

WHAT'S NEW WITH KIDS?

May 2012

Hyperthermia Deaths of Children in Vehicles

Since 2003, five infants/children in Nevada have died from vehicle-related hyperthermia (heat stroke). All of these deaths took place in Las Vegas and Henderson, see Table 1. If it is hot outside, a car's inside temperature is much higher than those outside, depending upon how long it has sat outside. If, for example, it is sunny and the outside temperature is 90 degrees F, the inside temperature of a car after 10 minutes is 109 degrees F.¹ After 30 minutes, the interior of a car is 124 degrees F. After 60 minutes it is 133 degrees F. After 90 minutes, it is 138 degrees F.

Table 1
Child Vehicular Hyperthermia Deaths in Nevada: 2003-2011

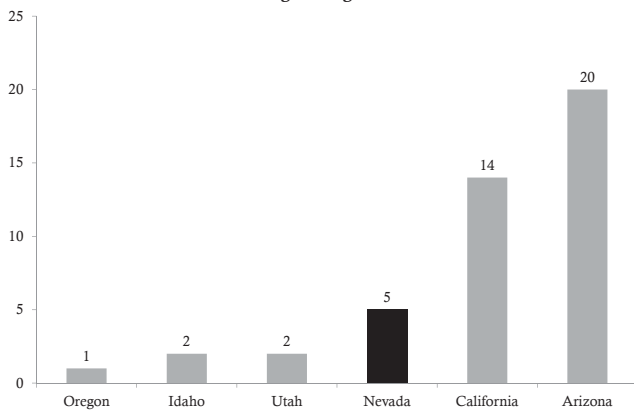
Year	Month	Location	Temperature	Age	Circumstance
2008	June	Las Vegas	90°	4 Years	Unintentional
2005	July	Las Vegas	104°	16 Months	Unintentional
2004	July	Henderson	107°	3 Years	Unintentional
2003	July	Las Vegas	100°	2 Years	Unintentional
2003	June	Las Vegas	98°	7 Months	Unintentional

Source: Null, Jan, CCM, Department of Geosciences, San Francisco University, <http://ggweather.com/heat/>, 5/17/12.

Nevada and its 5 neighboring states experienced a total of 44 deaths. As shown in Figure 1, Arizona experienced the highest number of deaths, 20, and Oregon the lowest number, 1. While all of the deaths in Nevada occurred in June and July, Figure 2 shows that vehicle-related hyperthermia deaths also occurred during months when the temperatures are normally cooler.

Figure 1

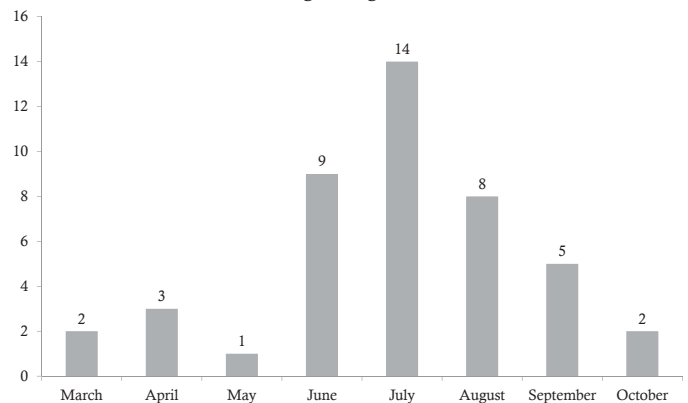
Child Vehicular Hyperthermia Deaths (ages 14 and under): Nevada and Neighboring States: 2003-2011



Source: Null, Jan, CCM, Department of Geosciences, San Francisco University, <http://ggweather.com/heat/>, 5/17/12.

Figure 2

All Child Vehicular Hyperthermia Deaths by Month (ages 14 and under): Nevada and Neighboring States: 2003-2011



Source: Null, Jan, CCM, Department of Geosciences, San Francisco University, <http://ggweather.com/heat/>, 5/17/12.

Infants less than one year old are more vulnerable to vehicular hyperthermia. Table 2 shows that about 57 percent of the deaths in Nevada and 5 neighboring states were infants up to 1 year old. The figure for the nation as a whole, at 53.8 percent, is slightly lower.

Nevada is one of 19 states that passed legislation related to leaving a child unattended in a vehicle.² In Nevada, the person responsible for leaving a child unattended in a vehicle can be charged with a misdemeanor.³

What can be done to prevent these seemingly preventable deaths? According to Professor Jan Null, whose website data are used in this *Newsletter*, “educating and raising awareness should be the primary solution to preventing hyperthermia deaths of children in vehicles?”⁴ This is the goal of the National Highway Traffic Administration’s “Where’s baby? Look before You Lock campaign.”⁵ The campaign, which began in April 2012, consists of radio and online advertisements that focus on recommendations to prevent accidental deaths due to vehicle-related hyperthermia. One such recommendation is placing a purse or briefcase in the back seat, which will ensure that the driver of a vehicle look in the back seat before leaving his/her car.

For more information on child deaths due to vehicle-related hyperthermia, visit <http://ggweather.com/heat/>.

Table 2
Child Vehicular Hyperthermia Deaths by Age: 2003-2011

<i>Age</i>	<i>Nevada and Neighboring States</i>		<i>National</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Less than 1 year old	17	38.6	103	28.0
1 year old	8	18.2	95	25.8
2 years old	8	18.2	77	20.9
3 years old	4	9.1	45	12.2
4 years old	4	9.1	19	5.2
5 years old	1	2.3	9	2.4
6 years old	1	2.3	5	1.4
7 years old	0	0.0	2	0.5
8 to 14 years old	1	2.3	9	2.3
Unknown	0	0.0	4	1.1
Total	44	100.1	368	99.8

Note: Totals may not sum to 100 percent due to rounding.
Source: Null, Jan, CCM, Department of Geosciences, San Francisco University, <http://ggweather.com/heat/>, 5/17/12.

Sources

¹The Weather Channel, slide show by Jan Null, adjunct professor of meteorology at San Francisco State University, <http://www.weather.com/newscenter/specialtopics/slideshows/hotcar061909.html?page=1&scheme=image-horiz-plain.css>, 5/17/12.

²Null, Jan, CCM, Department of Geosciences, San Francisco University, <http://ggweather.com/heat/>, 5/17/12.

³Nevada Revised Statute 202.575 states that “1. A parent, legal guardian or other person responsible for a child who is 7 years of age or younger shall not knowingly and intentionally leave that child in a motor vehicle if:

(a) The conditions present a significant risk to the health and safety of the child; or

(b) The engine of the motor vehicle is running or the keys to the vehicle are in the ignition,

unless the child is being supervised by and within the sight of a person who is at least 12 years of age.

2. A person who violates the provisions of subsection 1 is guilty of a misdemeanor.”

Nevada Revised Statutes 202.580, Chapter 202 Crimes Against Public Health & Safety, <http://www.leg.state.nv.us/nrs/NRS-202>, 5/17/12.

⁴Null, Jan, CCM, Department of Geosciences, San Francisco University, <http://ggweather.com/heat/>, 5/17/12.

⁵National Highway Traffic Safety Administration, NHTSA Unveils Campaign to Prevent Child Heatstroke in Cars,” <http://www.nhtsa.gov/PR/NHTSA-05-12>, 5/18/12.

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