

Literature review rearward and forward facing Child Restraint System (CRS)

Ref 1-5

- Effect forward facing CRS 0-3 years: 60-77%
- Effect rearward facing CRS 0-4 years 90-95%
- Difference: between 3 and 8 times more effective with rear facing compared with forward facing CRS.

Crash tests ref 6

- “In forward facing CRS, the tension and the Gz (acceleration head) were at least three times those of the rearward-facing systems.”
- “.....a significant advantage of rearward CRS in the front seat comparison with rearward facing CRS in the back seat”

Ref 7.

Cervical spine fractures sustained in forward facing CRS – five real life cases.

.Final recommendation ”..children younger than two years of age and preferably younger than four years should travel rearward facing.”

Ref 8.

- Spinal cord injuries to children 1.5-55 months old in 7 accidents.
- All but one injury could have been prevented with rearward facing CRS
- “...the children’s spine develops until about five years of age and recommends rearward facing systems as long as possible.”

Ref 9.

- 1722 children 12-47 months in forward facing CRS

“ The occurrence of head and neck injuries for these children provides supporting data to suggest than an extension of the current recommendation to keep children rearward facing beyond 1 year of age may be appropriate”.

References

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