

# Control Banding

**2<sup>nd</sup> International Workshop on Control  
Banding**

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# Control Banding

## Summary :

- **Who needs control banding?**
- **COSHH Essentials**
  - **What is it?**
  - **Does it work?**
  - **Current Developments**
  - **Good control practice**
- **Questions**

# 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

# 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

# Compliance

**Some do**

**Some don't**

**Some won't**

# Compliance

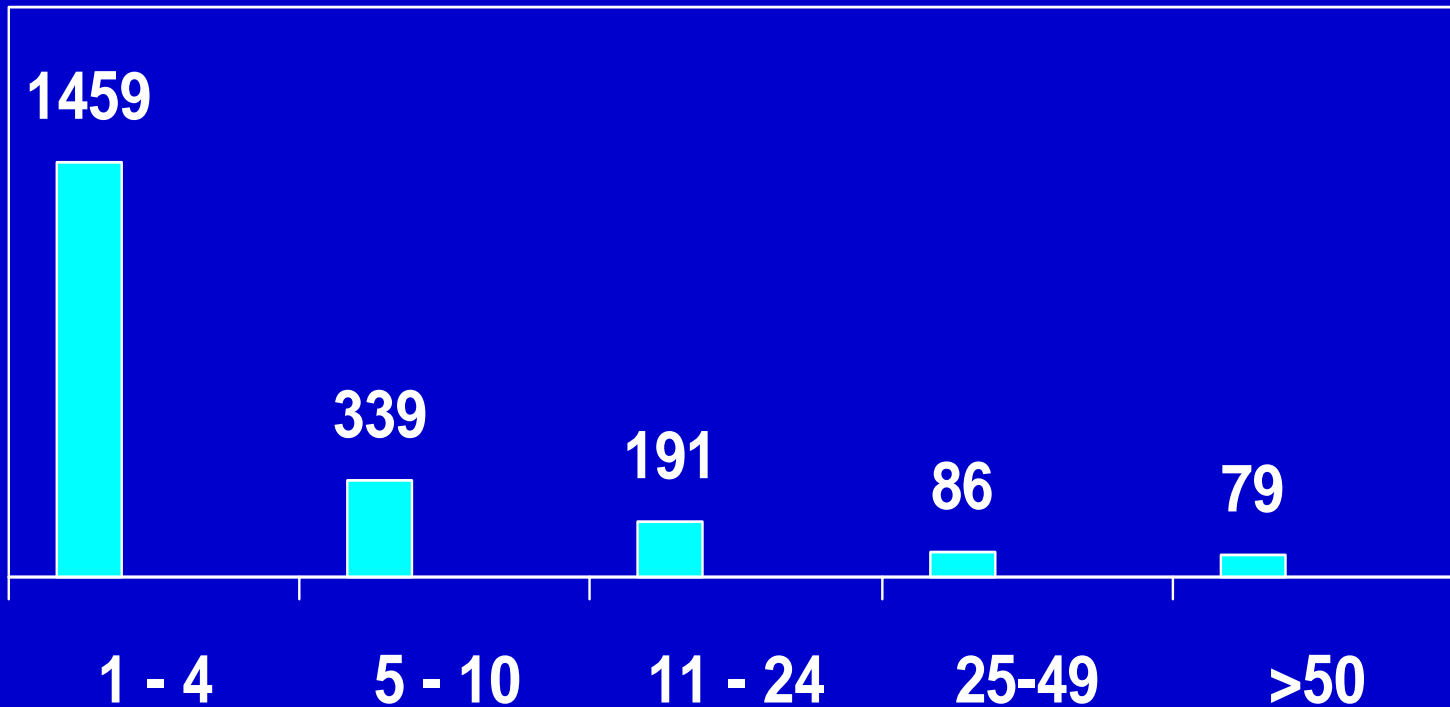
**Encourage**

**Educate**

**Enforce**

# ALL INDUSTRIES

## Number of workplaces (x1000) by size (employees)



(54% of total workforce)  
Annual Business Enquiry 2000



# The Options

1. Simplify Control Choices
2. Simplify Exposure Limits

