

Farmer's lung



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Which dusts are dangerous?

Dust can cause serious illness.

- Hay, straw, grain and similar farm produce can go mouldy and produce the spores of the micro-organisms that cause farmer's lung.
- Handling the compost used in mushroom growing also gives rise to the micro-organisms that cause a similar disease called mushroom worker's lung. Mushroom spores themselves very rarely cause this disease.
- Dry dust from grain and feedstuffs can cause irritation or asthma, eg harvest worker's lung.
- Poultry feathers and droppings can cause allergies – poultry breeder's lung.
- Dust in intensive livestock houses can also cause similar respiratory ailments.

You are at risk if you:

- handle hay, straw, grain or similar produce that has been harvested in damp conditions and stored in a way that leads to heating and drying out;
- work with mushroom compost;
- are exposed to dry dust from the harvesting and storage of grain or the milling, moving and handling of feedstuffs;
- work with intensively kept livestock, eg pigs and poultry.

How does dust get into the body?

Larger dust particles are stopped in the nose and breathing passages where they can cause irritation or bronchitis. Smaller ones, including the mould spores that cause farmer's lung and mushroom worker's lung, are carried right into the lungs.

What effects does it have?

Short-term effects include:

- irritation of the nose and eyes;
- acute bronchitis with cough and phlegm;
- acute farmer's lung, with fever, headache, chest tightness, breathlessness and weight loss;
- acute occupational asthma with chest tightness and wheezing;
- grain fever with shivering, headache, fever and general aches and pains.

Longer-term effects include:

- chronic bronchitis with cough, phlegm and shortness of breath;
- chronic farmer's lung with increasing shortness of breath and weight loss;
- chronic occupational asthma with persistent chest tightness and wheezing;
- damage to the heart.

What should you do to protect yourself?

You should, wherever possible, avoid breathing in dust and spores by taking the following precautions:

- Do not create more dust than necessary when working.
- Ensure that machinery is constructed, adapted and maintained to contain dust as far as possible.
- Where materials are handled indoors, make sure there is adequate ventilation – either local exhaust ventilation or dilution ventilation of the whole area. Get a competent person (eg a ventilation engineer) to confirm that it is adequate.
- Observe good housekeeping where materials are being handled. Use an industrial vacuum cleaner to remove excess dust from the floors, walls and rafters of buildings. If you have to use a brush, thoroughly wet the dust beforehand to stop it from rising.
- Keep personal clothing and hair clean, eg by wearing a coverall and headgear.
- Use disposable protective clothing, otherwise ensure your working clothes are laundered regularly. Do not take them home with you – leave them at the workplace.
- Where other methods of preventing exposure are not reasonably practicable, wear suitable, properly fitted and maintained respiratory protective equipment (RPE).

Selecting and using RPE

Remember the following points when selecting equipment:

- RPE should only be used as an additional measure when all other reasonably practicable means of controlling exposure to dust have proved inadequate.
- RPE can never provide 100% protection against exposure – there will always be some leakage of dusty air into it.
- RPE must be capable of giving adequate protection, must be suitable for the purpose and CE-marked with the appropriate standard of manufacture.
- Suitable RPE includes a disposable filtering face piece respirator to BS EN 149 or a half mask respirator to BS EN 140 with particle filters to BS EN 143. The performance of both types of respirator depends on a good face seal. Include fit testing in the selection process.
- Powered respirators such as ventilated visors or ventilated helmet respirators (to BS EN 146) may provide similar protection to approved respirators – if in doubt as to which type of respirator you need, ask your supplier.

Before use:

- you must have received proper training in the use of a respirator, including fitting and maintenance;
- examine the equipment for obvious defects such as worn straps or holes or tears in a mask;
- store equipment ready for use properly where it will not be contaminated by dust etc. Never hang masks with harnesses from nails etc.

What the law says

All employers, self-employed and employees have certain duties and responsibilities under the Health and Safety at Work etc Act 1974.

Under the Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended), employers and the self-employed are required to make an assessment of the risk to health from the work activity, to introduce and maintain control measures and to inform, instruct and train employees about the risk and precautions to be taken.

If you employ people who are regularly exposed to dust, COSHH would normally require that you ask if they have any symptoms of respiratory illness and that you make sure you know the reason for any absence from work. If employees suffer from respiratory illness you will need to prevent further exposure by changing work methods or otherwise improving control measures.

The need for health checks

If you have a chest illness and have been working with dusty material, tell your doctor about the job you do. You may need to take a test, such as a blood test, chest X-ray or lung function test. If you have access to an occupational health service you may be able to have regular health checks.

If you have had an attack of farmer's lung, mushroom worker's lung or occupational asthma do not breathe in the dust again – avoid it or protect yourself. Repeated exposure can lead to chronic disabling illness.

Further reading

Control of substances hazardous to health. The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved Code of Practice and guidance L5 (Fifth edition) HSE Books 2005 ISBN 0 7176 2981 3

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

COSHH: A brief guide to the regulations. What you need to know about the Control of Substances Hazardous to Health Regulations 2002 (COSHH) Leaflet INDG136(rev3) HSE Books 2005 (single copy free or priced packs of 10 ISBN 0 7176 2982 1)

Preventing asthma at work. How to control respiratory sensitisers L55 HSE Books 1994 ISBN 0 7176 0661 9

Respiratory protective equipment at work: A practical guide HSG53 (Third edition) HSE Books 2005 ISBN 0 7176 2904 X

Respiratory sensitisers and COSHH: Breathe freely – An employers' leaflet on preventing occupational asthma Leaflet INDG95(rev2) HSE Books 1995 (single copy free or priced packs of 15 ISBN 0 7176 0914 6)

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This leaflet 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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