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## **Primary Enforcement of Child Safety Seats Testifying Statement**

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My name is Mike Gittelman and I am a pediatric emergency medicine physician at Cincinnati Children's Hospital. My specialty research area is in the field of injury control. This interest has led me to serve on many national organizations to help prevent injuries to youth. Currently I am the ex officio for the American Academy of Pediatrics (AAPs) executive Council on Injury, Violence and Poison Prevention, Treasurer and Co-Director of the injury prevention programs for the Ohio Chapter of the AAP, Co-Director of the Comprehensive Children's Injury Center at Cincinnati Children's Hospital, and Co-Director of Cincinnati's Injury Free Coalition for Kids. Today, I am here to speak in support of HB 30, sponsored by Representative Dorothy Pelanda, to insure that children are properly restrained in a proven safety restraint system while traveling in an automobile and as a result, less children will suffer unintentional injuries and deaths.

### **Magnitude of the Problem**

Pediatric injury is the leading cause of death and acquired disability for children and young adults.<sup>1</sup> Motor vehicle collisions are a main cause of these injuries for all pediatric age groups. Every year, over 5,000 children and adolescents die in crashes, representing approximately 15% of all crash deaths for all ages.<sup>2</sup> Fatalities represent only the tip of the motor vehicle crash problem for children. For every fatality, approximately 18 children are hospitalized and over 400 receive medical treatment for injuries sustained.<sup>3</sup> Since Ohio has the 10th largest roadway system in the United States, motor vehicle crash injuries affect Ohio youth in large numbers similar to the national data.

## **Restraint Systems to Prevent Child Injuries**

Through the early 1990s, child occupant fatality rates remained relatively stagnant at approximately 3.5 deaths per 100,000 population.<sup>4</sup> Beginning in 1995, attention began to focus on the unique needs of children in automobile safety due to childhood deaths from airbags. Subsequently in the US, the number of motor vehicle fatalities and serious injuries has been reduced through a combination of increased attention to age-appropriate restraint use and rear seating position,<sup>5-10</sup> as well as enhanced child restraint laws and enforcement of these laws.<sup>11-12</sup> Although the rate of deaths in motor vehicle crashes to children has decreased substantially – 45% between 1997 and 2009 – it is still the leading cause of pediatric deaths.<sup>13</sup>

Restraint systems are designed to reduce risk of ejection during a crash, better distribute the energy load of the crash through structurally stronger bones rather than soft tissues, limit the crash forces experienced by the vehicle occupant by prolonging the time of deceleration, and limit the contact of the occupant with interior vehicle structures. Optimal performance of restraint systems depends upon an adequate fit between the restraint system and the occupant at the time of the crash. Restraint systems can be generally categorized as vehicle restraints—airbags and seat belts vs. add-on restraints specifically made for children—Child Restraint Systems (CRS). CRS have been shown to be incredibly effective as they can reduce the risk of death in passenger cars by 71% for infants and 54% for toddlers.

Although child restraint use has increased over the past 10 years, with 99% infants under 1 year old, 92% 1- to 3-year-olds, and 89% 4- to 7-year-olds using CRS, these rates vary among different groups.<sup>14</sup> For example, restraint use for children driven by a belted driver was significantly higher (92%) than for those driven by an unbelted driver (54%). Also, using these restraints improperly limits its effectiveness. Children less than 1 year of age should be rear-facing in the back seat, yet 21% were not compliant with recommendations.<sup>15</sup> For children 6-8 years involved in a crash, 57% were found to be inappropriately restrained.

The first state child occupant restraint law was passed in Tennessee in 1978, due primarily to the efforts of pediatrician Robert Sanders. By 1985, all 50 states and the District of Columbia had passed laws requiring child restraints for young children. These laws have played an instrumental role in changing restraint behavior and educating the public about recommended restraint practices. One study showed that booster seat legislation covering children from 4 to 7 years increased the use of child restraints by 39% for that age group.<sup>16</sup> Currently, 33 states recognize this reality and classify failure to properly restrain children in a motor vehicle as a primary offense. Previous studies have demonstrated that, on average, the effects of primary laws are larger and more consistent than secondary laws in increasing safety belt use and decreasing injuries among adult drivers and passengers.<sup>17-20</sup> Durbin et al. compared reported use of seat belts among 13–15 year old passengers in crashes in states with a primary enforcement safety belt law versus states with a secondary enforcement law.<sup>21</sup> After adjusting for the driver's age and restraint use in the study, a 13–15 year old was more than twice as likely to be unrestrained in a secondary enforcement state as compared to a primary enforcement state. In addition, primary enforcement booster seat laws are cited by law enforcement as an important component to effective enforcement of the law compared with secondary laws.<sup>22</sup>

In summary, HB 30, put forth by Representative Pelanda, will improve upon the significant shortcomings in the current Ohio law by providing law enforcement and prosecutors with the tools they need to enforce current requirements. The literature is clear that having state legislation allowing officers to issue citations whenever a law enforcement officer observes an unbelted driver or passenger, more Ohio children will be properly restrained and less injuries and deaths to these children will occur.

On behalf of the Ohio Chapter of the American Academy of Pediatrics and Cincinnati Children's Hospital we congratulate Representative Pelanda and others for their concerns on this issue and we fully support this bill and their efforts. Thank you for your consideration, and I would be happy to answer any questions that you may have.

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