# Option 1

## ➤ Simplify Control Choices

### **COSHH essentials**

**– Easy steps to control chemicals**

# Simplify Control Choices

## COSHH essentials

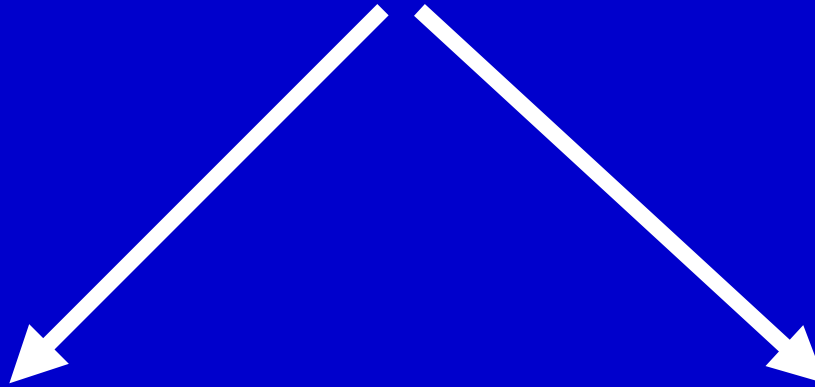
– Easy steps to control chemicals

- ❖ Published May 1999
- ❖ Printing Essentials October 2000
- ❖ Asbestos Essentials April 2001
- ❖ Free Internet Version April 2002

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



# Two Things Make COSHH Essentials Possible



**There are few basically different approaches to control. So we can band risks**

**Many problems have been met - and solved - before**

# What is COSHH Essentials?

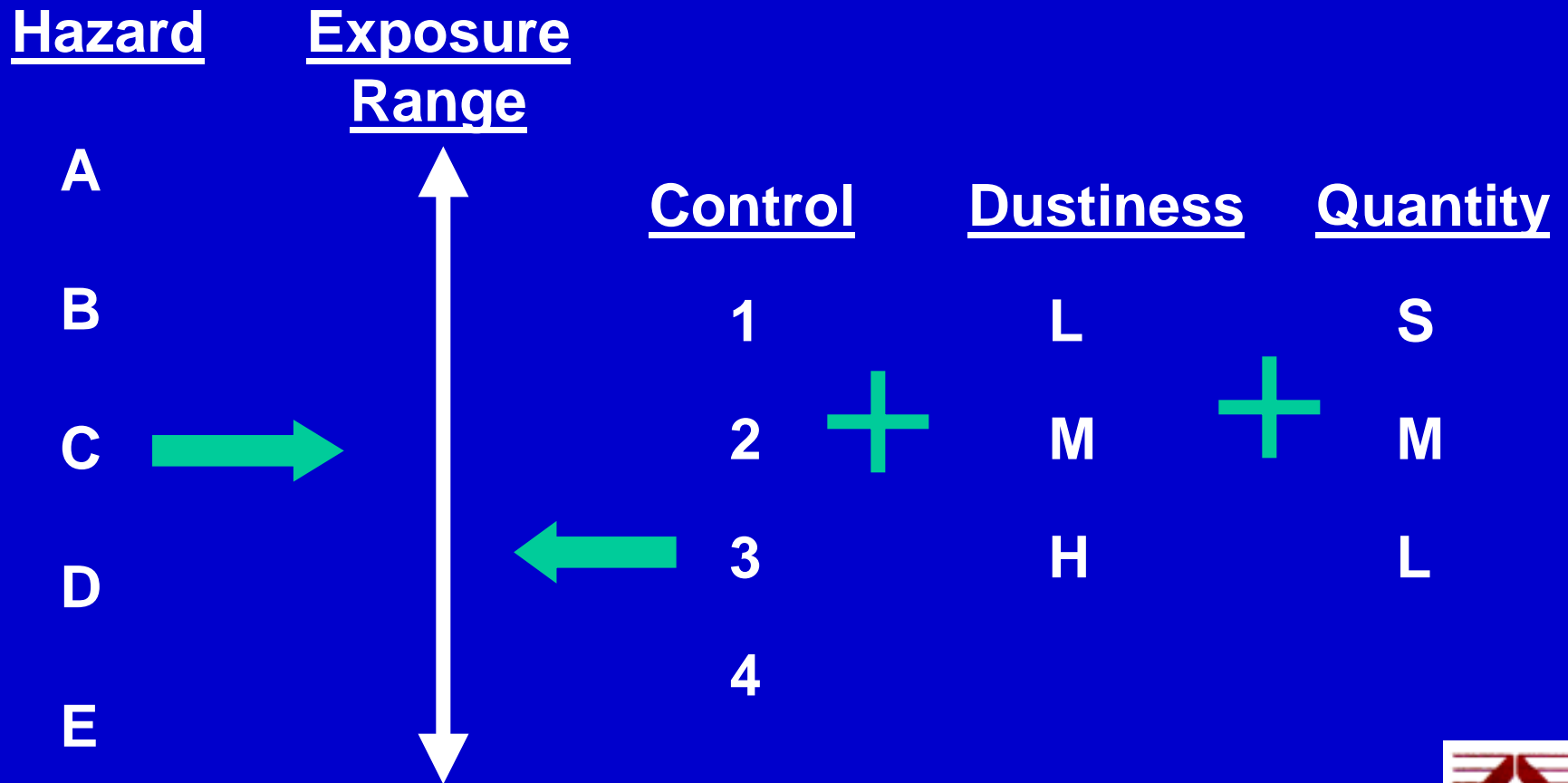
- **Guidance on the COSHH Regulations**
- **Practical - plain English - no technical terms**
- **Step-by-step risk assessment**
- **Provides solutions - identifies adequate control**
- **Tells you when expert help is needed**

