



Choosing Safer Vehicles

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When choosing a new (brand new or second-hand) car, it is important to consider what features are most important for you, and to ensure that the car you choose is in a safe, roadworthy condition.

A vehicle's safety performance and condition may be difficult to assess just from an external inspection, so where possible choose a vehicle with four or five stars in EURO NCAP tests (see below), and seek expert advice (see rear cover).

If choosing second-hand vehicles it is vital to have a safety check conducted, and to find out as much as possible about the vehicle's history. Motoring organisations can provide an independent safety check service. Always ask to see the vehicle's documents and do a Hire Purchase Information (HPI) check (see rear cover) to ensure that the vehicle does not have a fraudulent history.

Consider the type of car that is most suitable for you overall. How will you mainly use it: for short, stop/start trips, long journeys on trunk roads and motorways, for carrying children, adult passengers or lots of luggage or equipment? The answers to these questions may point you towards particular types of car or specific safety features. Some people find automatic cars easier to drive than manual ones.

Drivers with disabilities, or who may have disabled passengers, should consider their needs carefully when choosing a vehicle. Advice is available from Motability, a registered charity which helps disabled people and their families to become more mobile (see rear cover).

Use this checklist to help you select the vehicle most suitable for your needs.

EURO NCAP Rating

The European New Car Assessment Programme (EURO NCAP) conducts crash tests with specific models of cars and grades their performance according to how well they protect the occupants, and the severity of injuries to a pedestrian struck by the vehicle. Initial research has shown that each EURO NCAP star reduces the risk of fatal or serious injury for occupants by 12%. EURO NCAP reports detail how the vehicle performed in each test and the results are widely published, and can also be viewed at www.euroncap.com.

EURO NCAP Rating for Impact Protection Stars

EURO NCAP Rating for Pedestrian Protection Stars

Anti-Lock Braking System (ABS)

If the wheels lock during severe braking the driver is likely to lose control of the vehicle. Anti-lock Braking Systems (ABS) prevent the wheels locking, and in adverse driving conditions, can minimise stopping distances whilst still allowing the driver to gently steer around any obstruction. To be fully effective, ABS needs to be used correctly, and many drivers would benefit from specific training.



ABS

Yes No

Training required

Yes No

Brake Lights

Separate brake and rear lights have proven more effective than integrated ones, and a third central brake light mounted fairly high up away from the other lights provides extra warning to following drivers, especially in heavy traffic.



Separate brake and rear lights

Yes No

High level brake light

Yes No

Rear Screen Wiper/washer

Hatchback or estate cars should have a wiper and washer on the rear windscreen. They are not necessary on saloon cars. For all cars, heated rear windows are useful to clear the rear windscreen quickly and keep it clear.



Rear Screen Wiper/Washer

Yes No

Heated rear window

Yes No

Air Conditioning

Air conditioning enables the windows to be demisted more quickly, helps to keep them clear during a journey, and provides cleaner, fresher air in the vehicle. However, it also increases fuel consumption by up to 10%. For vehicles without air conditioning, a powerful demister is useful for keeping windows clear.

Air conditioning

Yes No

Powerful demister

Yes No



Windows

Electric windows are easier to operate, but care needs to be taken to ensure that children or pets cannot become trapped in a window. If the vehicle has electric windows, make sure that they do not operate when the engine is switched off, and that they have an anti-jamming device which stop the windows closing if an object is trapped. Avoid cars with tinted windows; they reduce the light entering the vehicle and in poor visibility can reduce the driver's vision.



- Only work when engine is on** Yes No
- Anti-jamming device** Yes No
- Non-tinted windows** Yes No

Head Restraints

Head restraints help to prevent or reduce whiplash injuries, which can occur even in minor impacts. They are common for front seats, but less so on rear ones. Adjustable head restraints can be raised or lowered although they may need regular re-adjustment. Fixed ones do not need adjusting, but check they are the right height for the occupants



- Head restraints on front seats** Yes, fixed Yes, adjustable No
- Head restraints on rear seats** Yes, fixed Yes, adjustable No

The top of the head restraint should be level with the top of your head, and it should be close to the rear of your head, preferably touching.

Seat Belts

Seat belts are essential. If you are buying an older second-hand car, only choose one with seat belts in the front and the rear. Three-point belts are better than lap belts, so where possible choose a vehicle with three-point belts on all seats, including the centre rear seat.



Modern cars have inertia-reel seat belts on the four outer seats which automatically lock the belt during hard braking or cornering. Many models have seat belt 'pre-tensioners' and/or 'webbing grabbers'. Pre-tensioners tighten the belt during the first milliseconds of a crash and webbing grabbers clamp the belt just outside the reel. Some cars equipped with airbags may have load limiters on the front seat belts, which allow some forward movement and limit the forces on the chest during an impact.

- Seat belts on all seats** Yes No
- Central three-point seat belt in rear** Yes No
- Inertia-reel seat belts on outer seats** Yes No
- Seat belt pre-tensioners** Yes No
- Seat belt webbing grabbers** Yes No
- Seat belt load limiters** Yes No

Airbags

Airbags offer extra protection, and are designed to be used in conjunction with seat belts. Most new vehicles are fitted with driver airbags; many have passenger front airbags, and some have side airbags (usually only as optional extras).



There is a risk of injury if an airbag hits a driver or passenger while it is inflating, although this can only happen if the occupant is sitting too close to the airbag. Check that you do not have to sit too close to the steering wheel in order to properly manage the controls. Advice in the USA is that the distance between the centre of the steering wheel and the driver's breastbone should be at least 10 inches. However, airbags differ from car to car, so always follow the manufacturer's advice. If you are sitting too close, check whether the manufacturer can adjust the foot pedals so you can sit further away (avoid fitting pedal extensions). Otherwise, consider looking for an alternative vehicle.

