

# Height restrictions

## Workplace transport site safety information sheet WPT10

This information will be useful to anyone who uses workplace transport or who works where it is used. It will help employers, managers and supervisors to assess their workplace and make improvements. The checklists will help you to prepare your risk assessment.

Height restrictions can apply where there is low headroom for vehicles to pass, eg car parks or where vehicles enter into a covered area such as a warehouse. Pedestrians are also subject to warnings in places with restricted headroom, eg underground storage areas where there may be overhead pipes.

## Common problems

**Low bridges and overhead structures:** Low bridges and overhead structures are potential accident areas for vehicles as they can crash into them if the height restrictions are not clearly shown. This is especially the case with visiting vehicles and drivers, such as delivery vehicles, if restricted heights are not clearly signed and marked.

**Damaged structures:** If a vehicle crashes into an overhead bridge it can damage the structure and the vehicle, injure the driver and any people nearby. It can also be dangerous for people working in the surrounding area if part of the structure collapses, or if overhead pipes have been damaged, causing them to leak. Even if it does not cause damage, the accident will block a traffic route and disrupt the operation of the site. Damaged structures and leaks will also disrupt site operation.

**Ignoring height restrictions:** Ignoring height restrictions can lead to accidents. People can bang their heads and vehicles can knock into overhead structures, which could damage the vehicle, the structure and possibly injure the driver.

**Restricted headroom:** There can be problems with headroom on sites where vehicles operate under cover and where staff work in restricted spaces. If places with low headroom are not properly identified and considered within the operation of the site, drivers and pedestrians may try to avoid these areas, which can lead to accidents.



Photo Jackie Stevens

### Checklist – what to look out for

- Low bridges, doorways or entrances that are potential accident spots.
- Restricted headroom, which can cause damage to vehicles and machinery.
- Incidents involving collisions with low structures, which can cause leaks and damage the structure, affecting site operation.
- Drivers or pedestrians ignore height restrictions.
- Vehicles and people who try to avoid areas where headroom is restricted, and in doing so venture into unsafe areas.

## How can you deal with common problems?

**Inform drivers and pedestrians about height restrictions on site:** You can avoid accidents relating to restricted headroom by making sure that people are forewarned of areas with low headroom and that dangerous areas are properly identified. You should make people aware of issues with headroom before they come to the site by sending out visitor information and giving full information as they enter the site. Height restrictions should be clearly marked so that drivers can see them as they enter the site.

**Use warning signs:** Use warning signs to inform drivers and pedestrians about areas where there is low headroom. Erect early warning signs showing the height restrictions, and put

Photo: Jackie Stevens



warning markings on the actual structures, eg pipe bridges and overhead gantries. The lowest point on a route should be clearly marked. Use signs to warn staff and visitors about areas where they should wear hard hats.

**Remove the hazard:** Do you need to keep the structure that is causing problems with low headroom? Many pipe bridges on sites can become surplus to requirements.

**Increase the height of the structure:** You could consider increasing the height of the structure so that it is no longer a risk to vehicles or you could look into lowering the floor level. These options may not be feasible and may be expensive.

**Use smaller vehicles:** If you have problem areas such as low overhead bridges, you could consider using smaller vehicles.

**Accident reporting:** Encourage workers to report all accidents and make sure they are fully investigated.

**Use protective measures:** If you have identified areas where accidents might happen and you have put in place warning signs and marked the area, you may want to consider protecting vulnerable structures. This would be especially relevant where there are overhead electricity cables.

**Make sure pedestrians wear hard hats:** In areas with restricted headroom for pedestrians, you can reduce the risk of head injuries by ensuring that hard hats are worn at all times.

### Checklist

- Clearly identify vulnerable areas such as pipe bridges and overhead gantries and clearly mark height restrictions in advance.
- Make sure you are aware of the size of the vehicles using the site and the delivery vehicles that enter the site, as they may not all be to normal highway standards.
- Is it possible to raise the headroom of structures that could be a problem?
- Could the ground beneath the area be dug out?
- Define abnormal road routes and make sure drivers know the height of their load.
- Consider using smaller vehicles.
- Protect areas where there are overhead electric cables or any other potentially dangerous cables.
- Enforce the hard hat rule when staff are working in areas with restricted headroom.

