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# HEALTH PLAN APPROACHES TO CHILD INJURY PREVENTION

## EDUCATION DEVELOPMENT CENTER, INC. & NIHCM FOUNDATION ISSUE BRIEF JULY 2015

According to the Centers for Disease Control and Prevention (CDC), unintentional injuries remain the leading cause of death among 0-19 year olds.<sup>1</sup> Health plans can be important partners in the prevention of child injuries given their access to millions of Americans insured through both public and private insurance plans. Health plans can:

- inform health care professionals and families about the toll of injuries,
- encourage physicians to use *Bright Futures* and provide age-appropriate injury prevention guidance to families,
- support evidence-based prevention practices, and
- promote the use of and access to safety devices.

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*"If we operate off of the premise that [injuries] can be prevented, then the opportunities are vast through our plans and our Foundations."*

— Yvonne Cook, Highmark Foundation

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This issue brief presents the Centers for Disease Control and Prevention's (CDC) National Action Plan for Child Injury Prevention (NAP); highlights the prevalence and cost of injuries; shares examples of current health plan child injury prevention activities; and offers opportunities for future action.

### THE NATIONAL ACTION PLAN FOR CHILD INJURY PREVENTION

Injuries and associated disability and death are preventable through education, environmental modification, effective policy-making, and enforcement of evidence-based interventions. The CDC's National Center for Injury Prevention and Control (NCIPC) led an effort to develop the NAP to support solutions that will save lives and help children live to their fullest potential. The overall goals of the NAP are to lay out a vision to guide actions pivotal to reducing childhood injuries and provide a platform for organizing and implementing future child injury prevention activities.

The NAP seeks to:

- increase awareness about the magnitude, risk factors, and effects of child injuries,
- identify opportunities that draw attention to the preventability of child injury and unite stakeholders around a common set of goals and strategies,

- create recommendations to accelerate child injury prevention efforts through improved data and surveillance, research, communication, education and training, health systems and health care, and policy, and
- develop and mobilize actions to reduce child injuries.

Recognizing that health plans are important partners in reducing the burden of childhood injuries, the CDC funded the Education Development Center, Inc. (EDC) who subcontracted with the National Institute for Health Care Management (NIHCM) Foundation to explore the feasibility of implementing two strategies contained in the NAP. The two strategies are:

- implement child unintentional injury prevention programs through community-based prevention programs and through *Bright Futures*, and
- promote use of safety devices, such as child safety seats, as "durable medical equipment" so they can be prescribed and are reimbursable.

NIHCM and EDC utilized an environmental scan and two webinars with health plan and health plan foundation representatives to:

- understand current health plan injury prevention activities,
- raise awareness of the importance of child injury prevention (CIP), and
- explore opportunities and challenges to implementing CIP activities.

Through the scan and during the webinars, health plans indicated a need for data and information to make the case for investing in CIP, identified CIP-related activities that are most feasible for them to implement, and offered specific examples of activities currently underway.

The sections that follow share data and highlight current and potential ways health plans can further the goals of the NAP by developing, implementing, and evaluating evidence-informed practices to decrease the incidence and severity of injury.

## WHY ARE INJURIES A CAUSE FOR CONCERN?

Injuries are not "accidents," and the majority of injuries are preventable. This section highlights data on the prevalence, causes, locations and costs of child injuries and can be used by health plans and other stakeholders to draw attention to the need for additional investments in injury prevention.

### Prevalence of Child Injuries<sup>2</sup>

- In 2013 more than 8.3 million children were treated for injuries in hospital emergency departments (ED).
- More than 150,000 children were hospitalized for injuries in 2013.
- In 2012 more than 8,000 children died from injuries, which is equal to 150 school buses filled with children.

