



# Motoring after a brain injury

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## This booklet

This booklet is for people who have had a traumatic brain injury – *Motoring after a stroke* is another booklet in this series.

First we give details of how a brain injury might affect your driving and the rules about driving with a disability.

Then we tell you about useful features on standard cars and about the specialist products that might suit you. We also tell you how you can have your car adapted to make driving easier.

**Where we give product prices, these should be used as a guide only. If you can, shop around and talk to different firms as prices vary.**

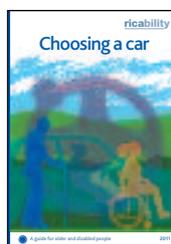
At the back, there is information, including addresses, about sources of funding and expert advice.

More detailed information on choosing and using a car can be found in the Ricability guides shown opposite. The *Mobility address list* tells you about all UK specialist motoring suppliers.

## Our guides

All our guides are free – contact us for a copy or see them on our website: go to [www.ricability.org.uk](http://www.ricability.org.uk) and follow the links to the Mobility section.

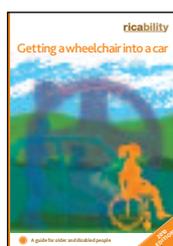
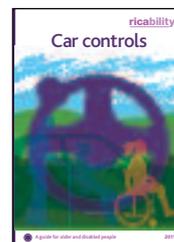
The main guides are shown here:



### Choosing a car

Details of features that may help you and ways of adapting a car

**Car controls**  
Information on types of adaptations and how to get them



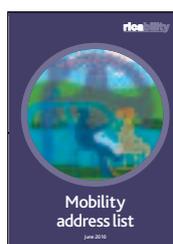
### Getting a

### wheelchair into a car

Equipment to help you stow or carry a wheelchair

### Getting in and out of a car

Techniques that may help and details of equipment that is available



### Mobility address list

Addresses of all adaptation suppliers and car converters in the UK and what services they offer



## Driving after a brain injury

A brain injury can be caused by an accident, an assault, an infection, a stroke or brain surgery. It can affect you in many ways and may affect your ability to drive.

**It is essential to take your doctor's advice about whether you are fit to drive. You may also need to have an assessment, which will tell you if you are fit to drive and if you need any extra help.**

### EFFECTS OF A BRAIN INJURY

Driving involves judgement and thought as well as physical action. A brain injury can affect all of these and this may affect your ability to drive. A brain injury can:

- make it hard for you to **think**
- make it hard for you to **see**
- cause **epilepsy**
- cause **physical disabilities**.

#### Thinking

You may find it hard to:

- concentrate. You may be easily distracted, get muddled, or lose track
- remember things
- read the road or work out what is

happening. For example you may not notice a stop sign

- gauge things like speed and distance
- foresee the consequences of actions or situations
- react in time
- control your temper.

#### Seeing

Changes in your vision can include:

- blind spots or tunnel vision, so it's hard to see some areas without turning your head
- double vision
- jerky eye movements
- difficulty with your judgement of speed, distance and depth.

Often people with these problems don't know they have them. A specialist in sight, such as an orthoptist or ophthalmologist will need to assess and treat any visual impairment you have.

#### Epilepsy

Some types of injury mean there is a high risk of epilepsy, particularly if you have had brain surgery. If your injury puts you at risk, you will be told to stop driving for 6 months or a year, in case you have a fit. If you have had a fit, you are not allowed

to drive for a year afterwards. Medication can control fits, but if your medication is changed, you should follow your doctor's advice about stopping driving while you adjust to it.

### Physical disabilities

A brain injury can cause physical disabilities. They can include:

- paralysis of part of the body
- loss of sense of touch
- less control over some movements.

You may have other physical disabilities too, particularly if you have been injured in a road traffic accident. Choosing a car with the right features or fitting the right adaptations can overcome these difficulties so you will very likely be able to continue driving. See the summaries below and our *Car controls* guide for more information.

## DRIVING ABILITY ASSESSMENT

You may feel you can carry on driving after a brain injury but don't rush it. It can take time to recover and to find out what the long term effects of your injury are. You may have more of a problem than you know.

On the other hand, your family and friends may tell you not to drive when you can do so safely.

