



# Rearward or forward facing

## Rearward or forward facing – what should I do and when?

The shoulder height markers on a child’s seat determine when it is legal and safe to turn the child forward facing (refer to shoulder height markers fact sheet).

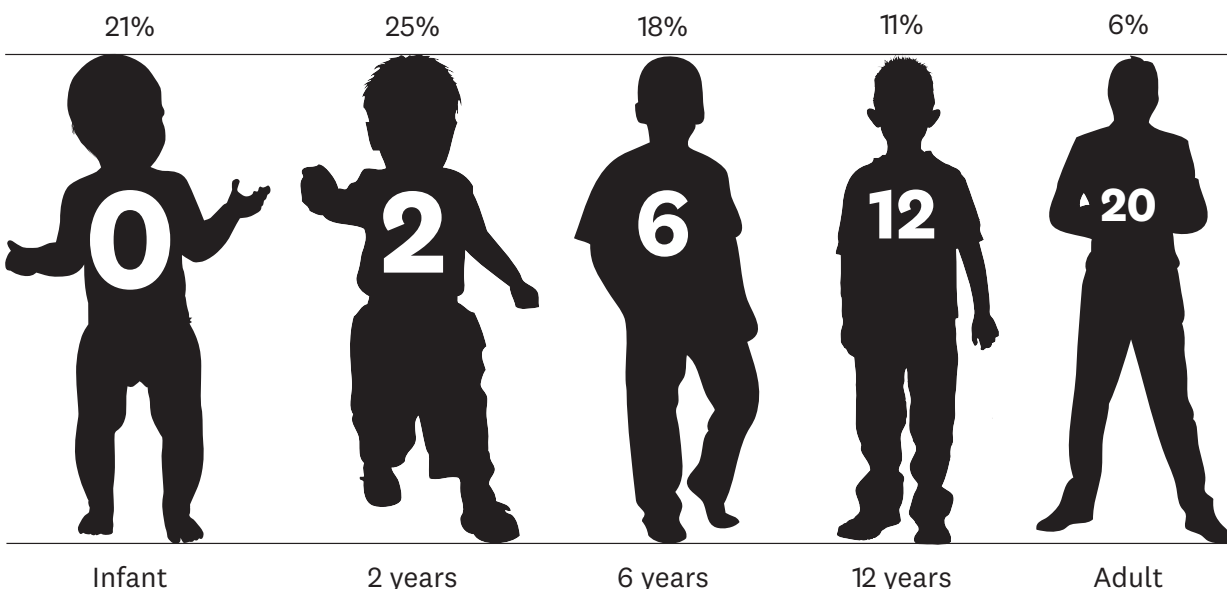
### What are the risks?

The head of a newborn child makes up a fifth of the child’s total body weight and a quarter of their total body length. With adults, the weight of the head is only a 16th of the total body weight and a seventh of the total body length.

The illustration below shows the head’s size and weight in relation to the total body size and weight at different ages.

Because the head of a child is proportionally larger and heavier, the child’s centre of gravity is located higher up on the body, in comparison to the centre of gravity of an adult. This means that a child involved in a crash is very vulnerable to spinal injuries.

### Weight of head as a percentage of total body weight



In a crash, a rearward facing restraint supports the child and spreads the force evenly, resulting in less injury to the child, as seen in image 1. A child in a forward facing seat, is thrown forward with the impact with nothing to support their head, with the potential of causing greater injury.

This puts so much strain on their spinal cord it can stretch. If it stretches too far it can tear, resulting in paralysis or death.

Young children have poorly developed ligaments and muscles, and their vertebrae are not strong enough to protect the spinal cord.

Research conducted by Kathleen Weber at the University of Michigan showed that at around 12 months of age the injuries seem to lessen from severe consequences to moderate consequences. Her recommendation is to keep children rearward facing until they're at least one year old.



**The Australian Standard**

The Australian Standard requires that all child restraints be fitted with a top tether (unless it is a booster seat weighing under 2kgs).

The top tether strap significantly reduces the forward movement of a child (and their restraint) in the event of a crash or significant braking. This lessens the injury risk for those children that are ready to turn forward facing.



**Recommendation**

RAA recommends choosing restraints that enable children to remain rearward facing until they're at least 12 months old. Always follow the markers and the instructions (as seen in image 3) provided by the manufacturer regarding turning the restraint forward facing. All of the convertible restraints recommended by RAA accommodate children rearward facing until they're at least 12 months of age, with some rated up to 30 months.

**RAA recommends choosing restraints that enable children to remain rearward facing until they're at least 12 months old.**



**We're here to help**

For more information on child restraints, call the RAA Safety Centre on **8202 4592**, email [childrestraints@raa.com.au](mailto:childrestraints@raa.com.au) or visit [raa.com.au/childsafety](http://raa.com.au/childsafety)