



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**



DOT HS 812 106

January 2015



American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



Hospital Discharge Recommendations for Safe Transportation of Children:

**Best Practice Recommendations Developed
By an Expert Working Group Convened
By the National Highway Traffic Safety
Administration**

Prepared under Contract DTNH22-08-C0023

Hospital Child Passenger Safety Discharge Policy

Recommendations and Best Practices

While Child Passenger Safety (CPS) typically refers to the safety of children in car seats and booster seats, it also encompasses children who have outgrown car seats and booster seats and therefore need to be properly restrained by a seat belt. Hospitals and other health care providers have an interest in occupant protection no matter the age of the patient, so a thorough set of discharge protocols, including language about seat belt use beyond car seats and booster seats, is advantageous for everyone. Every vehicle occupant should be buckled up on every trip. Hospitals and hospital systems are encouraged to address CPS in their discharge policies and to consider these recommendations and best practices as they develop and implement their policies.

Methodology:

The Hospital Child Passenger Safety Discharge Policy Planning Group met on March 25, 2014, and agreed to adopt the following consensus recommendations and best practices. This product resulted following many years of collaboration and shared ownership of a project that began with a literature review and case studies of hospitals with established discharge protocols. Consultation with experts in child passenger safety, interagency, and committee review yielded the current recommendations. The end product is the result of a successful collaboration of organizations and individuals who care deeply about the safety of children as passengers in motor vehicles and are experts in their protection from injury in motor vehicle crashes.

Members of the Expert Working Group:

Thank you to all past and present members of this expert working group who have helped shape this important policy to ensure safer travel for children throughout this country.

Current Members:

Carole Guzzetta – National Highway Traffic Safety Administration, National Child Passenger Safety Board (NCPSB)

Karen Seaver-Hill – Children’s Hospital Association

Bonnie Koziel – American Academy of Pediatrics – Council on Injury, Violence, and Poison Prevention

Amy Artuso Heinzen, MPH, CPSTI – National Safety Council, National Child Passenger Safety Board (NCPSB) –Diversity Committee

Laura Dunn, MPH, CHES, CPSTI – Association of Schools and Programs of Public Health/National Highway Traffic Safety Administration

Past Contributors:

Becky Levin, MPH; Michele DeGrazia, PhD, NNP-BC; Elizabeth Flanigan; Pamella Holt, RN,BSN; Anne Brunzell; Tess Benham; Kate Bernacki; Thelma Kuska; Dennis Durbin, MD, MSCE, FAAP; Kyran Quinlan, MD, MPH, FAAP; Alan Korn; Sharon Bilbrey; Roxanne Woods

We also wish to thank the following:

Marilyn Bull, MD, FAAP – American Academy of Pediatrics, Riley Hospital for Children

Children’s Hospital Association

National Safety Council

National Child Passenger Safety Board – Diversity Committee

National Highway Traffic Safety Administration

HOSPITAL CHILD PASSENGER SAFETY DISCHARGE POLICY RECOMMENDATIONS AND BEST PRACTICES

1. The protection of children (from birth to 19 years old) is of primary concern, and Child Passenger Safety should be implemented holistically in a hospital or hospital system. The initial step for this process is to develop a child passenger safety discharge policy based on these recommendations and best practices.
2. CPS is not an issue that should be specific to a given unit within the hospital but, rather, should be considered system-wide. Communication and coordination are critically important in effective policy implementation. We recommend that institutions take an inclusive approach involving multiple areas of the hospital in CPS policy, program development, and implementation.

Participation of the following areas, and other areas as appropriate within the institution, should be considered:

- Nursing and medical staff
- Risk management

- Trauma services, emergency department, and injury prevention center or program
- Women’s hospital/obstetrics
- Pediatrics
- NICU
- Marketing
- Community outreach
- Development
- Administration
- Human resources/education
- Rehab – OT/PT
- Case management/social work

3. We recommend that hospitals explicitly state the following in their CPS policies:

- The units and patients covered by the CPS policy;
- Which units house the CPS policies and programs and which individuals are responsible for oversight;
- Which recognized cost centers will include CPS activities. All staff and other resources should be appropriately and accurately included in the budget; and
- A regular cycle for review of policies and procedures.

