

# Warehousing and storage

Keep it safe



This is a web-friendly version  
of leaflet INDG412

This short guide is to help those involved in warehousing and storage to reduce the number of injuries and cases of occupational ill health. It contains simple advice that you should be able to apply to your business. You can find more information in *Warehousing and storage: A guide to health and safety HSG76*.

## Causes of accidents

The main causes of accidents in warehousing and storage are:

- slips and trips;
- manual handling;
- work at height;
- vehicles in and around the warehouse; and
- moving or falling objects.

There may be other risks on your site that you should also consider.

## Slips and trips

Slip and trip accidents are a serious problem in warehousing and storage and can happen anywhere. They are often seen as trivial and 'just one of those things', but most slip and trip accidents can be avoided.

### Slips

Slips usually happen because the floor is wet or contaminated.

Within warehouses, water, oil, cleaning products, dry powders and foodstuffs can all make the floor more slippery. Other items, like stretch wrapping, label backing and plastic bags, can also cause slips.

Try to stop the floor getting contaminated, eg by maintaining equipment properly. When contamination does happen, deal with it immediately, eg by cleaning.

Most floors have good slip resistance when they are clean, dry and level. However, smooth floors that become even a tiny bit wet or contaminated will be slippery; the rougher the floor, the better it will cope with water and other contamination and the less likely someone is to slip.

The right footwear can help reduce slips but only consider issuing footwear to control slip risks as a last resort – try to eliminate the root of the problem first.

### Trips

Objects on the floor or uneven surfaces are usually the cause of trips. Trip hazards can include items like goods, waste packaging, banded strapping loops and pallets.

Plan workflows and storage to make sure that goods, equipment and waste do not cause obstructions or project into places where people may walk. Keep floors and traffic routes free from obstructions. Check that floor surfaces are even both inside and outside buildings and fill in any holes. Provide good lighting.

Good housekeeping is important; if items fall onto traffic routes, clear them as soon as possible. Also inspect the workplace regularly to make sure that there are no trip hazards.

## **Manual handling**

People suffer from work-related aches and pains in the warehousing and storage industry, including problems such as lower back pain and neck pain.

If there is a risk from a manual handling task, try to avoid the task first. If the task cannot be avoided, the risk of injury occurring must be minimised.

Carry out a manual handling assessment for manual handling operations and tasks that present a risk of injury. Consider:

- the task;
- the load;
- the working environment;
- individual capability; and
- other factors.

Think about all systems of work and tasks that involve manual handling. Where appropriate, redesign tasks to avoid the need to move loads manually, or use mechanical handling devices, eg lift trucks, pallet trucks, trolleys, conveyors, chutes, scissor lifts etc. Where necessary, introduce additional mechanical handling devices to avoid or reduce manual handling operations.

Give your employees information about the weight of a load and its heaviest side if its centre of gravity is not central.

Provide training in safe manual handling techniques and manual handling devices used. Training should be specific to the task. It should complement a safe system of work and not be a substitute for it.

## **Work at height**

Any work at height, including maintenance work undertaken for you by a contractor, must be properly planned, appropriately supervised and carried out in a safe way.

Avoid work at height if you can, but if it cannot be avoided, select the correct equipment for the task.

People can fall from stepladders or ladders. Where they are used you must be able to show that it is not reasonably practicable to select alternative, safer equipment because the task is low risk and short duration.

Never use pallets on fork-lift trucks for accessing work at height or as working platforms. Never climb on racking unless it is specifically designed for use as access equipment.

Make sure that everyone involved in working at height has the ability to do the work safely, training may be needed. Some access equipment may require specialist training, eg a mobile elevating work platform (MEWP).

Inspect equipment used for work at height (such as ladders) to make sure it is safe. Do this before use, periodically and after an incident that might affect the equipment's safety.

## **Vehicles in and around the warehouse**

Moving vehicles need to be carefully managed to control and reduce the likelihood of accidents.

### ***Managing deliveries and visitors***

All of the employers involved in the delivery and collection of goods should exchange any relevant information on health and safety.

Visiting drivers should be given any information they need in advance to ensure their own safety and that of others. Think about how you will communicate with visiting drivers who do not speak and/or only have a limited vocabulary or understanding of English, eg provide copies of your site rules, illustrated with pictograms, to cover expected foreign languages.

### ***Pedestrian safety***

Pedestrians and vehicles have to be able to circulate safely. Workplace traffic routes should be suitable for the people and vehicles using them. Where vehicles and pedestrians use the same traffic route, there should be adequate separation between them. Consider the complete separation of vehicles and pedestrians first – where this is not possible you will need to use other control measures.

