Module 2:
Load restraint

(If you experience any issues with text or images displaying on your iPad, simply press the 'Replay' button to reload the page)
At the end of Module 2 ‘Load restraint you will be able to:

- Explain the legislation for restraining loads
- Describe how to load safely
- Explain the responsibilities different parties in the supply chain have regarding loading
Why is load restraint important?

Safe load restraint applies to: Light vehicles + Heavy vehicles

Loose or incorrectly restrained loads cause serious incidents or accidents. These occur when:

- **Heavy objects fall from vehicles onto other vehicles or pedestrians**
- **Drivers swerve to avoid objects which have fallen from other vehicles**
- **Spillage from lost loads cause other vehicles to skid and lose control**
- **Vehicles overturn due to shifting loads**

Lost loads and spillage from these loads often cause major traffic delays. These affect the community as they are expensive to clean up, can cause increased travelling times and property damage.

💡 A driver has the legal responsibility to passengers, other road users and themselves to ensure that all loads carried by their vehicle are secure.
Any item carried loose on the vehicle floor or on the seats can become a projectile in a crash.

Loads can be restrained directly or indirectly, or by a combination of both methods.

Click each method below to find out more.
Restraining light vehicle loads - Indirect restraint

Any item carried loose on the vehicle floor or on the seats can become a projectile in a crash.

Loads can be restrained directly or indirectly, or by a combination of both methods.

Click each method below to find out more.

**Indirect restraint**

- Indirect restraint via a friction grip prevents a load from moving
- Amount of friction depends on the surface area in contact
- Usually not sufficient
- To increase the friction tie-down equipment as required to completely secure the load.

**Direct restraint**

Please click each category before moving on.
Restraining light vehicle loads - Direct restraint

Any item carried loose on the vehicle floor or on the seats can become a projectile in a crash. Loads can be restrained directly or indirectly, or by a combination of both methods.

Click each method below to find out more.

- Indirect restraint
- Direct restraint

- Contains, blocks or physically attaches the load to the vehicle
- Seats are not intended to support the force of a load in a crash
- Cargo barriers have been fitted to passenger vehicles

Please click each category before moving on.
Heavy Vehicle National Law and supporting Heavy Vehicle (Mass, Dimension and Loading) National Regulation

- Set requirements for the safe loading of vehicles and combinations
  1. A load must not be placed in a way that makes the vehicle unstable or unsafe
  2. A load must be secured so that it is unlikely to fall or be dislodged from the vehicle
  3. An appropriate method must be used to restrain the load on a vehicle
  4. Loads must meet the standards recommended in the Load Restraint Guide
- Sets the responsibilities of parties in the supply chain for safe load restraint

Heavy Vehicle National Law and Regulations
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.

- **Transport company**
- **Consignee/Consignor**
- **Packer**
- **Loader**
- **Loading manager**
- **Driver**

The transport company must provide load restraint equipment and training.

Specifically, the transport company must ensure that the driver:

- has sufficient and appropriate load restraint equipment
- is provided with sufficient training to use it correctly.

Please click each category before moving on.
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.

- Transport company
- Consignee/Consignor
- Packer
- Loader
- Loading manager
- Driver

The consignee and consignor must provide accurate load information.

Specifically, the consignee and consignor must ensure that:

- the transport company is given correct and appropriate information so that they can supply suitable vehicles and adequate equipment for the load
- any breaches are reported to all parties
- product packaging can withstand stacking and restraint forces without damage or breakage

Please click each category before moving on.
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.

The packer must ensure that the load is safely packed.
Specifically, the packer must use methods to ensure safe packing, such as:

- stacking cartons in a safe manner
- ensuring goods are secured to the pallet
- ensuring goods are stretch wrapped where necessary.
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.

The loader must load the vehicle safely.

Specifically, the loader must use methods and load restraint equipment to ensure loads do not:

- become unstable
- move inside the vehicle.
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.

The loading manager must ensure the vehicle is loaded safely and the load is securely restrained.

Specifically, the loading manager must:
- ensure correct procedures are used so that the load is securely restrained
- check when the truck arrives to ensure the load has not shifted or become unstable due to lack of load restraint
- report any incident to the customer so that transport companies are made aware of any problems
- allow drivers access to the loading area to supervise and/or participate in the load restraint process

Please click each category before moving on.
Each party within the chain of responsibility has specific responsibilities for load restraint. Click each role below to find out more.

- **Transport company**
- **Consignee/Consignor**
- **Packer**
- **Loader**
- **Loading manager**
- **Driver**

The driver must ensure the load is safely restrained before leaving.

