

DRIVING HOME SAFETY:

The Johns Hopkins CARES Safety Center



December 2016



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

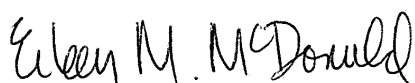
Center for Injury Research and Policy

Thank you for your interest in the Johns Hopkins CARES Safety Center, a collaboration between the Baltimore City Fire Department (BCFD) and the Johns Hopkins Center for Injury Research and Policy (JHCIRP). Ultimately, the goal of the CARES Safety Center is to reduce childhood injuries. This unique partnership between a fire service and an academic injury research center combines fire and life safety education with population health perspectives to maximize the health and safety of Baltimore City's families.

We wrote this guide to share the lessons learned from our collaboration, which has spanned more than two decades. JHCIRP began addressing childhood injury prevention by establishing a hospital-based safety center – the Johns Hopkins Children's Safety Center – in 1997. We started working with the BCFD a few years later by referring our families to their free smoke alarm distribution program. And by 2004, we developed our mobile resource center together. This guide is a supplement to our earlier document, The Johns Hopkins Children's Safety Center: A Replication Guide (still available by request to JHCIRP). "Driving Home Safety" updates you on advances made to our successful hospital-based safety center and shares strategies for developing a mobile safety center to address your community's injury prevention needs.

We hope that by sharing our model we will inspire others to develop similar programs and partnerships within their communities for the benefit of children and families.

Sincerely,



Eileen M. McDonald, MS
Director, Johns Hopkins Children's Safety Centers
Johns Hopkins Center for Injury Research and Policy



About Johns Hopkins Center for Injury Research and Policy

Under the leadership of Dr. Andrea Gielen, professor and director, the Johns Hopkins Center for Injury Research and Policy (JHCIRP) is dedicated to closing the gap between injury research and practice to prevent injuries and violence and to reducing these issues' impact on people's health and quality of life. For three decades, JHCIRP's innovative research, teaching, and advocacy have spanned the entire injury spectrum – from primary prevention to trauma care and rehabilitation. The CARES Safety Center is one of a number of safety resources within JHCIRP's community education and outreach portfolio.



Dr. Niles Ford, Chief of the Baltimore City Fire Department

About the Baltimore City Fire Department

The Baltimore City Fire Department (BCFD) enjoys a long history as a leader and an innovator in the fire service. Under the direction of Fire Chief Niles R. Ford, PhD, the BCFD is a municipal career department with over 1700 active members who serve in more than 38 neighborhood fire stations within Baltimore City. The CARES Safety Center is the cornerstone of the Office of the Fire Marshal's fire and life safety education and outreach programming.



Dr. Andrea Gielen, Director of the Johns Hopkins Center for Injury Research and Policy

PREVENTING INJURIES TO CHILDREN AND THEIR FAMILIES

Unintentional injuries – accidents – persist as the leading cause of death for children in the United States.(1,2) Among youth ages 0 to 19, almost 8,000 children die from unintentional injuries annually – that is about 22 deaths every day!(3) Include the estimated 20 million children and adolescents who require medical attention or have restricted activity due to injuries, and the magnitude of the injury problem becomes even more apparent.(4)

Because our focus is on young children and because young children spend most of their time in and around their homes, the CARES Safety Center primarily focuses on home-related injuries. If you choose to develop a program or service to address injuries, you must understand the specific injury profile of your priority audience(s).

Injury 101

- Injuries are the leading cause of death for children of all ages in the US
- Nationally, motor vehicle crashes are the leading cause of fatal injuries for children 5 and older
- Falls are the leading cause of nonfatal injuries
- Fatal and non fatal injury rates vary by season, by state, by sex, and by age

Preventing Pediatric Injury

Good prevention practice dictates that you know your target audience well and that they be involved as early as possible in the project.(5) Although our focus is injury among young children, parents and adult caretakers of children are our primary audience. We believe adults are responsible for creating and maintaining safe environments for children. When we do target our educational messages to children, we make sure they are appropriate to the child's age and stage of development.

