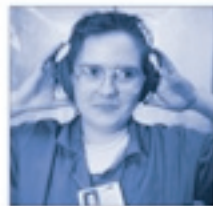


Health and Safety



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ESSENTIALS



INTRODUCTION



The AEEU has a proud tradition of upholding policies and systems that are essential in maintaining safe and secure workplaces. Over the years we have published many leaflets and books on various aspects of health and safety. This latest publication is new in both format and approach in dealing with everyday and more complex safety problems.

In this booklet we have included major industries, while not ignoring smaller enterprises that have problems of equal gravity. As time has moved on, much of the older legislation has been repealed and replaced with new regulation. With this in mind, we have put an abbreviated version of the most relevant legislation into this publication. The law is constantly changing and updates are published in the Union News, the AEEU's quarterly journal. Health and Safety Essentials is available for downloading on the AEEU website at www.aeeu.org.uk, or further copies are available from head office on: 020 8462 7755 ext 436.

As your interest broadens, so will your information sources need to expand. Therefore a network of people dedicated to health and safety issues is now in place. The network is responsible for all aspects of safety training, information dissemination, National representation on various official bodies and committees, and most importantly listening to what our safety representatives want, and responding to their wishes.

We hope that you find this book useful. If you need advice remember we are only a phone call, fax, e-mail, or letter away. Keep in touch, together we can make workplaces safer.

Best wishes,

A handwritten signature in black ink, appearing to read 'Ken Jackson', written in a cursive style.

Sir Ken Jackson
General Secretary
AEEU

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CHAPTER THREE

Office hazards

More than 5,000 serious injuries are sustained in offices every year. Many thousands of less serious injuries go unreported and often unrecorded. Office work may be less hazardous than a car plant, but millions of people work in offices, and the health hazards can still leave people disabled for life.

Cramped, unventilated and badly lit offices are a real source of hazards. Work pressures can also put you at risk. New technology has brought a whole new range of hazards into the office. The office environment may include fumes, eye-strain, more shiftwork and more pressure. Equipment is often added to the office without consideration for the people who use it, nor its effects on noise, heat or space available.

Cramped conditions not only cause discomfort, but also increase the hazards of office workers tripping over wires or bumping into equipment. Overcrowding is usually worse when the office is in an unsuitable building, but even purpose-built offices can be outgrown and need careful planning to avoid accidents, and ensure that workers' health is not put at risk.

Electrical safety is as important in offices as in factories. Faulty electrical equipment can cause shock to users and may be a fire hazard. All electrical equipment should be regularly maintained and any unsafe

equipment immediately taken out of service. No one other than a trained mechanic should attempt to investigate the internal workings of any piece of equipment.

Fire precautions are poor in many offices. Fire exits may be locked or obstructed, extinguishers may be old and fire drills, non-existent. Overcrowding increases the hazards by making it more difficult to escape, should a fire occur.

Many offices are too hot, too cold, draughty and airless. People who work in such conditions talk of always feeling below par and having headaches, lethargy, dry throats and skin problems. Some cannot wear their contact lenses comfortably in the office and many say that their eyes are sore and itchy. In some cases, this general malaise can be identified as sick building syndrome.

Such offices are likely to be air-conditioned and open-plan, with screens, partitions and banks of filing cabinets blocking the flow of air. They are also likely to be overcrowded and depend on artificial lighting and the jobs done there will be the repetitive type of clerical work which is low status and usually done by women.

Display screen equipment

Ever since its introduction to the office, the health and safety aspects of Display Screen Equipment Regulations 1992 (DSE) have been the subject of much conjecture. It has been estimated that in the UK there were around 8.5 million workstations in regular use at the end of 1992.

When the use of DSE began to proliferate in the late 1970s/early 1980s, initial concerns were centred on the belief that there may be a radiation

risk, particularly to the unborn child of a pregnant worker. Since then, there has been no confirmed scientific evidence to support this fear. Since the mid 1980s, conditions thought to be caused by intensive keyboard use and affecting the musculoskeletal system began to gain prominence in the UK. The term 'repetitive strain injury' or RSI, now more accurately referred to as work-related upper limb disorders (WRULD), entered the popular vocabulary.

The possible effects of continual DSE use upon eyes and eyesight has also raised questions from the user population. Employers began to recognise the importance of providing suitable furniture, equipment and job design and began to adopt an ergonomic approach to these issues.