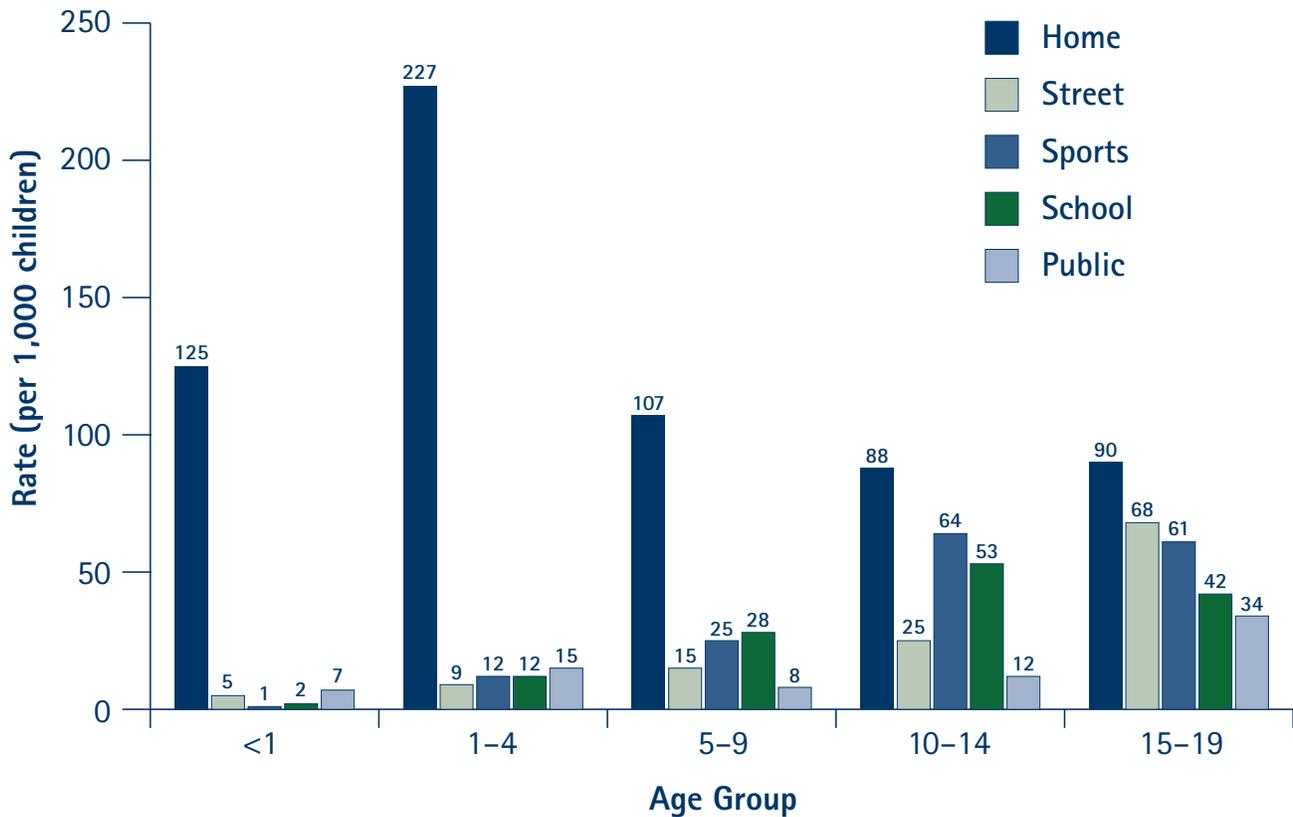
### Causes and Locations of Unintentional Child Injuries<sup>3</sup>

- In 2008 most injury-related ED visits for children were due to injuries sustained in the home. (Figure 1).
- Youth ages 10-19 had an increasing likelihood of being injured outside of the home on the street, in sports or at school (Figure 1).
- The primary cause of home injuries for ages 1-4 was falling from beds.
- The leading products associated with injuries outside of the home for ages 10-19 were footballs, bicycles and basketballs.