Promoting the use of safety products is another effective pediatric injury prevention tactic.(6) Evidence shows that safety products minimize the chance of an injury event from occurring as well as reduce the severity of an injury should such an event occur. For instance, we know that correct and consistent child safety seat use reduces the risk of death in a car crash by upwards of 70% for infants.(7) The use of bicycle helmets has been shown to reduce the risk of severe brain injury by 63-88% (8), and smoke alarms cut in half the risk of dying in a house fire.(9)

Safety Resource Centers

Effective prevention programming starts with providing understandable and personalized education. However, that is not enough. We must also make it easy for people to do what is being recommended. To prevent injuries to children, this means improving access to safety products like car seats, bike helmets, cabinet locks, and stair gates. How then do we get these safety products into the homes and hands of those who need them? Safety resource centers are one promising answer. We established the first U.S. hospital-based children's safety center in 1997.(6) Other children's hospitals throughout the country have opened their own centers on child safety. (10) We also created a mobile safety center in partnership with our local fire department to take this effective prevention approach on the road.

What is a Mobile Safety Center?

While we have a forty-foot truck, your center could be a car, a van, a converted school bus, or a retro-fitted ambulance (see Fig. 1 for an early rendering of our mobile safety center). Mobility is the unique feature that distinguishes a mobile safety center from a stationary one. Bringing your services directly to your priority audience removes one more barrier to families learning about injury prevention and getting the products and skills they need to protect their families.

Why Partner with the Fire and Life Safety Community?

The fire service has a long-standing tradition of providing community education and outreach. (11) Most fire departments have strong ties to their communities, and fire personnel are well-regarded and trusted as experts in fire and life safety. A solid foundation exists in many communities upon which to expand the scope of topics beyond fire and burn prevention to address the full gamut of childhood injuries.

Of course, the fire services not your only possible partner. You need to consider the resources and needs in your community to find the partner of partners that make the most sense for you.

Why Partnerships are Key?

About 22 children die every day of an injury—from Bangor, Maine to Boca Raton, Florida and from Seattle, Washington to Sacramento, California—throughout the United States. Perhaps because these incidents are widely distributed, occurring in relative isolation from one another and resulting from different types of injuries, they are allowed to “fly under the radar”

of the individuals who are charged with the safety of children. Imagine if these 22 children died together in a classroom fire, a school bus crash, or a swimming incident at a community pool. School administrators, clinicians, first responders, community leaders, and parents would join forces to demand attention to the issue and—most importantly—changes to the environment that contributed to the injury event. They would work together to ensure that another group of children was not needlessly cut down in their youth. We encourage you to harness the power of partnerships to bring attention to the child injury problem in your community and the programs and services needed to address them.

Whether you work with your local fire service, children’s hospital, health department, or some other organization that addresses the needs of children, youth, and families, partnerships can help you reach your goals. Sharing expertise, resources, and access to your priority audience are examples of why partnerships are helpful. The CARES Safety Center’s primary partner was the fire department, but we had the help of many other organizations to start the Center (see list of partners on page 7). In fact, many of these partners still work with us to sustain our program.

