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Flaura Koplin Winston, MD, PhD is a board-certified practicing pediatrician, biomechanical engineer, and clinical researcher. An internationally recognized leader in pediatric trauma research, Dr. Winston is the Founder and Co-Scientific Director of The Center for Injury Research and Prevention at The Children's Hospital of Philadelphia (http://www.chop.edu/injury). This unique multidisciplinary center now enjoys a global reputation for its contributions to the growing field of childhood injury prevention through research followed by translation (Research to Action to Impact).

Dr. Winston's primary research focus is traffic injury. She is the Principal Investigator for research funded by the National Highway Traffic Safety Administration, the National Science Foundation, the Maternal and Child Health Bureau, and State Farm Insurance Companies, among others. Her research has been published widely in medical and engineering journals and conference proceedings. For her work, Dr. Winston has received awards from many organizations including the American Philosophical Society, Centers for Disease Control and Prevention, National Highway Traffic Safety Administration, the American Society of Mechanical Engineers, the American Academy of Pediatrics, Academy Health, the Emergency Medical Services for Children Program, the Joint Commissions on the Accreditation of Hospitals (JCAHO), and the National Quality Forum.

Dr. Winston currently serves as Associate Editor of the BMJ journal, *Injury Prevention*, and the Center for Disease Control and Prevention's National Advisory Committee on Injury Prevention and Control. She also has served on committees for the Institute of Medicine, the National Highway Traffic Safety Administration, the American Academy of Pediatrics, the Society of Automotive Engineers, the National Academies, the International Society of Child and Adolescent Injury Prevention, and the U.S. Product Safety Commission.

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### Testimony of Flaura Koplin Winston, MD, PhD Scientific Director and Founder Center for Injury Research and Prevention The Children's Hospital of Philadelphia

Pennsylvania State House Committee on Transportation April 13, 2010

Good Afternoon, Chairman Markosek and members of the Committee.

Thank you for the opportunity to speak. My name is Flaura Winston. I am the scientific director and founder of the Center for Injury Research and Prevention at the Children's Hospital of Philadelphia. I am also an associate professor of pediatrics at the University of Pennsylvania School of Medicine, a practicing pediatrician and the mother of two boys ages 15 and 20.

I work with a multidisciplinary group of scientists at CHOP that is dedicated exclusively to addressing injury, the leading cause of death for children and adolescents in the US. The Center conducts research into the origin and nature of childhood injuries and then seeks to develop effective interventions to prevent recurrence of those injuries.

As traffic crashes are the leading cause of death for children, adolescents and young adults, out of need, we have developed a well-recognized expertise in child passenger and teen driver crash-related injury and have published and presented extensively on the topic.

In my testimony today, I will focus on scientific evidence for the action that you are considering as part of House Bill 67.

In 2008 in Pennsylvania, 176 teen drivers and their passengers died in teen driver crashes and approximately 15,000 teen drivers were injured. When we looked at **all** the people killed in crashes involving teen drivers in 2008, the death toll rose to 242 citizens of Pennsylvania. Over the past five years, 1,444 people died in Pennsylvania in teen driver crashes. Left in the wake of these tragedies are the families, schools and communities who are devastated with grief and regret.

You may be overwhelmed to hear these statistics. This is a huge loss of life – about seven classrooms of high schools students every year. You may be saying, "Pennsylvania has had a GDL system since 1999 and STILL we're facing a major public health epidemic among our youth? What more can we do?"

Since 1999, there has been a watershed of new data on ways to make GDL more effective at reducing teen crashes and their related injuries and death. Pennsylvania's limited GDL system is part of the reason why we still have such a high death toll related to teen drivers. We can do better. House Bill 67 is a lifesaving step in the right direction.

House Bill 67 would limit teen drivers from carrying more than one teen passenger; ban the use of phones and other handheld devices; and it would hold the teen driver responsible for making sure all occupants younger than 18 are properly restrained. This law, if enacted and then supported by adequate education and enforcement, will substantially reduce teen-driver related crashes and deaths.

#### **About GDL Passenger Restrictions**

Published research tells us that restricting the number of passengers during the first year of independent driving saves lives.

Peer passengers are a deadly distraction. Just one teen passenger doubles the risk a teen driver will get into a fatal crash; three or more passengers quadruples the risk.

Despite these dire statistics, a recent study conducted by The Children's Hospital of Philadelphia (CHOP) and State Farm Insurance Companies® found that only 1 in 10 teens knows that giving a friend a ride is dangerous.

