Introduction

This guidance is for the printing industry and was prepared by HSE in partnership with a Printing Industry Advisory Committee (PIAC) working group. It describes good control practice for handling chemicals, for a range of common printing processes and tasks.

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The sheets are available from www.hse.gov.uk/printing/coshhessentials. You are unlikely to need all the sheets. Select and download the appropriate control guidance sheet for the printing process or task that you are interested in and follow the advice given in the sheet. By getting and checking the advice, you have assessed the risk. Following all the advice means that you will normally comply with Workplace Exposure Limits (WELs). Read the advice in all of the sheet(s) you downloaded. Compare it with what you do now. But before acting, make sure the advice really fits your situation.

You need to keep all controls in good working order. This means mechanical (e.g., extraction, protective gloves), administrative (e.g., supervision, health surveillance) and operator (following instructions). Look at all aspects of the advice. Don’t pick and choose - the points work together to provide ‘adequate control’.

You may already have the right controls in place. But is it working properly? When was it last checked? Is it always used when needed? Compare your controls with those in the guidance sheets, and then produce an action plan to fill any gaps.

You should also consider substituting harmful products with less harmful ones. Get an up-to-date safety data sheet from the product.
supplier. Part 15 of the safety data sheet should tell you about safety hazards (e.g., flammability, reactivity) and environmental hazards. Note: Safety or environmental will sometimes need more stringent controls than COSHH.

If you cannot find a sheet that applies to a task, you may need to make an assessment using COSHH essentials. This is available free on the Internet at www.coshh-essentials.org.uk. You will need up-to-date safety data sheets to do this - get them from your product supplier. Or you could use a qualified occupational hygienist - see www.bohs.org.

Seek expert help if you are in doubt. You may wish to draw up an action plan to prioritise the changes needed. Decide how best to make any changes required.

If you do need expert help, please don’t give up. Ask your trade association or trade union, or log onto www.bohs.org.

The greatest health risks in printing are from contact with skin. Substances used in printing can damage the skin and eyes. But skin contact is common, and once hands are contaminated, touching or scratching spreads contamination to other parts of the skin or into the mouth.

The range of options to minimise skin contact are:

- modify the process - minimise handling;
- change the physical form – to granules from dusty powders, or to pastes from liquids;
- use personal protective equipment;
- segregate clean and dirty areas to reduce the spread of contamination;
- provide smooth, impervious, easily cleaned surfaces;
- wipe ink containers clean after use;
- launder work clothing regularly;
- tell workers about the risk and how to follow good personal hygiene;
- plan how to deal with spillages swiftly and safely.

**Protective gloves**

Provide the type of glove suggested in the relevant control guidance sheet. If you must use latex gloves, then use only ‘low-protein, powder-free’ gloves.

No glove is tested to give more than eight hours’ protection against chemical permeation. Remember also that wear and tear, stretching and abrasion are not part of this test.

Throw away chemical protective gloves at the end of the shift and ‘single-use’ gloves whenever they are taken off. Dispose of gloves as hazardous waste.

Coated gloves with a knitted liner provide only splash protection.
Chemicals can ‘wick’ through such gloves and those with knitted cuffs, onto exposed skin within seconds of exposure.

‘Maintenance’ of chemical protective gloves
In general, you cannot ‘maintain’ gloves. They nearly always become contaminated inside, particularly the second time they are put on. They may look undamaged and clean inside, but they won’t be. Single-use gloves might offer better protection!

**Training and supervision**

Warn workers about the chemical hazards - read the supplier’s safety data sheets. Remind them about dermatitis regularly and provide training on how to handle these chemicals, how to use the exposure controls, how to deal with spills, and skin care.

Most workers do not know how to take off or put on contaminated gloves safely. Ask the glove supplier for training on how to put on and take off protective gloves. Can you designate an area for putting on and taking off gloves and other protective equipment?

**General advice**

Check that the workroom is properly ventilated, that any extraction is working, that PPE is used correctly and that workers are following the rules on personal hygiene. Ensure that health surveillance is carried out for everyone who needs it.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.