



The Statistics

In 2003, 42 children died of heat stroke because they had been left inside a vehicle. In July and August 2003, 22 children tragically died after being trapped in car trunks. Leaving children unattended in or around vehicles is a serious problem. More than one thousand cases involving injury or death have been documented so far. Those injuries and deaths were caused by heat stroke, a vehicle being put in motion by a child, children being hit by vehicles backing up, children choking while alone in a car, being kidnapped, toxic fumes, activation of automatic power controls, or being trapped in car trunks. Children should never be left unattended in or around vehicles. *Source: Kids 'N Cars, 2004.*



Leaving Children Unattended in Hot Vehicles

Small children and infants are more sensitive to extreme heat. According to Dr. Martin Eichelberger, director of trauma surgery at Children's National Medical Center and president of the National SAFE KIDS Campaign, "Heat rapidly overwhelms the body's ability to regulate temperature. In a closed environment, the body can go into shock and circulation to vital organs will begin to fail."

Heat exhaustion can occur at temperatures above 90 degrees and heat stroke can occur when temperatures rise above 105 degrees. When a child is enclosed in a hot car, the child loses body fluids and salts through sweating, causing heat exhaustion. If not treated immediately, heat exhaustion can lead to heat stroke. In heat stroke, a child can no longer sweat. The body temperature rises to deadly levels leading to severe damage to the brain, liver and kidneys, or even death.

Keep in mind that a car is basically a metal box. The hot sun can turn this metal box into an oven. Nobody would ever consider leaving a child in an oven. When the outside temperature is 93 degrees Fahrenheit, the



Temperature inside a car After 20 min. - 125°F After 40 min. - 140°F *when it is 93°F outside

Source: North Carolina Department of Health and Human Services, 1999. ture inside a car can reach 125 degrees in just 20 minutes and 140 degrees in 40 minutes even if a window is cracked open. A car parked in direct sunlight can reach 131-172 degrees Fahrenheit, even after only **fifteen** minutes. At that temperature it only takes a matter of minutes for children to die or suffer permanent disability.

(North Carolina Department of Health and Human Services, 1999)

Of the recently reported deaths, more than a third involved children who had crawled into unlocked cars during play and then perished in the sweltering heat. With children that are naturally curious and often lacking in fear, unlocked cars can pose serious risks. Once a child gets into a vehicle, they often do not have the developmental skills to get themselves out again.

Trunk Entrapment

Since 1970, 1,175 people have been victims in 992 incidents of trunk entrapment. There are two main categories of victims of trunk entrapment — people who are deliberately locked in a motor vehicle trunk by a criminal, and those, usually children, who unintentionally lock themselves in a trunk. Between thirty-five and forty percent of victims ages 14 and under do not survive the entrapment episode, compared to an overall fatality rate of twenty and twenty-five percent of all victims. Because there is no government database for such statistics, it is likely that the incidence of trunk entrapment is underestimated.

Often unintentional entrapment is the result of children playing games or exploring while looking for or retrieving items from a car trunk, or while adults are performing installation or repair work inside car trunks. To a child when playing hide and seek, the trunk may seem like the perfect hiding place. The months of July and August when outside temperatures are 85 degrees or higher are when the majority of unintentional trunk entrapment deaths occur. Car trunks provide a deadly combination of high temperature, humidity and poor ventilation.

As more and more cars come equipped with remote trunk releases, trunk openers on key chains and access to the trunk through fold down seats, it becomes easier for children to gain access.

Some cars come equipped with manual releases inside the trunk. In the future, a few car manufacturers have plans to equip family cars with infrared devices that will detect heat and motion. When the detector senses a person inside, it will automatically unlock the trunk. The reality is that most cars do not have a way to escape from inside the trunk once the lid is closed. However, dealers can install a trap resistant kit to allow children to escape from inside a locked trunk. Such a device has an



A car parked in direct sunlight can reach 131°- 171° F in 15 min.

Source: National SAFE KIDS, 1999.



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temilluminated yellow handle, connected to the latch by a cable. A child can easily find and turn the handle to release the trunk lid. When purchasing a new vehicle look for such features as trap-resistant trunk release systems. (*Drive Safer America, March 2000.*)

Tips for Parents

- Never leave your vehicle unlocked or let your children play in or around any vehicle(s).
- Always lock car doors and trunks and do not leave your car keys within reach or sight of children.
- Never leave children alone in a vehicle to run a quick errand.
- Teach kids not to play in or around cars.
- Supervise young children closely when they are around cars.
- Be especially careful when loading or unloading the trunk.
- Keep rear fold-down seats closed to help prevent kids from getting into the trunk from inside the car.
- Never leave your child in an unattended car, even with the windows down.
- Always make sure that all child passengers have left the car.
- If your child gets locked inside a car, get him out and dial 9-1-1 or your local emergency number immediately.
- Make sure you check the temperature of the car seat surface and safety belt buckles before restraining your children in the car.
- Use a light covering to shade the seat of your parked car. Consider using windshield shades in front and back windows.
- Be careful with child-resistant locks. Teach older children how to disable the driver's door locks if they unintentionally become entrapped in a motor vehicle.
- Contact your automobile dealership about getting your vehicle retrofitted with a trunk release mechanism.
- If you see young children in a car unattended, please try to find the parents immediately or call police for help. Taking action immediately could save a child from serious harm, or even death.

(National SAFE KIDS Campaign, 6/99)

Additional Resources

National SAFE KIDS Campaign http://www.safekids.org

National Highway Traffic Safety Administration http://www.nhtsa.dot.gov/people/injury/childps/

TRUNC (Trunk Releases Urgently Needed Coalition) http://www.netkitchen.com/trunc

KIDS'N CARS http://www.kidsncars.org



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