

## The Vaccine That Prevents “Accidents”

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As a Professor of Surgery and Pediatrics, and Director of Trauma and Burn Services at Children’s National Medical Center in Washington, D.C., every day I see the pain and suffering of kids with injuries. Many parents ask me “Why did this happen to my child? What could I have done?”

Whether I’m treating a little girl who fell off her bike or a young boy who was in a car crash, my job is clear. I must do whatever I can to help these children live normal, healthy lives.

Many of my patients come to Children’s Hospital because of unintentional injuries—what most people call “accidents.” Burns that disfigure, pedestrian injuries that disable, and falls that cause brain injury are childhood tragedies that happen every day. But these injuries are not out of our control. They are preventable.

It’s astonishing that unintentional injuries are still a leading killer of children in most nations, with more than a million children ages 14 and under dying each year. In a recent study conducted by SAFE KIDS Worldwide, we found that within our member country network alone 280,000 children died each year from drowning, 279,000 died from traffic-related injuries, 101,000 died from fire-related injuries, 74,000 died from poisonings, and 45,000 died from falls. Another 284,000 children died from causes such as choking and suffocation<sup>i</sup>. The fact is unintentional injuries kill more children than violence and disease. While a polio epidemic is rare, injuries are not.

Unintentional injury is a public health issue with significant economic consequences. In the United States, injury is the leading cause of medical spending for children ages 5 to 14.<sup>ii</sup> The annual lifetime cost of unintentional injury among children ages 14 and under is nearly \$157 billion, which includes \$5 billion in direct medical costs, \$3.3 billion in future earnings lost and \$148 billion in lost quality of life.<sup>iii</sup>

Compared to the investment in prevention, the expense of saving a child’s life after injury is enormous: an ambulance, rescue efforts, hospitalization and rehabilitation are expensive and far outweigh the cost of the injury prevention vaccine. A child burned on 60% of his body who spends 6 weeks in the intensive care unit costs \$1 million in medical and other expenses. A smoke alarm on the other hand costs \$32. Statistics also clearly demonstrate the economic impact of injury prevention:

- Every **\$1** spent on a child safety seat saves **\$32** in direct medical costs and other costs to society
- Every **\$1** spent on a bicycle helmet saves **\$30** in direct medical costs and other costs to society
- Every **\$1** spent on a smoke alarm saves **\$69** in fire-related costs <sup>ii</sup>

On a global scale, 98 percent of all injury-related deaths occur in developing nations. Children living there are five times more likely to die from injury before the age of fifteen than children in

developed countries. In fact, children living in poverty anywhere are more likely to experience unintentional injury and its long-term effects, such as disability and lost productivity for the nation. These injuries to children can further destabilize families and communities already stressed by poverty.

Globalization and rapid urban development have only increased the risk of injury to children. According to the World Health Organization, in 1998 road injuries ranked ninth as a cause of death globally, but they are expected to rank third by 2020 since population, urbanization and road traffic are increasing rapidly. New research by the World Health Organization also shows that injuries kill more than five million people a year. Road crashes account for 1.2 million or 1 in 5 of these injury-related deaths, and an additional 1.3 million injuries are due to drowning, poisoning, falls and burns<sup>iv</sup>.

Because we have worked hard to ensure that fewer children die from infectious diseases like pneumonia, malaria and diarrhea, injury will likely become the single most significant health risk to children. But, as we found when we first started SAFE KIDS in the United States, many people around the world don't realize the threat. The good news is that we have a vaccine, and that vaccine is called SAFE KIDS Worldwide. Founded more than 15 years ago, SAFE KIDS is a proven strategy to save lives.

The SAFE KIDS model is a vaccine against injury based on the science of injury prevention and control. The formula consists of community assessments and evaluation, public education, safety device distribution and improved laws and enforcement. The grassroots coalitions of SAFE KIDS bring prevention into the community with local solutions that are often low-tech and low-cost or even free, like child safety seat checks, bike rodeos, home safety visits and school-based educational programs. SAFE KIDS translates injury prevention into simple and effective measures that families and communities can take to protect children.

SAFE KIDS Worldwide is based on the successful U.S. model launched in 1987, which brings together public health experts, global corporations, foundations, government agencies and citizens to empower communities. These partnerships successfully create changes at the community level that are sustainable. In 1992, SAFE KIDS Canada began its journey to provide this good medicine to children. Through SAFE KIDS Worldwide, we are now transferring and adapting this model for childhood injury prevention to countries in need.

SAFE KIDS is a global injury prevention movement. Our network is comprised of more than 600 coalitions and chapters in all 50 U.S. states, the District of Columbia and Puerto Rico and 16 member countries around the world, like Austria, Canada, China, UAE, Israel, Uganda and Brazil. We have developed longstanding, multi-million dollar partnerships with companies like Johnson & Johnson, General Motors and FedEx Express. These companies support SAFE KIDS through unique and successful programs, demonstrating both the power of public and private partnerships and the importance of global corporate social responsibility. SAFE KIDS also plays a major role in enacting safety laws and regulations, and we partner with organizations like the League of United Latin American Citizens and the National Council of LaRaza to reach the children who are most at risk. As a result of these efforts, we now reach millions of families around the world with education and safety devices.

SAFE KIDS activities often lead quickly to increased public awareness and enormous growth in injury prevention efforts. What's happened in Brazil over the last few years is a great example.

*Criança Segura*—SAFE KIDS Brazil—was launched in 2001. Unintentional childhood injury currently claims the lives of more than 7,000 Brazilian children annually and results in more than 40,000 permanent injuries. But *Criança Segura* is changing this fact. This year its grassroots coalitions will reach thousands of families in São Paulo, Curitiba, Recife and Londrina.

