

Neonatal Transport

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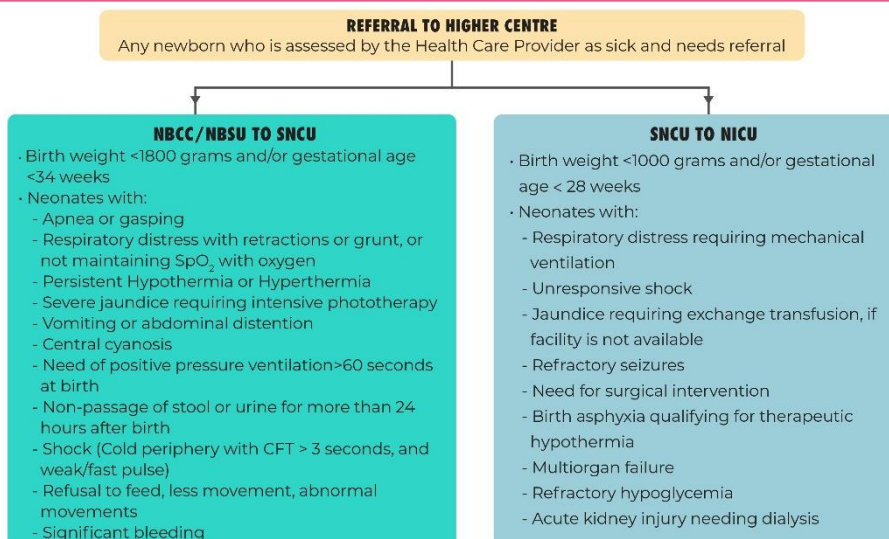
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Standard Treatment Workflow (STW) NEONATAL TRANSPORT

INDICATIONS FOR TRANSPORT IN NEONATES



PREPAREDNESS AND PRE-TRANSPORT STABILIZATION

- Identify and communicate with the referral facility
- Check availability of the services and bed in the referral facility (e.g. Ventilator)
- Explain the condition of the patient, need for transport to higher facility, the expected plan and prognosis to the family
- Discuss with parents the possible expenses
- Take informed consent of the parents prior to transport
- Share the contact numbers of both referring and the receiving facility including the concerned doctor
- Enclose (1) Complete summary (2) All investigations (3) Mother's blood sample
- Identify the transport team with appropriate skilled persons
- Ensure the logistics and the vehicle are organised
- If shock present - start treatment before transport
- All doses of antibiotics and drugs should be timed prior to transport
- Check temperature and blood glucose prior to transport
- Ensure clear airway, appropriate respiratory support and secure IV access

MONITORING AND MANAGEMENT DURING TRANSPORT

MONITORING DURING TRANSPORT	MANAGEMENT DURING TRANSPORT
<ul style="list-style-type: none"> • Parameters to be monitored: Temperature, Heart rate, Respiratory rate, Air entry, SpO₂, GI Aspirates, Position of tubes (ET, OG, Catheter, ICD, IV cannula), Ventilator/ Continuous positive airway pressure (CPAP) settings • Frequency of monitoring: Every 30 minutes depending on the sickness of the baby • Communication: Parents and the receiving doctor should be informed of any change in the condition of the baby by the transport team 	<ul style="list-style-type: none"> • Maintain temperature and warmth (incubator / clothing / Kangaroo Mother Care) • Position, clear the secretion and assess for need of intubation • Assist with appropriate respiratory support (Oxygen, CPAP, Neonatal ventilation). Stop the vehicle if needed for urgent care, e.g. intubation • Manage shock by titrating the fluids and inotropes • Appropriate quantity, frequency and modality of feeding should be followed during transport (preferably breastfeeding or expressed breastmilk)

TRANSFER (HANDING OVER) TO THE RECEIVING CENTER BY TRANSPORT TEAM

Transport team should assist the transfer of the baby to the SNCU/ NICU in the receiving center	The receiving doctor should have a one to one discussion with the handing over team	All the documents viz. discharge summary, investigations, mothers' samples, list of awaited investigations that will be intimated later etc. should be handed over
Once transferred to the SNCU/ NICU bed, the baby should be stabilized by both the teams		The family should be introduced to the new team in person

ABBREVIATIONS

- | | | |
|---|--|--|
| CFT: Capillary filling time
ET: Endo tracheal
ICD: Intercostal drain | NBCC: Newborn care corner
NBSU: Newborn stabilization unit
NICU: Neonatal Intensive care unit | OG: Orogastric
SNCU: Special Newborn care unit
SpO₂: Pulse Oxygen saturation |
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REFERENCE

1. Transport of a sick neonate. Evidence-based clinical practice guidelines. National Neonatology Forum India. Available at www.nnfi.org/cpg

👉 AVOID INVASIVE PROCEDURES DURING TRANSPORT

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