**The most important piece of advice we can give is to get an independent assessment. A Mobility Centre (see page 10) can give you an assessment. This can cost up to £130 depending where you are. They will tell you:**

- if you are safe to drive
- what you can do to make driving safer and easier

- where you can find specialist driving lessons
- where you can get specialist equipment
- where you can go for help with funding.

**An assessment will also help make sure you are complying with the law about driving (see page 5).**

If you can drive safely, the assessment will help you and your family feel more confident. If your injury means that you feel nervous about driving, they may advise you about how to build up your confidence.

If you are over-confident they may work out a programme which will help you understand how your driving has been affected and give you the skills to drive more safely.

## DRIVING LESSONS

The effects of your brain injury may be lasting but any of them can improve with time. Most people keep many of the driving skills they had before the injury but they may still need specialist driving lessons. These will help you learn how to deal with the effects of your injury and how to change the way you drive. Be prepared for this to take time.

If you have never driven, your assessment will tell you if your injury is likely to affect your ability to learn before you take specialist lessons. If you can learn, the assessment will provide information that will help the instructor.

If you get the Higher Rate Mobility Component of the Disability Living Allowance, you can apply for a driving licence when you are 16 so you can get mobile quicker.

## LEGAL MATTERS

It is against the law to drive if you are not fit to do so. You must tell the Driver and Vehicle Licensing Agency (DVLA) about your injury if your doctor advises you to or if you think it affects your driving.

They will assess your fitness to drive using the information you give them. They may contact your doctor – with your permission – and may ask you to have a medical examination or a driving assessment. You may be:

- allowed to keep your licence
- given a temporary licence for one, two or three years
- given a licence to drive an automatic or a car with special controls
- told to stop driving for a short time or, in extreme cases, forever.

You can appeal if you do not agree with the DVLA's decision.

For more information on driving licences get *What you need to know about driving licences* (D100) from a post office or go to:  
[www.direct.gov.uk/motoring](http://www.direct.gov.uk/motoring).

### Take care

- **Make sure you tell your insurance company about your injury and about any special controls you use (or if you have to drive an automatic) – or you may not be covered.**
- **Do not make any fixed plans about finance for a car until the DVLA have confirmed that you can continue to drive – you could end up paying for a car you can't use.**

## Plan of action

### 1 Ask some basic questions

Think about what you may need in future as well as about what suits you now. For more information see pages 6–8 and our other guides.

**Will you keep your car or change it?** If your car is too difficult to use, you can adapt it or get a new one. If you're getting a new car, look for features that will make your life easier.

**How will you get in and out?** Do you need wide or high doors, or specialist equipment to help?

**Will you be comfortable in the seat?** Is it supportive? Can you sit without pain? Can you reach the controls?

**Will you need specialist controls?** There is a wide range – from simple gadgets to more complex controls.

**What equipment will you carry?** Think about everyday and occasional use.

**Do you use a wheelchair?**

### 2 Collect information

Start with motoring magazines and the internet plus manufacturers' brochures. You may also try the following:

- **Reviews by disabled drivers** in Motability's magazine *Lifestyle* and in newsletters of disabled motorists' organisations (see pages 10–11)
- **Mobility Centres** (see page 10) can assess your driving and find out what equipment may suit you. Charges vary from centre to centre (check with your local centre). Free in Scotland if you are referred by a GP. Free under Motability's Managed Adaptation Programme (only open to Motability customers).

- **Mobility Roadshows** (see page 11)  
Visit one of these free events to see and try out vehicles and adaptations and other mobility equipment
- **Motability** (see page 11) have a list of accredited car dealers with specialist knowledge and facilities for disabled people. They have free guides, in print or on their website.

### Find a car

- use our online database of car measurements
- search for a particular seat height, wide doors, low sills or lots of headroom or look for a boot to fit your wheelchair
- go to [www.ricability.org.uk](http://www.ricability.org.uk) and follow the link for the Car measurement database.

### 3 Try out before buying

Try any car you are considering. Dealers may bring one to you and should be able to find an automatic version. Try getting in and out several times. If you use a wheelchair, check that it fits. You might be able to try out adapted cars at a Mobility Centre or an adaptation firm. They will also tell you if the adaptations can be fitted to your chosen car.

### 4 Get plenty of practice

It is advisable to have lessons with an instructor using the adaptations you have chosen – essential when learning to use a left foot accelerator (see page 8). Mobility Centres can help you find an instructor. Make sure that you are not driving with adaptations for the first time when you collect the car.

