

# HOT CARS

On a typical Australian summer day, the temperature inside a parked car can be as much as  $30^{\circ}$  -  $40^{\circ}$  degrees hotter than the outside temperature.



### Facts

- On a 30° day the temperature inside the car could be as high as **70**°!
- 75% of the temperature increase occurs within **5 minutes** of closing the car and leaving it.
- 90% of the temperature increase occurs within **15 minutes**.
- Darker coloured cars can reach slightly higher temperatures than lighter coloured cars.
- The increase of temperature is related to the amount of glass surface. For example, Hatchback temperatures are higher than those in Sedans.
- Larger cars can heat up just as fast as smaller cars.
- The colour of interior trim has little effect on the speed that the temperature can increase inside a car.



 Having the windows down 5cm causes only a slight decrease in temperature with an outside temperature of around 30 degrees. A closed car can reach a temperature of 78°C while temperatures will still reach 70°C with a gap of 5cm.

In NSW it is against the law to leave your child unattended in the car, with very heavy fines applying

#### 'Real Life' Case #1

At 4.47pm in July, a 4-year-old girl was found in a locked car in front of a childcare centre. She had disappeared from the centre at approximately 10am. CPR was administered on the scene, but rigor mortis had already occurred.

Death was attributed to hyperthermia. The temperature inside the car at the time of her death was unknown; however, the estimated temperature in the area that day was 33.9°.

### What are the Risks?

- The temperature and humidity begin to increase inside the car while the airflow decreases.
- As the temperature increases inside the car the child can begin to develop heat stress (hypothermia) and can start to dehydrate.
- Young children are more sensitive to heat than older children and adults. This can put them at greater risk of heatstroke and other health risk.
- The younger the child the faster the onset of heatstroke, dehydration and other health risks.



• If the child becomes distressed and tries to get out of the restraint, they could be at risk of strangulation by the harness

#### 'Real Life' Case #2

A customer outside a Supermarket finds a 6-year-old boy, a 4-year-old girl, and a 2-year-old boy in a locked car with the windows closed. After unsuccessfully attempting to attract the children's attention the customer called 000. Police and paramedics were able to get the 6-year-old to unlock the car door. Paramedics reported the children were unresponsive, disorientated, flushed, and profusely sweating and had delayed reflexes.

The children were placed in the shade under a tree and given juice and water for re-hydration; they regained alertness and began talking within 30 minutes. The children had been in the car for 10-20 minutes. The outdoor temperature and humidity were 28.9° and 60%, respectively, and the estimated temperature inside the car was greater than or equal to 43.3°. Paramedics reported that the children had classic signs of the onset of heatstroke. Another 5 – 10 minutes would have been life threatening.

### Safer Practices

- If you have to leave the car, even to run a quick errand, take the children with you.
- Never use the car as a "baby-sitter" substitute.
- Never leave your child/ren in the car without adult supervision at all times.

## Safety Travelling in Hot Weather

- Provide plenty of cool water or fluids regularly during the journey.
- Dress children to promote airflow around their body, i.e. lightweight fabric and use light colours.
- When planning long journeys especially with small children, consider travelling in the cooler hours of the day.
- Plan to stop every 2 hours so all passengers including the baby have an opportunity to get out of the car.
- In summer when children are wearing lightweight clothing restraints and harnesses could need to be tightened.
- For rear facing restraints, it is not recommended that you use a hood to protect the baby from the sun. A hood can reduce airflow around a baby's head that can lead to the baby overheating. A visor or sunshade is a safer alternative.
- On every trip, short or long, take the time to check your children's safety by re-checking the fit of their harnesses.



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