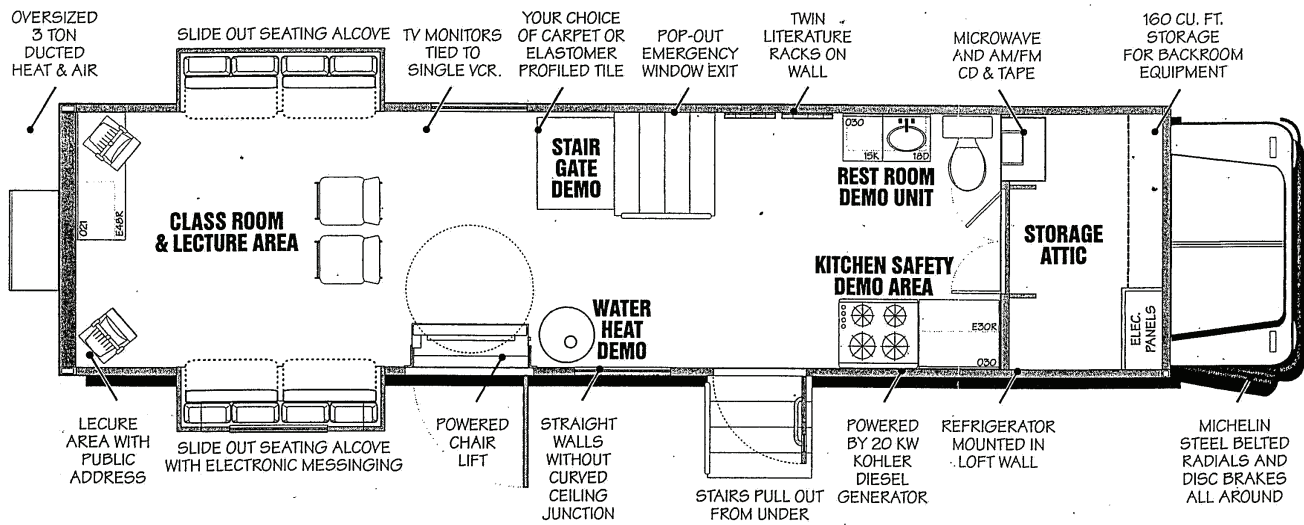


Figure 1. Early rendering of the mobile safety center

SNAPSHOT OF THE JOHNS HOPKINS CARES SAFETY CENTER

The CARES Safety Center was designed to address some of the most serious causes of household and traffic injuries to young children. The 40-foot long truck houses more than 20 engaging and interactive educational exhibits. These exhibits highlight common household hazards and teach parents and children how to avoid or mitigate household injuries. Education is primarily targeted to parents and other adult caretakers of children, but CARES educators also utilize a curriculum to directly teach children using developmentally appropriate safety messages.

Scald/Burn Prevention.

A life-size stove and wooden silhouette of a toddler (see Fig. 2) are used to talk with visitors about scald/burn prevention. Visitors are asked to place a pot on the stove. When the pot is placed on the front burner (a risk for scald/burn injuries in children), a red light indicates an unsafe behavior. When the pot is moved to the back burner, the light turns green to indicate a safer behavior. Adults also learn how to adjust the temperature settings using a real water heater (not pictured) and see an exhibit demonstrating how children's skin is more sensitive to hot water than adults' skin (see Fig. 3).

Fire Prevention.

A replica of a child's bedroom is used to teach fire escape skills (not pictured). A smoke alarm is activated by a smoke machine so educators can demonstrate how to crawl low to the ground to escape the smoke. A heating element in the door is used to teach adults and children how to determine if it is safe to exit a room. Developing a fire escape plan and installing smoke alarms in the home are other important safety messages targeted to adult visitors.

Choking Prevention.

Small toys and life-like models of an infant, toddler, and adult (not pictured) are used to show how human anatomy contributes to choking risks in small children.

Poison Prevention.

Visitors are asked to identify potential poisons in the Center's kitchen (see Fig. 4) and bathroom exhibits (not pictured), and they learn ways to reduce poisoning risks in their home through proper storage of hazardous items.

Strangulation Prevention.

A window blind exhibit (not pictured) shows the potential strangulation risk they may pose. Educators focus on teaching parents what they can do to minimize or remove those risks.

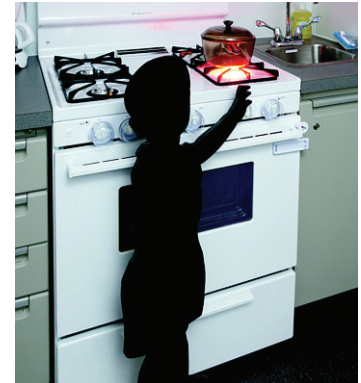


Figure 2. Fire and Scald/Burn Prevention exhibit



Figure 3. Scald/Burn Prevention exhibit



Figure 4. Poison Prevention exhibit

Educational Protocols and Training Materials.

