

## 14.5 Injury prevention during transportation checklist (for wheelchair users in vehicles)



### Injury prevention during transportation checklist

A range of strategies can help reduce the risks (to an acceptable level) of injury to the wheelchair user. This is not an exhaustive list:

- Reduce the risk of equipment failure:
  - » Prescribe only proven, crashworthy wheelchairs (refer to manufacturer's information).
  - » Use only proven wheelchair tie-down (anchor) restraints and occupant restraint systems (seatbelts), that comply with Australian standards (AS/NZS 10542: 2009) and that are maintained in working order.
- If relevant, provide a means of attachment of the seating system to the wheelchair, which is also suitable for transport.
- Wheelchair components to be considered:
  - » Provide a head rest, which must be no lower than the most prominent point on the back of the head and above the person's ears, close to the back of the head and well padded. The brackets at the of the head rest must not pose a risk to other passengers.<sup>184</sup>
  - » Provide a back support<sup>184, 186</sup> and a head rest.
  - » Wheelchair brakes must be in good working order and able to be locked in transit.
  - » Dimensions of the wheelchair must be accommodated in the proposed modes of transport.
  - » Wheelchair and user height must be compatible with internal height and door height of the proposed vehicle.
  - » The wheel drive position (rear, mid or front wheel drive) can have an impact on safe vehicle entry and egress.
- Use a properly fitted occupant restraint system that is anchored to the vehicle (lap sash seatbelt or lap belt NOT pelvic belt attached to the wheelchair). The sash portion should be across the chest and mid shoulder and the lap portion should be over the pelvis not the abdomen.<sup>184, 186</sup>
- Position the wheelchair in the vehicle so that the wheelchair and occupant face the front of the vehicle when in motion.
  - Consider the local environment and available modes of transport the client will potentially access (public or private), and any alternatives.
  - Consider the interface between the wheelchair and the vehicle. This includes:
    - » Wheelchair dimensions
    - » How to enter and exit the vehicle safely (e.g. ramps—rear or side entry, manual or motorised hoist, entry door size).
    - » If transferring to a seat, safe stowage of the wheelchair and battery (for powered wheelchairs) in all forms of anticipated public and private transport options, including aeroplanes.
    - » The wheelchair user should sit as upright as possible, within 30 degrees of the vertical. Tilt in space should not be used in the vehicle while in transit.<sup>184, 186</sup>
    - » Decide how to manage additional equipment such as trays and augmentative communication devices. Hard trays, communication devices and mounting should be removed for transport and stored securely to avoid the risk of obstruction or a missile in the vehicle.
    - » Chin controls can be an obstruction and should be swung away if possible.
    - » Powered wheelchair controls should be switched off during travel.
  - Take into account individual factors such as:
    - » Medical concerns, for example, the need for medical devices such as ventilators to remain in situ and secured during travel, or access to assistance if the wheelchair user has a condition which requires immediate responses (epilepsy or airway difficulties).
    - » Behavioural issues such as the user habitually releasing the seatbelt and safety restraints at an inappropriate time. The preferred option is a behavioural intervention program developed by a psychologist. If further intervention is required, other options include an escort or a seatbelt cover. ([http://www.ilcnsw.asn.au/search?search\\_phrase=seat+belt+buckle+cover](http://www.ilcnsw.asn.au/search?search_phrase=seat+belt+buckle+cover))

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