# COSHH Essentials Approach

## The Generic Risk Assessment



# Generic COSHH Essentials



# Target Exposures - Vapour

Hazard Group	Target exposure range	R-phrase examples
A	>50 – 500 ppm	R36
B	>5 – 50 ppm	R20
C	>0.5 – 5 ppm	R23
D	<0.5 ppm	R40
E	Seek specialist advice	R45 R42

# Control Approach Guidance Sheets

- **access**
- **design and equipment**
- **maintenance**
- **examination and testing**
- **cleaning**
- **PPE (see control approach S)**
- **training**
- **supervision**

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Worked Example

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Single Liquid,  
Single Task



This guidance sheet is aimed at employers to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 1999 (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 good practice

Control guidance sheet

# Local exhaust ventilation

## Engineering control

200

### Access

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

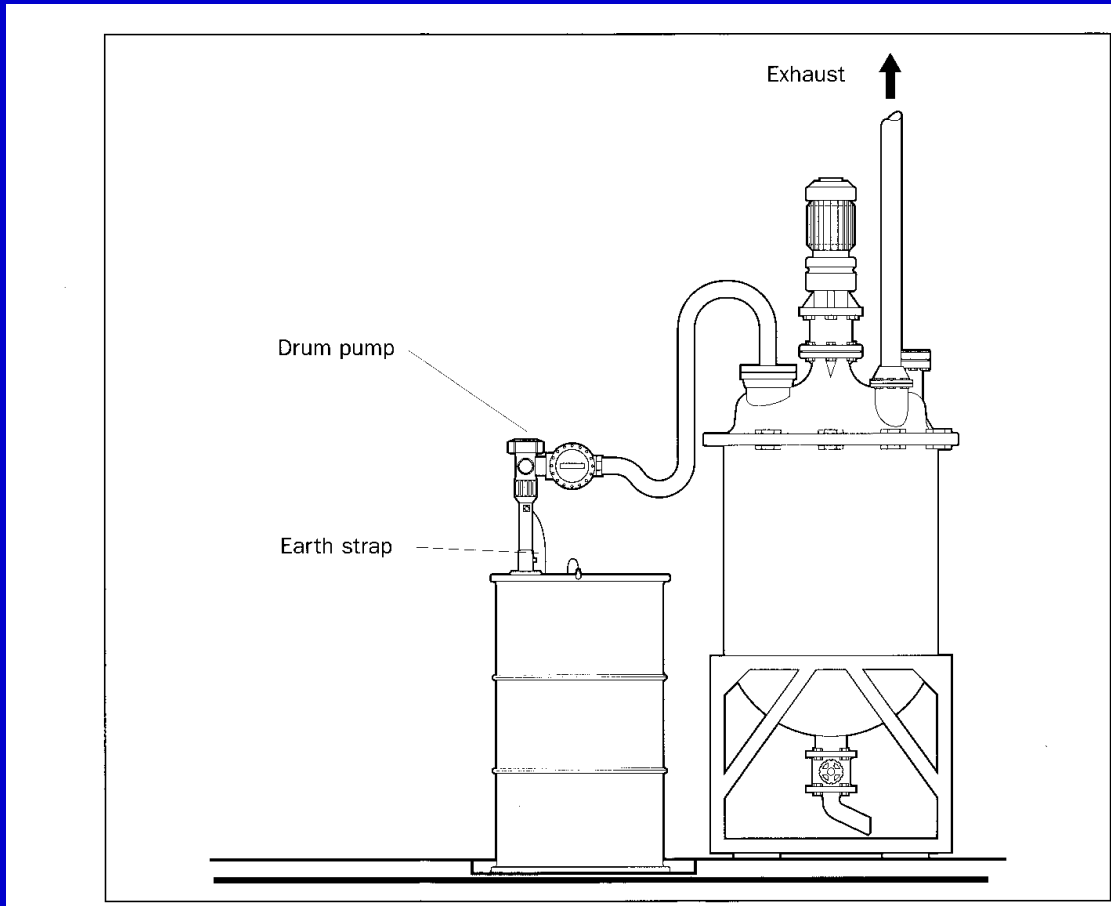
### Design and equipment

- ✓ Apply 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, site the work area away from doors.



Exit

# Drum Emptying



# Generic COSHH Essentials

## Includes:

- Liquid/solid chemicals
- Mixtures
- Inhalation exposure
- Common processes

## But not:

- Process fume/dust
- Lead, asbestos, gases
- Cleaning/maintenance
- Skin/PPE
- Chemical safety
- Releases to environment

..... yet



# Limitations of Generic COSHH Essentials

- **Simplistic**
- **Tends to be precautionary**
- **Doesn't handle process emissions**
- **Refers 'nasties' to experts**

# e-COSHH Essentials

- Demand identified from market research
- Launched in April 2002
- Free on HSE Direct

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



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## COSHH Essentials

