

# 'Give Me a Boost!' Pediatric Car Safety Seat Program

## A Hasbro Children's Hospital partnership with Neighborhood Health Plan of Rhode Island

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### INTRODUCTION

Considering the immense toll of motor vehicle crashes (MVCs) on children in the United States, initiatives that optimize the use of child safety seats are imperative. In children under the age of 12 who died in a crash, 38% were unrestrained.<sup>1</sup> Belt positioning booster seats have been shown to reduce the risk of injury to children by 61%, as well as reduce the risk of death.<sup>2</sup> Studies have shown that, unfortunately, around 46% of child restraint devices are used incorrectly which can minimize effectiveness and safety.<sup>3</sup> However, statewide data regarding booster seat laws is promising, illustrating that the number of children using booster seats increases when the age requirement increased, and therefore, the rate of children sustaining fatal injuries decreases in states with booster seat laws.<sup>4</sup>

Hasbro Children's Hospital (HCH) Pediatric Primary Care is a large academic primary center for urban and underserved families, among which many children are without adequate child safety seats. To meet the needs of children in Rhode Island, HCH Pediatric Primary Care and Neighborhood Health Plan of Rhode Island (Neighborhood), the largest Medicaid pediatric insurer in the state, partnered to develop the "Give Me a Boost" Program. Here, we introduce this program and share the impact this collaboration has had in providing car safety seats to children across the state.

### DEVELOPMENT

HCH's Pediatric Primary Care and Neighborhood partnered in 2019 to develop a program to accomplish three specific aims: (1) to meet the car seat safety needs of children living in Rhode Island, (2) to train pediatric providers on how to counsel families on child restraints and safety, (3) to optimize the role of primary care physicians and the frequency of these discussions during well-child appointments.

To address the first aim of this initiative, Neighborhood granted funding to purchase and provide booster seats to families who were found to have need at their well-child appointments. In addition, through this funding, any child who requires a seat other than a booster is referred to the Injury Prevention Center to obtain a free car seat and

Figure 1. One example of educational materials available to help residents guide discussions on the proper use of child safety seats

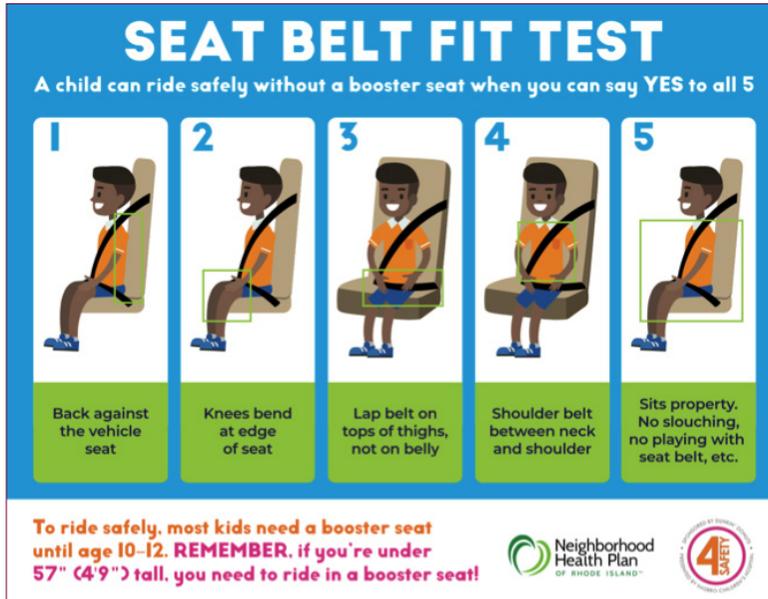
<p><b>REAR-FACING CAR SEAT</b></p> 	<p>Keep your child rear-facing until they are over the height or weight limit written on the car seat</p> <p>Keep your child rear-facing for as long as possible</p>	<ul style="list-style-type: none"> <li>All children under the age of 2 must be in a rear-facing car seat in the back seat</li> <li>In a car crash, the car seat cradles and moves with your child, which decreases stress and injury to your child's fragile neck and spinal cord</li> <li>Infant carrier seats can only be used rear-facing</li> </ul>
<p><b>FORWARD-FACING CAR SEAT</b></p> 	<p>Transition to a forward-facing car seat when your child outgrows the height or weight limit written on their rear-facing car seat</p> <p>Keep your child in a forward-facing car seat with a harness for as long as possible</p>	<ul style="list-style-type: none"> <li>A forward-facing car seat has a harness and a tether which limits your child's movement during a car crash. It should always be used with a harness in the back seat</li> </ul>
<p><b>BOOSTER SEAT</b></p> 	<p>Transition to a booster seat when your child outgrows the height or weight limit written on their forward-facing car seat</p>	<ul style="list-style-type: none"> <li>A booster seat positions the seat belt so that it is correctly positioned over the strongest parts of your child's body</li> <li>Use in the back seat of the car</li> </ul>
<p><b>SEAT BELT</b></p> 	<p>Use a booster seat for your child until he or she can pass the seat belt fit test, usually at around 4' 9" (57 inches)</p>	<p><b>Say YES to all 5 to pass the Seat Belt Fit Test:</b></p> <ol style="list-style-type: none"> <li>Back against vehicle seat</li> <li>Knees bend at edge of seat</li> <li>Lap belt lays flat across the upper thighs (not the stomach)</li> <li>Shoulder belt lays flat across the shoulder and chest (not crossing the face or neck)</li> <li>Child sits properly and does not unbuckle seat belt</li> </ol>