4. Hospitals should manage risk by providing for the following when implementing their policies:

- Appropriate documentation;
- Consistent application of all policies;
- Appropriate staffing and training (a CPS Technician is recommended);
- Appropriate referrals to outside resources; and
- The inclusion of patient education (e.g., written material) at the time of admission with regards to the discharge policy.

5. Hospitals should specify the responsibilities of the health care facility and providers. CPS Technicians and hospital staff should provide education regarding best safety practices. Final decisions are made by the parent or legal caregiver. Hospitals should:

- Ensure proper documentation is used;
- Provide education to families and referral to community resources;
- Provide families car seat use and installation education and/or if necessary, referral;
- Provide guidance for management of non-compliant patients;
 - CPS Technicians/Hospital staff should provide education regarding best safety practices. However, final decisions are made by the parent or legal caregiver;
- To ensure the policies are implemented and that appropriate staff receive CPS; training, hospitals should specify staff responsibilities, including the individual(s) who will:
 - Develop policy;
 - Develop/review/obtain update materials for family education;
 - Train other staff members. When available, it is preferable that a certified Child Passenger Safety Technician Instructor (CPS Instructor) train staff about CPS; and
 - Assure the quality of policy implementation and programs.

6. To ensure that hospitals have policies that meet the needs of children with special needs, procedures should be adopted that specify care of the following:

A. Preterm and Low Birth Weight Infants

There should be a hospital policy regarding Car Seat Tolerance Screening¹ (CSTS), also sometimes referred to as Car Seat Tolerance Testing, consistent with the American Academy of Pediatrics clinical report, "Safe Transportation of Preterm and Low Birth Weight Infants at Hospital Discharge," stating:

- Which staff conduct the screening and what training they should receive;
- Equipment used for screening;
- Importance of using the infant's own car seat, placed at the angle recommended by the manufacturer;
- Length of time for which the car seat tolerance screening is conducted;

¹ Bull, M. J., & Engle, W. A. (2009, May). Safe transportation of preterm and low birth weight infants at hospital discharge. (Report for American Academy of Pediatrics, Committee on Injury, Violence, and Poison Prevention and the Committee on Fetus and Newborn). *Pediatrics*, Vol. 123(5): 1424-1429.

- Threshold values for considering a car seat tolerance screening to have been “failed” that is appropriate for their institution;
- How parents will be educated about the car seat tolerance screening; and
- Need for follow-up testing for infants discharged in car beds, including an appropriate site for retesting and when the retesting should occur.

B. Children with Special Healthcare Needs

- Hospitals that discharge children with medical conditions that involve special positioning requirements or considerations for travel should have appropriately trained staff who will ensure children are transported in the safest manner possible.
- Safe transportation questions for children with special healthcare needs should be deferred to a CPS Technician with Special Needs training; or, at a minimum, provide referral to appropriate resources to families with children with special healthcare needs.
- Children with special healthcare needs that require ancillary pieces of medical equipment in transit (e.g., walkers, crutches, oxygen tanks, monitors), should have these items secured on the vehicle floor; underneath a vehicle seat or wheelchair; or to the bus seat, bus floor or bus wall below the window line so that they do not become projectiles during a crash and strike an occupant.²
- Resources are available at www.preventinjury.org or the American Academy of Pediatrics’ policy statement on School Transportation Safety.³

7. We recommend that hospitals specify the training and qualifications necessary for staff involved in CPS activities. In general, training and qualifications should be

² American Academy of Pediatrics. (1999). Transporting children with special healthcare needs. (Report for Committee on Injury, Violence, and Poison Prevention). *Pediatrics*, Vol. 104(4): 988-992

³ American Academy of Pediatrics. (2007, July). School transportation safety. (Report for Committee on Injury, Violence, and Poison Prevention). *Pediatrics*, Vol. 120(1): 213-220

commensurate with the level of involvement in family education; staff should only perform the tasks for which they are trained. Specific considerations include:

- Conducting the car seat tolerance screening (CSTS):
 - Training and qualifications for conducting the screening should be defined.
 - A CPS Technician with newborn or NICU experience should position the infant in the car seat. Alternatives include allowing staff or a parent who has received education from the Technician to position the infant. If the hospital policy dictates that a parent should position the child in the seat, this information should be explained during admission.
 - The policy should specify who can educate families about how to properly place their infant in a car seat.
 - Staff should receive CSTS training and it is recommended that a CPS Technician assist with the screening.

