

# National Control Banding Workshop

## *COSHH essentials*

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## *COSHH essentials*

### Overview :

- What is it?
- Who needs it?
- Who developed it?
- Does it work?
- What's in it for me?



# Occupational Ill Health in Britain

	<u>Cases - total</u>
Lower respiratory diseases	200 000
Asthma	7 000
Skin disease	66 000
Pneumoconiosis	19 000
Cancer (per year)	6 000 – 12 000



## Influence of OELs

### Study:

- 1,000 firms
- Profile reflected UK industry
- 150 Trade Union representatives

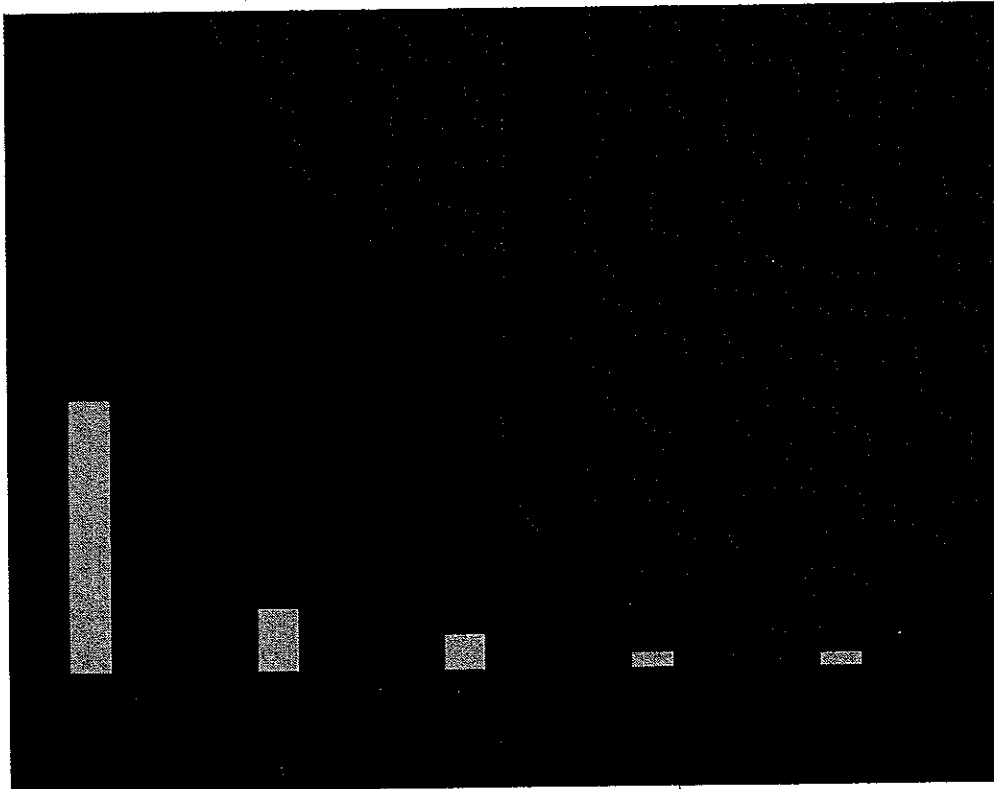
### Results:

- Most chemical users take steps to protect employees.
- Heavy reliance on suppliers.
- OELs play very little part in risk assessment or risk management decisions in SMEs.



# The Challenge

- 1.3 million businesses in GB use chemicals
- Small firms have difficulty applying risk assessment to chemicals
- Lack of understanding of OELs
- Many chemicals don't have OELs
- SMEs want practical help



(54% of total workforce)  
Annual Business Enquiry 2000



# What is COSHH essentials?

- **Guidance on good control practice**
- **Practical - plain English - no technical terms**
- **Step-by-step risk assessment**
- **Provides solutions - identifies adequate control**
- **Tells you when expert help is needed**

