

# RESPIRATORY SENSITISERS

(See also: [COSHH\(19\)](#); [Occupational Health\(57\)](#); [Soldering\(79\)](#); [Woodworking\(90\)](#); [Food/Catering Sector\(31\)](#); [Motor Vehicle Repair\(55\)](#))

## RESPIRATORY SENSITISERS

### INTRODUCTION

Breathing in respiratory sensitisers can cause occupational asthma and other allergic conditions such as rhinitis and conjunctivitis. Once the sensitisation reaction has taken place, further exposure to the substance, even in very small amounts, will produce the symptoms. Sensitisation does not usually take place right away but happens after several months or even years of breathing in the sensitiser.

Once the person is sensitised, symptoms can occur either immediately they are exposed to the sensitiser or several hours later (so workers may not realise it is work that is causing the problem). Continued exposure can result in permanent damage to lungs and increasingly severe symptoms. Asthma attacks are likely to become worse and can be triggered by other things such as tobacco smoke or even cold air. These attacks often continue for years after exposure to the sensitiser has stopped.

Respiratory sensitisers of significance in the LA-enforced sector include:-

<b>Substance Groups</b>	<b>Typical Occurrence (LA Sector)</b>
Isocyanates	"2 pack" paints used in motor vehicle refinishing.
Animal dander (e.g. skin flakes)	Pet shops; Animal Boarding Establishments.
Grain dusts/flour	Bakeries.
Wood dusts	Woodworking units within DIY stores/Builders Merchants.
Soldering	Repair work activity within otherwise LA enforced premises.

### LEGAL DUTIES

- Respiratory sensitisers are subject to the Control Of Substances Hazardous to Health Regulations 1999. They require employers to carry out an assessment of the risks created by work that is likely to expose employees to respiratory sensitisers.
- **Assessing risks** includes establishing:-
  - likelihood of the sensitiser becoming airborne in use
  - existence of safer alternatives
  - exposure (who; what concentration; how long; how often)

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- arrangements for
  - (i) **preventing** exposure, or if that is not reasonably practicable,
  - (ii) securing and maintaining adequate **control** of exposure
  - (iii) **monitoring**
  - (iv) **health surveillance**
  - (v) **information, instruction and training.**

- **Preventing/controlling exposure**

Some respiratory sensitisers have been assigned an occupational exposure limit (OEL) and COSHH defines what is meant by adequate control in these cases. Where prevention of exposure is not practicable and control is necessary, special attention should be paid to:-

- controlling short term peak exposures
- maintaining control measures in good working condition
- ensuring control measures are properly used
- preventing the spread of contamination
- non-routine work (e.g. maintenance)

- **Health surveillance** is required where there is occupational exposure to respiratory sensitisers unless the COSHH assessment shows that there is unlikely to be a risk to health under the particular conditions of work. Further guidance is contained in 'Health Surveillance under COSHH - guidance for Employers'. Sample questionnaires are contained in Booklet L55 'Preventing Asthma at Work'.

- Employees should be **informed, instructed and trained** regarding risks to health, symptoms, reporting, control measures etc. If health surveillance makes you suspect an employee has become sensitised you should:-

- remove the affected individual(s) and advise to consult their doctor, giving all relevant work details
- review the COSHH assessment/control measures and make any necessary changes.

## **PARTICULAR ISSUES**

### 1. BAKERIES

In recent years the information on the ill-health effects of flour dust has been accumulating, although the evidence/literature is neither extensive nor universally accepted.

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Studies have indicated that about 8% of cases of occupational asthma may be due to flour/grain dust, giving bakers the third highest ranking of any occupational grouping. Guidance on health surveillance and practical methods of exposure control is contained in 'Guidance on practical measures to control dust in bakeries', from the National Association of Master Bakers, (NAMB) 21 Baldock Street, Ware, Herts, SG1 9DH, Tel: (01920) 468061.

The NAMB has also produced 'Guidance to Bakeries on the implementation of the COSHH Regulations'.

## 2. PLASTIC FILM WRAPPING

Very intensive use of 'hot-wire sealed' film used for packaging food products may give rise to asthma or bronchial irritation. Precautions include ensuring cleanliness of the wire, good ventilation, suitable cold cleansing of the wire and following the manufacturers' instructions.

## 3. MOTOR VEHICLE REFINISHING

Factors involved in the control of spraying include the type of booth, the type of filter, ventilation (requirements and measurements) and methods of work. Advice on all these is contained in HELA Circular LAC 71/3 'The control of compressed air spraying in motor vehicle refinishing'.

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# **CHECKLIST - RESPIRATORY SENSITISERS**

- |   |     |    |
|---|-----|----|
| 1. Are your employees exposed to respiratory sensitisers?   | YES | NO |
| 2. Have you carried out an assessment of the risks created by such exposure?  | YES | NO |
| 3. Have you identified and implemented the measures needed to prevent or control exposure to the respiratory sensitiser(s)? | YES | NO |
| 4. Have you established any health surveillance, in consequence of the COSHH assessment?                                    | YES | NO |
| 5. Have you informed, instructed and trained your employees as appropriate in relation to respiratory sensitisers?          | YES | NO |

## **RESPIRATORY SENSITISERS**

### **REFERENCES/FURTHER DETAILS**

- \*1. Booklet L55 - "Preventing Asthma at Work - How to control respiratory sensitisers". (HSE) ISBN 0 - 7176 -0661 - 9
- \*2. Booklet - Health Surveillance Under COSHH. (HSE) ISBN 0 71760 4918.
- \*\*3. Leaflet IND (G) 95 (L) Rev - Respiratory sensitisers and COSHH - an employers' leaflet on preventing occupational asthma. (HSE) [www.hse.gov.uk/pubns/indg95.pdf](http://www.hse.gov.uk/pubns/indg95.pdf)
- \*4. Leaflet IND (G) 172L - "Breathe freely - a workers" information card on respiratory sensitisers. (HSE)
- \*5. HELA Circular LAC 71/1 - Flour dust in bakeries, airborne levels and ill-health. [www.hse.gov.uk/lau/lacs/71-1.htm](http://www.hse.gov.uk/lau/lacs/71-1.htm)
- \*6. HELA Circular LAC 71/2 - Plastic film wrapping - exposure to irritant/toxic fumes. [www.hse.gov.uk/lau/lacs/71-2.htm](http://www.hse.gov.uk/lau/lacs/71-2.htm)
- \*7. HELA Circular LAC 71/3 - The control of compressed air spraying in motor vehicle refinishing. [www.hse.gov.uk/lau/lacs/71-3.htm](http://www.hse.gov.uk/lau/lacs/71-3.htm)
- \*8. MS25 (2nd edition) - Medical aspects of occupational asthma (HSE). ISBN 0 7176 1547 2.
- \*9. EH66 - Grain Dust (HSE). ISBN 0 7176 1535 9.

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- \* Available to view by prior arrangement at Nuneaton and Bedworth Borough Council, Environmental Health Services, Council House, Coton Road, Nuneaton. CV11 5AA
  - \*\* Free copy available from Nuneaton and Bedworth Borough Council at the above address.

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