

Hot Cars

Never Leave Children Alone in Cars

On a typical Australian summer day, the temperature inside a parked car can be up to 30° higher than the outside temperature.

75% of the temperature rise occurs within 5 minutes of closing the car and leaving it, 90% of the temperature rise occurs within 15 minutes.

Dark coloured vehicles reach slightly higher temperatures than lighter coloured vehicles. The greater the area of glass in a car (eg. hatchbacks), the faster the rise in temperature.

Larger cars heat up just as fast as smaller cars and the colour of the interior trim of the car has little or no effect on inside temperature.

Opening a window a little makes minimal difference to the internal cabin temperature (~1°C when window open 1cm)¹

What are the risks?

- The temperature inside the car begins to rise, as does the humidity while the airflow decreases.
- As the temperature rises, the child begins to dehydrate and develop heat exhaustion.
- Young children are more sensitive to heat than older children and adults, and are at greater risk of heatstroke.
- The younger the child, the greater the risk of dehydration and heatstroke.
- Hyperthermia, dehydration and asphyxia can all lead to death.
- Concurrently, the child may also become distressed and try to get out of their restraint; this may also increase the risk of strangulation on the harness.

Case study

Three children aged 6, 4 & 2 years were found in a locked car with the windows closed. After unsuccessfully attempting to attract the children's attention, Emergency services were called. 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 sweating profusely 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



The Law

Under the Children and Community Services Act 2004, Part 4 - Protection and care of children. A person who has the care or control of a child and who leaves the child in a motor vehicle (as defined in the Road Traffic Act 1974) without proper supervision for such period or in such circumstances that:

- a) the child becomes or is likely to become emotionally distressed; or
- b) the child's health becomes or is likely to become permanently or temporarily impaired;



is guilty of a crime, and is liable to imprisonment for 5 years.

Safety Steps

- If you leave the car, even to run a quick errand; take the children with you.
- Do not use the car as a 'baby-sitter' substitute.
- Plan to complete quick jobs such as refuelling the car when you don't have children with you.

Safety when travelling in hot weather

- Provide plenty of cool fluids, preferably water, for all occupants and offer them to children regularly.
- Dress children suitably to promote airflow around their bodies i.e. if the car does not have air conditioning, dress the children in clothing made of lightweight fabric and light in colour.
- Double check that the harness fits the child - children wearing lightweight clothing may need their harness tightened.
- Do not use a hood on rearward facing restraints to protect the baby from the sun. This will decrease airflow around the baby's head. Instead use a visor or sunshade to filter the sun's rays.
- Plan car journeys for the cooler hours of the day & make frequent stops, at least every 2 hours.
- Cool your car down as much as possible before putting the child in the car.
- Where possible, when stopping or parking your car, put it undercover or in the shade to reduce the amount of the direct sunlight hitting your car.

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For more information

☎ (08) 9340 8509

Child Safety Information Line

☎ 1800 802 244

Poisons Information Centre

☎ 13 11 26

¹Ibrahim Almanjalie "Temperature Variations in a Parked Car" UWA 2007