Also: Technical basis for expert users



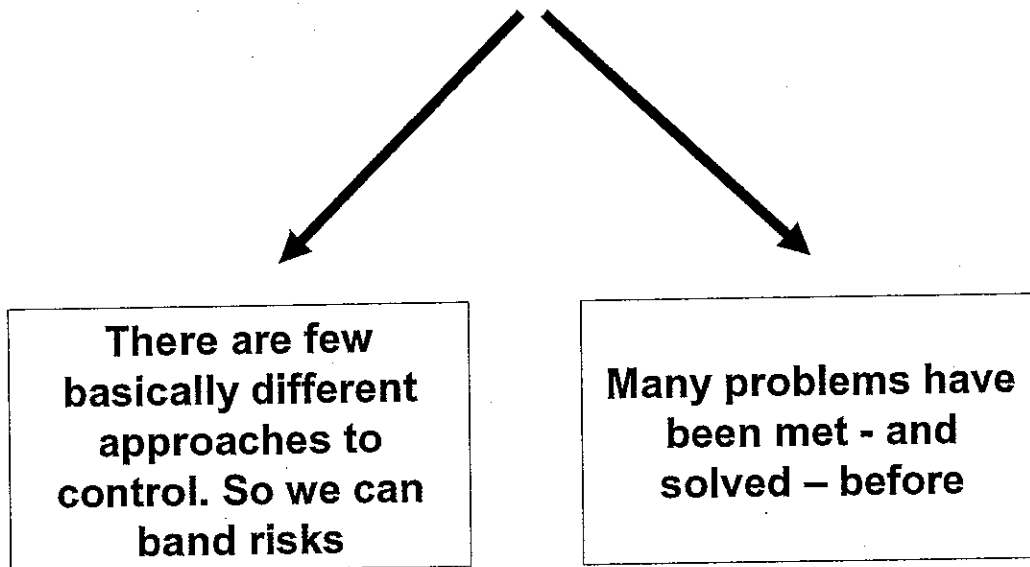
## **COSHH essentials** **– Easy steps to control chemicals**

- ❖ **Published** - May 1999
- ❖ **Printing essentials** - October 2000
- ❖ **Asbestos essentials** - April 2001
- ❖ **Free Internet Version** - April 2002
- ❖ **Phase 2** - October 2003
- ❖ **Phase 3** - Autumn 2005?

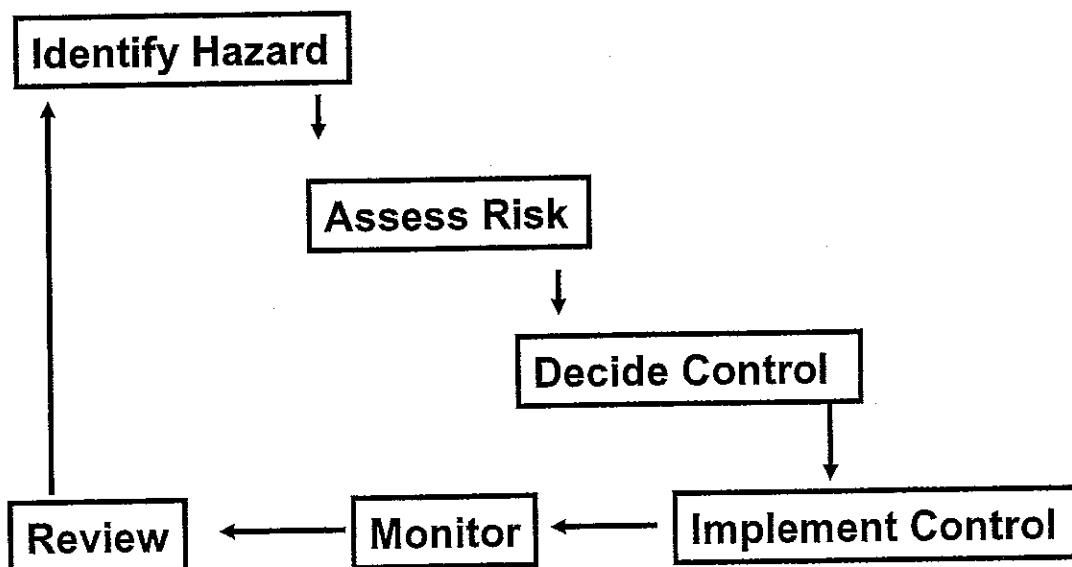
[coshh-essentials.org.uk](http://coshh-essentials.org.uk)



