NICU CAR SEAT FITTING GUIDELINE

POLICY

All infants discharged from hospital should be transported home in a car safety seat that is appropriate to the infant’s maturity, size, and clinical condition, and meets Canadian Motor Vehicle Safety Standard 213.1 (2012).

Caregivers of all infants who are discharged home from the NICU will be supported to correctly position their infant in their car seat with assistance from staff. They will also receive education regarding safe car seat use (ie. undergo ‘car seat fitting’).

Infants Requiring Car Seat Fitting

Caregivers must be counselled on safe car seat practices to inform safest travel for infants. All infants admitted to the NICU require teaching regarding safe car seat use for travel prior to discharge, regardless of their child’s gestational age. Refer to Car Seat teaching checklist and fitting procedure.

The Canadian Pediatrics Society, BCAA and Transport Canada recommend the following:

• Infants should only be placed in a car seat for travel in a moving vehicle
• Plan frequent stops on long road trips to assess the infant and remove them from the car seat ("breaks")
• An infant car seat should never be used as a crib
• Infants should never be left unattended in a car seat
• Infants should be removed from the car seat upon arrival at destination

Infants Requiring Specialized Car Seat Fitting

While routine infant car seat challenges are not required for the discharge of preterm infants (see next section), some infants are at increased risk of cardiorespiratory instability when placed semi-upright in a car seat due to their underlying medical condition. Such infants require a referral to physiotherapy and a specialized car seat fitting which may include tolerance testing. If a tolerance test is being performed ensure car seat is in base and at 45 degrees, and/or level on seat is within range.

A specialized car seat fitting with possible tolerance testing is required for infants with any of the following:

• Neurological conditions, including:
  o Hypotonia (eg. Trisomy 21)
  o Hypertonia
  o Neuromuscular diseases
  o Central Nervous System Abnormalities
  o Hydrocephaly, Macrocephaly, Ventriculo-peritoneal shunt
• Musculoskeletal diseases
• Facial Abnormalities (e.g. Pierre Robin) that may compromise respiration
• Cardiac anomalies with abnormal baseline oxygen saturations or cyanotic heart lesions
• Home Oxygen Therapy or home suctioning
• Respiratory Support on discharge
• Tracheostomy
• Swallowing dysfunction (eg. abnormal feeding study or high risk of aspiration)
• Infants requiring special (non-supine) positioning on discharge
• Osteogenesis Imperfecta
• Epidermolysis Bullosa
• Other conditions as identified by the clinical care team which may place the infant at increased risk for cardiorespiratory instability
Infant Car Seat Challenge For Preterm Infants

As per the Canadian Pediatric Society, ‘preterm infants younger than 37 weeks corrected gestational age are at increased risk for abnormal control of respiration….. While it is clear that infants placed in a car seat are more likely to experience oxygen desaturation and/or bradycardia than when they are supine, neither positioning predicts an adverse neurodevelopmental outcome or mortality post-discharge.’ (CPS Position statement, 2016)

As such, a car seat challenge is not required for routine discharge of well ex-preterm or late preterm infants who have otherwise met medical criteria for discharge, as per the Canadian Pediatric Society Position Statement (2016):

- The Canadian Paediatric Society does not recommend routine Infant Car Seat Challenge (ICSC) testing before discharge for preterm infants (level 3 evidence, grade C).
- Parents and other care providers should be counselled regarding safe car seat use and be able to demonstrate appropriate technique and practice – preferably using their own car seat – before their infant is discharged from hospital (level 3 evidence, grade C).
- Infants should only be placed in a car seat for travel in a moving vehicle and removed promptly once the destination is reached (level 3 evidence, grade C).

DOCUMENTATION

Nursing Flow Sheet
  - Document Car Seat fitting teaching
Physiotherapy Documentation Sheets
Car Seat Fitting Checklist

REFERENCES


Transport Canada (April, 2004). Third-party aftermarket products for children’s restraint systems. TP2436 Road safety leaflet and consumer information notice.