## Products and techniques

### GETTING IN AND OUT

The best way to get in is to sit in the seat first then turn and bring your legs in, doing the reverse to get out.

Look for the following features:

- **doors which open easily**
- **high and wide door openings – doors on two and three-door cars are usually wider**
- **no door sills, or low, narrow sills**
- **handholds you can use when getting in and out**
- **seat height that suits you**
- **seats that move up and down and back and forward easily**
- **plenty of space around the seat.**

If you need more space to get in and out, you can have the seat runners extended.

You can also convert your existing seat to make it higher or height adjustable, or have a specialist replacement seat fitted. Costs start at about £800. Our *Getting in and out of a car* gives more information.

If swivelling helps, there are turning cushions (mostly between £20 and £80 from general aids suppliers) and swivel seats, from around £850 upwards.

For any of these, contact adaptation firms in our *Mobility address list*.

**Wheelchair users** – If you have a manual wheelchair, you may be able to lift it into the back of the car and walk the few steps to the front. However if you can't, there are devices and techniques for getting you and the wheelchair into your car. See our guide *Getting a wheelchair into a car* for more information on these.

## LOCKING AND IGNITION

Look for the following features:

- **remote and central locking**
- **keyless entry system**
- **push-button start**
- **windows that close automatically when the car is locked.**

## PRIMARY CONTROLS

For steering, braking and accelerating.

Look for the following features:

- **automatic gears – may make driving less stressful and tiring**
- **power steering**
- **cruise control to maintain a constant speed**
- **electronic handbrakes – can be helpful if you have a weak hand or wrist.**

**Steering** – You can fit a steering ball or spinner to the steering wheel to let you steer one-handed.

Spinners come in several shapes and sizes to suit different types of grip. Most cost between £15 and £110.



Steering wheel spinners from Alfred Bekker

**Changing gears** – This is very much easier with automatic transmission. This means fewer gear changes, but also helps with pulling away, especially in hill starts.

To change gear in a manual car, you have to use the gear selector with your hand, and the clutch pedal with your foot, both at the same time.

If you cannot use a mechanical gear selector, you can have an electronic system fitted, but these can be expensive. Take advice from a Mobility Centre before investing in one of these systems.



Electronic gear selector, from Adaptacar

Some cars have automated manual gear systems which work without using a clutch pedal. You move a lever to the right setting or push buttons or paddles on the steering wheel.



Gear controls on steering wheel

Adaptation firms can also fit a lever or button on the gear stick of a manual car that allows you to operate the clutch with the same hand as you use to change gear. These cost from around £1,800 but they may mean that you can continue driving a manual car.

**Accelerating and braking** – If the strength or control of your legs is poor, you may be able to have more brake assistance added to reduce the effort.

If your right leg is affected, you can fit a fold-up left foot accelerator, for around £350. Only one pedal should be down at any time. Driving in this way takes a lot of time and practice. Specialist driving lessons are **strongly recommended**.

Different types of hand control system can be fitted on an automatic car.

- Push pull controls combine acceleration and braking in one lever – mounted on the steering column or on the floor, around £400-£900



Jeff Gosling single lever accelerator and brake – here fitted with optional indicator switch

- Separate controls for the accelerator and brake give you more choice and may need less effort. An under ring accelerator (from £1,500) lets you steer with both hands. This is normally combined with a hand-operated brake lever, from £550.



Under ring accelerator, from Autoadapt

**Parking brake** – Mechanical attachments can make it easier to use the handbrake, from £85. Electronic parking brakes cost from around £750.

RSE Auto-brake can be fitted to a manual car to help with pulling away – ask your adaptation advisor.

## SECONDARY CONTROLS

For controls like the lights and indicators. Try to find a model where these are in the best position for you. Also look for:

- **automatic wipers and lights**
- **parking sensors or cameras**
- **electric windows**
- **'take me home' headlights – stay on for a while after you get out.**

There are many simple attachments to make secondary controls easier to use and several systems which bring all the controls together. They can be adjusted to meet your individual needs. Prices vary depending on how complex they are and on the wiring system of the car.