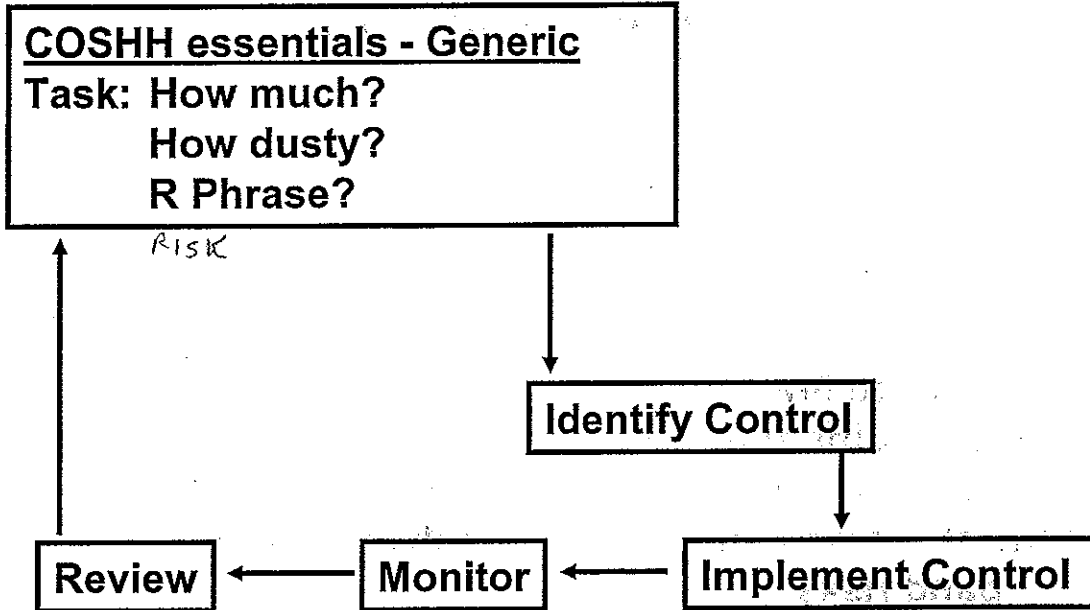
## Two Things Make COSHH essentials Possible



## Risk Management



# Risk Management



# Risk Management

- Prevention
- Substitution
- OELs
- Monitoring
- Health surveillance

*COSHH  
essentials*



# COSHH essentials

## Control guidance:

- Access
- Design and equipment
- Maintenance
- Examination and testing
- Cleaning
- PPE (plus 'S' sheet)
- Training
- Supervision
- Employee checklist

**Continuous drying labyrinth oven**

Engineering control **229**

**Access**

- ✓ Restrict access to the working area to authorized staff only.

**Design and equipment**

- ✓ Design local exhaust ventilation (LEV) at the source of exposure to capture the dust or vapour.
- ✓ Enclose the source of dust or vapour as much as possible to help stop it spreading.
- ✓ Don't allow the worker to get between the source of exposure and the LEV, otherwise they'll be directly in the path of the contaminated air flow.
- ✓ Where possible, situate the work area away from doors.



Health & Safety Executive  
Reducing risks,  
protecting people.

## COSHH ESSENTIALS Demo

Easy steps to control health risks from chemicals
hselirect
Help

Home

Help

Worked Example

Back to Demo Menu

Single Liquid,  
Single Task

Exit

**Control approach 2**

**Local exhaust ventilation**

Engineering control **200**

**Access**

- ✓ Restrict access to the working area to authorized staff only.

**Design and equipment**

- ✓ Apply local exhaust ventilation (LEV) at the source of exposure to capture the dust or vapour.
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- ✓ Don't allow the worker to get between the source of exposure and the LEV, otherwise they'll be directly in the path of the contaminated air flow.
- ✓ Where possible, situate the work area away from doors.

This guidance sheet is aimed at employers to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 1989 (COSHH) by controlling exposure to chemicals and protecting workers' health.

The sheet is part of the HSE guidance pack *COSHH essentials: easy steps to control chemicals*. It can be used where the guide recommends control approach 2 - engineering control - as the suitable approach for your chemical(s) and task(s).