## Checking your site

Carry out a visual inspection of your site to look for problems with headroom. Walk around the premises, make notes and take photographs. Mark the problem areas on a site plan. Check for damage and inspect areas where near-misses have been reported. Check accident records and encourage reporting of accidents and near-misses. Ask for feedback from visitors and talk to your staff. Ask where they experience problems and where they would like additional warning signs and indicators.

Try to make sure that your site keeps to the required standards for height restrictions, where possible. The standard minimum clearance over every part of the carriageway of a public road is 16 feet 6 inches (5.03 m) but remember that many site vehicles may be larger than those allowed on public highways. When the clearance over any part is less than the standard 5.03 m, provide warning signs both on and before the structure. The stated clearance should be at least 75 mm less than the measured height.

Where emergency vehicle access is required, you should check the height of such vehicles with the relevant emergency service. Roads and bridges are often not level, and while a vehicle may be able to go underneath a bridge at a certain point, there might not be as much headroom at other points. Additional clearance will be required to allow for road resurfacing. Changes in gradient may also reduce the effective headroom for long vehicles.

Give prominent warning of any height restrictions, both in advance and at the obstruction itself. Any potentially dangerous obstructions such as overhead electric cables etc need to be protected.

### Checklist

- Carry out a visual inspection of your site and make a note of areas where there are height restrictions or where there could be issues with headroom.
- Check for structural damage and damage to ceilings, bridges etc.
- Be especially aware of areas where there have been 'near misses' or where there is a high level of pedestrian and vehicle activity.
- Be aware of changes in ground level, especially where long vehicles are used.
- Investigate all accidents or complaints relating to restricted headroom and height restrictions.

## Where to get help

If you have a problem with height restrictions on your site, you might be able to carry out some initial works yourself, eg erect warning signs before the obstruction and highlighting the obstruction itself. If you have a problem with a certain structure, you may want to employ a structural engineer to assess it. Other safety issues may need a safety engineer to assess your site and present your options in terms of works required.

You can also get advice by speaking to other similar local businesses – look for examples of good practice. Contact your local trade association or Chamber of Commerce for recommended local suppliers or look in the *Yellow Pages*.

### Checklist

- Can you introduce or review height restrictions yourself?
- Will it be more cost effective to have a professional to assess your site and arrange for any works, such as erecting warning signs?
- Speak to your health and safety representative and talk to your staff.

## What might it cost?

- Advance highway warning sign £200–£500.
  - Goal posts with upper height level £500.
- (These costs are a guide and may vary.)

## Find out more

Traffic signs and road markings in relation to height restrictions should, wherever possible, be in accordance with standard road markings and comply with the *Traffic Signs Manual*.

*Traffic Signs Manual: Chapter 5: Road markings*  
The Stationery Office 2003 ISBN 978 0 11 552479 0

*Traffic Signs Regulations and General Directions 2002*  
SI 2002/3113 The Stationery Office 2002  
ISBN 978 0 11 042942 7

DfT, DSA *The Official Highway Code* (Revised 2007 edition)  
The Stationery Office 2007 ISBN 978 0 11 552814 9

*Workplace transport safety: An overview* Leaflet  
INDG199(rev1) HSE Books 2005 (single copy free or priced packs of 5 ISBN 978 0 7176 2821 6)  
[www.hse.gov.uk/pubns/indg199.pdf](http://www.hse.gov.uk/pubns/indg199.pdf)

*Workplace transport safety: An employers' guide* HSG136  
(Second edition) HSE Books 2005 ISBN 978 0 7176 6154 1

*Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21* (Second edition)  
HSE Books 2000 ISBN 978 0 7176 2488 1

## Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk/](http://www.hse.gov.uk/). You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

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

This document is available at:  
[www.hse.gov.uk/pubns/wpt10.pdf](http://www.hse.gov.uk/pubns/wpt10.pdf).

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