2026
5	Preterm & Low Birth Weight Care Kangaroo mother care, feeding plans, referral guidance	Assoc. Prof. Ezenwa Beatrice	Wed, 19 Aug 2026
6	Neonatal Jaundice Severity assessment, referral timing, caregiver counselling roleplay	Prof. Zubaida Farouk	Wed, 2 Sep 2026
7	Neonatal Sepsis Risk factors, first-line management, referral pathway mapping	Assoc. Prof. Ezenwa Beatrice	Wed, 16 Sep 2026
8	Vaccine Hesitancy & Risk Communication Rumour management, roleplay, community engagement planning	Prof. Zubaida Farouk	Wed, 30 Sep 2026
9	Interactive Review — Periods 1–8 Case presentations, knowledge quiz, experience sharing	Module Facilitators	Wed, 14 Oct 2026

Thank You