CARES educators receive comprehensive training in a wide variety of injury control topics. Training ranges from reviewing in-house curricula highlighting core educational messages for each exhibit to participation in the Johns Hopkins [Summer Institute in Injury Prevention Principles and Practice](#) to learn about the field and strategic planning for prevention programs. CARES educators may also receive certifications from outside agencies for expertise in child passenger safety and health education.

Data Collection and Evaluation.

Data collection and evaluation are critical to the proper design, management, and evaluation of the safety center. (12) Formative, process, and impact evaluation help build better program strategies, ensure they are implemented with fidelity, and help direct resources in ways that are most likely to be effective. Our formative evaluation involved conducting focus groups with priority audiences, scanning the environment for existing resources, and reviewing the literature for best practice approaches. For process evaluation, our program needs must be balanced with our concern to not overburden visitors. Administrative protocols dictate the type and amount of information to be collected. Standard process indicators such as number of visitors per event, services rendered, and financial transactions are documented as a matter of routine practice. CARES was also involved in a research study to measure its impact early in its history, and more detailed information was collected from clients to evaluate impacts on knowledge, attitudes, and safety behaviors.(13) These evaluations were conducted with appropriate approval and monitoring by our institutional review board.

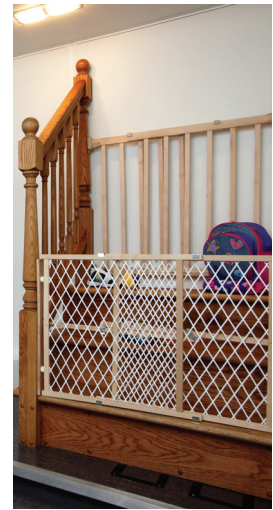


Figure 5. Fall Prevention exhibit

Fall Prevention.

A mock staircase is used to highlight fall risks on stairs (see Fig. 5). Visitors learn to keep stairs uncluttered and well lit. Stair gates are recommended and kept on hand so parents can learn how to properly position and use them. A window (not pictured) is used to highlight potential fall risks and to discuss ways to prevent children from accessing windows.

Safe Sleep.

To demonstrate an unsafe sleep environment for infants, this exhibit (not pictured) includes a portable crib, infant doll, blanket, pillow, stuffed animals and some hard toys. Educators highlight the need for infants to sleep alone, on their back and in a crib with no soft bedding or other objects.



Figure 6. Child Passenger Safety exhibit

Child Passenger Safety.

Center educators are certified child passenger safety technicians. They help adults select the proper seat for their child. They use a demonstration seat (see Fig. 6) to educate adults about proper installation and use of safety seats. Such services are critical, as research indicates that most car safety seats are either installed or used incorrectly.

Safety Products and Educational Materials.

All of the safety products (not pictured) demonstrated by the safety educators are sold at below-retail cost at the Center. Free services, such as car safety seat checks and referrals to the Fire Department's smoke alarm distribution and installation program, are also available. Educational brochures (see Fig. 7), designed specifically for use at the Center, are provided free of charge and reinforce the prevention messages learned during a family's visit. Much effort was directed at understanding the cultural background and reading ability of our priority audiences. Educational materials were pre-tested and written for low-literacy and urban audiences.



Figure 7. Education Materials exhibit

DAY TO DAY DETAILS: INTERVIEWS WITH CARES PARTNERSHIP MEMBERS

Eileen M. McDonald, Principal Investigator, JHCIRP

Q: To what do you attribute the overall success of the CARES Safety Center and its partnership?

A: A clear vision, a committed group of partners, and a leap of faith. Our idea was relatively simple: develop a mobile safety center that could spread injury prevention messages and safety products in the community. But our reality was a little more daunting. Whenever we experienced a major barrier, one partner would offer the solution. I recall when we received our first financial support – a significant sum of money, but not all that we needed to purchase the vehicle, our fire partner bravely said, “you have to take a leap of faith”— and we did!

Q: No one had done a project like this before. How did you know what success was?

A: We defined it for ourselves. As a group, we identified our shared mission, goals, and objectives. At the same time, we asked partners to articulate their individual priorities so we could keep an eye on both the big picture (our shared mission) as well as partners’ individual needs.

