Occupied wheelchairs in cars and private transport – reminders of safe use

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The MHRA receives reports of adverse incidents involving people seated in their wheelchairs in road vehicles. Many of these problems are caused by the incorrect use of the wheelchair and wheelchair tie-down and occupant restraint systems (WTORS).

This document is for guidance only and does not replace the manufacturer’s instructions for use. It is aimed at:

- wheelchair service providers
- transport service providers
- healthcare professionals providing wheelchairs or transport services
- wheelchair users.

Note: only the wheelchair falls within the remit of MHRA’s work and this document applies in the UK only.

Identifying a suitable wheelchair for use as a seat in transport

- Read the instructions for use and check that the choice of wheelchair is suitable for occupied use in transport – not all models are.

- The driver, clinicians, rehabilitation engineers, equipment procurement personnel, the wheelchair user and their care provider must collaborate to reduce risks in transport to the lowest possible level.

- Complete and document a comprehensive risk assessment, taking into account the requirements of the wheelchair user (including the type of transport they plan to use). This process should involve as many interested parties as possible to reach the most appropriate solution. In addition to the standard considerations, think about:
  - the degree of upper body and head control each user has and how this could be affected by the way the vehicle moves (e.g. accelerating, cornering and braking)
  - the type of occupant restraint and head support the user will need in a vehicle
  - any accessories the wheelchair user needs (instructions for accessories should state whether or not they are suitable for use in transport.)

- If in doubt, contact the manufacturer – they have designed the equipment and will be able to tell you how to get the most out of it.
**Instructions for use (IFU)**
The wheelchair’s IFU should make it clear if the wheelchair is suitable for occupied use within a vehicle, and if so, how to do it safely. If it doesn’t, report this to us using the **Yellow Card** online reporting system.

The IFU should clarify:

- what additional equipment is required, such as wheelchair tie-down and occupant restraint systems (WTORS) or an alternative docking system

- how to secure both the wheelchair and the seated passenger in position whilst in transit (note that lap belts and postural aids supplied with a wheelchair are **not** intended for this purpose). This includes guidance on the correct vehicle anchorage points for both tie-downs and occupant restraint

- any limitations to how the wheelchair can be used (including guidance on suitable configurations of tilt in space seating, adjustable elements of the wheelchair, suitable seat height and maximum user weight).

The latest version of the IFU for a wheelchair is often found on the manufacturer’s website. If not, then request a copy from them directly.

**Identifying the best occupant restraint system**
The most commonly used restraints aren’t suitable for everyone. If you can’t follow the IFUs to the letter:

- make sure the risk assessment demonstrates that risks have been identified and reduced as far as practicable and that the benefits to the user outweigh the risks

- note that people who need to travel in their wheelchair in unconventional positions might need a bespoke WTORS

- involve both the WTORS manufacturer and seating or wheelchair supplier in discussions to ensure that the chosen wheelchair can accommodate bespoke occupant restraints

**Wheelbase and seating system combinations**
The party who combines a wheelbase and seating system (e.g. service provider, clinician etc) is responsible for the performance of the resulting device. It is therefore their responsibility to ensure that the combination is safe and meets the user’s requirements, which may include being suitable for occupied use within a vehicle.

- Check the compatibility documentation provided by the manufacturers of both the wheelbase and the seating system to find out whether the combination has been approved and if so, if it’s suitable for occupied use in transport.

- If the combination is not one already approved by the manufacturer of either device, carry out and document a risk assessment for the combination.

- If in doubt, contact the manufacturer(s) for guidance.
Docking systems
Certain wheelchair manufacturers tested third party docking systems with their products. The instructions for use should give details about this.

Note that, like WTORS, docking systems themselves are not classified as medical devices and do not fall under the remit of MHRA's work.

We are aware of situations in which wheelchairs have been damaged beyond repair because of the way they were modified to try to fit them to particular docking systems.

You must check whether the wheelchair is compatible with the docking system you want to use. If you need to modify the wheelchair, check the instructions for use for the wheelchair and the docking system. If you modify the wheelchair against the manufacturer’s guidance, this is considered ‘off-label use’ and the manufacturer won’t be liable if this causes an adverse event.

Preparing to travel
Remember that ideally, wheelchair users should transfer to vehicle seats whenever possible, and the wheelchair stowed as an item of luggage.

If this is not possible and the person needs to stay seated in their wheelchair, carry out the following before setting off:

- check that the wheelchair is suitable for use as a seat in a vehicle
- check that the vehicle is suitable for transporting the person sitting in their wheelchair
- use the appropriate equipment to secure both the wheelchair and the seated passenger in position. Transport providers should carry a variety of different WTORS as one type is unlikely to fit all wheelchairs and users
- check if the wheelchair needs more than the standard 4-point restraining tie-downs. The wheelchair manufacturer’s instructions for use should tell you this
- ensure that powered wheelchairs are turned off
- do not leave powered wheelchairs in ‘freewheel’ mode
- apply the brakes on the wheelchair and/or block the wheels in position
- secure accessories and postural aids to stop them coming loose whilst the vehicle is moving or in case of an impact
- check that the accessories (eg headrest) don’t interfere with the WTORS

Adverse events
If a wheelchair is involved in a vehicle collision, do not use the wheelchair and WTORS again until the manufacturer or their approved repair agent has checked them. If there is any doubt, the wheelchair or WTORS should be scrapped.

Report details of adverse incidents to MHRA.
Further reading
The Posture and Mobility Group (PMG) has a document ‘Best Practice Guidelines for the Transportation of People Seated in Wheelchairs’ which was put under review in March 2016. It is aimed at clinical practitioners, rehabilitation engineers and seating specialists. PMG is a charitable group created to advance and disseminate knowledge about the posture and mobility needs of people with mobility impairments.

Government advice on travelling in a wheelchair in public transport, taxis, minicabs, planes and ships.

Government policy publications from the Department for Transport.

BS 8603, Code of practice for wheelchair passport schemes intended to reduce the potential for accidental user error. This includes a generic template risk assessment. Please note that BSI charge for this document.

Driving at work: Managing work-related road safety may also be of general interest to drivers.

Health and Safety Executive has generic risk assessment templates and guidance on completing risk assessments.

The Disabled Living Foundation and the British Healthcare Trades Association (BHTA) have useful information on wheelchairs.