Photocopier and laser printer hazards

If photocopiers and laser printers are badly positioned, poorly maintained and used frequently or for long runs, there are risks to health, ranging from irritated eyes, nose and throat to dermatitis, headaches and reproductive and cancer hazards. Proper ventilation and maintenance are essential.

Chemicals

Ozone is a gas produced during the high voltage electrical discharge in photocopiers and laser printers. If you can smell ozone the levels are too high. Ozone breaks down in air quite quickly, though this can be slowed by high humidity, temperature and some effects of office furnishings. Health effects are eye, nose, throat and lung irritation, dermatitis,

headaches and nausea, premature ageing and potential reproductive dangers. When mixed with nitrogen oxide in certain proportions it can have an effect on the central nervous system.

Selenium and cadmium sulphide some copiers use a drum impregnated with these chemicals. The gas they emit, especially when hot, can cause throat irritation and sensitisation to exposed workers. This is mostly a risk to maintenance staff when cleaning or grinding the surface of the drum.

Nitrogen oxide may be produced when there is a spark in electrostatic photocopiers. Symptoms are similar to those produced by carbon monoxide.

Carbon monoxide is produced when toner (containing Carbon Black) is heated in an inadequate air supply. Some copiers can reach half the OEL even in well-ventilated rooms. In poorly ventilated conditions the effects include headaches, drowsiness, faintness and increased pulse rate. Carbon monoxide can cross the placenta and affect the unborn child.

Toners are generally a mixture of plastic resin and Carbon Black often with other additives. Carbon Black is classified as a nuisance dust (i.e. only mildly toxic in itself), but will contain impurities known to be carcinogens. Toners should be handled with care, protective gloves should be worn, and dust release minimised. Contact with the tongue, i.e. by touching copied papers with a wetted finger, can lead to small growths on the tongue. Other health effects may be irritated eyes, headache and

itching skin. Maintenance workers are at risk from repeated exposure which can lead to skin and eye sensitisation.

Ultra violet light photocopier lids should be kept closed when the machine is in use. Ultra violet light can cause eye irritation and burns.

Noise levels can reach up to 65dB (A) for ordinary copiers. Care should be taken in siting copiers with noisy collators as far from workers as possible.

Fire hazards excessive dust in electrical equipment will cause sparking. Provision of carbon dioxide extinguishers near machines is essential.

Jams even though most machines cut out when opened, they should be switched off before removing jammed paper. Avoid hot surfaces and wash hands immediately afterwards.

Laser printers

Unlike photocopiers they are usually placed on desktops beside workers. However, they produce ozone like conventional copiers. There must be regular checks on filters, which may need to be replaced as often as once a month.

Noise

Many offices are built on streets where there is constant heavy traffic. Others may be next to a major building site or factory. The increasing use

of machinery in offices can make noise levels intolerable. Noise interferes with concentration and makes working stressful. A noise level of 60 dB(A) is thought to be about right for office work, but many offices are much noisier than this. One survey found that 80 per cent of workers in an open-plan office were disturbed by noise. There are several ways to make offices quieter:

- (a) Double-glazing can reduce noise coming in from the street
- (b) Safety Reps can negotiate an agreement with employers to ensure that they will not purchase any equipment which produces more than a certain maximum level of noise
- (c) Acoustic hoods can be purchased for any noisy printers
- (d) The amount of shiny surfaces which reflect noise can be reduced
- (e) Decisions about the number of people, the amount of furniture and equipment to be in any room must take account of the effect on the noise level

Lighting

Lighting can cause many problems and consideration must be given to the amount and type of lighting and where desks and working areas are placed in relation to the lighting fitments. In some offices, people work totally in artificial lighting and very far away from windows. Lighting fitments may be broken, flicker or be dirty, and can be inadequate in store rooms and on staircases. Many offices do not have an emergency system for staircases and corridors in the event of a power cut. Some office jobs require extra task lighting to provide sufficient light to do the job well.

Visual Display Unit Screens (VDUs) are too often placed in offices

without any understanding of the importance of avoiding glare and reflection from windows, lights and other screens. This means that the image on screen could be unclear and much harder to read.

Using the law

HASAWA applies to all workplaces including offices. Section 2 says that employers have a general duty to ensure the health and safety of their employees. The Offices, Shops and Railway Premises Act 1963 applies specifically to those such workplaces and the Workplace (Health, Safety and Welfare) Regulations 1992 apply to all workplaces, covering overcrowding, temperature, ventilation, lighting, toilets, washing facilities and seating. There is also specific regulations covering Display Screen Equipment and VDUs.