Q: How do you support and sustain the safety center?

A: CARES is supported through a variety of federal research and service grants, foundation support, and in-kind contributions from partners. JHCIRP and BCFD assume priority responsibility for sustaining the safety center. While it hasn’t been an easy task, both agencies have been successful, either individually or collectively, in attracting support for CARES.

Shawn Belton, Fire Marshal, Baltimore City Fire Department

Q: How is CARES perceived in the fire service?

A: Locally, we’ve been blessed to have the support from the very top leaders in the BCFD. Even though we have had four fire chiefs over the lifespan of the safety center, all have supported fire prevention activities in general and CARES in particular. More broadly, CARES was honored with the 2007 Nicholas Rosecranz Award, a national injury prevention award recognizing innovation in fire and life safety. We frequently get requests from other fire and safety professionals from around the country who are interested in developing comparable services in their communities.

Q: What advice would you give to a fire department considering starting a mobile safety center?

A: I would suggest that they not reinvent the wheel and encourage them to talk to others who are doing this work. I would strongly recommend that they explore partnership opportunities with local groups that focus on children or safety or that have a skill set or expertise not represented in their own agency. Finally, I would encourage them to ensure that they have the necessary support of leadership. This work is not easy and when it gets challenging it’s nice to know that leadership has your back.

Amanda Davani, CARES Project Director, JHCIRP

Q: How do you promote the safety center and its services?

A: We use numerous mechanisms. When we have the financial resources, we use radio, TV and billboard (see Fig. 8) spots to promote our work, often highlighting a specific injury threat. We also use a number of other low-cost promotion methods including maintaining a website with a calendar of upcoming CARES events, distributing quarterly newsletters to community agencies that serve our priority audiences, and attending community meetings to inform them about CARES. We reach out to agencies that serve our priority audiences and educate them about our free service. Word of mouth from happy clients and visitors has been another way that our center gets promoted. Finally, we try to develop relationships with local media outlets so that when a child safety-related news event happens they seek out our perspective and often remind their audience of our services.

Q: What makes for effective safety education with parents and children?

A: First, we start with a plan. We have an established curriculum that identifies priority injury areas and our core safety messages. Second, we engage our audience, whether it is a group of 3rd graders or a handful of parents and their children. We present the material in new and engaging ways, and we make it relevant to their needs by getting their input throughout their visit. We support our educational messages with access to safety products and free safety materials that reinforce their CARES experience. Finally, we have staff members who are passionate about prevention and committed to helping families keep their children safe. Families appreciate that authentic concern.

Q: How do you know your audience’s needs and wants?

A: Again, we take a multi-pronged approach. All of our work is informed by data and by best practice. We are constantly reviewing literature, attending conferences and professional meetings, and talking to experts. But, perhaps most importantly, we ask questions of CARES visitors and listen to their responses. CARES educators prioritize creating a personalized and tailored experience at the mobile safety center for our visitors, shaping the educational messages using the priority needs of the visitor.

Kevin Williams, Lieutenant & Fire Educator, Baltimore City Fire Department

Q: How do you staff the safety center? Do you use volunteers?

A: We have a core group of professionals, fire educators from BCFD, and safety educators from JHCIRP. We all get trained in the same curriculum and attend periodic refresher courses to keep abreast of the latest content and best practices. We do occasionally have volunteers, mostly from Johns Hopkins. These are public health or health education students who are interested in safety and injury prevention. They get exposed to the same orientation manual as anyone who works on the safety center. Before they are allowed to work independently on the center, they must shadow us for a period of time until we are satisfied that they know the material. It is important to us that families receive consistent and correct messages about safety topics when they visit the safety center.

Q: How do you best engage families when they visit the safety center?

A: We personalize the message and engage people as active learners. For instance, we ask people to describe their family’s fire escape plan. When they don’t identify a meeting place, we discuss options with them and help them select an appropriate meeting place outside their house. They then have the opportunity to practice “escaping” a room when the smoke alarm activates. This helps bring to life the importance of having and practicing a fire escape plan and gives them the confidence that they can perform it should the need arise.