This sheet provides control guidance

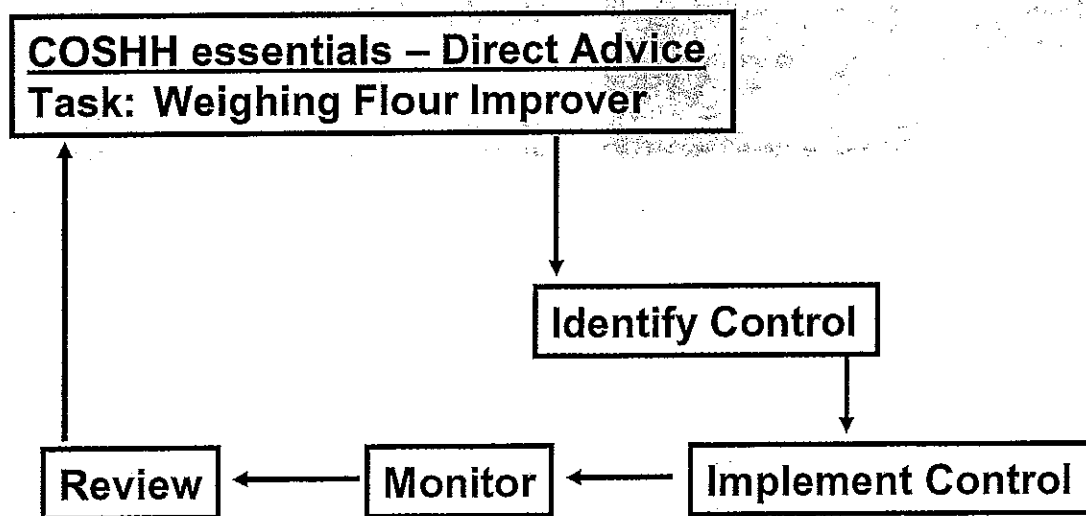
# e-COSHH essentials – Phase 2

- Asthmagens
  - Isocyanates
  - Flour
  - Wood
- Process generated
  - Foundry
  - Rubber
  - Wood
- Service & Retail
- Health Surveillance

Launched  
8 October 2003



## Risk Management





Dust control guidance sheet FL02

## Weighing and handling flour improvers etc (craft bakery)

Engineering control

FL02



This guidance sheet is for employees including the self-employed to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (COSHH) by controlling exposure to chemicals and protecting workers' health.

The sheet is part of HSE guidance COSHH essentials: easy steps to control chemicals. It describes 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.

Other ingredients (eg improvers, egg powder) can cause asthma.

Exposure to substances with the potential to cause occupational asthma should be prevented, or if that is not reasonably practicable, control exposure to prevent exposed workers from developing asthma. This applies to short-term high exposures as well as long-term exposures. If an individual develops occupational asthma, exposure must be controlled to prevent triggering further attacks. Suitable levels are likely to be well below any exposure limit.

Control approach 2 (engineering control) is recommended to control dusts in weighing.

The dust is combustible - build-up on ledges etc can result in dust explosions. Extraction helps to reduce this risk.

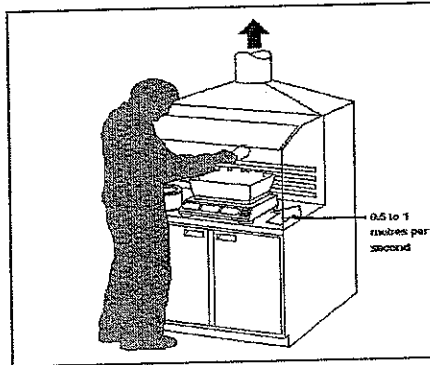
For environmental advice see Further information on the back page.

### Access

- ✓ Restrict access to those staff who need to be there.

### Design and equipment

- ✓ Reduce ingredient and additive dust in air as much as possible. Use only low-dust additives, eg dust-suppressed improvers, low-dust granules, pastes.
- ✓ Where possible, avoid weighing - use single-dose packets or whole bags.
- ✓ Use a small extracted booth or workstation for weighing.
- ✓ You need an air speed between 0.5 and 1 metres per second into the booth.
- ✓ Ensure a manometer or pressure gauge is fitted near the extraction point, to show that the extraction is working properly.
- ✓ Always confirm that the extraction is turned on and working at the start of work. Check the gauge.
- ✓ Keep extraction ducts short and simple - avoid long sections of flexible duct. It is easily changed.
- ✓ Good lighting will help you see escapes of dust.
- ✓ Consult a qualified ventilation engineer to design new control systems (see Control guidance sheet FD14).



# COSHH essentials – Does it Work?

## Evaluation

- Does it give the same advice as an expert?
- Does it deliver target exposure ranges?
- Do users like it?
- Is it used?
- Is it used properly?
- Has it improved control of exposure?



