Child restraint use in Sweden

Authors + affiliation:

- Sofia Bergfors, Helena Lundberg, Volvia
- Lotta Jakobsson, Katarina Bohman, Volvo Cars •

Corresponding author:

Sofia Bergfors, Volvia, E-mail sofia.bergfors@volvia.se +46 (0)768 932923

Primary theme/topic:

Field observations

Keywords:

Child restraint use, rear-facing child seat, booster seat, booster cushion

Abstract:

This study aims at presenting the CRS usage, perception and behavior of parents in Sweden 2021, and to compare with the last 6 years.

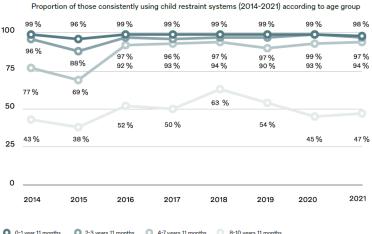
Methods:

Questionnaire based study, conducted annually from 2014 to 2021. Selection criteria included parents aged 20-65 with children aged 0 to 10 years and 11 months (0-10y11m) as well as access to cars which they drive regularly. Each year, the quantitative survey is conducted online with a web panel of more than 1000 interviewees put together to be representative for Swedish parents, each year more than 1000 persons. In cases where an interviewee has more than one child, the answers were registered per child. For 2020 the study was also performed in Norway, Finland and Denmark, providing a reference for comparison.

Results:

Restraint use for children is high in Sweden. For children up to eight years old, 96% of the parents say they always use some kind of CRS. Only in exceptional cases at low speeds some children occasionally may ride unrestrained for a short distance. These high figures have been consistent since 2016, see Figure. For the age group of 8-10y11m, 47% use CRS and the rest seatbelt only.

The Swedish national recommendation is that children should travel rear-facing until at least 4-5 years of age, thereafter



Use of infant seats, child seats, booster seats/cushions

Q 2-3 years 11 months Q 4-7 years 11 months 8-10 years 11 months 0-1 year 11 months

best practice is a booster. Convertible seats or forward-facing seats with internal harness are rarely used in Sweden.

Many parents keep their children in rear-facing CRS until they are around 4 years old. In this year's study 89% of children 0-3y11m are always traveling rear-facing. The youngest age group (0-1y11m) have remained stable and high around 97% over the years, while an increase has been seen in the group of 2-3y11m, from 72% in 2015 to 81% in 2021. In addition, this year 22% of the 4-year-olds travel rear-facing, while only 3% of the 5-year-olds. Although high in relation to most other countries, it is a concern that over the last few years, the proportion of children in the age group 2-3y11m placed in forward-facing CRS has remained relatively consistent at 20%. Moreover, as many as 78% of 4-year-olds travel forward-facing. The parents' main answers for changing to a forward-facing CRS are that they claim the child has outgrown the rear-facing seat or that the child gets car sick.

In the oldest age group (8-10y11m), 29% state that their children *never* use a booster. A booster cushion is the most commonly used type of booster at the age of 7 in Sweden.

Are Swedish parents special? As a society, Swedes have a long-term focus on safety, including child safety in cars, as well as driving safe cars. The results are striking even when comparing to other Nordic countries, where the use of rear-facing child seats is considerably lower than in Sweden. Furthermore, in Sweden children stay in CRS to a high age before using seat belt only.

Swedish parents consider "good test results regarding safety", a child seat with "a high total weight-limit" and "easy to attach" as most important factors when choosing a CRS. Attaching large rear-facing seats are not seen as a hinder for usage. When buying a CRS, the most common is to buy a new for the first child and let the next child inherit the sibling's seat if they are not too close in age. With respect to car sharing, many parents consider it to be an option. If so, about 70% would bring their own CRS, while 30% would like the CRS to come with the car. This will be a challenge when different types of car sharing solutions get more popular. There is an apparent risk that the use of CRS will be considerably low among these parents.

Although not required by law in Sweden, 70% of the parents state that a child should travel rear-facing until it the age of 4, which is in line with the national recommendations. However, only 4 out of 10 parents know that children are recommended to use a booster until 10-12 years of age and 54% don't know that children shorter than 135 cm are required by law to use a CRS. The booster usage of 47% in the oldest age group, indicate an area for improvement in Sweden. Generally Swedish parents are very aware of recommendations for younger children, but as the child grows older the knowledge gap widens.

The results from this study has been presented to media in May 2021, through Volvia.se media site and to journalists.