### ***Traffic routes***

Traffic routes should be properly designed. Consider:

- vehicles being used;
- minimising the need for reversing;
- avoiding sharp bends and blind corners;
- maintenance – don't allow potholes to develop; and
- anything that can affect load stability, eg steep slopes.

### ***Reversing vehicles***

Warehouses should be designed to reduce the risks from reversing vehicles where possible, eg by using a one-way system. Where you cannot avoid reversing, keep pedestrians out of the area where a vehicle is reversing. Reversing sensors and CCTV on vehicles can be useful.

### ***Coupling and uncoupling***

You should have procedures in place to check that trailers are coupled and uncoupled safely (using the parking brakes on the tractor unit and the semi-trailer) and that semi-trailers are parked with the parking brake correctly applied.

### ***Load safety***

You should have safe systems of work for loading and unloading vehicles. When goods or materials are unloaded from one level to another and there is a risk of injury from a fall, you should use appropriate fall protection measures.

### ***'Driveaways' or premature vehicle departures***

Have a safe system of work in place so that drivers never move their vehicles (accidentally or deliberately) until the load is secure and it is safe to depart. Check this system regularly to make sure that it works.

## **Moving or falling objects**

### ***Falling objects***

Take steps to prevent people being injured by falling objects. If there are areas or specific activities in the warehouse with a risk of material or an object striking someone, make sure that the area is clearly indicated and that unauthorised people don't enter it.

### ***Mechanical handling***

Mechanical handling equipment (eg a fork-lift truck) should be suitable for the job it is used for. All industrial truck operating areas should be suitably designed and properly maintained.

Industrial truck operators need to be trained by a competent person. Operator training should include the following three stages:

- basic training;
- specific job training; and
- familiarisation training.

### ***Maintenance and examination of industrial trucks***

Lift trucks should be regularly maintained in accordance with the manufacturer's recommendations. Lifting parts of industrial trucks, such as the mast, chains, carriage, forks and tilt mechanism, need to be thoroughly examined by a competent person.

You should have:

- a documented pre-shift check;
- a system for reporting defects and for ensuring that remedial work is carried out;
- a planned routine maintenance system; and
- a thorough examination/safety inspection regime for each truck.

### ***Storage systems***

Storage areas should be properly designated and clearly marked. The layout of storage and handling areas should avoid tight corners, awkwardly placed doors, pillars, uneven surfaces and changes of gradient.

Inspect pallets each time before use to make sure that they are in a safe condition. Take damaged pallets out of use for repair or destruction. Handle empty pallets carefully – do not drag or throw them about.

Pallets should be loaded correctly to ensure load stability; banding, shrink or stretch wrap can help with this.

If you use pallet racking in your warehouse, make sure the pallets you use are suitable for the type of racking you have.

Racking systems should be properly designed and installed, this includes being able to safely take the load of the goods being stored. Protect racking if it is likely to be struck by lift trucks and other vehicles.

Inspect racking regularly to make sure it is repaired and maintained properly and is safe. You should use three types of inspection:

- immediate reporting of damage and defects;
- visual inspections at regular intervals; and
- 'expert' inspections carried out at intervals by a competent person.

Where you find damage that affects the safety of the racking system, offload the racking and introduce controls to prevent it being used until remedial work has been carried out.

Keep a record of inspections, damage and repairs, eg in a logbook.

### **Further reading**

*Warehousing and storage: A guide to health and safety* HSG76 (Second edition)  
HSE Books 2007 ISBN 978 0 7176 6225 8

HSE website: [www.hse.gov.uk](http://www.hse.gov.uk)

### **Further information**

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165  
Fax: 01787 313995 Website: [www.hsebooks.co.uk](http://www.hsebooks.co.uk) (HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website: [www.hse.gov.uk](http://www.hse.gov.uk).)

For information about health and safety ring HSE's Infoline Tel: 0845 345 0055  
Fax: 0845 408 9566 Textphone: 0845 408 9577 e-mail: [hse.infoline@natbrit.com](mailto:hse.infoline@natbrit.com) or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

This leaflet is available in priced packs of 15 from HSE Books, ISBN 978 0 7176 6253 1. Single copies are free and a web version can be found at [www.hse.gov.uk/pubns/indg412.pdf](http://www.hse.gov.uk/pubns/indg412.pdf).

© *Crown copyright* This publication may be freely reproduced, except for advertising, endorsement or commercial purposes. First published 11/07. Please acknowledge the source as HSE.