Introduction

Over 20,000 Usdaw members work in distribution in warehouses handling large volumes of goods. Frozen foods, groceries, pharmaceutical products and household and DIY products – the goods handled are as varied as the locations. But common factors include high volumes, rapid throughput and intensive manual handling. The HSE’s guidance on health and safety in warehouses, ‘HSG76 Warehousing and Storage – A Guide to Health and Safety’, gives detailed advice on the common hazards.

This leaflet distils the guidance from HSG76 with the years of experience of Usdaw Health and Safety Reps. It covers many of the most significant risks in the sector and provides useful checklists for Reps to use when inspecting their warehouse.

Research has proved that Union Health and Safety Reps can make a real difference to health and safety performance in their workplace. But they can only do so if they use their legal functions to inspect the workplace and to represent members. The experience, knowledge and training of Union Health and Safety Reps are valuable assets. Many employers now realise how helpful they can be.

But Reps also provide another important service. Some of the most important risks remain hidden because workers want to get on with the job and are reluctant to complain. Checklists in this guide stress the importance of Reps talking to members. By doing so in an organised way Reps can uncover the hidden risks and give a collective voice to workers’ concerns. Often these problems can be remedied by simple changes – making work more productive and efficient as well as safer and healthier.

Working methods in the sector are changing fast in response to business pressure and technical and environmental change. Some of the emerging issues such as stress and musculoskeletal risks from paperless picking systems and increased knowledge about health risks from shift systems cannot be covered in such a compact guide as this.

Reps can keep informed about the changes and about emerging risks by signing up to our email alert system and checking out our health and safety web pages – www.usdaw.org.uk/healthandsafety
Slips and Trips

Slips and trips are the commonest accidents in warehousing and can cause serious injury. At the same time they are easy to prevent.

Slips

Wet or contaminated floors are the main slipping hazard. This can be from leaking roofs, ingress of rain water at loading bays or spilt goods from damaged packaging. Good housekeeping and cleaning regimes are important. Systems should be in place to remove slipping hazards as soon as possible. Most warehouse floor surfaces are good when dry, level and clean. But even the best can become dangerous when wet or contaminated with spilt product.

Slip resistant footwear can help. But it is better to remove slipping hazards where possible and only to use footwear as an additional measure.

Trips

Trips occur when floors are untidy with goods left in the wrong place, discarded package strapping, pallets and other items where they should not be. Uneven floors also cause problems. Goods should only be stored in designated areas. Traffic routes (both vehicular and pedestrian) should be kept clear and free from obstructions and all floor areas should be even, in good repair and clean. Good lighting is also essential. All these control methods must be applied to both indoor and outdoor work areas.

The Usdaw risk mapping tool for slips and trips – www.usdaw.org.uk/slipsandtrips can help identify problem areas. Reps should regularly inspect the workplace and ensure slips and trips are on the agenda at safety committee meetings.

- Use the Usdaw risk mapping tool.
- Talk to members to find where hazards are.
- Inspect the workplace regularly.
- Discuss ways of preventing contamination from getting onto the floor.
- Is there a system for clearing up spillages and removing obstructions?
- Are goods stored safely in clearly marked locations?
- Are flooring materials level and secure on all walkways?
- Are slopes and changes of level clearly marked?
- Is lighting adequate?
- Is appropriate footwear provided?

Usdaw slips and trips mapping tool
Manual Handling

Back pain and strain injuries to arms and legs are the main causes of work-related absence. Warehouse work involves intensive manual handling often involving heavy weights. But it is not only the weight of the load that can cause problems. Even light objects can cause risks if the work is repetitive; the load is awkward to hold or lifting involves stretching or twisting. A number of risk factors have to be considered.

<table>
<thead>
<tr>
<th>T – the task</th>
<th>Does it involve repetitive work or prolonged effort? Are there enough rest breaks?</th>
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<tbody>
<tr>
<td>I – the individual</td>
<td>Does a person’s height or age put them at greater risk? Are there other factors such as disability? Are pregnant women more at risk?</td>
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<tr>
<td>L – the load</td>
<td>Is it heavy? Is it awkwardly shaped or otherwise difficult to hold?</td>
</tr>
<tr>
<td>E – the environment</td>
<td>Are there obstructions or space constraints that force workers to stretch or twist? Are there cold draughts?</td>
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The law requires employers to arrange the work to eliminate manual handling risks if they can. Any remaining risk must be reduced as far as possible.

The HSE has produced a range of tools to help assess the risk – the Manual Handling Assessment Chart (MAC), guidance on pushing and pulling and a filter for risks from repetitive work – [www.hse.gov.uk/msd/index.htm](http://www.hse.gov.uk/msd/index.htm)

Employers often put a lot of reliance on training in safe handling techniques. But research has shown that generic training does not prevent injuries. If training is provided it should be task-specific. It cannot be used as a substitute for risk prevention.
Automated systems can remove the need for manual handling. Even simple tools such as trolleys and rollers can reduce the risk. But all such equipment needs to be properly maintained and assessed for any new risks it may bring.

