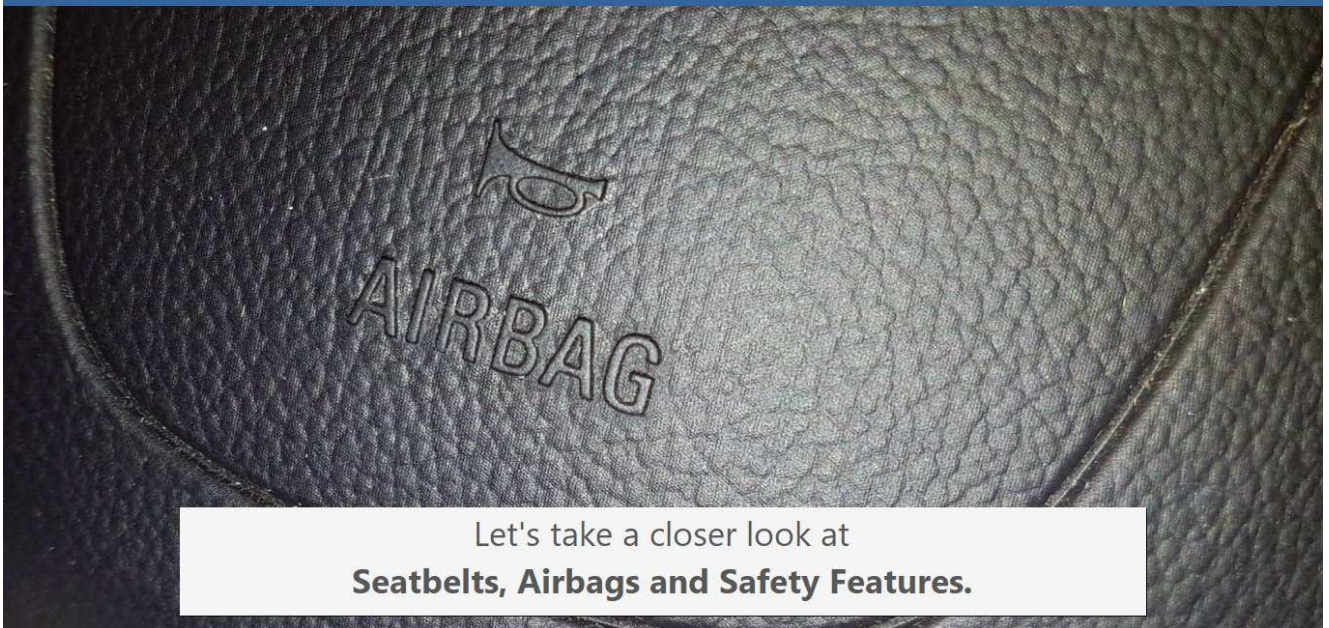


Seatbelts, Airbags and Safety Features

Welcome to this **Perfect Driver** course. Throughout this course, we are going to look at the law, skills, techniques, and ideas to help you become a better, and safer driver.

In this lesson, we'll look at **Seatbelts, Airbags and Safety Features.**

Seatbelts, Airbags and Safety Features



Let's take a closer look at
Seatbelts, Airbags and Safety Features.

Seatbelts, Airbags and Safety Features

Seatbelts. By now, we all know that seatbelts are mandatory in all cars. This means for the driver, as well as all passengers.

If a passenger in a car does not wear a seatbelt, technically the driver is at fault, and the driver will incur the fine and penalty.

Young children, depending on age, need to be placed in age appropriate child restraints - not in a seatbelt, and definitely not in anyone's lap.



Seatbelts, Airbags and Safety Features

And you should also know that seatbelts are designed to protect you in car accidents. But you may not realise how effective they are, or what might happen if they are not worn.

- Depending on location, only 70% to 95% of drivers and passengers wear seatbelts.
- Statistics show that more than 50% of passengers that die in motor accidents were not wearing seatbelts.

Drivers who wear a seatbelt **double their chances of survival** and reduce risk of injury.