### Cost of Unintentional Injuries

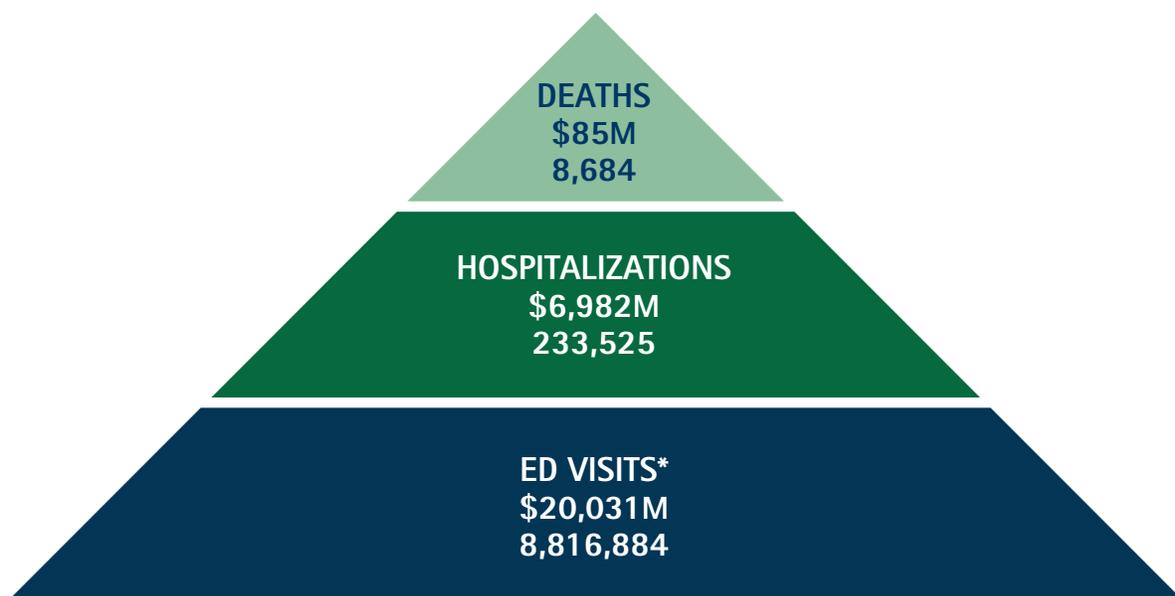
As shown in Figure 2, the cost of ED visits and hospitalizations for child injuries totaled more than \$26 billion in 2010. In addition to these costs, many children are also treated in a physician's office at an additional cost to families, employers, health plans and the health care system.

FIGURE 1: INJURY RATE PER 1,000 CHILDREN BY LOCATION OF INJURY (ED VISITS), 2008



Source: 2008 National Electronic Injury Surveillance System – All Injury Program

FIGURE 2: UNINTENTIONAL INJURY MEDICAL COSTS AND INCIDENCE: ED VISITS, DEATHS, HOSPITALIZATIONS, AGE 0-19, 2010



\*Treated and Released

Source: CDC WISQARS, Cost of Injury Reports, 2010 Incidence and Dollars

## Cost-benefit Analysis of Injury Prevention Programs

We know a great deal about what works to prevent injuries to children. The estimated cost savings by select child injury interventions are described in Figure 3 below.

**FIGURE 3: COST SAVINGS OF SELECTED CHILD INJURY PREVENTION STRATEGIES**

Every Dollar Spent On	Saves Society (in 2013 dollars)
Childproof Cigarette Lighter	\$77
Booster Seat	\$71
Bicycle Helmet	\$48
Child Safety Seat	\$42
Zero Alcohol Tolerance, Driver Under 21	\$25
Alkaline-Battery-Operated Smoke Alarm Voluntary Use	\$18
Pediatrician Counseling	\$9
Poison Control Center	\$8

Source: Children's Safety Network, Injury Prevention: What Works? A summary of cost outcome analysis for injury prevention programs (2014).

## HEALTH PLANS IN ACTION

This section highlights examples of the current ways health plans and health plan foundations are supporting child injury prevention. It includes examples of programs for: 1) members and 2) communities.

### Programs for Members

**Support home visitation programs:** Home visitation programs connect parents and their children with trained health care providers who provide services and education during pregnancy and early childhood, including injury risk assessment and education about prevention strategies. Health plans can consider offering home visits to their members through either Medicaid managed care or private insurance. For example, Blue Cross Blue Shield of Vermont's Better Beginnings program offers three post-delivery visits from a visiting nurse.<sup>4</sup>

### RESOURCES:

The American College of Preventive Medicine has developed an "Infant and Early Childhood Injury Risk Assessment Tool for Home Visitation Staff." For additional information contact Paul Bonta at [pbonta@acpm.org](mailto:pbonta@acpm.org).

The Health Resources and Services Administration's Maternal and Child Health Bureau has identified 13 evidence-based home visiting models. More information is available at <http://mchb.hrsa.gov/programs/homevisiting/models.html>.