Figure 8. Billboard advertising CARES Safety Center

CARES Safety Center Mission Statement:

Making children safer by delivering fun, interactive education and affordable safety products to the Baltimore community.

PARTNERSHIP PRIMER FOR PREVENTION

In 2004, JHCIRP approached the BCFD with the idea to integrate Hopkins' successful safety resource center model with the rich community outreach and education tradition of the Fire Department's fire safety trailer. Over time, numerous other community organizations with special expertise joined the collaboration. By the summer of 2005, the Johns Hopkins CARES Safety Center was traveling the streets of Baltimore educating parents and families about childhood safety where they live, work, worship, and play.

We formed the CARES Safety Center Partnership. After several exploratory meetings, members signed an "official" agreement that spelled out the overall partnership aims, general operating principles, and specific decision-making authority. We also agreed on a mission statement (see page 6) for the center. While some of the partner agencies had direct responsibilities for child health and safety, several partners had not previously worked on a pediatric issue. However, the expertise, strengths, and resources of each partner were used to develop, fund, build, or otherwise contribute to the safety center (see chart below for more details).

Funding Partners

Arguably our most important partners are our funding partners. Without their support, the CARES Safety Center would have never gotten on the road, nor been sustained for all these years. Foundation support was pursued to cover the costs related to purchasing the vehicle, developing the exhibits and securing the

inventory of child safety products. Research funding was pursued to develop the educational protocols and curricula used on the center, to hire and train staff, and to conduct various evaluation studies to answer certain questions about the feasibility and impact of the safety center with different audiences. Our diverse partnership group allowed us to follow a funding strategy that allowed individual members to seek funding from organizations with which they had a shared mission or a prior relationship. Because multiple partners could go after funding from different sources simultaneously, it increased our chance for success. As the CARES Safety Center continues to evolve and identify new injury problems or new priority audiences, we are always exploring new possible funding partners with which to collaborate. Below is a list of former and current funders of the CARES Safety Center.

- Annie Casey Foundation
- BP
- CareFirst Blue Cross Blue Shield of Maryland
- Centers for Disease Control and Prevention
- Johns Hopkins Center for Injury Research and Policy
- Johns Hopkins Pediatric Trauma Service
Federal Emergency Management Association
- The Associated: Jewish Community Federation of Baltimore

The Johns Hopkins CARES Safety Center Partnership

Johns Hopkins Center for Injury Research and Policy: Provides overall leadership and administrative support to partnership; assumes primary responsibility for CARES staffing, scheduling, curriculum, and evaluation

Baltimore City Fire Department: Assumes primary responsibility for CARES vehicle-related maintenance and operations; provides fire educators for the program

Maryland Institute College of Art: Contributed to conceptual design of CARES vehicle as well as educational exhibits; created graphics for use on the outside of the vehicle and for promotional materials

Maryland Science Center: Consulted on the design of educational exhibits used inside CARES

Johns Hopkins Pediatric Trauma Service: Provided data from pediatric trauma registry to help define the burden of injury in Baltimore; solicited first major donation that enabled the partnership to purchase the vehicle

Injury Free Coalition for Kids of Baltimore: Contributed to initial brainstorming sessions to create the CARES Safety Center and program; provided parent advisory group who offered input throughout the design and implementation stages

Johns Hopkins Children's Safety Center: Assumed lead responsibility for CARES curriculum and educator training protocol; shared administrative and educational protocols successfully used in stationary safety center



Figure 9. Safety Center partners celebrating arrival of CARES vehicle

TEN TIPS FOR PRODUCTIVE PARTNERSHIPS

The Johns Hopkins CARES Safety Center Partnership has been successfully working together to implement, evaluate, enhance, and sustain the center since 2004. We offer these 10 tips for partnerships:

