

Road Safety Factsheet

May 2017

Seat Belts: Advice and Information

This factsheet covers:

- General advice and information about seat belts
- Seat belt laws
- Seat belt technology

The Purpose of Seat Belts

Seat belts are designed to retain people in their seats, and so prevent or reduce injuries suffered in a crash. They ensure that as little contact is made between the occupant and vehicle interior as possible and significantly reduce the risk of being thrown from a vehicle.

Seat belts are designed to work as the key part of wider injury prevention measures and safety systems, such as airbags and head restraints, which will not be as effective in reducing the risk of injury if an occupant is not wearing a seat belt.

ALWAYS WEAR YOUR SEAT BELT WHEN TRAVELLING IN THE FRONT OR REAR OF A VEHICLE.

ALWAYS MAKE SURE THAT CHILDREN TRAVEL IN AN APPROPRIATE CHILD RESTRAINT UNTIL THEY ARE AT LEAST 135CM TALL OR 12 YEARS OLD.

Facts and Figures

Car occupants form 60% of all road casualties. In 2015, 111,707 people were killed or injured while travelling in cars, of these 76,432 (68%) were drivers.

	Drivers	Passengers	All Occupants
Killed	534	220	754
Seriously Injured	5,335	2,553	7,888
Slightly Injured	70,563	32,502	103,065
All	76,432	35,275	111,707

Table 1, shows the number of car occupant casualties during 2015, sorted by severity of injury. Source: Reported Road Casualties 2015, DfT, September 2016.

Over 90% of adult front seat passengers and drivers wear seat belts, as do 66% of adult rear seat passengers. Since the law to wear seat belts in the front was introduced in 1983, front seat belts are estimated to have saved tens of thousands of lives in Great Britain.

A review of research about the effectiveness of seat belts can be found on the [Road Safety Observatory](#).

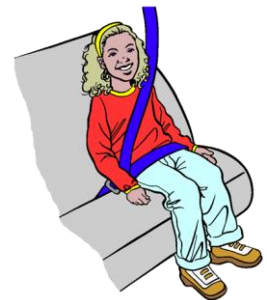
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Wearing a Seat Belt Correctly

In order to wear a seat belt safely, the following points should be adhered to:

- The belt should be worn as tight as possible, with no slack
- The lap belt should go over the pelvic region, not the stomach
- The diagonal strap should rest over the shoulder, not the neck
- Nothing should obstruct the smooth movement of the belt by trapping it

In many vehicles, the height of the top of the seat belt can be adjusted on the B-pillar. If you cannot get the seat belt to fit over you correctly, as described above, you should try adjusting the height.



Damaged Seat Belts

Seat belts should be regularly checked for damage. Common forms of damage to the seat belt that will reduce its effectiveness in an accident, and also lead to the vehicle failing an MOT test, are:

- Fraying or fluffing around the edges of the seat belt
- A cut which causes the fabric to split
- A hole in the seat belt
- Damage to the buckle

In an accident, the webbing of a seat belt stretches, which absorbs some of the energy in an impact. This helps prevent any injury from the contact between the seat belt and occupant. A seat belt that has restrained an occupant in an accident would be more likely to cause an occupant injury if it were involved in another accident, and must always be replaced.

If any forces are applied to a seat belt, which are larger than would be expected during its usual operational life, it may also be worth having it checked to see if the webbing of the belt has been strained.

If in doubt, take your car to a garage to have the belt inspected by an expert.

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Pregnant Women and Seat Belts

All pregnant women must wear seat belts by law when travelling in cars. This applies to both front and back seats and pregnancy does not in itself automatically provide exemption from the law.

The safest way for pregnant women to wear a seat belt is:

- Place the diagonal strap between the breasts (over the breastbone) with the strap resting over the shoulder, not the neck.
- Place the lap belt flat on the thighs, fitting comfortably beneath the enlarged abdomen, and over the pelvis not the bump.
- The belt should be worn as tight as possible.



In this way the forces applied in a sudden impact can be absorbed by the body's frame.

Pregnant women should not wear 'Lap-only-Belts' as they have been shown to cause grave injuries to unborn children in the event of sudden deceleration. Mother and unborn child are both safer in a collision if a lap and diagonal seat belt is being worn correctly.

Lap Belts

Although lap belts are not recommended for pregnant women, they are safe and suitable for other adult passengers. Three-point seat belts are safer, but wearing a lap belt is far better than wearing no seat belt at all, because the greatest risk of injury to car occupants in an accident comes from being thrown about inside the vehicle or being ejected from it.

The lap belt should go over the pelvis (not the soft stomach area) and fit as tightly as possible. Most car manufacturers now fit at least some of their range with a three-point seat belt in the centre of the rear seat.

Seat Belt Adjustment

Several devices exist which are designed to attach to the seat belts in order to pull them into a different position or change the way in which they rest on an occupant. RoSPA do not recommend the use of these devices, as no standards currently exist ensuring a basic crashworthiness.

