

Ten Common Construction Site Hazards

The construction industry is one of the largest sectors in the UK and many other countries. It is well known for being notoriously dangerous because of the combination of Health and Safety risks involving vehicles, equipment, and manual tasks which few other industries share.

According to HSE.gov.uk, the construction industry has the most fatalities than any other in the UK. It is on par with agricultural, fishing, and forestry with the most work-related deaths.

On the job, these construction workers face a wide range of day-to-day vocational safety hazards such as working from a height, falls, slips and trips, moving equipment such as lorries, cranes, noise, vibration, and manual handling, and this is only half of it.

The dangers of working in construction should never be overlooked, and whether you are an apprentice or a site manager, it is the duty of everyone on-site to keep everyone safe.

According to various industry papers and expert blogs, the top 10 health and safety site hazards in construction are as follows.



1. Working at Height

This is the most common cause of fatal injuries and has become a daily risk for construction workers.

Building construction and demolition often require staff to work from a height which often includes working across several surfaces and platforms without the correct equipment or training is highly dangerous. Injuries can be caused by unstable working surfaces, restricted movement, and misuse or failure of safety equipment.

The primary sources of risk are as follows:

- Loose equipment stored on roofs or raised pathways

- Unsecured scaffolding or ladders
- Unprotected edges
- Lack of safety nets or guardrails

Reducing the risks.

There are many ways to reduce risks and it all starts with training. Employees must be trained in working on different pieces of equipment and surfaces, such as how to work safely on scaffolding, ladders, and roofs to enable them to safely carry out their work.

All work from height must then be planned, controlled, supervised, and performed within the given procedures. Preventive measures to keep the risks to a minimum can involve the introduction of safety nets, guard rails, and keeping equipment secured among others.



2.Moving Objects

Construction sites are places of constant movement of vehicles, machinery, and equipment. Due to its ever-changing environment, construction hazards continue to change. With many moving objects that you will encounter on a construction site, you will notice that there is a high volume of moving traffic, supply vehicles, diggers, and forklifts all of which move around a usually uneven terrain this can make it difficult to maneuver around. Therefore, your safety rule should be able to create clear routes for vehicles and ensure that your employees avoid positioning themselves between fixed moving objects.

Construction sites are places of constant movement of vehicles, machinery, and equipment. Supply vehicles, diggers, and forklifts all manoeuvring on uneven ground creates a busy site

As the building site develops the risks associated with it increased accordingly.

The primary sources of risk are as follows:

- Poor working light
- Heavy-duty vehicles
- Overhead lifting equipment
- Little space to manoeuvre
- Working close to moving objects

Reducing the risks.

The workforce should wear protective clothing such as high vis jackets to be seen by moving vehicles, as well as steel-toe shoes and helmets to protect them against moving/falling objects. Finally, they should be trained to keep vigilant and aware of their surroundings and to avoid hazards.



3. Slips, Trips, and Falls

Slips, trips, and falls can happen in almost any environment. Construction sites can sometimes become a maze of equipment, debris, dirt, and more. Navigating around a busy site, even when being cautious can still cause workers to slip and trip. When you consider all the things that happen above it's no surprise that slips, trips, and falls could happen on an almost daily basis.

The primary sources of risk are as follows:

- Wet and slippery surfaces
- Uneven surfaces and ground
- Loose cables
- Materials or equipment left unchecked

Those in control of construction sites must effectively manage the site so that workers can move around it safely.

Reducing the risks.

A good start is to provide designated walkways with good conditions underfoot and be well lit. Work and storage areas must be kept tidy with designated areas for waste collection. Any slippery areas should be signposted, and suitable footwear provided with a good grip should be worn.

[Other HSE figures show that around 61,000 construction workers sustained non-fatal injuries in 2019/2020 and most of these were slips, trips, and falls \(26%\).](#)



4.Noise & Hearing Damage

Much of the equipment used on a construction site generates high levels of noise, whether that's hand tools, machinery or heavy duty vehicles

Repetitive, excessive noise can cause long-term hearing damage and can also be a dangerous distraction causing accidents.

The primary sources of risk are as follows:

- Power tools
- Groundwork equipment
- Heavy-duty vehicles

Reducing the risks.