**Offer rewards or discounts for purchase of car safety seats:** As discussed earlier in this brief, the proper use of car seats reduces the risk of injury and death and has been shown to achieve significant cost savings for society. According to the Department of Transportation's National Highway Traffic Safety Administration (NHTSA), more than a third of children under age 13 who died in passenger vehicle crashes in 2011 were not in car seats or wearing seat belts.<sup>5</sup> The American Academy of Pediatrics (AAP) recommends the use of car safety and booster seats for most children up to eight years of age.<sup>6</sup> Many health plans offer discounts or gift cards for the purchase of child safety equipment. For example, some health plans offer members a 15 percent discount on their purchase of safety equipment with a special member discount code for safety websites such as Safe Beginnings, an online catalog of childproofing products.

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*"The more that we can put child injury in the context of a public health issue, the better we are positioning it [CIP] internally and externally."*

— Yvonne Cook, Highmark Foundation

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**Blue Cross and Blue Shield of Minnesota** offers reimbursement for select members who purchase a car safety seat for their child. Car safety seats have been shown to deliver a high return on investment for health plans that offer them to members.<sup>7</sup> Learn more at [www.bluecrossmn.com/cs/jsp/programs/download.jsp?docid=1320181692167](http://www.bluecrossmn.com/cs/jsp/programs/download.jsp?docid=1320181692167).

#### RESOURCES:

Safe Beginnings <http://www.safebeginnings.com/index.asp>

Children's Safety Network National Injury and Violence Prevention Resource Center <http://www.childrenssafetynetwork.org>

Safe Kids Worldwide <http://www.safekids.org>

**Highmark Foundation** has a long history of commitment to children's health, particularly injury and violence prevention, through their specific focus on bullying prevention among children and youth. As a result of learning about the CDC's NAP and the cost and health impacts of child injuries, they developed a focus on CIP as part of their 2014 grantmaking in Pennsylvania and West Virginia. The Highmark Foundation provided examples of ways that schools may use funds to promote injury prevention including concussion screening and prevention activities, CPR courses, youth decision skills programs, and activities designed to promote an environment of safety in schools. The addition of CIP in the grant program has resulted in new projects, several of which are focused on CIP activities. Read about these activities at <http://www.highmarkfoundation.org>.

## Communities

**Incorporate child injury prevention as a focus area for foundation grantmaking and health plan corporate giving:** Health plan foundations and health plan corporate giving programs are committed to improving the health of the communities in their respective markets by investing in local programs and organizations. Many health plan foundations fund community programs to improve children's health, such as child obesity prevention programs focused on increasing levels of physical activity. There may be opportunities to incorporate a specific focus on

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*"If a disease were killing our children in the proportions that injuries are, people would be outraged and demand that this killer be stopped."*

— Former Surgeon General C. Everett Koop

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**Arkansas Blue Cross Blue Shield** shares child safety information through their Blue & You newsletter. The quarterly magazine reaches approximately 400,000 members, providers and others in Arkansas and across the country.

**Health Care Service Corporation** developed a public health and wellness website that uses real-life video and the power of storytelling to deliver important health prevention messages. The website, BeSmart. BeWell. (BSBW) ([www.besmartbewell.com](http://www.besmartbewell.com)) includes specific CIP messaging developed in partnership with the CDC.

One BSBW video features a traumatic brain injury (TBI) expert from CDC who discusses TBI causes and prevention. Another video features the real-life story of the daily struggles faced by a man who suffered a TBI after falling from his bicycle. The video is meant to be a precautionary tale to emphasize the importance of helmet usage. View videos and learn more at [www.besmartbewell.com/](http://www.besmartbewell.com/).

**RESOURCES:**

CDC Injury Prevention messages: <http://www.cdc.gov/injury/index.html> and <http://www.cdc.gov/safekids/>

Safe Kids Worldwide messages: <http://www.safekids.org>

Children's Safety Network National Injury and Violence Prevention Resource Center <http://www.childrensafetynetwork.org>

Prevent Child Injury toolkits and resources: <http://www.preventchildinjury.org>

education and training on child injury prevention, including the proper use of protective equipment, through these grantmaking programs.

**Include child injury prevention messages in social media and other communications:** Most health plans have a social media presence and strategy to interact with their members and the broader community and share important health messages. Sharing educational messages about CIP is one way that health plans can quickly disseminate this important information to a wide audience. In addition, they can leverage existing messaging developed by the CDC, Children's Safety Network National Injury and Violence Prevention Resource Center (CSN), Safe Kids Worldwide, and other trusted sources of information. Health plan newsletters and websites or partnerships on public service announcements are additional communication vehicles for health plans.