Your Hasbro Children's Hospital Primary Care doctor can help you get a car seat or booster seat if your child needs one.





**Figure 2.** Seat Belt Fit Test: One of the educational materials provided to families (English version pictured; also available in Arabic, French, Portuguese, Spanish and Swahili)



**Figure 3:** Booster seat height chart displayed in the Hasbro Children’s Hospital Primary Care lobby for patients and families to reference



installation. In Rhode Island, all children under the age of 8 who are less than 57 inches and under 80 pounds are required to be restrained in a rear-facing car safety seat, forward-facing car seat, or booster.<sup>5</sup> In discussions with families, most children were previously inappropriately restrained with solely a seat belt (58.2%), a trend which has been seen in studies across the country.<sup>6</sup> Moreover, 20.5% of children who received a booster seat in clinic were previously not restrained at all; in fact, many caregivers (66.9%) reported not being aware that their child needed a booster seat. Parents may believe booster seats are designed to elevate children in the car and are unaware of the safety benefits of using a booster seat.<sup>7</sup> In addition, many parents believe their children are too large for a booster and are unaware of the height guidelines which delineate appropriate transition to a seat belt alone.<sup>7</sup> Other reasons for lack of appropriate booster usage included inability to afford a seat (5.7%) as well as having had a booster but requiring another (14.2%) due to lack of enough seats for the number of children requiring restraints, or age of existing seats. Lack of access to acquiring an appropriate booster seat is a likely reason as well, which this program bridges by making them available to all families at routine encounters.

The second aim of the program is to enhance pediatric resident education on the proper use of car restraints and safety seats, to increase confidence and ability in counseling families. In order to meet this objective, a series of resident-run lectures was held to review Rhode Island’s car seat safety laws and specific parameters to guide proper child transition through various car safety seats. They also introduced residents to educational reference materials designed to provide

to families (Figure 1) and strategies for leading these discussions with caregivers. The lectures were given at the beginning of each academic year to educate new residents and provide a review for the senior residents who had participated during the prior year. (See article ‘Give Me A Boost: A Child Passenger Safety Educational Intervention’ in this issue for a specific study on the im-

impact of this program on pediatric resident education, page 51.)

To address the third aim of the initiative, increasing the frequency of car seat safety counseling in a primary care setting, a specific template was integrated into the electronic medical record to standardize the conversations on car seat safety during well-child checks. Considering that HCH Pediatric Primary Care serves nearly 5,000 patients between 5 and 8 years of age, it is essential that every well-child appointment is viewed as an opportunity to screen families in need of car safety seats, provide education on Rhode Island laws, and share resources for additional learning. Providing the family with the booster seat at the time of the visit fills a crucial need and provides safety tools at point of care. Educational materials for families were also provided by Neighborhood in multiple languages (Figure 2). Colorful booster seat height charts for parental guidance are displayed in the patient waiting area (Figure 3). Even if families already have the appropriate child safety seat at the time of the visit, by increasing the frequency of these conversations at each well-child check, providers are strengthening the patient-physician partnership and encouraging an open dialogue centered on their child’s safety, and overall preventing childhood morbidity and mortality from car crashes.

## CONCLUSION

HCH Pediatric Primary Care and its providers are uniquely positioned to serve as car seat safety champions for the children and families of Rhode Island. Not only is Hasbro the only pediatric hospital in the state, but it serves 10,000 children every year who are from socioeconomically disadvantaged families and require appropriate safety seats. Since the program's implementation two years ago, there has been success across all domains; the clinic has provided 415 free booster seats at well-child visits and referred 102 children to the Injury Prevention Center to pick up free car seats, three resident-run lectures were given to the pediatric residency program, and the electronic medical record for 5–8-year-old well-child appointments was updated to include a specific section on safety seat counseling. The success of the 'Give Me a Boost' program thus far indicates that this partnership between the largest pediatric primary care center and largest Medicaid insurance payor in Rhode Island has already made a significant, and measurable, impact. Our group looks forward to continuing this partnership and optimizing the safety of Rhode Island children and families.

## References

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