Are you exposed to hazardous substances at work?

a UNISON guide for members
Nearly every workplace will contain some hazardous substances and the law says your employer must ensure that you and colleagues or visitors are not harmed by them.

What are hazardous substances?
Hazardous substances include most dangerous chemicals, waste products, germs and other biological materials, (incredibly small) nanoparticles, and dusts – all of which can be harmful. They can be gases, vapours, liquids, or solids. Different forms or sizes may be more or less dangerous. For example, substances with nanoparticles may be more toxic.

Examples include bleach and other cleaning substances with a warning label, wood dust, glues, solvents, paints, oils, fumes, fuels, pesticides, fertilisers, flour, medicines, biological substances, toner, inks, and paper dust.

How do they cause harm?
These substances may harm you if they are inhaled, swallowed, or if they touch your skin. Contact with (exposure to) more than one substance at the same time may be more harmful, and so may greater or longer exposure.

The effects may be quick and easy to spot (eg some chemical burns) or may take many years (eg work related cancer) and may develop where they contact the body (eg eczema) or may affect other parts of the body (as with a chemical breathed in which then makes you drowsy).
Hazardous substances at work a guide for members

Employers must make sure that you are not harmed

This is done through a process called risk assessment.

Step 1 - what is the hazard and who may be harmed?

Your employer must identify the hazard and consider who may be harmed by collecting information on all the hazardous substances, including waste and by-products (including any used by another employer nearby). If your workplace is shared, the employers must share information and work together to prevent harm.

Safety data sheets (provided by suppliers of dangerous chemicals), the labels on products, industry standards, and guidance from UNISON and the Health and Safety Executive (the main health and safety “police”) may provide this information.

Next, your employer must consider how likely and seriously someone may be harmed.

Questions they should ask include:

- how much of the substance is there and in what form?
- what type, how long, and how much exposure (if any) is there?
- does anything indicate that employees are being harmed (eg the results from health checks or other measurements)?
- who may be exposed (particularly the vulnerable, eg pregnant women, young or inexperienced workers, people with disabilities or pre-existing conditions - including asthma and dermatitis)?

Step 2 - prevent or minimise exposure

If there is a significant chance of harm, then your employer must prevent your exposure if reasonably possible. Can they:

- do the work in a different way (so that the dangerous substance is not needed or produced, or exposure becomes impossible)
- use a safer alternative (eg pellets instead of powder which release less dust).
But before making a change, your employer must check that it really is safer and that any new hazards are also risk assessed.

If prevention is not possible, then your employer must minimise (control) exposure by:

1. considering all types of exposure and using the smallest amount of substance possible
2. limiting the number of employees exposed, and their length and level of exposure
3. controlling exposure early in the process using the most effective and reliable methods
4. not breaking workplace exposure limits (WELs)
5. providing personal protective equipment (PPE) in addition to (and not in place of) other control measures
6. regularly reviewing and checking control measures and not creating new uncontrolled or more significant hazards
7. giving you information and training on how and why to use the control measures.

Further specific control measures are required if a substance may cause cancer or genetic damage, or where the work is with harmful biological material including germs and cells (eg refuse disposal, or work with bedding or laundry). Separate requirements also cover sharps use in health care.

Your employer must clean, check, test, and maintain physical control measures. Safe systems of work, procedures, and supervision must also be checked. Defects should be put right as soon as possible, or immediately if serious. And if a serious exposure is a risk, the work may need to stop.

Any PPE must be provided to you free, followed by training and supervision on its correct use. You or your colleagues and reps should have been asked about its selection so that you find it comfortable and practical. It must be properly stored, maintained, and replaced or repaired when defective. If possibly contaminated, remove PPE when leaving the work area and keep it separate to
uncontaminated clothing and equipment.

You should quickly remove any accidental contamination and wash any affected parts of your body. It may be appropriate to use (special) skin creams before beginning the work. If ingestion (exposure by the mouth) is a risk; do not eat, drink, or smoke before removing any contaminated clothing (in the place specific for this) and thoroughly washing your hands and face, and under your fingernails.

If necessary, there should be suitable uncontaminated facilities for washing, changing, eating and drinking.

**Step 3 - record the details**
Employers with five or more employees must record (on paper or electronically) the significant findings, which are:

- the hazards and risks
- who may be harmed and how
- the measures of prevention or control
- who is responsible for making sure that those measures are taken.

