Memory and Brain Expert Addresses Federal Government on “Forgotten Baby Syndrome” to help prevent hot car tragedies

Federal government steps up efforts to prevent child deaths in hot vehicles

Tampa, FLA. – Sept. 23, 2011….Children continue to die in hot vehicles – and parents and families across the country endure the worst nightmare imaginable. Yet, most parents still think it could never happen to them.

Dr. David Diamond, professor at the University of South Florida department of psychology; and research career scientist at J.A. Haley Veterans Hospital, spoke out today at a National Highway Traffic Safety Administration (NHTSA) event in Tampa to help prevent families from having to endure the life-long grief of losing a child.

There have been at least 27 child vehicular heat stroke fatalities in the U.S. this year, and one of those deaths took place in Florida….we hope that is the last child death in a hot car,” states Janette Fennell, president of KidsAndCars.org a national nonprofit child safety organization working to prevent injuries and deaths of children in and around motor vehicles. A tragic record 49 children died in 2010 in hot vehicles. Since 1990 KidsAndCars.org has documented over 600 child vehicular heat stroke fatalities and 60 of those deaths took place in the state of Florida, placing Florida second only to Texas in the number of children losing their lives in this way.

An internationally renowned memory and brain expert, Diamond asks, “How can normal, loving and attentive parents, with no evidence of substance abuse or an organic brain disorder, have a lapse of memory which results in the death of a child?” His research group has developed a two-part hypothesis to address the basis of “Forgotten Baby Syndrome” (FBS). First, they evaluated whether there is a consistent pattern of circumstances that may provide insight into FBS occurrences and, second, they speculated on the neurobiological basis of FBS.

Diamond hypothesizes that FBS occurs as a result of the competition between cognitive and habit forms of memory. Cognitive memory occurs when one consciously plans out a task to accomplish in the future, for example, planning to take a child to daycare as a part of a larger driving plan. In contrast, habit memory occurs when one performs a routine that can be completed automatically with minimal thought, such as driving to work in an “autopilot” mode, in which decisions as to where to stop and turn occur automatically.

Brain habit and cognitive systems are in a constant state of competition, Diamond notes. In all cases of FBS he and his associates studied, the caretakers had every intention to stop at the daycare center as a part of their drive.
However, stopping at the day care center on the day FBS occurred was not a part of an established daily routine. With FBS, the brain habit-based memory system suppressed the activation of the cognitive memory to interrupt the drive and take the child to daycare.

Diamond also noted that in some FBS cases the parents experienced impaired sleep the night before, and/or they experienced a powerful stressor during the drive, which suppressed the activation of a cognitive memory. Dr. Diamond concludes that “the brain habit memory system has the capacity to completely suppress the cognitive memory system, thereby providing a neurobiological explanation of how FBS can occur.”

NHTSA brought together local safety advocates, health professionals, law enforcement officials and concerned residents today to discuss ways to prevent the modern-day phenomena of children being unknowingly left alone in vehicles and how to prevent children from gaining access to hot vehicles.

“The KidsAndCars.org message is very clear – Never leave a child alone in a vehicle and don’t think a tragedy like this can’t happen to you or someone you know,” said Fennell. “No one is immune.”

The organization is pleased that Ron Medford, NHTSA deputy administrator, is spearheading efforts in Florida to eliminate child deaths in hot vehicles by 2013.

KidsAndCars.org has incorporated a provision as part of the reauthorization of the National Highway Traffic Safety Administration, which could help prevent these inadvertent deaths. Equipping vehicles with sensors to detect the presence of the child and sound a warning when a child is left inside would help prevent these deaths when the driver’s memory fails. Similar warning features currently remind drivers when they have left the key in the ignition or left the headlights on.

Based on incidents documented by KidsAndCars.org:
- 54 percent of the time children die after being unknowingly left inside a hot vehicle similar to what happened to Payton McKinnon.
- 32 percent when children got into a vehicle on their own
- 12 percent when they were knowingly left in vehicle.
- 2 percent of the circumstances were not clear.

**Safety Tips from KidsAndCars.org**
KidsAndCars.org provides the BE SAFE safety tips on an information card being distributed to new parents as part of the information packet given to them when having a baby:

- **B**ack seat – Put something in the back seat of your vehicle that requires you to open the door every time you park – cell phone, employee badge, handbag, etc.
- **E**very child should be correctly restrained in the back seat.
- **S**tuffed animal – Keep a stuffed animal in your child’s car seat. Place it on the front seat as a reminder when your baby is in the back seat.
- **A**sk your babysitter or child-care provider to call you if your child hasn’t arrived on time.
- **F**ocus on driving – Avoid cell phone calls and texting while driving.
- **E**very time you park make it a routine to open the back door of your car to check that no one has been left behind.

**KidsAndCars.org provides these additional safety tips:**
- Keep vehicles locked at all times, even in the garage or driveway, and always set your parking brake.
- Keys and remote openers should never be left within reach of children.
- When a child is missing, check vehicles and car trunks immediately.
- If you see a child alone in a vehicle, get involved. Call 911 or your local emergency number immediately.
- If they are hot or seem sick, get them out as fast as possible. Be especially careful about keeping children safe in and around cars during busy times, schedule changes and periods of crisis or holidays.
Use drive-through services when available (restaurants, banks, pharmacies, dry cleaners, etc.)

Use your debit or credit card to pay for gas at the pump.

For additional information about ways to keep children safe in and around vehicles, visit www.KidsAndCars.org

About KidsAndCars.org: Founded in 1996 in California, KidsAndCars.org is a national nonprofit child safety organization dedicated to preventing injuries and deaths of children in and around motor vehicles. KidAndCars.org promotes awareness among parents, caregivers and the general public about the dangers to children, including backover and frontover incidents, and heatstroke from being inadvertently left in a vehicle. The organization works to prevent tragedies through data collection, education and public awareness, policy change and survivor advocacy.