- 1. Think broadly.** Be creative and open when considering whom to invite to the table as possible partners. Who wouldn't want to work on a program whose goal is to keep children safe?
- 2. Aspire boldly.** Be audacious and bold when developing the goals for your program. Is even one injury-related death of a child acceptable?
- 3. Plan strategically.** Be clear and strategic in your partnership's goals. Fuzzy goals are not conducive to effective partnerships; everyone must share a clear vision, and tasks must be clearly defined and assigned.
- 4. Define specifically.** Be exacting and precise in your work; this goes beyond writing SMART objectives for your program. Careful attention to detail and accuracy is critical in any community program in which content is at the core. Ensure your messages and strategies are consistent with best practice recommendations.
- 5. Act respectfully.** Be respectful with and considerate of your partners. It is likely that you will have differences of opinion over the course of your partnership. Focus on your common goal rather than on any differences.
- 6. Meet judiciously.** Be careful with and respectful of your partners' time. No one has time to waste, and nothing erodes partners' enthusiasm more than unnecessary or unproductive meetings.
- 7. Communicate frequently.** Be timely and frequent with partner communication. Share meeting minutes to keep partners informed. Use technology to share important information with partners between or instead of meetings to keep everyone engaged and informed of partnership tasks, accomplishments, and needs.
- 8. Share generously.** Be authentic and generous in acknowledging partners' contributions to the overall project.
- 9. Assess periodically.** Be sure to assess and evaluate the partnership and your program regularly. Nothing stays the same, and without careful monitoring, the partnership may go astray.
- 10. Celebrate frequently.** Be quick to acknowledge and celebrate even small successes. Make certain all partners' efforts are noted.

EVOLUTION AND EVALUATION OF THE SAFETY RESOURCE CENTER MODEL AT JOHNS HOPKINS

Johns Hopkins Children's Safety Center

JHCIRP opened the Johns Hopkins Children's Safety Center in 1997 as the first hospital-based safety resource center in the United States (see Fig. 10). Its inspiration came from the Royal Children's Hospital in Melbourne, Australia, which opened its safety center in 1979. With leadership support from both the Johns Hopkins Children's Center and the Department of Pediatrics, a 6 x 9 foot space was made available that was close to both the pediatric primary care clinic and the pediatric emergency department. Formative work (12) clarified audience needs and guided center development. Pediatricians referred families to the CSC for assistance with various child safety topics, although anyone was welcome to visit for:

- Personalized and tailored safety education by knowledgeable safety educators
- Access to known effective safety products at reduced or no cost
- Opportunities for hands-on practice with safety products to ensure their correct use

A randomized controlled trial was conducted in the first three years of the CSC's existence to study its impact.(14) Numerous process indicators continue to be routinely tracked to monitor progress and needs. (12) At the conclusion of the trial, enthusiasm was strong to maintain the safety center as a community service. Funds were sought from within and outside the Johns Hopkins institution to sustain and grow it. The CSC continued to draw visitors from the pediatric primary care clinic and emergency department, but



Figure 11. Children's Safety Center in its newest home

CSC staff members were encouraged to reach out to other patients. CSC educators initiated visits to injured patients' hospital rooms to talk about preventing future injuries. We took control of a once-monthly infant car seat loaner program and expanded its services (low-cost sales and installations), its inventory (infant, convertible, combination and booster seats), and its frequency (operating five days per week). The CSC team also developed new services and educational materials to cover more injury topics.

In 2012, the new Charlotte Bloomberg Children's Center was opened, and the old children's hospital space was dismantled. The CSC operated out of this new location for about a year but was ultimately moved to the Harriet Lane primary care clinic (see Fig. 11).



Figure 10. Baltimore Sun news article

Major CSC Evaluation Findings

- Process indicators document that more than 22,000 families have been served by the CSC.
- Child passenger safety issues are among our most requested services.
- CSC served as a major referral source to the fire department's free smoke alarm program.

From the evaluation trial, we learned:

- Pediatrician's injury prevention counseling was enhanced through training in patient-provider communication skills.(14)
- Counseling about injury prevention improved parent satisfaction, but it was not sufficient to change parents' home safety behaviors.(14)
- Parents who received counseling from their pediatricians and who visited the CSC improved their home safety behaviors. (6)

Johns Hopkins CARES Safety Center

Although the CSC model was successful, we also realized that many families were still being missed and other interventions were needed to reach more parents. We needed to extend the reach of the hospital-based safety center into the community. Thus, the CARES Safety Center was born. Since its grand opening in summer 2004, CARES has been traveling the streets of Baltimore promoting child safety, distributing safety products, and educating adults and children.

