



Control approach 1



This guidance sheet is aimed at employers to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (COSHH) by controlling exposure to chemicals and protecting workers' health.

The sheet is part of the HSE guidance pack COSHH essentials: easy steps to control chemicals. It can be used where the guide recommends control approach 1 (general ventilation) as the suitable approach for your chemical(s) and task(s).

This sheet provides good practice advice on using general ventilation, and can be applied to a range of tasks involving small, medium or large scale use of solids and liquids. It describes the key points you need to follow to help reduce exposure to an adequate level.

It is important that all the points are followed.

Some chemicals can also be flammable or corrosive. Where they are, your controls must be suitable for those hazards too. Look at the safety data sheet for more information.

Depending on the scale of work, releases into the atmosphere may be regulated within the pollution prevention and control (PPC) framework. You should consult your local authority or the Environment Agency. In Scotland, consult the Scottish Environment Protection Agency (SEPA). They will advise you if PPC legislation applies to your company, and about air cleaning and discharging emissions into the air. Otherwise, minimise emissions into the air.

General ventilation

100

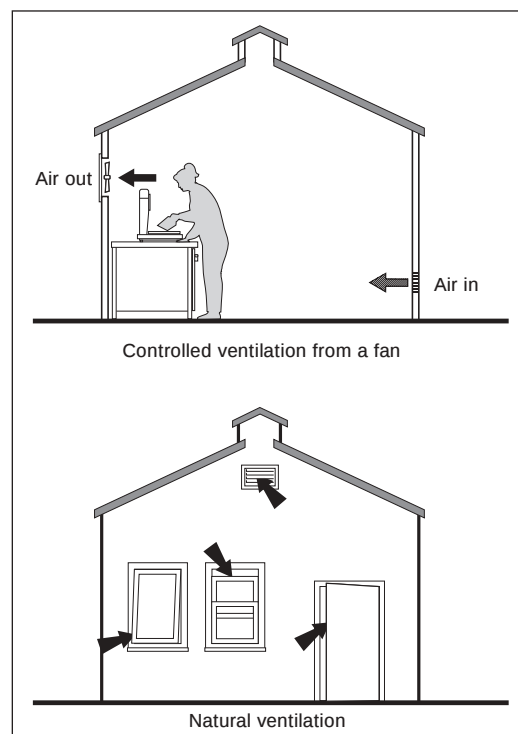
General ventilation

Access

- ✓ Consider restricting access to the working area to those who need to be there.

Design and equipment

- ✓ Provide a good standard of general ventilation. This can be natural ventilation from doors, windows etc, or controlled, where air is supplied or removed by a powered fan.
- ✓ If you work in a shop or office, natural ventilation will normally be enough to control dusts and vapours from cleaning materials etc.
- ✓ If you work in a factory, you will normally need controlled general ventilation to remove contaminated air and make it up with clean replacement air. This can be a wall-mounted fan to extract or supply air, with venting through airbricks, grills or louvres, or a more complex ducted air supply and removal system.



- ✓ Ensure that supplied or make-up air comes from an uncontaminated area.
- ✓ Ensure that enough fresh air is supplied to dilute and remove the dust or vapour produced.

Between 5 and 15 air changes per hour are recommended.

- ✓ Discharge air away from doors, windows and other air inlets.
- ✓ With dusts, you can re-circulate clean, filtered air into the workroom.
- ✗ With vapours, re-circulation is not recommended.
- ✓ Ensure, where possible, that air comes from a fresh source, flows past the worker and then past the work activity to the extraction point.

Maintenance

- ✓ Maintain the system as advised by the supplier/installer in effective and efficient working order.

Examination and testing (if a ventilation system is provided)

- ✓ Get information on the design performance of the ventilation equipment from the supplier. If this isn't possible, get a competent ventilation engineer to obtain information on the system's optimum performance as part of a thorough examination and test of the system. Keep this information to compare with future test results.
- ✓ Visually check the ventilation equipment at least once a week to make sure it's working and hasn't been damaged.
- ✓ Get the ventilation equipment examined and tested against its performance specification.
- ✓ Keep records of all examinations and tests for at least five years.

Cleaning and housekeeping

- ✓ Clean work equipment and the work area daily. Clean other equipment and the workroom regularly - once a week is recommended.
- ✓ Deal with spills immediately.
- ✗ Don't clean up with a dry brush or compressed air. Vacuum or wet clean.
- ✓ Store containers in a safe place and dispose of empty containers safely (see CGS 101).
- ✓ Put lids on containers immediately after use.

Personal protective equipment (PPE)

- ✓ Chemicals in hazard group S can damage the skin and eyes, or enter the body through the skin and cause harm. See CGS S100 and S101 for more specific advice. Check the safety data sheets to see what personal protective equipment is needed.
- ✓ Ask your safety clothing supplier to help you select suitable protective equipment.
- ✗ Respiratory protective equipment shouldn't be needed for routine tasks.
- ✓ Keep any PPE clean, and replace at recommended intervals.

Training

- ✓ Give workers information on the harmful nature of the substance.
- ✓ Provide them with training on: handling chemicals safely; checking controls are working and using them; and what to do if something goes wrong.

Supervision

- ✓ Have a system to check that control measures are in place and being followed.

Further information

- Safety data sheets
- *Controlling airborne contaminants in the workplace* Technical guide no 7 British Occupational Hygiene Society 1987 ISBN 0 9059 2742 7
- Control guidance sheets 101, 102, 103, S100 and S101

Employee checklist for making the best use of the controls

- ☐ Make sure the room is well ventilated, and any extraction or air supply is switched on and working.
- ☐ Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor. Don't carry on working if you think there is a problem.
- ☐ Wash your hands before and after eating, drinking or using the lavatory.
- ☐ Don't use solvents to clean your skin.
- ☐ Clear up spills immediately. For liquids, contain or absorb (with granules or mats). For solids, use vacuum cleaning or wet mopping. Dispose of spills safely.



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