Steering knob combined with wireless secondary controls, from Autoadapt

## BOOT

Look for the following features:

- **no sill or low sill**
- **internal boot release**
- **powered boot opening/closing**
- **space for your wheelchair or scooter if you use one.**

## RICABILITY GUIDES

### **Getting in and out of a car**

- hoists which lift and lower you on to a car seat
- lifting seats which swing in and out of the car, lowering and locking into a position to suit you
- wheelchair systems where a specially designed wheelchair slides into the car while you are sitting in it and becomes the car seat
- wheelchair accessible vehicles (WAVs) where you travel in your own wheelchair or transfer inside the car.

### **Getting a wheelchair into a car**

- hoists, lifts and ramps to help get a wheelchair or scooter into the boot
- boot and rooftop hoists which stow a manual chair in the car or on the roof once you are in your seat
- trailers and racks which carry a wheelchair on the back of the car.

### **Car controls**

- primary and secondary control adaptations.

## Finance

**Motability** – Contract Hire and Hire Purchase Schemes set up for disabled people, using the Higher Rate Mobility Component of the Disability Living Allowance (DLA) or the War Pensioner's Mobility Supplement. See page 11 for more information.

**Access to Work** – May help if you are working or about to start work. Go to [www.direct.gov.uk/disabledpeople](http://www.direct.gov.uk/disabledpeople) or ask at your Jobcentre.

**VAT exemption on adaptations** – You do not have to pay VAT on adaptations, or on installation, repairs or maintenance.

**VAT exemption on a new car** – If you use a wheelchair or stretcher, you may not have to pay VAT on the purchase and maintenance of an adapted car. Information from HM Revenue and Customs (see page 11).

**Vehicle Excise Duty (Road Tax)** – You don't have to pay this if you get the Higher Rate Mobility Component of DLA or the War Pensioner's Mobility Supplement. Get an exemption certificate from the DLA Unit (08457 123456) or the Service Personnel and Veterans Agency (0800 169 2277).

**Car insurance** – Under the Disability Discrimination Act, insurers are not allowed to refuse disabled drivers insurance or charge extra without justifying evidence. Shop around for the best deal. Mobility Centres and organisations of disabled motorists have lists of companies that specialise in insurance for disabled drivers.

**Charities** – To find a grant maker try:

- your library for local charities such as the Round Table or the Rotary or Lions Clubs
- Charity Search – provide a free service for people over 50, to help find a grant-giving charity  
Tel: 0117 982 4060 (9.30am-2.30pm)  
[www.charitysearch.org.uk](http://www.charitysearch.org.uk)
- Turn2Us: a website for people in financial need: [www.turn2us.org.uk](http://www.turn2us.org.uk)
- contacting your local Headway group to discuss financial assistance.

### Blue Badge parking scheme

**Allows disabled people to park in restricted areas, but do read and follow the conditions of use carefully. The scheme is administered by local authorities who deal with applications and issue badges.**

**For more information go to [www.direct.gov.uk/disabledpeople](http://www.direct.gov.uk/disabledpeople). Also see [www.dft.gov.uk](http://www.dft.gov.uk) and follow the link for the Blue Badge Scheme. Blue Badge Helpline: 020 7944 2914 or 0161 367 0009 [blue.badge@dft.gsi.gov.uk](mailto:blue.badge@dft.gsi.gov.uk)**

### Blue Badge Network

- up to date legislation, information, news and ideas relating to parking concessions in particular and disability issues in general.

11 Parson's Street

Dudley DY1 1JJ

Tel: 01384 257001

Fax: 01384 257317

Email:

[headoffice@bluebadgenetwork.org.uk](mailto:headoffice@bluebadgenetwork.org.uk)

[www.bluebadgenetwork.org](http://www.bluebadgenetwork.org)

### Brain and Spine Foundation

- research, education and information
- help and advice to people affected by brain and spine disorders.

Freephone: 0808 808 1000

Email: [helpline@brainandspine.org.uk](mailto:helpline@brainandspine.org.uk)

[www.brainandspine.org.uk](http://www.brainandspine.org.uk)

### Disability Benefits Helpline

- government information service

Tel: 08457 123456

[www.dwp.gov.uk](http://www.dwp.gov.uk) or [www.direct.gov.uk](http://www.direct.gov.uk)

### Disabled Living Foundation

- advice and information on disability equipment.