Evaluation strategies used on CARES include routinely captured program monitoring and utilization data. Satisfaction surveys are completed periodically by visitors; and we studied the Center's impact on families' knowledge and use of safety products.(5, 13) The impact evaluation was conducted during the first three years of operation with a local Medicaid managed care pediatrics practice to determine if CARES was an effective strategy for disseminating proven effective safety products and injury prevention information.

Major CARES Evaluation Findings

- Utilization data reveal that CARES attends an average of 84 community events per year and reaches thousands of children and adults each year. (15)
- Utilization of CARES varies under different circumstances, with more visitors at community events but more products distributed when CARES is partnered with a health care facility. (13)
- Survey results document high levels of visitor satisfaction, with 96% reporting learning something new and 98% indicating they would recommend CARES to others. (5)
- CARES holds promise for enhancing the appeal of safety information and increasing the protection of children. (5, 13)



Figure 12. CARES Safety Center

KEY FEATURES OF A SAFETY RESOURCE CENTER

After two decades of creating and sustaining safety resource centers, we have identified key features of the safety center model:

- Interactive educational exhibits are important for engaging families and ensuring they learn the injury prevention information
- Educational materials need to be sensitive to cultural and literacy issues of different audiences
- Expert safety educators who provide advice tailored to individuals' needs are effective communicators who can reinforce physician advice

- Access to affordable safety products is critical to make sure families can take action on the advice they receive
- Innovative partnerships are essential and add to efficiency and effectiveness
- Monitoring and evaluation need to be planned for from the beginning and maintained over time

Of course, costs are another inevitable part of a mobile safety center. Many people ask us for our costs, but since we started in 2004, those are not meaningful today. To assist you in your planning for a mobile safety center, we offer a variety of both one time and continuing costs to help inform your planning and fundraising needs (see Table 1).

Vehicle Costs	Safety Product Inventory
<ul style="list-style-type: none"> • Purchase, lease or rental fees • Insurance and maintenance fees • Gas • Design and application of graphics (Name, images, logo, etc) to decorate outside of vehicle 	<p>Alarms</p> <ul style="list-style-type: none"> • Carbon Monoxide Alarms • Smoke Alarms <p>Appliances & Furniture</p> <ul style="list-style-type: none"> • Adapter & Plug Covers • Cabinet & Drawer Latches • Cabinet Slide Locks • Furniture Corner Cushions • Furniture Wall Straps • Stair Gates - Top & Bottom <p>Doors & Windows</p> <ul style="list-style-type: none"> • Finger Pinch Guards • Window Blind Cord Wind-Ups • Window Locks <p>Kitchen & Bathroom</p> <ul style="list-style-type: none"> • Bathtub Decals • Bathtub Thermometers • Magnetic Tot Locks • Oven Locks • Stove Knob Covers • Toilet Lock Covers <p>Other</p> <ul style="list-style-type: none"> • Bike Helmets • Child Passenger Safety Seats • Sleep Sack Wearable Blankets
<p>Educational Exhibits</p> <ul style="list-style-type: none"> • In-house or external contractor • Volunteer (consider local theaters, vocational-technical schools, children's or science museums) • Digital screens, DVD players 	
<p>Educational Materials</p> <ul style="list-style-type: none"> • Training and orientation manuals for staff • Brochures and fact sheets for distribution 	
<p>Administrative Costs</p> <ul style="list-style-type: none"> • Project database to track project metrics (visitors, sales, evaluation reports, annual reports, etc) • IRB reviews • Staff liability insurance • Promotional costs (radio, tv, print ads; newsletters; visitor give-aways) 	
<p>Personnel Costs</p> <ul style="list-style-type: none"> • Supervisor's salary • Staff salaries or volunteers • Travel reimbursement costs 	

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