This information will help employers, the self-employed and contractors comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended, to control exposure and protect workers’ health.

It is also useful for trade union safety representatives.

This sheet describes good practice using vehicles with a filtered air supply to the cab or, if that is not practicable, respiratory protective equipment (RPE).

It covers the key points you need to follow to help reduce exposure to an adequate level.

It is important to follow all the points, or use equally effective measures.

Main points

- High dust levels are produced when straw chopping and blowing.
- Keep exposure as low as possible using all the controls in this sheet.
- Health surveillance is usually needed – see sheet G402.

Hazard

- Dust produced from natural material such as straw can cause lung diseases such as asthma and farmer's lung.
- Control exposure to stop occupational lung diseases developing - this means short-term as well as long-term exposure.
- If an individual develops occupational asthma, avoid further exposure.

Access and premises

- Only allow access to trained people.
- Keep everyone else away.
- If possible, locate mobile plant outside.

Equipment and procedures

- Provide a good standard of general ventilation indoors; 5-10 air changes per hour, with a through draught.
- Try to keep upwind of dust clouds.
- Let dust settle or disperse - allow 10 minutes for dust to settle before entering the building - or use respiratory protective equipment (RPE).

Large bales

- Use a tractor with air filtration fitted to the cab, including the following features:
  - pre-filters, to protect the main HEPA filter;
  - pressure gauges to show the system is working properly;
  - alarms to sound when filters clog;
  - overpressure above 10 Pa inside the cab to prevent dusty air ingress;
  - flaps to release excess pressure;
  - door seals - heavy-duty neoprene or other suitable material; and
  - self-closing doors.

- Check that the clean air is turned on and working.
- Check any air conditioning self-test every time you use the vehicle.
- Keep doors and windows closed.
- If this is not possible, use RPE.
Standard bales

✓ If you cannot avoid breathing dust, use RPE.

Respiratory Protective Equipment (RPE)

✓ RPE should not be needed if the harvester cab filters work properly.
✓ RPE is needed for maintenance and cleaning the machinery, or where you cannot avoid breathing in dust.
✓ Powered or air-fed RPE is more comfortable to wear.
✓ Select RPE that suits the wearer, the job and the work environment.
✓ Use RPE with an assigned protection factor (APF) of at least 10. See sheet R2.
✓ Disposable RPE, type FFP2, is acceptable. Don’t use ‘nuisance dust’ masks.
✓ Make sure that RPE fits properly - get advice from your supplier or read the instructions on the box.
✓ Train workers to check their RPE works properly before use.
✓ Replace RPE filters as recommended by the supplier. Throw away disposable RPE at the end of the day, or sooner if heavily soiled.
✓ Keep RPE clean and store it away from dust.

Other protective equipment

✓ Provide overalls that do not retain dust, eg smooth synthetic fabrics - not cotton or knitted.

Maintenance, examination and testing

✓ Plan regular checks and maintenance of the critical parts.
✓ Every day, look for signs of damage, eg door and window seals. Repair damage immediately.
✓ Check pre-filters regularly - keep spares.
✓ Check that the filter seating is in good condition.
✓ Change inlet air HEPA filters as advised by the manufacturer, but at least after every 250 hours’ use.
✓ Get a competent ventilation engineer to examine the air filtration regularly.
✓ Examine and test non-disposable RPE thoroughly at least once every three months.
✓ Keep records of all examinations and tests for at least five years.
✓ Review records - failure patterns show where preventive maintenance is needed.

Cleaning and housekeeping

✓ Clean the cab at least once a week. Use a Type H vacuum cleaner fitted with a HEPA filter, or wet clean.

Caution: Don’t use a brush or compressed air, and never use compressed air to remove dust from clothing.

Health surveillance

✓ There is a chance of asthma developing, even with good controls in place. Use health surveillance - see Sheet G402.
✓ Ask an occupational physician for advice - see ‘Useful links’
Training and supervision

- Tell workers that dusts can cause lung diseases including asthma.
  Show them this sheet.
- Working in the right way and using the controls correctly is important for exposure control. Train and supervise workers. See sheet AG0.
- Ensure that health surveillance is carried out on everyone that needs it.

Further information

- Respiratory protective equipment at work: A practical guide
- Preventing asthma at work. How to control respiratory sensitisers L55
  HSE Books 1994 ISBN 0 7176 0661 9
- Farmer’s lung Agricultural Safety Leaflet AS5 HSE Books 1995
- See www.hse.gov.uk/pubns/agindex.htm for other advice on health and safety risks in agriculture.

Useful links

- For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.
- Contact the British Occupational Hygiene Society (BOHS) on 01332 298101 or at www.bohs.org for lists of qualified hygienists who can help you.