Arizona Enhances Law to Boost Child Passenger Safety

Overview
Motor vehicle crashes claim the lives of more children in the United States than any other cause of death, even though most motor vehicle-related deaths and injuries are preventable. Ensuring the safety of child passengers is a sound policy decision — one that supports the health and safety of young children and reinforces safe transportation practices among families and communities. In a recommendation to the Arizona legislature, the Arizona Department of Health Services (ADHS) urged policymakers to enact legislation requiring children who are between 5 and 8 years old and who are 4’9” or shorter to be properly secured in a belt-positioning child restraint system (“booster seat”). Child safety advocates across the state supported the measure and, as the 2012 legislative session concluded, Arizona passed HB 2154 and joined the majority of states that require booster seats or other appropriate devices for children who have outgrown their child safety seats but are still too small to safely use an adult seat belt.

In 2009, more than 1,300 children aged 14 years and younger died in motor vehicle crashes and more than 173,000 were injured as motor vehicle occupants in the United States. Data on the burden of injuries shows how vulnerable infants and youth are in the absence of proven, effective interventions and policies to address child occupant safety, including the use of child safety seats. The Community Preventive Services Task Force (CDC) recommends several measures, based on strong evidence of their effectiveness in increasing child safety seat use, including: laws mandating use, community-wide information and enhanced enforcement campaigns, distribution and education programs, and incentive and education programs. When correctly and consistently used, child safety seats can reduce the risk of fatal injury by 71 percent for infants (younger than 1 year) and by 54 percent for toddlers (1 to 4 years old) who are traveling in passenger vehicles. Among children under age 5, an estimated 303 lives were saved in 2010 by restraint use. Of these lives saved, 285 were associated with the use of child safety seats. For highway crash scenarios, the odds of serious injury are 59 percent lower for children aged 4 to 7 years using booster seats compared to seat belt use only. Belt-positioning booster seats and laws mandating usage also generate net resource cost savings. With medical spending, productivity, and parental expenditures considered, a $30 booster seat produces cost savings greater than 9 to 1.

Population Focus
The new law strengthens occupant protections for children aged 5 to 8 years.

Role of the State Health Agency
Data from ADHS revealed how imperative it was to modify the state’s existing code: Arizona’s Child Fatality Review Program cited lack of or improper use of vehicle restraints as a preventable factor for 20 motor vehicle

---

crash fatalities among children (34 percent) in Arizona. In 2010, according to ADHS, five children (between the ages of 5 and 8 years) died in motor vehicle crashes in Arizona. All five of these child passengers were not properly restrained in seat belts or booster seats.

When paired with legislation, child restraint systems are widely recognized as instrumental to reducing the likelihood of serious injury during motor vehicle collisions. All 50 states, the District of Columbia, Guam, the Northern Mariana Islands, and the Virgin Islands have child passenger restraint requirements that vary based on age, weight, and height. With the amendment to Arizona’s state law, 48 states and the District of Columbia now require booster seats or other appropriate devices for children who have outgrown their child safety seats but are still too small to use an adult seat belt safely. Mandatory use laws are effective in changing behavior and in cultivating an understanding of restraint recommendations to keep vehicle occupants safe. Consequently, many states have enhanced their child occupant restraint laws by enacting booster seat provisions for older children. In states with “booster seat laws,” children 4 to 7 years old are 39 percent more likely to be secured in a booster seat or child safety seat than children in states without such laws.

Arizona’s state law previously allowed parents and caregivers to determine when to move the child passenger from a safety seat to an adult seat belt, beginning at age 5. The new law requires children who are under 8 years of age and who are not taller than 4’9” to be properly secured in a booster seat. Testifying before the House Transportation Committee, a pediatrician at Phoenix Children’s Hospital stated that belt-positioning child restraint systems keep children safer in the event of a crash. The use of any restraint (i.e., seat belt) is better than none, but booster seats are more effective in preventing injuries among young children. In a crash, an ill-fitting seat belt can cause serious injuries to the child’s abdomen, neck, and back.