Child Car Seats

Children must use a child car seat until they are either 135cm in height or 12 years old. For more information on Child Car Seats, RoSPA's website, www.childcarseats.org.uk, provides advice on choosing, fitting and using child car restraints and the law about using them.

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Seatbelt Laws

Cars:

Adults

In the Front Seat

Drivers and front seat passengers aged 14 years or over in cars must wear a seat belt, unless they have a medical exemption certificate.

In the Rear Seats

Passengers aged 14 years or over in the rear of a car must also use seat belts, if they are fitted. It is the responsibility of the adult passenger (not the driver) to ensure that they are using the seat belt.

Exemptions

Anyone with a Certificate of Exemption from Compulsory Seat Belt Wearing issued by a doctor for medical reasons is exempt from having to wear a seat belt, but they must keep the certificate in the vehicle and show it to the police if stopped. They should also inform their insurer.

Taxis

Licensed taxi drivers are exempt from wearing a seat belt when 'plying for trade' or carrying passengers.

Passengers using taxis and private hire vehicles **MUST** wear a seat belt.

Delivery Drivers:

Van drivers and passengers must wear a seat belt. However, goods vehicle drivers who are travelling 50m or less between deliveries or collections do not need to wear a seat belt.

Children

Children Under 3 years old

In the Front Seat

The child **MUST** use the correct child restraint.

It is illegal to carry a child in a rear-facing child seat in the front if there is an active front passenger airbag. In this case the airbag must be deactivated or the rear-facing child seat must be placed in the rear.

In the Rear Seat

The child **MUST** use the correct child restraint.

It is the driver's legal responsibility to ensure that the child is correctly restrained within the law. Children under 3 years old cannot be carried in a car that does not have seat belts fitted.

The only exception is that a child under 3 years may travel unrestrained in the rear of a licensed taxi or licensed private hire car that has a fixed partition separating the front and rear seats, if a child restraint or seat belt is not available. However this only applies on an unexpected journey.

Children 3 to 11 years and under 135cm tall

In the Front Seat

The child **MUST** use the correct child restraint.

In the Rear Seat

The child **MUST** use the correct restraint, where seat belts are fitted.

There are three exceptions where a child may travel in a seat belt rather than a child seat, if a child seat is not available. These are if the child is travelling:

1. in the rear seats of a licensed taxi or private hire vehicle
2. if the child is travelling a short distance and the journey is necessary and unexpected
3. if there are two occupied child restraints in the rear preventing a third one being fitted.

In addition, children aged 3 years or over may travel unrestrained in the rear seat of a car that does not have seat belts fitted, provided it was originally manufactured without seat belts.

It is the driver's legal responsibility to ensure that the child is correctly restrained.

Children Aged 12 or 13 years or younger children 135cm or more in height

In the Front Seat

The adult seat belt **MUST** be worn if available.

In the rear seats

The adult seat belt **MUST** be worn if available.

It is the driver's legal responsibility to ensure that the child is correctly restrained

Minibuses and Coaches:

Minibuses and Coaches Registered On or After 1 October 2001

All minibuses and coaches registered on or after 1 October 2001 (whether they carry child or adult passengers) must have forward-facing or rearward-facing seat belts.

Minibuses and Coaches Registered Before 1 October 2001

When the main purpose of the trip is to transport three or more children, minibuses and coaches registered before 1 October 2001 must have a forward-facing seat for each child, fitted with either a three-point seat belt or a lap belt.

Minibuses - Front Seats

Drivers must wear a seat belt.

All children must travel in rear seats (any seat behind the driver) if a child car seat or an adult seat belt is not fitted in the front. The driver is responsible for ensuring that:

- Children under three years of age use an appropriate child restraint (if one is not fitted, they must travel in the rear)
- Children aged from three years up to their 12th birthday, and under 1.35 metres (approximately 4'5") tall use an appropriate child restraint if available, or if not available, wear the seat belt
- Children aged 12 and 13 years (and younger children who are 1.35 metres or taller) use the seat belt.

Passengers aged 14 years or more travelling in the front seats, or any exposed seat, must wear a seat belt and are personally responsible for doing so.

Passengers sitting in the front seats, and any exposed seat, **MUST** use the seat belts that are provided.

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Rear Seats in Small Minibuses

Passengers sitting in the rear of minibuses that have an unladen weight of 2,540 kg or less must wear seat belts or use an appropriate child restraint. It is the driver's responsibility to ensure that:

- Children under three years of age use an appropriate child restraint
- Children aged from three years up to their 12th birthday, and under 1.35 metres (approximately 4'5") tall, use an appropriate child restraint if available, or if not available, wear the seat belt
- Children aged 12 and 13 years (and younger children who are 1.35 metres or taller) use the seat belt.

Passengers 14 years or over must wear seat belts and are legally responsible for doing so.