- Have manual handling assessments been done for all handling jobs?
- Are there particular risks eg reaching into racking or inside containers?
- Do members find some jobs cause more aches and pains than others? (Use the Usdaw body mapping tool and survey forms to talk to members.)
- Are handling aids provided – eg levellers, trolleys, tilting racks?
- Is training appropriate and effective?
Vehicle Movements

Being run over by a vehicle is one of the main causes of fatalities in the warehousing sector. The greatest danger comes from reversing vehicles. Even slow-moving vehicles can kill if the victim cannot be seen by the driver. Every year 50 to 60 workers are killed in workplace transport accidents.

The best protection is strict segregation between pedestrians and vehicles. This requires clearly planned traffic routes inside and outside the warehouse; use of one-way systems where possible; barriers to separate pedestrian routes from vehicle routes and well-marked crossing points where necessary. Pedestrian access to vehicle areas should be kept to a minimum. Any pedestrians who do have to enter these areas should wear hi-vis vests. Both drivers and pedestrians should be aware of the areas where segregation is not possible.

Inside the warehouse, physical segregation may be more difficult – eg where pickers and lift trucks have to work in the same aisles. Other means such as separating times when trucks or pickers operate in an aisle or strict enforcement of rules about pedestrians avoiding trucks, drivers using horns and not operating trucks if pedestrians are in close proximity may be needed.

When trailers are being loaded or unloaded, systems such as traffic lights or key-holding need to be in place to prevent premature drive-offs. If drivers need to be able to view the loading operation then a safe refuge to observe from should be provided.

- Are pedestrians and vehicles separated as far as is possible?
- Are physical barriers used and crossing points clearly marked?
- Are there any areas where people take ‘short cuts’?
- Does everyone wear hi-vis clothing in areas where vehicles operate inside and outside the warehouse?
- If pedestrians and trucks have to share aisles in the warehouse are there rules to prevent accidents?
- Do managers enforce the rules effectively and consistently?
- Is there a system to prevent premature drive-aways from loading bays?
- Is reversing of vehicles kept to a minimum – eg by use of one-way traffic systems?
- Are all visiting drivers made aware of the traffic rules on site?
Lift Trucks

A variety of lift trucks are used throughout warehousing. They are involved in a large proportion of accidents and serious injuries.

Both driver selection and driver training are important. Operators should be reliable, responsible and physically capable. Use of trucks should be restricted to properly trained drivers. Training should be specific to the type of truck used and the work that it is used for. Systems should be in place to prevent unauthorised use. Under-18 year olds can operate lift trucks but only under close supervision.

Some medical conditions may affect the ability to operate lift trucks safely. The HSE provides guidance on medical standards, which are based on the DVLA standards for car drivers. This does not mean that a person with a particular health condition or disability should automatically be excluded from lift truck work. Reasonable adjustments may be possible and people should be assessed on individual merits and ability.

Lift truck drivers can spend many hours on their machines. It is important that the cab is suitable for them to work comfortably during their shift. This may include localised heating in the cab where required. There should also be a comfortable seat with good lumbar support, well-designed controls and good suspension and tyres.

- Are people given enough time to complete their duties?
- Are drivers trained and periodically tested?
- Are vehicles fitted with audible (horns) and visible (flashing beacons) devices?
- Are lift trucks regularly maintained/inspected?
- Are lift trucks stored in a safe location and refuelled outside if LPG?
- Are keys always removed from the ignition when not in use?
- Are people aware they should never ride on the forks of lift trucks?
- Are lift trucks inspected prior to use on a daily/pre-shift basis?
Falls From Height

Work at height can be a routine operation (eg on mezzanine floors or man-up trucks) or an occasional task (eg to remove fallen items from racking). The law requires employers to remove the need for work at height where possible and to reduce the risk when it cannot be avoided.

A fall from less than half a metre can result in major injury. Areas to consider include multi-level picking, loading or unloading vehicles, storage racks and loft areas.

Training, safe systems of work and correct equipment must all be available to enable the work to be done safely. For example, ladders are unsuitable for all but low risk, occasional jobs. Steps, cherry pickers or mobile elevated working platforms are likely to be needed for more routine work at height. Barriers are important to prevent people or objects falling from elevated work stations.

When working at height, falling objects are another cause of major injury. The risk is highest where people are working on storage racks and overloaded or damaged racking. Areas where this kind of work is being undertaken should be sectioned off and unauthorised persons excluded.

- Do people stand on the forks of a lift truck to get access at height?
- Do people climb onto racking to store or retrieve goods?
- Are members carrying more than they can safely manage when using ladders?
- Are pedestrians kept clear when lift trucks are working at height?
- Is there a system to remove damaged pallets or fallen goods from the racking?
- Are the correct steps, ladders or work-platforms provided for the job?
- Are people trained to use the correct access equipment?
- Are all steps or ladders checked before use?
Working in Chillers and Freezers

Cold work or work in Temperature Controlled Storage (TCS) can involve chillers where temperatures are around five degrees Celsius or sub-zero freezers where temperatures plunge as low as minus 20/30°C, therefore extra health and safety precautions are necessary.

TCS work can carry increased health risks such as:

- Frostbite/Frostnip.
- Chilblains.
- Hypothermia.

