# Hold On To Dear Life

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#### Children and Hot Cars Don't Mix

#### by Jan Null, CCM. San Jose State University

Every year on average, 37 children die in hot cars nationwide. Sadly, after two relatively good years which saw "only" 31 and 24 respectively in 2014 and 2015, there were 39 similar tragedies in 2016. This is more than twice the number of tornadoes deaths (17) last year! Since 1998 there have been over 700 pediatric vehicular heatstroke deaths in the U.S. And one of the saddest realities is that every one of these deaths is preventable.

- Over half (54%) of heatstroke deaths of children in vehicles occur when a child is inadvertently left behind.
- Another 28% happen when a child gains access to an unlocked car and are overcome by the heat.
- The final 17% of the deaths happen after a parent or other caregiver makes a choice to leave a child in a car while they go do something else like an appointment, gambling or shopping.

It takes very little time for a vehicle to heat up to a dangerous and too often a fatal temperature. The bottom line is that no amount of time is acceptable for a child to be alone in a car.

To find out more about this sad topic and some of the ways that these precious lives may be saved, please visit <u>www.noheatstroke.org.</u>



### **VEHICLE HEATING DYNAMICS**

- The atmosphere and the windows of a car are relatively "transparent" to the sun's shortwave radiation (yellow in figure below) and are warmed very little. However, this shortwave energy heats objects that it strikes. For example, a dark dashboard, steering wheel, or seat temperatures often are in the range of 180 to over 200 degrees F.
- These objects (e.g., dashboard, steering wheel, child seat) heat the adjacent air by conduction and convection and also give off long-wave radiation (red) which is very efficient at warming the air trapped inside a vehicle. Cracking windows makes very little difference in temperature.



ANIMATION (Courtesy GM and Jan Null, San Jose State University)

Intermountain<sup>®</sup> Primary Children's Hospital



### "What Kind of Person Forgets a Baby?"

The wealthy do, it turns out. And the poor, and the middle class. Parents of all ages and ethnicities do it. Mothers are just as likely to do it as fathers. It happens to the chronically absent-minded and to the fanatically organized, to the college-educated and to the marginally literate.

"Death by hyperthermia" is the official designation. When it happens to young children, the facts are often the same: An otherwise loving and attentive parent one day gets busy, or distracted, or upset, or confused by a change in his or her daily routine, and just. . . forgets a child is in the car.

Fatal Distraction By Gene Weingarten

#### What Can I Do to Prevent Heat Stroke in Cars?

- Never leave a child unattended in a vehicle. Not even for a minute!
- If you see a child unattended in a hot vehicle, CALL 9-1-1.
- Be sure that all occupants leave the vehicle when unloading. Don't overlook sleeping babies.
- Always lock your car and ensure children do not have access to keys or remote entry devices. Teach children that vehicles are never to be used as a play area.
- If a child is missing, always check the pool first, and then the car, including the trunk.
- Keep a stuffed animal in the car seat and when the child is put in the seat, place the animal in the front with the driver. Or place your purse, briefcase or cell phone in the back seat as a reminder that you have your child in the car.
- Have a plan that your childcare provider will call you if your child does not show up for school or day care.

## Want to Educate Others?

Primary Children's Hospital has a safety campaign called "Never Leave Children Alone In The Car". We have a flier available free of charge that you may <u>download</u> or call 801.662.6580 to order for your personal use, or community, school, church, and business events. We also have a video that you can <u>download</u> to help spread this important safety message.

Most people will not forget their child in a hot car but it has happened to nine children in Utah since 1998. Even one is too many. We all need to do our part to watch out for our little ones. And Utah is one of 20 states that has a law against leaving children unattended in cars. Never be afraid to call 9-1-1 or to intervene if you see a child at risk.



If you have any questions regarding injury preventions efforts, or if you would like to receive this newsletter, call 801.662.6580 or go to www.primarychildrens.org/safety