Arizona’s experience modifying the law, despite years of unheeded testimony before the state legislature, illustrates how persistent training and education efforts across the state sustained a broad network of partners to demonstrate public support for the new law. In 2012, with the reintroduction of HB 2154, several agencies across the state joined ADHS in support of this legislation, including AAA Arizona, Phoenix Children’s Hospital, the Arizona Chapter of the American Academy of Pediatrics, Safe Kids Maricopa and Coconino Counties, and several other injury and trauma prevention organizations.

Key Partners
Through diligent outreach and targeted programming, Arizona’s expansive community of health and safety partners has championed motor vehicle injury prevention. For example, resident physicians at the Maricopa

---

Integrated Health Services Emergency Department participated in a mandatory training on child/infant restraint system safety. The Community Health Grant contractors also distributed training materials to help pediatricians better educate and equip staff and parents with information on child safety seats.

ADHS’ Child Fatality Review Program, housed within the Bureau of Women’s and Children’s Health, is responsible for ongoing surveillance of child fatalities from birth through age 17 at local and state levels. The Child Fatality Review Team prepares an annual report for the Governor, Arizona legislature, and the public summarizing its findings and proposing actions to reduce preventable deaths, including those attributed to motor vehicle crashes. ADHS’ Community Health Program funds contractors through the Title V Maternal and Child Health Block Grant to facilitate infant and child passenger safety programs, including the distribution of child safety seats. In 2009, community-based injury prevention projects provided more than 1,700 car seats and booster seats with education on proper installation and use and certified 53 National Highway Traffic Safety Administration (NHTSA) car seat safety technicians.

Safe Kids Arizona has also been a vital supporter of the state’s efforts to improve child passenger safety. The statewide program, which conducts community risk assessments, public awareness campaigns, media outreach, and injury prevention advocacy at state and local levels, is a member of the National Safe Kids Campaign. The multidisciplinary Arizona Safe Kids Board is comprised of state coalition members, representatives from the Governor’s Office of Highway Safety, as well as State Farm and Safe Routes to School delegates. ADHS contributes 0.5 FTE in-kind to lead the state coalition, Safe Kids Arizona, which serves as the lead agency and technical assistance coordinator for five local coalitions, including a chapter organized by the Navajo Nation Division of Public Safety, Department of Highway Safety.

**Payment Mechanism**

Although the final bill was an acceptable compromise for both legislative chambers, the state remains accountable for implementing and enforcing the new measures of the law. Any person found in violation of the child restraint laws is subject to a civil penalty of $50. A fund for purchasing child safety seats will continue to grow from the fines levied through the Arizona Department of Economic Security. However, no additional funding will support the public education directive accompanying the change in law, which places considerable responsibility on child safety advocates, educators, health professionals, and families.

Booster seats range in cost from several hundred dollars for full seats with harnesses to approximately $20 for a backless seat that provides proper seat-belt positioning. Approved booster seats can be purchased at local retailers. Kohl’s has partnered with the Tucson Medical Center in the “Boost Your Booty” campaign to provide free booster seats for children in Southern Arizona. Free booster seats were distributed last December and similar events will likely take place in the coming year.

When lawmaking requires the use of a certain product or device, important questions emerge for the policymaker and the consumer, from the impact on a family’s or individual’s purchasing power to market competition and endorsements. A recent study to model the cost-effectiveness of Medicaid-based
State Health Agency Examples: Making an Impact on Population Health

Reimbursement for child restraint systems and education for low-income children estimated that the proposed program could save Medicaid more than $1 million per 100,000 children in direct medical costs, while costing $13/child per year after all eight years of benefit — results comparable in cost-effectiveness with federal vaccination programs targeted toward similar populations. In negotiating the recent change in child passenger safety policy, Arizona’s state health agency is well positioned to assess strategies for reducing motor vehicle injury disparities among low-income children and to reinforce the state’s commitment to preventing unintentional childhood injuries and deaths.