- Other CPS activities:
 - Staff members who are not CPS Technicians should refer families to community resources (e.g., local CPS Technicians and inspection stations), provide verbal information about correct car seat use as described in the American Academy of Pediatrics policy statement “Child Passenger Safety,”⁴ and distribute written educational materials to families.
 - Any additional tasks (e.g., providing hands-on education to families, providing information not included in the AAP policy statement) should only be performed by a CPS Technician.
 - Generally, CPS Instructors teach CPS Technicians and CPS Technicians conduct education and hands-on training with parents and families. CPS Instructors have more training and a higher level of knowledge regarding CPS issues and practices in the field.

4 American Academy of Pediatrics. (2011, April). Policy statement – child passenger safety. (Report for Committee on Injury, Violence, and Poison Prevention). *Pediatrics*, Vol. 127(4): 788-793

8. We recommend that all hospitals adopt policies regarding provision of family education on CPS. Such policies should include:

- A definition of the components of family education (e.g., education on transportation of infants, toddlers, preschoolers, and children with special healthcare needs; education on use of booster seats and seat belts for older children)
- Written educational material that:
 - Has been reviewed by a certified CPS Technician;
 - Is current and from the following nationally-recognized organizations with CPS expertise, such as:
 - National Highway Traffic Safety Administration;
 - American Academy of Pediatrics;
 - Safe Kids Worldwide;
 - Children’s Hospital of Philadelphia;
 - For children with special healthcare needs, please see material from the Automotive Safety Program, Riley Hospital for Children at IU Health at www.preventinjury.org;
 - Includes a specified review cycle for educational materials, which should be annual or biannual. This should include a current list of CPS Technicians employed by the hospital and available in the community;
 - Include a procedure for collecting, maintaining, and disseminating current information on community resources including CPS Technicians and car seat inspections stations. A responsible party should be indicated, and could be the organization’s senior CPS Technician or CPS Instructor.
- Staff who are not certified as CPS Technicians should refer families to community resources for additional assistance.

9. It is recommended that hospitals that provide (give, sell, or loan) car seats to families adopt an official policy stating the following:

- How to access the car seat;
- Eligibility criteria;
- How car seats will be checked for recall or expiration;

- How the hospital will ensure that the seat provided is appropriate for the child's age and size, per manufacturer's instructions;
- That the instruction manual should always be provided with the car seat;
- That the parent must read and familiarize themselves with the car seat manual; and
- Release of liability.

10. It is recommended that hospitals that have a car seat loaner program should adopt a policy that includes the following:

- How to access the car seat;
- Eligibility criteria;
- How car seats will be checked for recall or expiration;
- How the condition of the car seat will be ensured and monitored;
- How car seats will be cleaned and processed for the next use;
- That the instruction manual should always be provided with the car seat;
- That the parent must read and familiarize themselves with the car seat manual;
- Procedures for documentation and inventory control;
- Release of liability; and
- Whether families should be notified if the seat has been previously used, and if so, how such information will be provided.

11. Hospital CPS discharge policy should reflect state CPS laws as well as AAP and NHTSA best practices. If a hospital serves multiple states, the policy should describe how different states' laws will be followed. Hospitals are encouraged to recognize that state CPS laws are often less rigorous than best practice recommendations for car seat use. Best practice recommendations seek to provide the child with the most protection possible while traveling, and this information should be shared with families during their education.

12. An incremental approach to policy development and implementation increases the likelihood of success. Such an approach can be modeled on other hospital quality improvement or performance excellence efforts; specific metrics can be defined, monitored, and used to inform policy and program refinement and expansion. The collection of hospital-based data (e.g., number of emergency department visits for motor vehicle crash-related injuries) is encouraged.

DOT HS 812 106
January 2015



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**



www.nhtsa.gov

11045-010215-v4