

AG1

COSHH essentials for farmers

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 a combine harvester with a filtered air supply to the cab. Tractor-trailer drivers should keep upwind of dust clouds.

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 during harvesting.
- Keep exposure as low as possible using all the controls in this sheet.
- Health surveillance is usually needed - see sheet G402.

Harvesting grain and seed crops

Control approach 2 Engineering control

Hazard

- ✓ Dust created by grain and seed harvesting contains bacteria, fungi and insect residues, and 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.
- ✓ When all controls are applied properly, less than 10 mg/m³ grain dust is usually achievable (based on an 8-hour time weighted average).
- ✓ If an individual develops occupational asthma, avoid further exposure.

Access and premises

- ✓ Only allow access to trained people. Keep everyone else away.

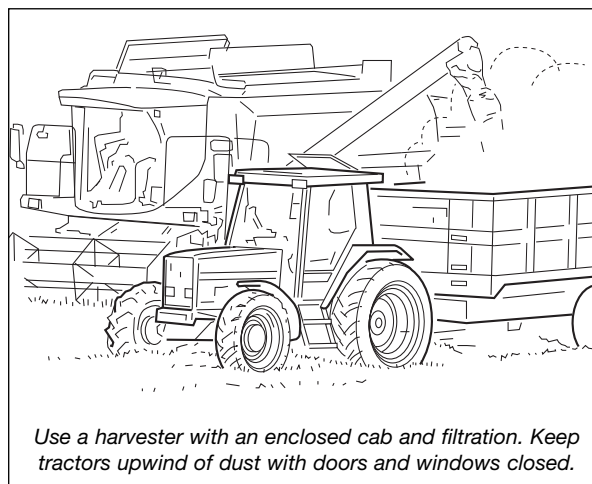
Equipment and procedures

Harvester

- ✓ Use a harvester 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 start the harvester.
- ✓ Keep doors and windows closed.

Tractor

- ✓ Use a cabbed tractor for trailers collecting grain from the harvester.



Use a harvester with an enclosed cab and filtration. Keep tractors upwind of dust with doors and windows closed.

- ✓ Close the cab doors and windows to keep dust out.
- ✓ Try to keep upwind of dust clouds.

Caution: Some dusts (eg from barley) are very irritating to skin.

Respiratory Protective Equipment (RPE)

- ✓ RPE should not be needed if the harvester cab filters work properly, or where tractor-trailer drivers stay upwind of dust clouds.
- ✓ RPE is needed for maintenance and cleaning inside the machinery, or where dust clouds are unavoidable.
- ✓ 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.

Maintenance, examination and testing

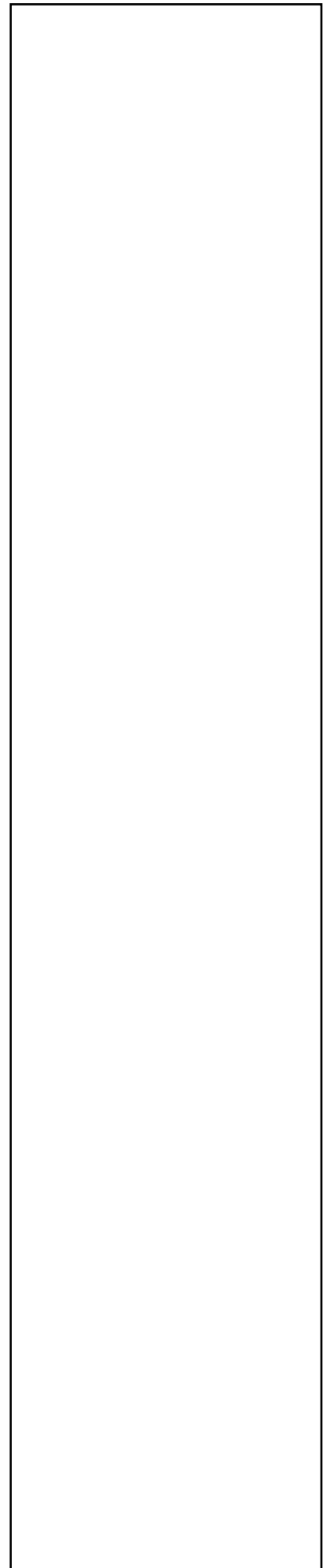
- ✓ Plan regular checks and maintenance of the critical parts.
- ✓ Every day, look for signs of damage, eg door and window seals. Repair damage immediately.
- ✓ Check pre-filters regularly - keep spares.
- ✓ Check that the filter seating is in good condition.
- ✓ Change inlet air HEPA filters as advised 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 during harvest. 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 grain and seed crop dust 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

- *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
- *Controlling grain dust on farms* Agriculture Information Sheet AIS3(rev) HSE Books 1996
- 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.

This document is available at: www.hse.gov.uk/pubns/guidance/ and www.hse.gov.uk/coshh/essentials/

This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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Employee checklist

- Shut cab doors and windows.
- Is the air filter working properly?
- Look for signs of leaks, wear and damage.
- If you find any problems, get them fixed. Don't just carry on working.
- Co-operate with health surveillance.