Expected Health Outcome
ADHS remains determined in its goal to reduce by 15 percent injuries due to motor vehicle crashes by the year 2015. While Arizona’s newly enacted child restraint code will contribute to this reduction, the responsibility will not end there. ADHS will facilitate networks and continue meaningful collaboration with multiple partners in the traffic safety community to promote the appropriate use of child booster seats.

Conclusion
Although the measure was successfully amended by the legislature and signed by the governor in early May, the law’s provisions will not go into effect until August 2012. ADHS affirms that, during the summer months, it is essential to work with the state’s long-standing network of injury prevention partners and grassroots consortiums to alert and educate Arizonians about the new law — to keep kids safe outside the classroom and protect them on the way back to school.

The state health department will assume a central role advising constituents and communicating the new rules governing child restraint systems, including enforcement measures, civil penalties, and operator exceptions. At the same time, ADHS will leverage its existing programs to accelerate public awareness of the law and identify resourceful ways to provide education.

For example, as part of Arizona’s statewide expansion of quality home visitation services, two programs within the ADHS’ Bureau of Women’s and Children’s Health developed the Arizona Safe Home/Safe Child Checklist, an assessment tool to identify potential home, water, environmental, and vehicle hazards. Lay health workers and staff for the Health Start Program and the High Risk Perinatal Program (Community Nursing Services) use the instrument during home visits to educate clients, supplementing the assessment with in-home demonstrations on safety devices. The home safety assessment may provide a structured opportunity to share information and provide guidance to parents and caregivers on selecting age-appropriate child safety restraints, in accordance with the new law.

Related State Example: Texas

In 2006, the state legislature directed the Texas Department of Public Safety’s Committee on Child Passenger Safety to examine the need for a booster seat law in Texas and identify legislative options for improving child passenger safety in the state. Charged with exploring the potential reduction in healthcare costs associated with treating child occupant injuries, the committee:

- Advised Texas to adopt national recommendations and pass a law requiring booster seats for children up to 8 years old, unless they exceeded 4’9” inches tall.
- Determined that the state could reduce the cost of health care by more than $17 million annually if children were required to use belt-positioning child safety or booster seats.
- Estimated the cost to treat a child with “Seat Belt Syndrome” (or injuries caused by a seat belt) to be approximately $22,607 per incident.

The new law took effect in September 2009. The Texas Department of State Health Services’ Child Health and Safety Branch, in cooperation with the Texas Department of Transportation, sponsors the Safe Riders Program. Safe Riders manages 80 local community agencies that distribute between 10,000 and 15,000 safety seats each year, in conjunction with educational programs targeted toward low-income families.

Related State Example: Colorado

“Booster seat” legislation was introduced in Colorado in 2003, but repeatedly failed to pass. Traffic safety advocates across the state gradually grew support for improved child restraint measures.

In 2009, Children’s Hospital in Denver hosted the Colorado Child and Adolescent Motor Vehicle Safety Symposium, the state’s first conference to focus solely on teen and child passenger motor vehicle safety. The symposium — sponsored by the Colorado Department of Public Health and Environment (CDPHE), in partnership with Drive Smart Colorado, Colorado Department of Transportation, Colorado State Patrol, and Colorado’s Injury Control Research Center — assembled more than 165 safety advocates.

During the state’s next legislative session, a policymaker who had attended the symposium introduced a bill that included provisions for primary seat belts and stronger child passenger safety laws. Demonstrating support for the bill, CDPHE contributed research on best practices and other state laws and provided vital statistics and hospitalization data, in addition to a set of legislative recommendations from Colorado’s Child Fatality Prevention System and the Child Injury Policy Subgroup.

Ultimately, primary seat belts were not included in the final version of the bill, but Colorado’s expanded child passenger safety law, enacted on August 1, 2010, requires all children under age 8 to be properly protected in a child safety seat when traveling in a motor vehicle. As a result, thousands of 6- and 7-year-olds across the state are now riding in booster seats.

The state conducted a year-long education effort to inform parents and caregivers about the change in the law and reinforce the importance of properly securing children to prevent serious injuries and help save lives.