One of the most successful programs is *Criança Segura No Carro*, a child passenger safety initiative in partnership with General Motors do Brasil. Millions of vehicles crowd Brazil's roads, but the child safety seat use rate hovers at a dismal 5 percent. This is especially astonishing when compared to the record levels of usage rates in the United States—99 percent for infants, 94 percent for toddlers and 83 percent for children ages 4-7<sup>v</sup>. Because of minimal consumer demand in Brazil, child safety seats have historically been limited in supply and overpriced. Since the program launch, however, *Criança Segura* has installed hundreds of child safety seats in cars and increased the number of child safety seat models that meet Brazil's voluntary safety standards from one to six.

*Criança Segura nas Escolas*, a program supported by Johnson & Johnson Brasil involved more than 100 public schools, 750 teachers, 30,000 children and the local government of Secretaria de Ensino de Sao Jose dos Campos in its celebration of SAFE KIDS Week this past August.

Finally, the *Criança Segura Pedestre* program, established with Perkons and FedEx Express has also reached 20,000 children with pedestrian safety messages and advocated for new traffic lights and pedestrian pathways. Just recently in Curitiba, two children were killed on the road next to a school in a very poor neighborhood. *Criança Segura* immediately mobilized volunteers and a local company to teach the children about pedestrian safety. Shortly thereafter, two traffic speed control devices were installed on the same road that took the lives of these young children to guarantee that it would not happen again. This effort is a terrific example of a local coalition working with a school to attract the private sector (Perkons) and public sector (Detran) to solve a problem that directly impacts children in their neighborhood.

*Criança Segura* is now the model for a child injury prevention movement under way in Chile, Argentina and Mexico.

We still face many challenges in trying to curb the effect of unintentional injury on children's lives. It is difficult to deliver cutting-edge pediatric medical care and rehabilitation in every neighborhood. But we can work to make sure every community has a coalition of people who care enough to deliver information, safety devices and the promise of preventing unintentional injuries to children. We must ensure that the good medicine of prevention is available to all.

As Abraham Horwitz recognized many years ago, "Health is a social product that is everyone's responsibility." All of these locally based efforts can and do add up to make a difference in children's lives. Here is another example of the effect people who care about injury prevention can have—since the National SAFE KIDS Campaign was established, the childhood injury death

rate in the United States has plummeted nearly 40 percent. This translates into 26,000 young lives saved over the past fifteen years. These are children who will potentially develop into leaders of a nation!

While such success is encouraging, we still have much work ahead to ensure every child is a Safe Kid. As we look to the future and work together with a growing network of sponsors, partners and friends, SAFE KIDS will:

- Educate families about the many simple ways they can protect their children from injury—at home, at play and on the road.
- Develop local community grassroots organizations and leaders to address unintentional injury with local solutions.
- Offer opportunities for global corporate citizenship that combats unintentional injury.
- Work with governments everywhere to influence policies related to child safety.
- Create the first-ever global organization of people working together to keep children safe from injury.
- Save the life of a child somewhere in the world every single day.

To reach these goals, SAFE KIDS needs the very best medical leaders, sponsors and public health advocates to become active coalition members. Then we must give those members the training, information and funds they need to become national and regional leaders in child safety.

As individuals committed to health, especially in the region of the Americas, I ask each of you to consider how you might help us directly touch communities and children. Maybe you know a child who was seriously hurt or even killed by an injury. Without a doubt, you have seen how unintentional injuries affect many children in your country.

There is something you can do and it is simple. Help establish SAFE KIDS as a part of the communities in your country. Help us create partnerships with government agencies, and identify private sector companies interested in being part of SAFE KIDS through corporate social philanthropy. Sometimes one conversation is all that is needed.

In conclusion, the health and safety of our children must be considered a vital component in efforts to promote community growth and development. Traffic related-injuries, drowning, falls, poisoning, suffocation, burns—all of these are threats to children in Latin America and worldwide. SAFE KIDS has demonstrated that child safety can be achieved through a low-cost and low-tech strategy, thus making it a practical and cost-effective solution for combating this major childhood killer. Using a systematic, community-based model that promotes public and private sector partnerships, SAFE KIDS Worldwide is creating a safety culture in countries where it is desperately needed in order to ensure sustainable change and lasting health improvements for children.

Please take the first step toward curing unintentional injury with the vaccine of prevention. Working together, we can touch a child and guarantee for them a productive and happy life.

SAFE KIDS Worldwide stands by to assist you in this noble endeavor.

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<sup>i</sup> Taft C, Paul H, Consunji R, Miller T. Childhood unintentional injury worldwide: meeting the challenge. Washington (DC): SAFE KIDS Worldwide; October 2002.

<sup>ii</sup> Children's Safety Network. Childhood injury: cost & prevention facts. Landover (MD): Children's Safety Network: Economics and Insurance Resource Center, 1996.

<sup>iii</sup> Mulder S, Miller TR, Covington KL, Jensen AF. Costs of injury by major cause, United States, 1995: cobbling together estimates in measuring the burden of injuries; 1998 May 13-15; Noordwijkerhout, Netherlands.

<sup>iv</sup> The Injury Chartbook and Injury: A Leading Cause of the Global Burden of Disease, World Health Organization, 2003.

<sup>v</sup> National Center for Statistics and Analysis, NHTSA, NOPUS, 2002.

*For more information about SAFE KIDS and becoming involved in the global injury prevention movement, please visit:*

[www.safekidsworldwide.org](http://www.safekidsworldwide.org) - SAFE KIDS Worldwide

[www.safekids.org](http://www.safekids.org) - National SAFE KIDS Campaign

[www.criancasegura.org.br](http://www.criancasegura.org.br) - Criança Segura/SAFE KIDS Brasil

*Or write:*

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