The risk is not just for the driver. Another CHOP/State Farm study released in 2007 found that starting at ages 12 to 14, a passenger's risk of dying in a crash with a teen driver doubles, and the risk continues to rise for each teen year. Most teen passengers who die in crashes are riding with a teen driver.

Perhaps more astounding: most teens do not consider themselves inexperienced drivers. We found that, although 60 percent of teens believe inexperience heavily influences driving safety, only 15 percent consider their peers to be inexperienced. According to other qualitative research from CHOP, teens may incorrectly associate having a license with experience, leading to a false sense of safety. There is a real disconnect between perception and reality among families and it puts our children at risk.

So you know the presence of passengers causes teens to crash. But do passenger restrictions make a difference? Three years after California enacted their legislation, which limits the number of teen passengers in a car driven by a teen, crash fatalities among teen passengers declined 25%.

Pennsylvania, once a forerunner in policies to prevent motor vehicle deaths for children and youth, now lags behind New York, New Jersey, Delaware, Maryland and West Virginia and 36 other states that have some form of restrictions on passengers.

### **About GDL Primary Enforcement of Seat Belt Laws**

The majority of teen crashes are due to driver error caused by inexperience and compounded by distractions such as passengers and cell phones, as well as inherent risk-taking such as speeding and nighttime driving. While these factors cause crashes, low rates of seat belt use kill teen drivers and their passengers.

When used, seat belts reduce the risk of fatal injury to front-seat passengers by 45 percent. Enforcing seat belt use for teens is even more crucial. Teens have the lowest seat belt use of any age group (76 percent). The result of this carelessness is deadly. In recent years, two-thirds of teens that died in crashes were not wearing seat belts.

Primary seat belt laws are proven to be more effective. Where they are in place, seat belt use is about 10 percent higher than in states with no primary seat belt laws on the books.

Whether a state enforces primary or secondary laws directly impacts young driver safety. The five states with the highest teen seat belt use (California, Maryland, Michigan, North Carolina, and Oregon) also are among those with the strongest primary seat belt laws.

CHOP research has also shown that teen drivers are less likely to make sure that everyone in the car is buckled up. In fact, children driven by 15- to 17-year-old drivers are three times as likely to have no restraint at all as those with adult drivers.

As teen driver crash risk increases greatly with every passenger, a law that requires seat belt use for all occupants, regardless of seating position, would better protect their passengers.

Additional data from CHOP show 13-to-15 year olds were more than twice as likely to ride unrestrained in secondary enforcement states than were their peers in primary enforcement states. In this study, we found that age and restraint use of the driver is associated with restraint use of 13- to-15-year-old passengers suggesting that teens may mimic the restraint use of the driver.

Still, primary enforcement belt laws have an effect on belt use for pre-driving teens that is independent of the effects of the driver's belt use. Even states with high-baseline restraint use rates would benefit by upgrading restraint use laws to primary enforcement.

### About a GDL Ban on Use of Cell Phones and Other Handheld Technologies While Driving

CHOP is supportive of a cell phone ban. The research that you will hear described by my colleagues today, clearly links use of cell phones and texting while driving to increased crash risk. What is unclear is if a law that only bans hand-held devices is adequate. The research from the Insurance Institute for Highway Safety suggests that these handheld-only bans do not significantly lower the numbers of reported crashes, as we would hope. We do not know why not do I do not fully understand the limitations of the study.

Perhaps, these laws need to be a complete ban that includes hands-free and that also provides other supportive activities such as primary enforcement, education provided to law enforcement, publicizing the enforcement, as well as public awareness efforts that promote alternatives to cell phone use while driving. All of these could serve to change the culture of cell phone use in the car. I'm interested to hear more from my colleagues about this.

In closing, we recognize that parents and families are the first line of defense. A study we published this past October in *Pediatrics* found that teens, whose parents set clear rules and boundaries while offering lots of support, were half as likely to crash compared with teens who said their parents were less involved.

Research done on this issue proves that laws not only empower law enforcement to protect road-users, they also empower families to determine the right rules for their homes and cars. With more than a decade of such research, we have learned that parents look to the law to guide them on how to protect their children in vehicles. They've essentially said, "If it were important, there would be a law".

With that in mind, we urge Harrisburg to send the message that introducing certain driving privileges gradually for novice teen drivers is a lifesaving strategy for communities and families.

Chairman Markosek and members of the committee, I thank you for this opportunity to share the evidence that supports House Bill 67. We are grateful for those that called for this hearing and who drafted the legislation.