Rear Seats in Larger Minibuses

In minibuses over 2,540 kg unladen weight, passengers aged 14 years or over must wear seat belts and are legally responsible for doing so themselves. Passengers aged under 14 years are not yet required by law to wear seat belts.

All passengers are strongly advised to wear seat belts, or to use child restraints if available, on all journeys.

Coaches

Passengers sitting in seats that are in line with, or in front of, the driver (excluding seats on an upper deck) **MUST** use seat belts that are fitted.

Passengers over the age of 14 **MUST** wear seat belts in the rear seats of coaches. However, passengers of all ages are strongly advised to wear seat belts or the correct child seat on all journeys.

Seat Belt Law At-A-Glance

	Front Seats	Rear Seats	Who is responsible?
Driver	Seat belt Must be worn if fitted	-	Driver
Child up to 3 Years of Age	Correct child restraint must be used	Correct child restraint must be used. If one is not available in a licensed taxi or private hire vehicle, the child may travel unrestrained.	Driver
Child Aged 3 To 11 and Under 135cm in height (about 4.5 Feet)	Correct child restraint must be used	Correct child restraint must be used if seat belts are fitted. If a child seat is not available, a child may travel using just the seat belt in these situations : <ul style="list-style-type: none"> • In a licensed taxi or private hire vehicle • For a short distance if the journey is unexpected and necessary • There isn't room to fit a third child seat 	Driver
Child Aged 12 or 13 years or Younger Child 135cm or more In height	Adult seat belt must be worn if fitted	Adult seat belt must be worn if fitted	Driver
Passengers aged 14 years and over	Must be worn if fitted	Must be worn if fitted	Passenger

Legal Penalties

The fixed penalty for failing to wear a seat belt as a driver or passenger is a £100 fine. If the case is taken to court, you could face a fine of up to £500.

As a driver, if you are convicted of failing to ensure that a child passenger is using an appropriate child car seat or wearing a seat belt according to the legal requirements described above, the fixed penalty is a £100 fine. If the case is taken to court, you could face a fine of up to £500.

In addition to the legal penalties, failure to wear a seat belt or failure to ensure that a child passenger uses an appropriate child car seat or wears a seat belt according to the legal requirements described above, could affect any claims against your motor insurance cover.

You could also face civil proceedings for damages, if (for example) you failed to safely carry someone else's child.

But, of course, the most serious penalty of all could be that you or a passenger loses their life!

Seat Belt Technology

Pretensioners

Seat belt pretensioners tighten the webbing in a crash to remove the slack in the belt and this helps to reduce the occupant's movement and distribute the load over the whole body.

Pretensioners tighten the seat belt, in the first vital milliseconds of a crash, by using a very small pyrotechnic charge. Pretensioners will need replacing after a vehicle has been involved in a collision.

The pretensioners usually use the same sensor system as the vehicle's airbag to detect a rapid deceleration caused by a collision, and deploy. This can help to ensure that an integrated protection is achieved between the systems, by keeping the occupant in a position where the airbag will be most effective in reducing the risk of injury. By removing the slack in the seat belt, the risk of the occupant coming loose from the belt and being ejected is also reduced.

There are two types of pretensioner, both of which are equally effective in removing the slack from the belt. Buckle pretensioners work by pulling the belt buckle downwards towards the floor, whereas other pretensioners are located in the B-pillar and pull the belt tight from the top attachment.

Load Limiters

Some car seat belts are fitted with load limiters, which have been developed because of the relatively small risk that seat belts may cause occupant injury from the restraining force. They respond when the belt is applying a large restraining force, and release a small amount of belt to compensate. The load that the belt applies on the occupant is kept below a threshold, above which the risk of injury would be higher.

This is an important consideration when elderly occupants are using the seat belt, as the aging of bones makes them brittle and increases the risk of injury.

Seat Belt Reminder Systems (SBR)

Despite publicity campaigns and legislation on the use of seat belts, not everyone uses them. Some of the excuses given for not wearing a seatbelt are, they forget to put them on, or they are only travelling short distances. Only 86% of men and 94% of women wear their seat belts in the front and around one third of rear seat occupants still don't wear their seat belts.

To increase the use of seat belts and encourage people to use them, vehicle manufacturers have developed reminder systems, which alert occupants that seat belts aren't being worn.

The systems tend to operate by detecting the weight of an occupant in the chair and whether the belt is buckled. If it detects an occupant isn't wearing a seat belt, an alarm will sound. These systems are now mandatory. Since November 2014, SBRs have been compulsory in Europe in the driver's seat on new cars. You should consult your vehicle's manual, which will tell you exactly when, and how the system will warn you that seat belts are not being used. Systems can have both audio and visual alerts. Usually there will be a light on the dashboard but an alarm may sound after the vehicle has moved a certain distance, travelled for a certain length of time, or exceeded a certain speed.