Cold can **aggravate** conditions such as:

- Asthma.
- Angina.
- Arthritis.

Cold also affects people who suffer from circulatory problems such as Raynauds disease – a condition in which blood is prevented from reaching the extremities of the body, mainly the fingers and toes. Hand Arm Vibration Syndrome (HAVS) is a similar condition caused by exposure to vibrating machinery or tools.

Lower temperatures may cause slower mental reactions or reduce manual dexterity which can increase the risk of accidents. Ice build up on floors is also a significant slipping risk.
Cold environments can have an adverse effect on equipment such as racking, lift trucks and other manual handling equipment. These should be included in regular maintenance scheduling.

Personal Protective Equipment is important when working in TCS and should be suitable for the task being performed. Thin, multi-layered clothing is better as it allows more flexibility for the worker.

- Is there a system to prevent accidental locking in?
- Are procedures in place to prevent/detect refrigerant release?
- Are equipment and racking used at low temperatures regularly checked?
- Are systems in place to prevent ice build-up?
- Are regular health checks on cold store workers carried out?
- Do the company provide suitable thermal/protective clothing for members?
- Do members have access to warm rooms with hot drinks for adequate rest breaks?
- Are the cabs of lift trucks heated and enclosed?
- Is there a person trapped alarm?
- Is there emergency back up lighting?
- Are members informed about the risks of work in a cold environment?
Storage Systems

A wide range of storage systems are used depending on the goods involved. Free-standing stacking is perhaps the simplest and runs the risk of collapse unless stacks are well-built and regularly inspected. Pallet racking is very common and provides versatile and secure storage. However, it is important that maximum storage loads are not exceeded and that racking is regularly checked for damage. Even slight damage can result in catastrophic failure. Pallets or goods from pallets can be dislodged and fall into gaps in the racking. There must be safe systems to clear spillages and retrieve fallen items – especially at height.

Automated retrieval systems are increasingly used to move goods in warehouses. It is essential that these are protected by secure fencing and that workers cannot get inside danger areas while the system is operating.

Conveyor belts should be set at comfortable heights where workers have to pick or pack from them. Risk assessments should ensure there are no trapping points where workers can be dragged into conveyors.

Pallets are widely used and can cause handling injuries as well as cuts and scrapes. Inspection and removal of damaged pallets can limit some of the damage. Training in safe handling of pallets can also help.

Where roll cages are used, mechanical aids such as picking trucks limit the amount of handling inside warehouses. But it is important that workers are trained to pack cages safely and to remove damaged cages to protect other workers further down the supply chain.

- Are storage stacks and racking regularly inspected for damage?
- Are they protected against accidental damage – eg from lift truck collisions?
- Is there a safe system for recovering dislodged pallets or fallen items?
- Is fencing secure around automated retrieval systems?
- Are conveyors in the right place and at the right height for workers to use?
- Are there any areas in the storage system that workers find more difficult to work in?
Welfare

As well as a safe and healthy working environment, employers are required to provide decent welfare conditions.

Temperature

Employers have a duty to maintain a reasonable temperature in the workplace. The minimum temperature should normally be 16°C or 13°C where the work is physically demanding. In warehouses this is not always possible – e.g., at open loading bays or inside chilled or frozen areas. But in such cases, other steps must be taken to protect workers. There is no maximum reasonable temperature in the regulations, but guidance suggests anything above 27°C is likely to start causing problems.

Lighting

Wherever possible there should be access to natural daylight. Lighting should be adequate for the work being carried out and for the hazards associated with that work. It should also be sufficient to enable people to move about safely. Emergency lighting must be provided where there is a risk of failure of artificial light.

Washing/toilet facilities

Toilets should be provided in adequately lit and ventilated rooms and be of sufficient number for the amount of people who work in the area. They should be clean and in good repair. Washing facilities should be provided close by.

Meals and rest facilities

Facilities should be provided for members to eat meals in an area free from any contamination. There should be sufficient seating to accommodate people, near to washing facilities. A canteen can double as a rest room so long as there is no obligation to purchase food. Drinking water should also be readily available at all times during working hours. Toilet and meal facilities should also be available to visiting drivers at warehouses.
It is important to include welfare in Health and Safety Rep inspections and to talk to members to make sure they are satisfied with the welfare provision.

- Are there parts of the warehouse that members find too hot or too cold?
- Are there areas where members feel the lighting is inadequate?
- Do members have ready access to drinking water at all times?
- Is there a system in place for members to report problems?
- Are workplace inspections carried out at least quarterly?
Further Information

Health and Safety Executive

Also free to download from: www.hse.gov.uk/pubns/priced/hsg76.pdf

Warehousing and Storage – Keep It Safe, IND412. This is a free leaflet available from the Health and Safety Section at Usdaw Central Office, or from the HSE website www.hse.gov.uk/logistics/warehousing.htm

Usdaw
Copies of the Usdaw guides referred to in this leaflet and much more can be found on the health and safety web pages of Usdaw’s website – www.usdaw.org.uk/healthandsafety

For further advice and assistance contact the Health and Safety Section at Central Office:

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