



CLINICAL PRACTICE GUIDELINE

Guideline coverage includes NICU KEMH, NICU PMH and NETS WA

Transfer/Transport by Air and Road of Stable Infants

This document should be read in conjunction with the [Disclaimer](#)

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Air: Stable Infants by Nurses

All infants that are transported by air will be transported in a manner that meets the infant's, and Civil Aviation Safety Authority's safety requirements. Infants for inter-hospital transfer by air must be able to maintaining temperature within normal limits in an open cot and not require continuous cardio-respiratory monitoring. An escort nurse is required for infants that require gastric tube feeding and/or saturation monitoring during the transport.

- Note: When transporting twins by air an escort nurse for each baby is required (airline may opt not to have infants travelling in the same row).
- Nurse escort **must** wear hospital ID for air transfers.
- The escort nurse is to carry an appropriate sized Laerdal bag and mask, and mucous extractor on the transport.
- For **Qantas flights** a 'Medical Oxygen Cylinder Approval Form' to be completed and emailed to dq@qantas.com.au. The form is to be carried at all times by nurse escort.
- For **Virgin flights** a Fitness to Fly form needs to be completed and emailed to va.medical@virginaustralia.com. The form is to be carried at all times by nurse escort.
- All infants require SaO₂ monitoring during transport using a small oximeter with adequate battery life.
- A medical fitness-to-fly form needs to be completed and faxed to the airline > 24 hours prior to the scheduled departure. (This is required for any infant that has been hospitalised within 4 weeks of flying).
- Mothers accompanying the infant on a flight are to be informed that their luggage is restricted to what they are able to carry themselves; the nurse escort is unable to assist with carrying luggage.
- EBM needs to be transported in an Esky with a freezer ice brick (not ice cubes). Contact the milk room for letter to carry with the EBM on flight.

On some occasions, due to flight schedules, it may be difficult to arrange for the nurse escort to accompany the infant from the destination airport to the receiving hospital. In these cases, the following options are to be investigated:

- Receiving hospital staff may receive the infant from the escort nurse at the destination airport and escort the infant back to the receiving hospital.
- The consultant medical officer may approve parent-only escorts for air transport of stable infants (non-oxygen dependent, sucking most feeds) providing that the parent is willing to transport the infant without a nurse escort AND the receiving hospital agrees to accept the parent-only escorted infant.
- Either of these options are to be approved by the consultant medical officer, parent and receiving hospital staff.

Air: Stable Oxygen Dependent Infants by Nurses

All infants that are transported by air who require in-flight oxygen will be transported in a manner that meets the infant's, and Civil Aviation Safety Authority's safety requirements.

- The decision to have a nurse escort is to be made by the Medical Officer.
- Note: When transporting twins by air an escort nurse for each baby is required (airline may opt not to have infants travelling in the same row).

- Flight booked by the CNC/Discharge Coordinator. Flight details are given to the ward Coordinator and the information is kept in their file. Book the taxi (with capsule) to the airport, remember to give Taxi vouchers. The parents should be informed of taxi and flight details as soon as possible.
- Parents should be reminded to be ready to depart the nursery at least thirty minutes prior to the taxi's arrival. If parents have a large amount of luggage, they should consider sending some luggage home (by mail or family members).
- The airline must be informed at the time of booking that the infant will be flying with oxygen, and a medical clearance form, or "fitness-to-fly" form must be completed and faxed to the airline > **48** hours prior to departure.
- For **Qantas flights** a 'Medical Oxygen Cylinder Approval Form' to be completed and emailed to dg@qantas.com.au. The form is to be carried at all times by nurse escort.
- For **Virgin flights** a Fitness to Fly form needs to be completed and emailed to va.medical@virginaustralia.com. The form is to be carried at all times by nurse escort.
- A nurse escort is required for the duration of all inter-hospital transports where the infant requires oxygen during the flight.
- Infants requiring SaO₂ monitoring during transport are to be monitored using a small oximeter with adequate battery life.
- Spare oxygen cylinders may be carried with permission of the airline. Requests to carry additional oxygen must be made 48 hours prior to departure.
- "D" size cylinders must NOT be carried on the aircraft. If these are required then a request is made to the airline, this is then organised by the airline.
- If travelling internationally then Qantas requires 14 days notice to organize the oxygen.

Pre-Flight Preparation - Nurse

- Aim to commence checking and preparation at least 30 minutes prior to departure from the neonatal unit. Receive handover of infant from allocated nurse prior to commencing preparations.
- The escort nurse must ensure that the following is available:
 - Photo identification for self and hospital identification badge.
 - Correct number of taxi vouchers.
 - Copy of flight details and hospital transport/taxi arrangements.
 - Phone contact names and numbers for receiving hospital and transport/taxi service.
 - Medical discharge summary and nursing transfer letter.