Tel: 0845 130 9177 (10am-4pm)

[www.dlf.org.uk](http://www.dlf.org.uk)

[www.livingmadeeasy.org.uk](http://www.livingmadeeasy.org.uk)

### Disabled Motoring UK

- self help organisation run by and for disabled people. It works to encourage and increase mobility. Membership £16 per year – includes monthly magazine.

Ashwellthorpe

Norwich NR16 1EX

Tel: 01508 489449

Fax: 01508 488173

Email: [info@disabledmotoring.org](mailto:info@disabledmotoring.org)

[www.mobilise.info](http://www.mobilise.info)

### DVLA (Driver and Vehicle Licensing Agency)

Drivers Medical Group

Tel: 0300 790 6806

Fax: 0845 850 0095

Email: [eftd@dvla.gsi.gov.uk](mailto:eftd@dvla.gsi.gov.uk)

[www.direct.gov.uk/motoring](http://www.direct.gov.uk/motoring) and follow link to 'medical rules'

### Northern Ireland: Driver & Vehicle Agency

Driver Licensing Medical Section

Tel: 0845 402 4000

Email: [dvlni@doeni.gov.uk](mailto:dvlni@doeni.gov.uk)

[www.dvani.gov.uk](http://www.dvani.gov.uk)

### Forum of Mobility Centres

- national information service on driving, specialist equipment and vehicle adaptations – call the helpline or visit the website

- a network of independent, accredited Mobility Centres which will: assess your driving and give you advice about how to make it safer, easier and more comfortable; give advice to carers; in some cases, help you find a specialist driving instructor.

Freephone: 0800 559 3636  
www.mobility-centres.org.uk

### Headway

- information, support and services to people with a brain injury, their families and carers
- national helpline and local groups
- publish a booklet *Driving after brain injury* – free to people with brain injuries or their carers.

Freephone: 0808 800 2244  
Email: helpline@headway.org.uk  
www.headway.org.uk

### HM Revenue and Customs

- VAT relief on adaptations (VAT Notice 701/7) and motor vehicles (VAT Notice 701/59) for disabled people.

Tel: 0845 302 0203  
Textphone: 0845 000 0200  
www.hmrc.gov.uk

### The Mobility Roadshow

- free events with advice, demonstrations and test drives on cars and mobility products and services.

### Mobility Choice in England, Scotland and Wales:

Tel: 0845 241 0390  
Email: choice@gtnet.gov.uk  
www.mobilityroadshow.co.uk

### Disability Action in Northern Ireland:

Tel: 028 9029 7880  
Email: hq@disabilityaction.org  
www.disabilityaction.org

### Motability

- If you get the Higher Rate Mobility Component of Disability Living Allowance or the War Pensioner's Mobility Supplement you can use it to lease or buy a car on hire purchase. If the car is leased, maintenance and servicing, insurance and breakdown assistance are included. If you choose a car that costs more than is covered by the Allowance or Supplement, you make an advance payment.

Tel: 0845 456 4566  
Textphone: 0845 675 0009  
www.motability.co.uk

### Remap

- voluntary group of engineers who design and manufacture devices when there is nothing else on the market.

### Remap UK

Tel: 0845 130 0456  
Email: info@remap.org.uk  
www.remap.org.uk

### Remap Scotland

Tel: 01466 730736  
Email: remap-scotland@btconnect.com  
www.remap-scotland.org

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Motability Tenth Anniversary Trust

■ Motability has teamed up with leading home, pet and travel insurers. For full details of the Motability Insurance range, visit [www.motability.co.uk](http://www.motability.co.uk) or call direct:

Motability HOME Insurance: 0800 783 0061

Motability PET Insurance: 0800 369 9094

Motability TRAVEL Insurance: 0800 519 9957

■ For every policy sold, the insurance providers will pay a proportion of the premium to Motability to help disabled people remain mobile.

# ricability

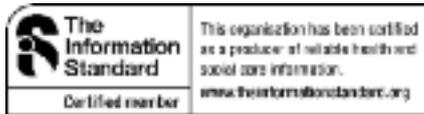
Ricability is an independent research charity that publishes information on products and services for older and disabled people

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In partnership with:



the brain injury association



forum of mobility centres



**Motability**

The leading car scheme for disabled people