Some cars have a switch which enables the airbag to be turned off. However, this means that the protection offered by the airbag is lost, and there are concerns that such devices may not work properly.

Driver Airbag	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Passenger Airbag	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Side Airbags	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Rearward-facing child seats should never be fitted in the front seat if there is a passenger airbag.

Child Restraints

Check that your child restraints will fit in the vehicle. If in doubt, seek expert advice.



If you do not have child restraints now, but might in the future, ascertain whether a wide range of restraints will fit the vehicle - ask the car dealer or manufacturer for a list. Some cars have an integral child restraint which is suitable for the vehicle concerned, but cannot be removed and placed in another vehicle.

Are the vehicle's seat belts long enough?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Do the restraints fit properly without the seat belt buckle resting on the frame?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Do the restraints 'sit' well in each seat in which they may be used?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Will a range of child restraints fit in the vehicle?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Integral child restraint	Yes <input type="checkbox"/>	No <input type="checkbox"/>



ISOFIX

A new child restraint system called ISOFIX is being developed. ISOFIX points are fixed connectors in a car's structure into which you can simply 'plug' an ISOFIX child seat. Some manufacturers are already offering ISOFIX-style connectors in specific vehicles and they are becoming increasingly common, although it is unlikely that all vehicles will have them available until 2002 or later.

ISOFIX Points

Yes No

Child Locks

If you have child passengers, child locks on the rear doors may be useful. These can usually be turned off by the driver if only adult passengers are being carried.

Child Locks

Yes No

Bull Bars

Bull bars (also often known as nudge, protection or roo bars) are often fitted on four-wheel drive vehicles. They do not provide any extra protection for the occupants but can significantly increase the risk of serious or fatal injuries to pedestrians (especially children) and cyclists. Do not buy a vehicle fitted with bull bars and don't fit them afterwards.



Bull Bars

Yes No

Load Restraint

Loads in the rear of cars need to be properly restrained to prevent them from moving and injuring the occupants in a crash or under emergency braking. Heavy loads may affect the vehicle's handling, and the tyre pressures may need to be adjusted - check the vehicle handbook. Folding rear seats, especially split seats, may be weaker than fixed seats. Some may be unable to restrain heavy loads in severe frontal collisions. Many cars have anchor-points and/or straps in the boot for restraining heavy objects.

Folding seats

Yes No

Split rear seats

Yes No

Anchor-points/straps

Yes No

Check the car

History

Check the V5, service and insurance records, MoT certificate and receipts where available.

Hire Purchase Information (HPI) Check

Offers protection against buying a car which is stolen, 'written-off' or subject to outstanding finance.

Safety Check

Use one of the independent safety check services offered by motoring organisations, or take a knowledgeable friend with you.

Comfortable Fit

Sit in a comfortable driving position, and check the following:

● All-Round Visibility

Good all-round, unobstructed, visibility is vital. Check whether the pillars between the front and side windows and the space taken up by the door mirrors still allow you to see forward without moving your head.

Good, clear view through the front and side windows Yes No

Good, clear view from interior and door mirrors Yes No

● Vehicle Controls

Check you can see, comfortably reach and operate all the instruments and controls. Adjust your seat so that you can fully depress the clutch pedal (unless it is an automatic vehicle in which case rest your left foot flat on the floor). You may be able to raise or lower the seat to make the driving position more comfortable, and obtain a clearer view.

Able to fully depress clutch Yes No

All controls within easy reach Yes No

All instruments easy to see from driving position, without moving your head Yes No

● Steering Wheel

You should not sit too close to the steering wheel (see airbag section, page 4). The steering wheel is adjustable in some vehicles. If you must sit too close to reach the pedals or controls, check whether the manufacturer can adjust the pedals. Otherwise, consider looking for an alternative vehicle.

Seated too close to steering wheel Yes No

THE TEST DRIVE Always test drive a vehicle to familiarise yourself with it and check that:

- it is running smoothly and working properly
- you feel comfortable driving the vehicle
- you have a good, clear view while driving and when doing manoeuvres, such as reversing
- you can see and operate all the instruments and controls.

Where to get advice

Manufacturers

Brochures provide details and specifications.

EURO NCAP

The European New Car Assessment Programme (EURO NCAP) provides an independent assessment of the safety performance of some of the most popular cars sold in Europe. Established in 1997 and now backed by five European Governments, the European Commission and motoring and consumer organisations, Euro NCAP publishes the results of its tests widely. Their website is www.euroncap.com

Hire Purchase Information (HPI) Check

The HPI Check offers protection against the risk of buying a car which is listed as stolen, 'written-off' or is subject to an outstanding finance agreement. Contact Hire Purchase Information plc. 01722 422422. www.hpcheck.com

Professional Safety Check

Many motoring organisations offer a vehicle safety check service through which a qualified vehicle engineer will examine and assess a vehicle.

Vehicle Recalls

The Vehicle Inspectorate publishes Vehicle Safety Recalls periodically. Vehicles and components that have safety-related defects liable to cause a significant risk of crashing are subject to recall by the manufacturer and recorded in the publication.

Consumer Programmes and Magazines

There are various motoring television programmes and magazines which review and assess new cars.

Books

Choosing Safety published by the DETR, HMSO, London, 1996 edition, ISBN: 0 11 551756 1

The Motability Scheme

Motability is a registered charity, which helps disabled people and their families to become more mobile by providing vehicles and powered wheelchairs.

Contact Customer Information Services on 01279 635666 (Minicom: 01279 632273). Their website is www.motability.co.uk