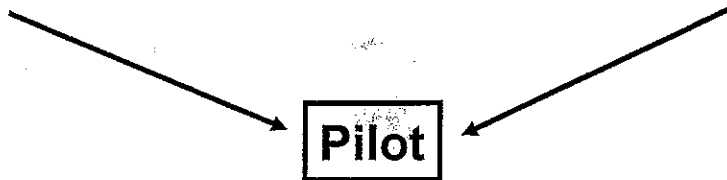
# COSHH essentials

## Technical Credibility

- ACTS subgroup
- BOHS / BIOH (FOH) consultation
- Peer-reviewed papers

## Usability

- Market testing
- Public consultation
- Presentations & feedback



## COSHH essentials – Schedule for Completion

Month	Milestone	Action
1		Initiation – ACTS CEWG
7	1	Draft 1 - HSE Occ Hygienists
10	2	Draft 2 - HSE Industry Sectors
<b>12*</b>	3	Draft 3 - Industry Experts
18	4	Draft 4 - ACTS CEWG
20		COSHH essentials website

\* Input for Stakeholder generated



# COSHH essentials

Does it deliver target exposure ranges?

Martin Tischer, BAuA:

- Solids - within range
- Medium scale liquids - within range or lower
- Small scale liquids – some exposures above range (small data set)

Control Banding Workshop, London, 4-5 November 2002. Selected papers in Annals of Occupational Hygiene Vol 47, No. 7, October 2003



# COSHH essentials

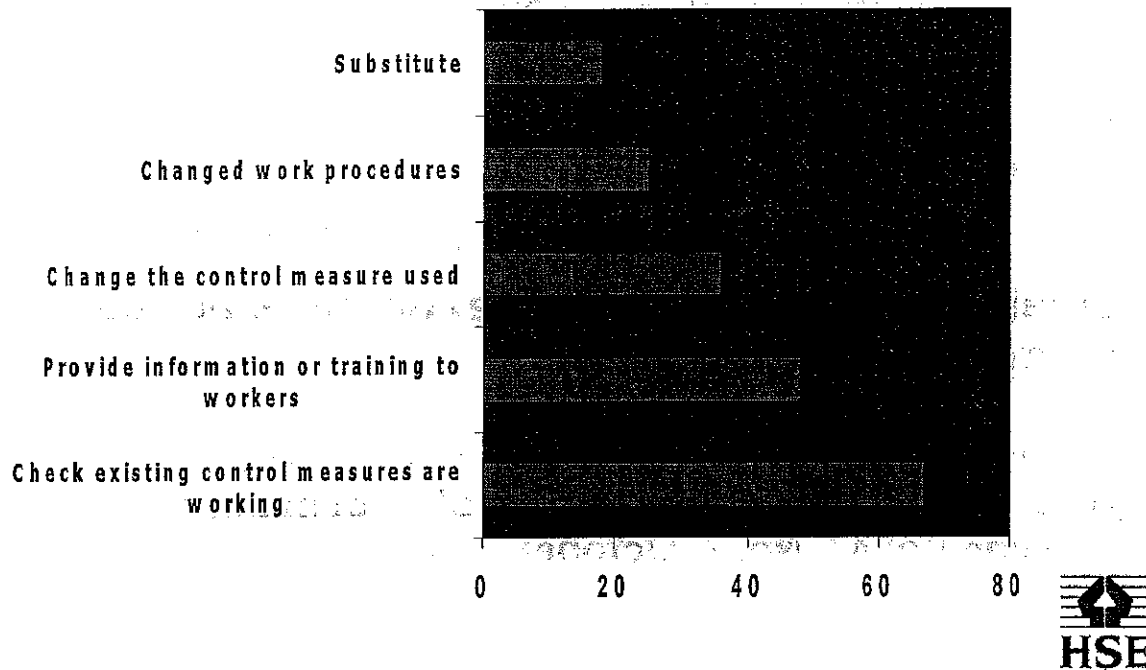
Do users like it?

Telephone survey of 500 purchasers of paper  
COSHH essentials

- 80% had used it
- Only 5% found it difficult to use
- 75% had taken action
- 95% would recommend to other businesses



# Telephone Survey of COSHH essentials Purchasers



## COSHH essentials

### Is it used?

- >500,000 visits
- >130,000 visitors
- >180,000 risk assessments

# COSHH essentials

## Evaluation

- Gives the same advice as an expert
- Delivers target exposure ranges
- Users like it
- Used widely
- Is it used properly?
- Has it improved control of exposure?



## What's in it for me?

- Employer – Knows what to do for compliance
- Trade Assoc. – Informed members, develop good practice
- Supplier – Good practice limits liability
- Employee – Knows health protected or when things are wrong
- Trade Union – Trained, informed representatives
- Academia, Prof. bodies – Expert input
- Regulator – Common benchmark for compliance

**Consensus on Good Control**



***COSHH essentials***

**Thank you**

