REVIEW OF SPECIALTY HARNESSES AND VESTS USED BY CHILDREN AND YOUNG PEOPLE WITH DISABILITIES AND MEDICAL CONDITIONS IN MOTOR VEHICLES IN AUSTRALIA AND NEW ZEALAND | FREQUENTLY ASKED QUESTIONS

#### **BACKGROUND**

Austroads' recent project has identified valuable opportunities to improve the selection and use of specialty vehicle harnesses and vests used by children and young people with disabilities.

Through a combination of surveys, expert input, and product analysis, the findings suggest there is a need for improved information and guidance about the selection and use of these products to ensure that children and young people can travel safely. See the questions and answers below for more details.

### FREQUENTLY ASKED QUESTIONS:

- What are specialty harnesses and vests?
- Why was this project undertaken?
- Who undertook the project?
- What did the project involve?
- What did the project find?
- Are the project findings relevant to adult passengers?
- Are there recommendations relating to specialty harness/vest selection and use?
- Do the expert safety recommendations relate to all vehicle types?
- What are the next steps?
- What does this research mean for allied health professional practice?
- Where can parents/carers find out more information?
- Where can I learn more about this project?

### **ANSWERS TO QUESTIONS:**

#### What are specialty harnesses and vests?

The term 'specialty harnesses and vests' is used to describe the accessory products available in Australia and New Zealand for occupants with disabilities, medical conditions or behaviours of concern that provide postural support (and in some cases a vehicle restraint function) and/or reduce the risk of the occupant getting out of their seatbelt.

### • Why was this project undertaken?

The project was undertaken to address the gaps in research and knowledge about these accessory products, and to inform the development of guidance and standards for their selection and use.

#### Who undertook the project?

Austroads engaged Mobility and Accessibility for Children and Adults Ltd (MACA) who worked with The George Institute for Global Health to undertake this project.

#### What did the project involve?

The project activities included:

• an online survey of parents of children and young people (under 16 years) to provide an understanding of specialty harness/vest use and access in the community

- a desktop review of eighteen specialty harnesses/vests, vehicle types they are used in, compliance with standards and road laws, and potential safety and usability issues
- engagement of experts to provide recommendations for the selection and use of specialty harnesses/vests, including identification of risks associated with their use.

### What did the project find?

Key project findings include:

- Specialty harnesses/vests are most commonly used in family vehicles, followed by school buses.
- Nearly half of parents (45%) purchasing specialty harnesses/vests are doing so without professional support.
- The main reason that parents purchase specialty harnesses/vests is for their child's behavioural needs, followed by physical needs.
- Instruction manuals and online information about specialty harnesses/vests are inadequate.
- The legal requirements for using specialty harness/vests when travelling in motor vehicles are unclear (this has since been clarified in the report).

The report also found that specialty harnesses/vests that require the lap-sash seatbelt to be converted to a lap-only belt present significant road safety risk. Research into similar style products, known as 'H-harnesses', found that they are widely misused and provide worse protection than a lap-sash seatbelt, even when correctly used (NeuRA, 2021).

#### Are the project findings relevant to adult passengers?

Although the project focused on specialty harness/vest use by children (under 16 years), the project findings are also generally applicable to adults.

## Are there recommendations relating to specialty harness/vest selection and use?

Experts in the field of child restraints, vehicle safety, child restraint research, and allied health developed recommendations for the safe selection and use of specialty harnesses/vests aimed at prescribers, such as occupational therapists.

These recommendations require the development of guidance materials, as recommended in the report.

# Do the expert safety recommendations relate to all vehicle types?

No. The recommendations relate to passenger cars only (such as family cars). The experts identified that further research is needed to guide the selection and use of specialty harnesses/vests in other vehicle types (e.g., supported school buses).

### What are the next steps?

The project outlines actions for consideration including the development of guidance materials to support prescribers' understanding of the expert safety recommendations. Further research is also recommended including research to investigate the selection and use of specialty harnesses/vests in supported school buses and the ongoing need for products that require a lap-sash seatbelt to be converted to a lap-belt, or for use with lap-only belts.

### What does this research mean for allied health professional practice?

When the guidance materials are developed, they will be made available for health professionals to use when supporting children's motor vehicle transport needs.

Project findings will also be incorporated into MACA's specialist online training course for Australian allied health professionals, Transporting Children with Disabilities and Medical Conditions.

MACA is currently adapting this specialist online training course for New Zealand allied health professionals.

### Where can parents/carers find out more information?

It is recommended that parents who need support with their child's motor vehicle transport needs speak to a MACA trained allied health professional or contact MACA. You can find a MACA trained health professional by searching MACA's registry.

### Where can I learn more about this project?

An Austroads webinar will be held on Thursday 5 June from 1-2 pm AEST. MACA CE Helen Lindner and Professor Julie Brown from The George Institute for Global Health will be presenting on the project. No charge but registration is essential. If you can't make the live session, a link to the recording will be provided after the webinar. Register here.

The report is available on the Austroads website.