Specifically, the driver must:
- ensure the load is correctly restrained so that the load cannot move during transit
- have access to the loading area or dock to supervise and/or participate in the load restraint process

Please click each category before moving on.
Regulations: Loads must meet the standards recommended in the Load Restraint Guide

You should:

- obtain a copy of the guide
- understand and apply the obligations of the guide (and any relevant state regulations)
- ensure the load restraint system you use meets the performance standards specified in section P
- understand the five steps to load safety
Five steps to load safety

1. Choose a suitable vehicle
2. Position the load correctly
3. Select suitable restraint equipment
4. Provide adequate load restraint
5. Drive carefully

Click each step below to find out more.
Five steps to load safety - Choose a suitable vehicle

Click each step below to find out more.

1. Choose a suitable vehicle
2. Position the load correctly
3. Select suitable restraint equipment
4. Provide adequate load restraint
5. Drive carefully

- Be of a suitable design for the load it is carrying.
- Have enough space and be able to take the weight of the load without exceeding the manufacturer’s specifications.
- Examples of manufacturer’s specifications include:
  - Most modern vehicles have a plate on the door sill.
  - All tyres will have a load capacity.

Please click each category before moving on.
Five steps to load safety - Position the load correctly

- Be placed in or on the vehicle in such a way that it does not affect the vehicle's:
  - stability
  - steering
  - braking performance
Five steps to load safety - Use suitable restraint equipment

1. Choose a suitable vehicle
2. Position the load correctly
3. Select suitable restraint equipment
4. Provide adequate load restraint
5. Drive carefully

- Load securing equipment and the vehicle’s restraint structure and attachments:
  - should be strong enough to carry the load
  - be in good condition

Please click each category before moving on.
Five steps to load safety - Provide adequate load restraint

Choose a suitable vehicle  1

Position the load correctly  2

Select suitable restraint equipment  3

Provide adequate load restraint  4

Drive carefully  5

Loads must be restrained to prevent dangerous movement under all expected conditions of operation.

Please click each category before moving on.
Click each step below to find out more:

1. Choose a suitable vehicle
2. Position the load correctly
3. Select suitable restraint equipment
4. Provide adequate load restraint
5. Drive carefully

- Be prepared for changes in the:
  - vehicle stability
  - steering
  - braking capacity

- Check the load and restraints during the journey.
1. Rope is only suitable for very light loads.
2. Understand the contribution that friction makes to load restraint.
3. Increasing friction is the most economical means of improving load restraint.
4. Oil, grease or multiple layers of plastic on cargo and floors can dramatically reduce friction.
5. Blocking and containing are effective ways in achieving load restraint.
6. Consignors should ensure all packaging will withstand stacking and restraint forces.
7. Lashing anchor points must have adequate design strength.
8. Often more than one means of restraint will be required.
9. Tautliner curtains were designed to keep freight clean and dry. They are not an effective load restraint option.
10. Never leave loose items on the back of a trailer or above the gates.
Which of the following statements about load restraint are correct?

(Select three answers then click the Submit Answer button.)

- Safe load restraint applies to heavy vehicles and light vehicles.
- Safe load applies only to heavy vehicles carrying freight.
- Loose or incorrectly restrained loads can cause serious incidents or accidents.
- Lost loads and spillage from these loads often cause major traffic delays.

Please submit an answer before moving on.
Issue of the safety of those around mobile plant equipment (such as forklifts) during loading and unloading operations

Loading and unloading exclusion zone (LUEZ)

LUEZ Guidelines
Click each item to find out more.
Issue of the safety of those around mobile plant equipment (such as forklifts) during loading and unloading operations

Loading and unloading exclusion zone (LUEZ)

LUEZ Guidelines
Click each item to find out more.

1. Forklifts, or other equipment, used for loading or unloading and drivers, and other pedestrians, should be segregated.

2. Authority for the area in which the loading or unloading activity is occurring should reside with the forklift operator.

3. If the driver ceases to be in the direct line of sight of the operator at any stage during the activity then the activity should immediately stop and not resume again until a direct line of sight is restored with the operator and the driver.

Please click each category before moving on.
Issue of the safety of those around mobile plant equipment (such as forklifts) during loading and unloading operations

Loading and unloading exclusion zone (LUEZ)

LUEZ Guidelines
Click each item to find out more.

1. Designated pedestrian exclusion zones for the sole use of forklift of other loading equipment
2. Designated driver safety zones so that the driver is kept away from the line of fire and can be kept under surveillance by the forklift operator at all times
3. Clear and effective systems of communication between the operator and the driver
4. Effective methods of providing loading in progress warnings to other operators, drivers, etc.

Please click each category before moving on.
Congratulations! You have now completed **Module 2: Load restraint**.

You should now be able to:

- Explain the legislation for restraining loads
- Describe how to load safely
- Explain the responsibilities different parties in the supply chain have regarding loading.

You can now return to the home page.