Pre-Flight Preparation - Infant

- Aim for infant to be fed around 60 minutes prior to departure from the Neonatal Unit.
- Check positioning and taping of nasal cannula and IGT (Escort may carry pre-cut tapes - scissors cannot be carried on board the flight).
- Sufficient milk feeds - packed in an Esky with ice brick (not ice cubes).
- Travel bag with the following equipment:

- Medications.
 - Adequate feeding and nappy changing equipment for the trip.
 - Laerdal bag and appropriate sized mask.
 - Mucous extractor/stethoscope.
 - Change of clothes, extra cardigan and wrap/blanket.
 - **No Scissors.**
- Check documented order for infant's in-flight oxygen requirement.
 - Size B or C cylinder in Oxypack carrier (an approved airline cylinder carry bag).
 - Anaequip regulator (conversion chart is attached to regulator).
 - Rapid emptying regulator.
 - Check presence of two identification labels on infant with another nurse prior to departure.

Checking in Procedure

Plan to arrive at the airport at least 45 minutes prior to take-off. At check-in, request engineering check securing of cylinder and carrying equipment.

On Arrival to Destination (If on a Turn-Around Flight)

Inform cabin crew that you will be returning on same flight. Check-in for return flight at check-in counter BEFORE handing over or transporting infant.

Prior to Return Flight Departure

Empty oxygen cylinder using rapid emptying regulator (the 60lpm flow meter takes approximately 20 minutes to empty a "C" size cylinder. EMPTY cylinder must be checked in as luggage and CANNOT be carried on board the return flight. **Oxygen is an accelerant and must be emptied in a safe location i.e. In a non-smoking area.** After emptying the cylinder remove the regulator and store in hand luggage for return flight (regulator prone to damage if left on cylinder).

On Return to NICU

- Ensure Reverse Transfer Data Sheet is completed.
- Empty contents of travel bag, restock and return equipment to appropriate places.
- Report any adverse incidents to Clinical Nurse Consultant/Discharge Coordinator. Adverse events to be reported on CIMS form (infant event) or OS&H form (staff event).

Air: Back Transfer of Preterm Infants < 35 Weeks Gestation at Birth

Preterm infants born at less than 35 weeks gestation are at risk of hypoxia in flight. This cannot be predicted from the infant's clinical history nor can it be predicted from the hypoxia challenge test. For pre-flight testing of infants, the hypoxia challenge test should not be used to determine need for oxygen in flight or safety to fly without oxygen in this group of patients.

All preterm infants less than 35 weeks gestation at birth who are going to be transferred to another hospital from KEMH or PMH and travelling by plane will need a nurse escort to ascertain if oxygen in-flight is necessary. The nurse will carry a travel pack approved for use on a plane. This contains a lightweight cylinder, low flow regulator, oxygen tubing and oximeter.

- For **Qantas flights** a 'medical oxygen cylinder approval form' to be completed and emailed to dg@qantas.com.au. The form is to be carried at all times by nurse escort.
- For **Virgin flights** a Fitness to Fly form needs to be completed and emailed to va.medical@virginaustralia.com. The form is to be carried at all times by nurse escort.

In those infants who may need to fly before they are 3 months corrected gestational age (i.e. Hospital appointments), and will be unaccompanied by a nurse escort, staff will need to educate parents about the potential need for oxygen and how to use the travel pack oxygen.

Refer to [Pre-flight preparation](#) above.

Management of the Infant on the Flight

- Attach oximeter.
- Record observations of the infant every 15 minutes.
- If oxygen saturations fall below 85% for 2 minutes, or less than 75% for any duration, commence oxygen at 125mLs/min and titrate oxygen to keep oxygen saturations over 90%.
- Record observations of the infant's behaviour, heart rate, and colour at the time oxygen was started.
- Document observations on MR810.21 In-flight observation chart for back transfer of infants <35 weeks gestation at birth.

After Flight

- For infants who **do not** require oxygen on the flight, monitoring on subsequent flights is not required.
- For infants who **do** need oxygen on the flight and will be returning to Perth by plane before they are 3 months corrected gestational age, the nurse escort will teach parents how to obtain and use the equipment. This should occur as part of the discharge planning procedure and be reinforced during the flight and on arrival at their destination.
- On return to Perth the nurse escort will hand in all records of the flight observations to the CNC/Nurse Manager.

For Return Flights

The CNC/Discharge Coordinator will liaise with medical staff to order **Travel Pack Oxygen** through BOC and sign aircraft fitness to fly certificates. It would be helpful to liaise with the patient's GP/local paediatrician. The parents in most circumstances will collect the oxygen from the BOC depot in their town and administer oxygen on the flight without a nurse escort. The flow rate of oxygen will be the level the infant required on the discharge flight.