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*"We embrace new ideas and new partnerships to propel our health and wellness education efforts."*

— Katie Hocking, Health Care Service Corporation

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## ADDITIONAL HEALTH PLAN OPPORTUNITIES AND RESOURCES

This section highlights other opportunities for health plans and health plan foundations to support child injury prevention. It includes examples of programs for: 1) health care providers and 2) employers.

### Programs for Health Care Providers

**Promote the use of *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents among network providers*:** The mission of *Bright Futures* is to promote and improve the health, education and well-being of infants, children, adolescents, families and communities. Injury is discussed at all of the 31 recommended visits from birth through adolescence. *Bright Futures* helps providers by prioritizing injury topics by age and development and providing accurate, AAP-policy-based language providers can use to communicate information to families.

#### RESOURCE:

The core tools of *Bright Futures* include pre-visit questionnaires and documentation forms for providers and parent/patient handouts. They can be accessed at <http://brightfutures.aap.org/>.

**Partner with hospitals and trauma centers:** Both children treated for an injury in the emergency room and their siblings are at an increased risk for a return ER visit for injury within three months.<sup>8,9</sup> According to the CDC's NAP, a strategy to reduce this risk is for health plans and other stakeholders to establish partnerships with hospitals for integrated follow-up care and education after discharge. This intervention benefits not only the patient, but also any siblings who may be at risk for injury due to their home environment.

Trauma centers care for severely injured people and are required to have someone in a leadership position who has injury prevention as part of their job description. All trauma centers must have an organized and effective approach to injury prevention, prioritize efforts based on local data, and include partnerships with other

The Children's Hospital Association developed a mechanism to test the feasibility of collecting data from the network of children's hospitals that operate safety centers to drive program evaluation and inform replication strategies. The project identified the challenges for ongoing data collection efforts and opportunities to promote benefits of the safety centers. For more information contact: Karen Seaver Hill at [Karen.Hill@childrenshospitals.org](mailto:Karen.Hill@childrenshospitals.org).

community organizations.<sup>10</sup> Health plans can explore partnerships with hospitals and trauma centers to ensure critical information on child injury prevention is conveyed to children and their families.

#### RESOURCES:

Find your local Trauma Centers through the American Trauma Society at <http://www.amtrauma.org/>.

**Incorporate child injury prevention into current health plan programs:** Health plans offer prenatal or maternity programs to provide comprehensive education to expectant mothers. There are opportunities to incorporate injury prevention education and messaging during pregnancy and postpartum since these programs connect directly with members through telephonic counseling with registered nurses, educational mailings, and online materials. The AAP and CDC, among others, have developed educational resources and tools that can be adapted for use by health plans.

#### RESOURCES:

*Bright Futures*: <http://brightfutures.aap.org/>.

CDC: <http://www.cdc.gov/safechild/>.

Text4Baby provides free text messages on prenatal care, infant injury prevention, infant health, parenting and more: <https://text4baby.org/>.

#### Share the AAP's HealthyChildren.org Website:

HealthyChildren.org is a parenting website created by the AAP. It is also available as a free app for Apple and Android smartphones and tablets. The website supports *Bright Futures* anticipatory guidance by providing more in-depth content on topics covered in the provider visit. Providers can interface their practice websites with the site and refer families directly to the site.

#### RESOURCES:

Logos, banner ads, flyers, posters, screensavers and more tools to link families to the website are available at <http://www.healthychildren.org/english/our-mission/Pages/Spread-the-Word.aspx>.

Prevent Child Injury also provides a variety of resources and information on injury prevention topics at [www.preventchildinjury.org](http://www.preventchildinjury.org).

#### Disseminate the Family Voices *Bright Futures* family pocket guide:

Developed in partnership with the AAP, Family Voices created this pocket guide based on *Bright Futures: Guidelines for the Health Supervision of Infants, Children, and Adolescents* as a resource to help parents navigate health and wellness information for their children. Similar to *Bright Futures*, the pocket guide includes specific content around the theme of promoting safety and injury prevention.

#### RESOURCE:

You can order the Family Voices *Bright Futures* Family Pocket Guide, 2nd Ed by calling 1-888-835-5669 or visiting [https://org2.democracyinaction.org/o/6739/t/11331/shop/shop.jsp?storefront\\_KEY=347](https://org2.democracyinaction.org/o/6739/t/11331/shop/shop.jsp?storefront_KEY=347).