But, it is good for all (even smaller) employers to do this to prove that they have carried out a risk assessment and for the future as a reminder, checklist, and during a review.

**Your employer must tell you and your safety rep about the findings. Has this been done?**

**Step 4 - review and update**
Things change, so your employer must review their risk assessments:

- at least once a year and possibly more often depending on the hazard and the chance and seriousness of any harm
- if there’s a significant change, such as new or different equipment, substances, or information that indicates that the assessment is out of date (eg the results of a check, some harm occurring, a near-misses or other incident).
Changes in technology or in the cost of safer alternatives might mean that your employer could now improve upon the current measures of prevention or control. Even if the current ones are to remain in place, they must be checked to see whether they are working as expected or need improving.

**Step 5 - checks, plans and procedures**

Your employer must measure the amount of hazardous substances you are exposed to if this is necessary to protect you from serious harm, to ensure that exposure limits are not exceeded or where control measures might fail.

If you are exposed, your employer must also pay for health surveillance (where it is appropriate, low risk, and reasonably possible to detect any likely harm). This should take place in a suitable private room, during work time, and with a suitably trained employee or medical expert (as appropriate). Employees and union reps should have been consulted on the procedure (to ensure that it is acceptable) and informed about any symptoms or signs to look out for. You must attend health surveillance if offered, but any negative results must not be used to discriminate against you if they find you less fit or more susceptible.

If something of concern is found you must be informed by a suitably qualified person and be provided with appropriate information and advice. Your employer will have to consult you (with your rep if you wish) if it is necessary for your health to find you alternative work.

If there is a risk of an accident, incident, or emergency; your employer must have a plan if the exposure and risk of harm may be way above the normal daily risks, eg:

- the substance may cause cancer, damage the genes, or is a biological or sensitising (to which your body may over-react) substance
- a serious spill or flood of corrosive agents that is likely to make contact with the skin
- a serious failure of controls that could lead to a sudden release, or a significant exposure over a workplace exposure limit (WEL).  

The idea is that the plan will enable an immediate response by
following set emergency/procedures, and indicate how to warn and advise other workers and the emergency services, etc. The plan must be regularly practised as ‘safety drills’ and reviewed and updated. Appropriate first-aid facilities must also be provided. The safety data sheet for a particular substance will contain information on how to deal with it during an incident, etc.

Step 6 - inform and consult.

Your employer must give you (and your safety rep) suitable and sufficient information, instruction, training, and supervision about controlling exposure. This includes:

- details about the hazardous substances
- the findings from the risk assessments
- the measures of prevention and control
- PPE and hygiene facilities
- any checks, emergency plans or procedures.

Employees and your safety reps must be consulted by your employer. You play a key role in checking the assessments because you know how the job is done and whether the suggested measures are practical. You may identify hazards, risks, ineffective safety measures, or solutions that those less familiar with the work may miss. Research shows that health and safety measures are more effective when the workers and their reps are involved, so don’t just leave health and safety to your management.
Are you experiencing a problem?

Is there still a risk?

Unless your work has been risk assessed and you have been given the appropriate information, your employer must not expect you to carry out work which is likely to expose you or others to hazardous substances. Also, your employer’s (emergency) plans should allow and enable you and other employees to stop work and move to a place of safety if appropriate (ie during a serious danger). If you believe that your employer may not be doing enough, speak with your local safety rep or steward.

Have you been exposed, injured, or made ill?

UNISON may be able to help you claim compensation. Usually it is necessary to prove that an injury or illness was caused by work and that the employer should have prevented it. For legal assistance, UNISON members should contact UNISONdirect on 0800 857 857.

But remember, it is best to prevent the harm in the first place, so make sure you and your safety rep are consulted!

When it comes to health and safety, UNISON's message to employers is: “Don’t harm us, don’t blame us, work with us!”
Further information

Hazardous substances at work, a guide for UNISON branches - UNISON guide for safety reps (stock number. 3506).

Managing and preventing sharps injuries - a guide for safety reps on needlesticks and other sharps injuries, covering health and other workers (stock number 3427).

Both can be downloaded or ordered from the UNISON online catalogue at: unison.org.uk/onlinecatalogue
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