Make sure you provide your workers with the appropriate PPE in the form of soundproof headphones to reduce the intensity of sound waves. Crews must wear the PPE when working in a high noise level environment so using signage as reminders and instructions will help ensure the PPE is being used.



5.Vibration

Operating heavy construction equipment for long periods may expose construction workers to high levels of vibration. Repetitive vibration caused by power tools can severely damage workers' nerves and blood vessels and can lead to hard-arm vibration.

The primary sources of risk are as follows:

- Handheld power tools
- Ground working equipment
- Vibrating power tools

Reducing the risks

Construction workers should be given appropriate protection when using vibrating tools, and equipment should be well maintained. Other precautions include the use of alternative equipment and implementation of new safety measures, advice on which can be found on the HSE has specific advice for avoiding HAVS which can be read here: <https://bit.ly/3wk3weP>



6. Material and Manual Handling

Materials and equipment are being constantly lifted and moved around on a construction site, whether manually or by the use of lifting equipment if this is done incorrectly it can lead to severe injuries. Back injuries can be caused by a lack of training on how to move heavy objects. Workers should bend their legs and lift the heavy items using the leg muscles and not bending their backs.

The primary sources of risk are as follows:

- The repetitive heavy lifting of loads
- Poor lifting posture
- Workers cannot see around or over the load they are carrying

Reducing the risks.

Where duties involve handling and lifting make sure adequate training is provided with adequate supervision thereafter. Equipment should also be provided for when manual lifting is not possible or unsafe, this could include forklifts or pallet trucks all of which need to be.



7. Collapsing Trenches

Collapsing trenches with workers inside them is a very common occurrence on-site. Sadly, this can lead to severe injuries or even death.

The primary sources of risk are as follows:

- Trench collapse
- Falling into excavation
- Weakened structure due to excavation

Reducing the risks.

Supervisors should ensure that the trench is fully secured and regularly inspected before and during a work shift. Crews should be issued with proper PPE, and equipment should be maintained. The presence of first aid on-site also helps speed the response in case of an accident.



8.Asbestos

Asbestos dust is particularly dangerous as it not only affects workers but also anyone that comes into contact with the particles at home or on the way home. Around 20 tradesman die each week as a result of pas exposure, so the danger is very real and one which corners cannot be cut.

[Why is asbestos dangerous? \(hse.gov.uk\)](https://www.hse.gov.uk/why-is-asbestos-dangerous/)

The primary sources of risk are as follows:

- Ceiling tiles, thermal paper, wall plaster in older buildings
- Certain types of insulation
- Old switch gears and circuit boards

Reducing the risks.

If there is asbestos on the construction site, workers must be informed where it is. They must be trained in what to do should they come across suspicious materials that may contain asbestos There are certain rules to be followed regarding licenses for working with asbestos which is essential to be followed. Details can be read here.

<https://www.hse.gov.uk/pubns/priced/hsg247.pdf>



9.Electricity

Exposed wires and live electrical parts are commonly present on site.HSE reports that 1,000 electrical accidents at work are reported every year. Electric shocks can be a very common

cause of falls from ladders and scaffolds. Construction work needs to be organised to ensure that workers can locate and identify.

The primary sources of risk are as follows:

- Inadequate PPE
- Lack of adequate training
- Incorrect testing
- Not taking precautions

Reducing the risks.

There are many types of PPE that you could benefit from around electricity; this could include insulating gloves, a face shield or safety glasses, insulating boots, and a flesh protection kit. You must take all of the necessary precautions such as staying aware of the presence of electrical wires, and ensuring that the site has been inspected regularly by a qualified electrical engineer.



10. Airborne Fibres and Materials

A lot of dust is produced on construction sites. This is a common danger. Just like asbestos, other fibre and material particles such as dust can cause issues among the health and safety of workers on the construction site.

The primary sources of risk are as follows:

- Damages the lungs and can lead to other diseases
- The dust is often invisible

Reducing the risks.

In order to reduce any risks of getting these diseases from on-site dust and particles, the correct PPE should be used, maintained, and inspected alongside suitable safety measures including the use of water or on-tool extraction to keep dust out of the air.