#### Programs for Employers

##### Provide tools to educate employees on the importance of safety devices:

Employers communicate with their employees about health promotion and health care and can share information about injury prevention activities for themselves and their families.<sup>11</sup>

The National Safety Council is working with employers to integrate child injury prevention into existing workplace safety and health programs; create tools for employers to address teen driving safety and childhood unintentional poisonings; engage parents and caregivers to prevent child injury; and strengthen linkages between employers and public health programs such as CDC's "Protect the Ones You Love" campaign, teen driving coalitions and parent education resources. For more information contact Kim Youngblood at [Kimberly.Youngblood@nsc.org](mailto:Kimberly.Youngblood@nsc.org)

#### RESOURCES:

National Safety Council: <http://www.nsc.org/pages/home.aspx>

CDC's Protect the Ones You Love campaign resource: [www.cdc.gov/ncipc](http://www.cdc.gov/ncipc)

### Additional Opportunities

Further opportunities for how health plans can prevent child injuries strategies are provided below.

- Form a safety coalition or committee and/or join an existing safety coalition. Find contact information for the Injury and Violence Prevention Director in your state at <http://www.childrensafetynetwork.org/states>
- Consider ways to use health plan data to guide injury prevention efforts internally or to support coalitions.
- Offer training programs around CIP for employees, members, parents, caregivers, etc.
- Use local news or events as an opportunity to share CIP messaging.
- Partner with local businesses to offer training or discounts on child passenger safety seats/booster seats, provide smoke alarms to fire departments for distribution in communities at risk, and/or provide a home safety check-list to families.

- Partner with schools to use data effectively to determine the needs for CIP. An example at a state level can be found at <http://www.health.utah.gov/vipp/schoolinjuries/overview.html>.
- Partner with state or local health departments to develop and implement a state plan to reduce injuries.
- Provide opportunities for community members, including students, to learn CPR.

### CONCLUSION

Decreasing the burden of unintentional child injuries in the U.S. requires action by all stakeholders responsible for the health and safety of children. Health plans and health plan foundations can be unique leaders in those efforts since their activities span both the clinical care and community settings and their partners include health care providers, employers, national and community organizations, and families. The information in this issue brief is intended to spark new ideas for starting and/or expanding efforts to reduce the number and severity of injuries to children and youth. Success in CIP is not only critical for the health of the nation's children, it can also result in a significant reduction in health care costs paid by families, insurance companies, federal, state and local governments, and society.

### RESOURCES

#### Centers for Disease Control and Prevention (CDC):

- National Action Plan for Child Injury Prevention: An Agenda to Prevent Injuries and Promote the Safety of Children and Adolescent in the United States 2012. Available at <http://www.cdc.gov/safechild>
- National Center for Injury Prevention and Control: <http://www.cdc.gov/Injury>
- WISQARS™ (Web-based Injury Statistics Query and Reporting System): <http://www.cdc.gov/injury/wisqars/index.html>

### EDC and National Institute for Health Care Management (NIHCM) Webinars:

- Recording for 8/21/13 Meeting: <http://edc.adobeconnect.com/p3z982wt336/>
- Recording for 8/26/13 Meeting: <http://edc.adobeconnect.com/p9u5z8uuvpf/>

### Children's Safety Network National Injury and Violence Prevention Resource Center (CSN):

- Children's Safety Network Homepage: <http://www.childrendefinesafety.org>
- What Works: <http://www.childrendefinesafety.org/publications/whatworks2014>
- State Data & Contacts: <http://www.childrendefinesafety.org/states>

### Safe Kids Worldwide:

- <http://www.safekids.org>

For more information about child injury prevention and to share your stories about preventing child injuries, please contact us at [nihcm@nichm.org](mailto:nihcm@nichm.org) or [CSNinfo@edc.org](mailto:CSNinfo@edc.org)

### ENDNOTES

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## **ABOUT NIHCM FOUNDATION**

The National Institute for Health Care Management (NIHCM) Foundation is a nonprofit, nonpartisan research and educational foundation dedicated to improving the effectiveness, efficiency and quality of the U.S. health care system.

## **ABOUT EDC, INC.**

EDC designs, implements, and evaluates programs to improve education, health, and economic opportunity worldwide. Collaborating with both public and private partners, we strive for a world where all people are empowered to live healthy, productive lives.

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