Arranging BOC Hire of Travel Packs

BOC telephone is 13 12 62 to locate nearest BOC depot and check ordering procedures, and for long flights if refilling of cylinder in Perth for return journey required.

To arrange hire of the Travel Pack Oxygen a fax needs to be sent to BOC on 1800 624 149.

Road: Transport of Neonates to Another Hospital

For NETS Retrievals - Please refer to [NETS Clinical Guidelines](#)

All infants that are transported from the neonatal unit will be transported in a manner that meets the infant's safety and monitoring requirements.

- The decision to transfer an infant from the NICU to another hospital is to be made in consultation with the infant's parents.
- Parents are to be informed of the date and time of the infant's movement to another hospital **before** the event.
- The consultant's assessment of the infant's clinical status will determine the need for nursing and/or medical escort.
- It is a legal requirement that all infants transported by road are to be restrained in a properly adjusted and securely fastened infant safety restraint. However, traffic laws allow infants to travel unrestrained in taxis; a person can therefore sit in the rear seat of a taxi holding an infant. This is not an ideal situation; taxi companies throughout the Perth metropolitan area and in many country centres are able to provide infant safety restraints and these are to be used wherever possible.
- Infants transported by road are to have an adult escort (other than the driver) available to attend to the infant.
- Infants traveling in a car seat are to have a portable oximeter attached for the duration of the transfer.
- Consider carrying size B or C cylinder in oxypack carrier, dependent on individual infant risk assessment.
- The escort nurse is to check transport bag for appropriate equipment for the length of the trip.
 - Laerdal bag and appropriate sized mask.
 - Mucous extractor/stethoscope.
 - Discharge medications.
 - Medical and nursing summaries.
 - Adequate feeding and nappy changing equipment for the trip.
 - Change of clothes, extra cardigan and wrap/blanket.

On Return to the NICU

- Ensure Reverse Transfer Data Sheet is completed.
- Empty contents of travel bag, restock and return equipment to appropriate places.
- Report any adverse incidents to Clinical Nurse Consultant/Discharge Coordinator. Adverse events to be reported on eCIMS form (infant event) or OS&H form (staff event).

Car Seat / Capsule Safety

All stable infants requiring road transport between sites or to another hospital are to be escorted by a nurse (seated in the back with the infant). Only the consultant medical officer can approve a parent-only escort.

In the interests of safety and OS&H insurance cover, staff are not to escort infants in private vehicles.

Ensure the parents have installed an approved capsule/car seat in the correct manner. Discuss this issue with the parents as soon as discharge becomes imminent. Infants should not go in car seats/capsule before weighing > 1650 grams.

Kidsafe House offers a capsule or car seat fitting, checking or hiring service. Appointments need to be made prior to arrival. Kidsafe House pamphlets are available from Health Information Resource Service (HIRS).

Phone number: (08) 6244 4880 and Website: <http://www.kidsafewa.com.au/>

Neonatal Transport

Available weekdays from 0830-1700hrs. Booked through SCN Discharge Coordinator at KEMH (page 3512). A nurse escort is required for inter-hospital transfers.

Taxi/Train/Bus

Taxis with baby capsules must be used.

Taxi vouchers are available from the Area Manager/CNC/Discharge Coordinator/SW.

Escort by the Parent

An infant being transported to another hospital by his/her parents must meet the following criteria:

- The consultant medical officer approves the parents transporting the infant without a nurse escort.
- Parent/s willing to transport the infant without a nurse escort.
- An approved safety restraint is to be used.
- The infant does not require continuous oxygen saturation and/or cardio-respiratory monitoring (unless the infant is being discharged/transferred with a home monitor and parents have been instructed in its use and infant CPR).
- The infant's temperature has been maintained within normal limits in an open cot for > 24 hours.
- Infants should not be transported on a full stomach. Feeds should be arranged so that the infant is fed 1-2 hours prior to transport.

Related policies

CAHS [Interhospital Patient Transport](#)

Related WNHS policies, procedures and guidelines

[NETS WA Clinical Guidelines](#)

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Document owner:	Neonatal Directorate Management Committee		
Author / Reviewer:	Neonatal Directorate Management Committee		
Date first issued:	August 2006		
Last reviewed:	24 th April 2017	Next review date:	24 th April 2020
Endorsed by:	Neonatal Directorate Management Committee	Date endorsed:	27 th June 2017
Standards Applicable:	NSQHS Standards: 1  Governance, 2  Consumers, 6  Clinical Handover		
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