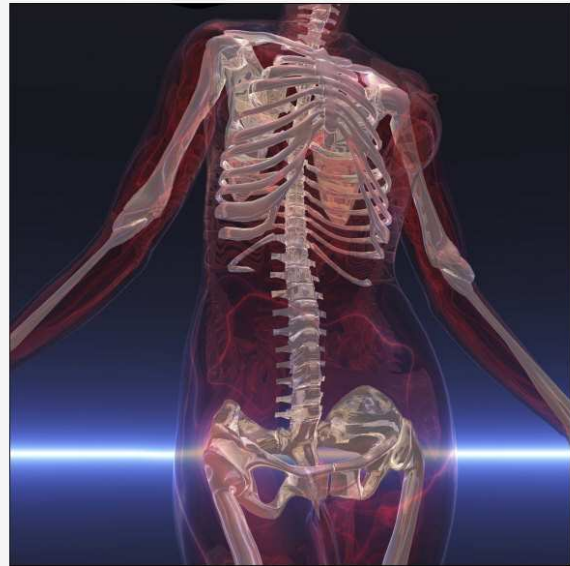
Seatbelts, Airbags and Safety Features

The human body is fragile.

A seatbelt is designed to reduce your velocity during an accident in a more controlled manner. Force is spread across your body, in effect reducing damage to any particular part of the body.

Without a seatbelt, the steering column, dashboard, or windscreen become deadly weapons.

We get to airbags shortly - but having a car equipped with airbags **does not mean** that seatbelts are unnecessary. Quite the opposite. Where installed, these safety systems work together, not alone.



Seatbelts, Airbags and Safety Features

As well as spreading the impact over the body, the job of the seatbelt is to protect the head and chest of a passenger or driver.

Seatbelts are not perfect. **Organ compression** is something that is very difficult to prevent, and can be deadly. Organ compression occurs when a human decelerates very quickly - and the organs become squashed, or pressed against the spine. The spleen is the most common organ affected by organ compression.



Seatbelts, Airbags and Safety Features

All modern cars have seatbelts fitted for both front and rear passengers. They cannot be registered without these being installed and in working order.

As driver, it is your responsibility to ensure that all passengers are buckled up.

Many cars have indicator sounds or lights to let you know if you, or perhaps your passengers, have not buckled up their seatbelts.



Seatbelts, Airbags and Safety Features

A man named Bohlin, working at Volvo, invented a seat belt that fit the driver's torso as well as their lap. Volvo gave the patent away because they decided it was too important to keep to themselves.

CONTINUE

Seatbelts, Airbags and Safety Features

A seat belt must fit snugly across the chest of the driver and passengers.

This means that a passenger cannot recline their seat too far while driving - as soon as the seat belt loses contact with the chest, it loses its effectiveness - and someone might get fined.



Seatbelts, Airbags and Safety Features

Depending on exactly where you live, and how old your children are, they may require special baby seats, car seats or boosters of some kind.

You must follow the laws for the safety of the children. Contact your local **Department of Main Roads** to see exactly what the local laws require.



Seatbelts, Airbags and Safety Features



Reminder: As the driver, it is up to you ensure all passengers wear seatbelts, and that children are placed in appropriate seat restraints. If they are not, you will be fined and accumulate demerit points on your license.

Seatbelts, Airbags and Safety Features



Reminder: If there is no seatbelt for a passenger (or appropriate child restraint for children), they don't get in the car. It is that simple. It's dangerous and illegal.

Seatbelts, Airbags and Safety Features



Reminder: Each seatbelt holds a single person. You cannot share a seatbelt, or put one passenger on another passenger's lap.

Seatbelts, Airbags and Safety Features



Fact: You do not have to wear a seatbelt while reversing.

Seatbelts, Airbags and Safety Features

Airbags. Most new cars have airbags installed. These may be in the dashboard, the steering wheel, behind seats or in car doors. Some cars may have only a driver airbag installed, some may have eleven or more installed through the car.

An airbag is a cushion designed to inflate very quickly (thousands of a second) in the event of an accident, cushioning you from the harder, dangerous elements of the car. They are designed only to inflate when required.



Seatbelts, Airbags and Safety Features

Unlike seatbelts, there is nothing much you have to do with airbags to ensure they work, assuming they are installed.

If an airbag has been fired, it must be reinstalled by a qualified technician. If you have any reason to believe it may be malfunctioning, or an airbag light appears on your dashboard indicating a possible malfunction, you must ensure it is checked out by a technician.



The Mercedes-Benz E-Class has 11 airbags.

CONTINUE

Seatbelts, Airbags and Safety Features

Airbags save lives, of that there is no doubt. But they are not perfect.

