Straw chopping and blowing

COSHH essentials for agriculture

The Control of Substances Hazardous to Health Regulations 2002 (COSHH) require employers to ensure that exposure is prevented or, where this is not reasonably practicable, adequately controlled. This guidance gives practical advice on how this can be achieved by applying the principles of good practice for the control of exposure to substances hazardous to health, as required by COSHH.

It is aimed at people whose responsibilities include the management of substances hazardous to health at work (eg occupational health specialists, anyone undertaking COSHH assessments, supervisors and is also useful for trade union and employee safety representatives). It will help you carry out COSHH assessments, deliver training and supervise activities involving substances hazardous to health.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, 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.

See Essential information near the end of the sheet.

Control approach 2  Engineering control

What this sheet covers
This sheet describes good control practice during straw chopping and blowing.

It covers the key points you need to follow to reduce exposure to an adequate level. Follow all the points, or use equally effective measures.

Hazards
✓ High dust levels are produced when straw chopping and blowing.
✓ Dust produced from natural material such as straw can cause lung diseases such as asthma and farmer’s lung (where mouldy straw is used).
✓ Control exposure to stop occupational lung diseases developing – this means short-term as well as long-term exposure.
✓ Once an individual develops occupational asthma, there will be a need to manage them to avoid further exposure.

Access to work area
✓ Allow access to authorised and appropriately trained people only.
✓ If possible, locate mobile plant outside.

Equipment and procedures
✓ Use a vehicle with an enclosed, ventilated cab fitted with filtered air intakes.
✓ Provide a good standard of general ventilation. Use powered wall- or window-mounted fans to supply clean air, greater than five air changes per hour, with a through draught.
✓ Try to keep upwind of dust clouds.
✓ 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.
✓ Let dust settle or disperse – allow a minimum of 10 minutes for dust to settle before entering the building – or use respiratory protective equipment (RPE).
✓ Where hand-push straw choppers are used, wear RPE.

Respiratory protective equipment (RPE)
✓ RPE is normally not needed if the vehicle cab filters work properly, and doors and windows remain closed during straw chopping and blowing.
✓ RPE is needed for maintenance and cleaning the machinery, or where you cannot avoid breathing in dust.
Provide RPE with a UK Standard Assigned Protection Factor (APF) of at least 10.
Fit testing is required for RPE with a tight fitting face seal.
Workers wearing tight fitting RPE must be clean shaven, trained how to fit it properly and look after it.
Tell workers to discard disposable RPE at the end of the shift, or sooner if their RPE becomes blocked with dust.
Change the filters on respirators in accordance with manufacturers’ recommendations and if:
- the shelf-life expiry date has passed;
- they are damaged or visibly contaminated; or
- they become harder to breathe through.
Examine and test non-disposable RPE thoroughly at least once every month and record this.
Tell workers to check RPE is working properly before every use and record this.
If RPE is required for extended periods, eg longer than 1 hour, use powered respirators.
Make suitable arrangements for maintenance, storage and replacement of RPE.

Personal protective equipment (PPE)
Provide PPE for maintenance and cleaning inside the machinery, or where dust clouds are unavoidable.
Ask your supplier to help you select suitable PPE.
Make suitable arrangements for maintenance, storage and replacement of PPE.

Personal decontamination and skincare
Provide warm water, mild skin cleansers, and soft paper or fabric towels for drying. Avoid abrasive cleansers.
Provide pre-work skin creams, which will make it easier to wash dirt from the skin.
Provide after-work creams to replenish skin oils.
Caution: ‘Barrier creams’ are not ‘liquid gloves’ and do not provide a full barrier.

Maintenance, examination and testing
Keep all equipment used for the task in effective working order. Maintain it as advised by the supplier or installer.
Check all equipment at least once a week for signs of damage or faults.
Have equipment thoroughly examined and tested against its performance standard at suitable intervals.
Keep records of all examinations for at least 5 years.

Vehicle air filtration
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.

Get a competent engineer to examine the air filtration at suitable intervals.

**Cleaning and housekeeping**
- Clean the cab at least once a week during harvest.
- Use vacuum equipment that meets at least dust Class M (medium hazard) classification to remove dust, or use wet cleaning methods.

**Caution:** Never allow the use of brushes or compressed air for removing dust from skin and clothing. Avoid the use of brushes or compressed air for removing dust from surfaces or from inside machinery.

**Health surveillance**
- Provide health surveillance for asthma where there is a reasonable likelihood that asthma may occur in your workplace. See G402.

**Training and supervision**
- Tell workers about the hazards associated with straw chopping and blowing and how to recognise the early signs of asthma.
- Provide supervision – ensure that safe work procedures are followed.
- Provide workers with training on:
  - working safely with hazardous substances;
  - when and how to use controls;
  - how to check they are working;
  - what to do if something goes wrong.
- Consider keeping training records.

**Essential Information**
You can find the full COSHH essentials series at www.hse.gov.uk/coshh/essentials/


*Advice for managers* COSHH Guidance Sheet AG0 HSE 2016 www.hse.gov.uk/pubns/guidance/ag0.pdf


**Further Information**
Occupational Safety and Health Consultants Register www.oshcr.org/

For other advice on health and safety risks in agriculture see www.hse.gov.uk/agriculture/


Also see www.nhsplus.nhs.uk

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.

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**Employee checklist**
- Shut cab doors and windows.
- Is the in cab filtration working properly?
- Look for signs of leaks, wear and damage before every job.
- If you find any problems, tell your supervisor. Don’t just carry on working.
- Is your respirator working properly? Check it every time you use it.
- Use, maintain and store your PPE and RPE in accordance with instructions.
- Co-operate with health surveillance.
- If you develop any symptoms that may be related to work, inform your supervisor.
- Wash hands before eating, drinking, smoking or using the lavatory and after work.