

## NEU Guidance for Members, Reps and Local Officers

***This briefing sets out advice on the safe use of photocopiers in schools. It cannot be emphasised too strongly that operating a photocopier, and undertaking any tasks associated with their operation, is not part of a teacher's professional role. All school staff are, however, affected by the presence of photocopiers, particularly if the equipment is not properly maintained, which is why photocopiers are a health and safety issue for NEU members.***

Photocopiers are in constant use in schools, and, whilst designs and product safety have improved over the years, the equipment can, nevertheless, be hazardous if operated without regard for safety considerations.

Whilst teachers themselves are no longer required to carry out bulk photocopying, the equipment is often sited in close proximity to areas in which teachers and other school staff work or rest. Work involving photocopying will be included within the job description of certain members of support staff such as those working in reprographics and teaching assistants.

It is essential; therefore, that appropriate risk management of such machines is in place, as described below.

Head teachers, with responsibility for support staff, may find this guidance useful. NEU health and safety representatives are invited to provide their head teacher with a copy.

### > **COSHH**

Under the Control of Substances Hazardous to Health (COSHH) Regulations 2002, employers must conduct a suitable and sufficient assessment of the health risks from photocopier emissions and assess whether exhaust ventilation is needed.

The term "suitable and sufficient" implies that the assessment needs to be in accordance with the risk. The assessment process includes

1. Designing and operating processes and activities to minimise emission, release and spread of substances hazardous to health
2. Taking into account all relevant routes of exposure
3. Controlling exposure by measures that are proportionate to the health risk
4. Choosing the most effective and reliable control options which minimise the escape and spread of substances hazardous to health
5. Where adequate control of exposure cannot be achieved by other means, providing, in combination with other control measures, suitable personal protective equipment
6. Checking and reviewing regularly all elements of control measures for their continuing effectiveness
7. Informing and training all employees on the hazards and risks from the substances with which they work and the use of control measures developed to minimise the risks
8. Ensuring that the introduction of control measures does not increase the overall risk to health and safety

**Note** Safety reps have the legal right to be consulted on COSHH assessments.

***Photocopiers in school***

In following the above steps with regard to photocopiers, the following information will be helpful.

## > **Evaluating health risks**

### Ultraviolet Light

Photocopiers produce ultraviolet light. Eye irritation from glare and ultraviolet light is prevented by the provision and use of, hinged lids over the glass tops of copiers. Copying of thick books allows the leakage of light. This should be avoided wherever possible. Where it is unavoidable, operators should not look directly at the light.

### Ozone

Photocopiers generate ozone (a gas produced during the high voltage electrical discharge in photocopiers) which should disperse by natural ventilation. However, if the machine is heavily used in a small room with little ventilation, concentrations of ozone may rise to harmful levels, causing health problems such as eye, nose, throat and lung irritation, dermatitis, headaches - and potentially, reproductive and cancer hazards. Research has shown that ozone can exceed occupational exposure limits if the copier room is too small, the number of air changes too low, and the copier is used a lot. The occupational exposure standard for ozone is 0.2 parts per million (ppm) over 8 hours and 0.4ppm over 15 minutes. The HSE advises that 0.02ppm is generally regarded as the worldwide background concentration level of ozone. If there is a sweet-smelling odour in a room, the ozone levels are too high.

Internal filters which break down the ozone can clog up over time, especially in areas of poor ventilation. Regular servicing of the equipment, in accordance with the manufacturer's instructions, should, however, minimise such problems.

### Toner

Other hazardous chemicals associated with photocopiers include selenium, cadmium sulphide, carbon monoxide and nitrogen oxide. Additionally, toner can contain carcinogens, and therefore care should be taken when changing cartridges, with gloves worn. Cartridges should, however, be changed by trained support/office staff and not by teachers.

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. is 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, e.g. by touching copied papers with a wetted finger can in rare cases lead to small growths on the tongue, so this should be avoided. 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 sensitization.

### Heat

Heat levels should also be monitored, with appropriate action taken, such as re-siting equipment where discomfort is caused. The hot dry air produced by photocopiers can be responsible for sore eyes and sore throats. Improved ventilation, with or without humidification, may alleviate this problem.

### Noise

Noise can reach up to 65dB(A)<sup>1</sup>. Care should be taken to site copiers with noisy collators as far from staff as possible.

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<sup>1</sup> A-weighted decibels, abbreviated to dB(A) or similar, are an expression of the relative level of sounds as sensed by the ear. These measurements usually refer to noise and its effects on humans and other animals, and they are widely used in industry while discussing noise control issues, regulations and environmental standards.

## Fire

Excessive dust in electrical equipment can cause sparking. Provision of carbon dioxide extinguishers near machines is essential.

## Jams

Even though most photocopiers cut out when opened, they should be switched off before trying to remove a paper jam. It is important to avoid hot surfaces, or wait for the equipment to cool down, and to wash hands immediately afterwards. **Again, it must be emphasized that this task should not be undertaken by teachers.**

### > **Determining risks to health**

To measure the likely risk to health posed by photocopier emissions, three factors need to be determined. These are

- proximity of any worker to the photocopier
- frequency of exposure to the equipment
- duration of exposure to the equipment

The greater the levels of proximity, frequency and/or duration, the greater the potential risks.

### > **Managing the risks**

The GMB union advises that, where possible, no one should work in the same room as a photocopier. It goes on to say that where there is no possible way of re-locating the photocopier, the machine should be sited **at least 3m away from workers**. Machines should not be positioned in rooms with a total volume of less than 25 cubic metres.

The NEU's view is that, wherever the photocopier is sited, consideration should always be given as to whether extractor fans are needed to avoid chemical concentrations reaching harmful levels. Problems are likely to arise if the machine is old, poorly maintained and/or used frequently or for lengthy runs. The smaller the room and the closer people are to the equipment, the greater the hazard.

Can the photocopier be re-located to a dedicated, and sufficiently ventilated, reprographics room? Many schools site a photocopier in the staff room or staff work room, which may be convenient, but if a member of support staff is carrying out bulk photocopying for a couple of hours whilst some teachers are on their PPA time, all the occupants of the room will be exposed to potentially excessive quantities of photocopier emissions, as well as distracting noise.

### > **Training**

Designated operators of reprographics equipment (this should not include teachers) should receive appropriate health and safety training. Information and training should also be given to employees who work in the same room as photocopying equipment, even if they do not operate the machinery themselves.

### > **Recording**

COSSH Assessments must be recorded in all circumstances.

### > **Reviewing the COSSH assessment**

The COSSH assessment should be reviewed/repeated periodically or if the work changes. The COSSH ACOP recommends that no longer than five years should elapse between assessments.

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