Airbags inflate rapidly and often violently. You must also wear a seatbelt to avoid being hit too hard by the airbag inflation.

Because airbags can inflate so violently, it is recommended that children under 16 do not sit in a seat where an airbag is installed.

Do not rest your head, legs, or other parts of the body on an area where an airbag is installed (it will be marked as such). Ensure passengers do the same.



Seatbelts, Airbags and Safety Features

Takata Airbags. Recently, a worldwide recall was made on **Takata Alpha Airbags**, which were found to rupture in up to 50% of cases, and causing multiple deaths around the world.

This recall affects a range of cars. You can check if your car is affected by visiting <https://www.productsafety.gov.au/news/takata-airbag-recalls-affecting-australian-consumers>.

[CHECK MY CAR...](#)

Seatbelts, Airbags and Safety Features



Reminder: Keep arms, legs, heads and any other part of your body away from airbag containers. They can fire with explosive speed and injure or kill people.

Seatbelts, Airbags and Safety Features

Anti-lock, anti-skid braking or **anti-lock braking system** (ABS) is a vehicle safety feature built into all new cars, and in many cars over the last 15 years.

ABS works by preventing the wheels from locking up - stopping spinning - under heavy braking. This prevents the car from skidding, and the subsequent loss of driver control this brings.

In most circumstances, this means shorter stopping distances - but not on loose surfaces, like gravel or snow.



Perhaps the main advantage of ABS is that because the wheels never lock up, the driver can still steer the vehicle to avoid an obstacle. This is a major safety feature - as if a car begins to skid (where the wheels lock up), steering is impossible - you'll go in a straight line no matter where you point the steering wheel.

Seatbelts, Airbags and Safety Features

According to **Wikipedia: Electronic stability control** (ESC), also referred to as **electronic stability program** (ESP), or **dynamic stability control** (DSC), is a computerized technology that improves a vehicle's stability by detecting and reducing loss of traction (skidding).

For all new cars sold in Australia, this life saving technology has been mandatory since 2011.

Cars fitted with this technology have significantly reduced accident rates.



Seatbelts, Airbags and Safety Features

Traction control is a safety feature built into many cars. It forms a part of active stability control, but can also be implemented without it for slightly older cars.

This technology is designed to ensure that the tyres always maintain traction, by controlling wheel speed and preventing such things as skidding.

It is sometimes optional - see the image below.



Seatbelts, Airbags and Safety Features

SUMMARY

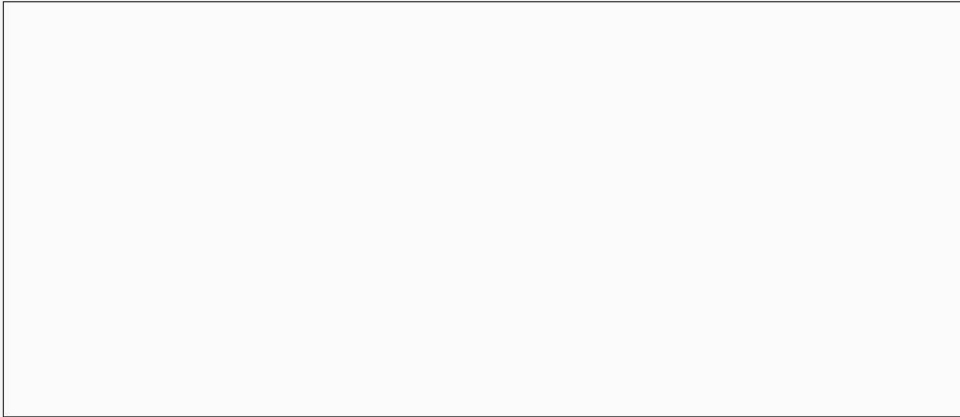
In this lesson, we discussed **Seatbelts, Airbags and Safety Features**. This included:

- Seatbelts and Statistics.
- How Seatbelts Work.
- Organ Compression.
- Buckle Up, Child Restraints, Airbags.
- Taking Care of Airbags and Airbag Warnings.
- Anti-lock Brakes.
- Active Stability Control and Traction Control.

[FINISH LESSON](#)

Seatbelts, Airbags and Safety Features

Signature. It is very important that you use the mouse, or touch, to *sign* the form below. This helps us record your progress accurately.



SUBMIT SIGNATURE

CLEAR SIGNATURE

Seatbelts, Airbags and Safety Features

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