COSH and the control of asthmagens

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Prevention and control of exposure

Asthmagens

- agents causing occupational asthma
- cause a hypersensitive state in airways and trigger a reaction

EXPOSURE → SENSITISATION → SYMPTOMS

- what *agents* (substances)?
- what *industries*?
## Prevention and control of exposure

### Substances
- Isocyanates
- Flour
- Grain dust
- Wood dust
- Animal dust
- Latex protein
- Colophony fume
- Glutaraldehyde
- Epoxy resin systems

(Compendium)

### Industries
- Bakers
- Food processing
- Beauty services
- Cleaning services
- Painters
- Healthcare
- Welders
- Repairers (inc. electronic)
- Forestry
Control of Substances Hazardous to Health Regulations 2002 (as amended)

- Approved code of practice
  - Exposure ALARP

- Workplace exposure limits
- Good control practice - principles

Usefulness?
Prevention and control of exposure

Reality check:

– Problems for EH practitioners in tackling occupational asthma?

– Duty-holder (SME) awareness of COSHH and WELs? Or awareness of hazard?

– Gap between awareness of a problem and action to tackle it
## Prevention and control of exposure

### Asthmagens

- Is it practicable to prevent exposure?
- What is ‘effective control’?

### Substances

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Control of exposure to asthmagens

Three stages for effective control:

- assessing exposure
  - every task, every exposure source
    eg cleaning, maintenance as well as normal use

- controlling exposure
  - mechanical, administrative, behavioural
    eg LEV, RPE  eg supervise, HS  eg training

- keeping in control
  - both ‘hardware’ and software

Good control practice
Control of exposure to asthmagens

Options for ‘Mechanical Controls’

- Full containment (eg medicines, glutaraldehyde)
- Refuge or cab (eg grain dust, waste handling)
- Dust / vapour extraction (eg soldering fume)
- Combination of extraction and respiratory protective equipment (eg spraying isocyanates)
- Good general ventilation (eg baking class)
Options for ‘Administrative Controls’

– Substitution (eg form of enzymes in baking)
– Exclusion (eg spray painting large articles)
– Concentration (eg protective gloves – latex protein)

– Maintenance, examination and testing
– Supervision
– Health surveillance
Control of exposure to asthmagens

Options for ‘Behaviour Controls’

– Information (eg hazard; using controls)
– Training (eg procedures, using PPE)
– Company rules (eg co-operation with H.S.)
Control of exposure to asthmagens

COSHH essentials - Control Guidance Sheets

- Workplace and access
- Design and equipment
- Procedures
- Special care
- Maintenance
- Examination and testing
- Cleaning and housekeeping
- Personal protective equipment
- Health advice / surveillance
- Training
- Supervision
- Employee checklist

www.coshh-essentials.org.uk

+ Further information
Control of exposure to asthmagens
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COSHH and the control of asthmagens

Summary:

- COSHH – control “as low as is reasonably practicable” below any workplace exposure limit (WEL)
- Good control practice
- Industry and task specific advice (evaluated)
- Partnerships to develop sector advice