### Assessment Summary Page

This risk assessment has been carried out using COSHH Essentials on the Internet. COSHH Essentials has been developed by the Health and Safety Executive, in collaboration with industry and the TUC. It provides simple step by step guidance for small businesses to control health risks to workers from chemicals.

COSHH Essentials asked the user a series of questions about:

- \* the process and task(s) being carried out;
- \* the chemical(s) used and whether a solid or liquid;
- \* the Risk phrases that appear on the safety data sheet;
- \* the dustiness of the chemical if a solid or the volatility if a liquid;
- \* how often the task is carried out and how long it takes;
- \* how much of the chemical is used.

COSHH Essentials then worked out the control measures needed to control exposure to protect the health of workers. Information on the control measures needed is shown on Control Guidance Sheet(s) which should be printed off and be attached to this assessment summary. You now need to take action to put the control measures recommended in place.

If you wish to find out more about COSHH Essentials or go back to make some amendments to this assessment you will find it on the Internet at:

- \* <http://www.coshh-essentials.org.uk>

The assessment code for this risk assessment is **KB18250757**. You can use this code to re-enter your assessment for up to 30 days from the date of the assessment. After this time you will need to input the information again.

Below is a summary of your risk assessment for

<b>Date of assessment</b>	:	<b>4/5/2002 3:11:55 PM</b>
<b>Process name</b>	:	<b>Bottling thinner</b>
<b>Task</b>	:	<b>Transferring</b>

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Single Liquid,  
Single Task

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**Recommended control approach : Engineering Control**

Task Name	Guidance Sheet Title	Number	Download
General tasks	Local exhaust ventilation  step	G200	
General tasks	Laminar flow booth	G202	
Transferring	Drum filling	G212	
Transferring	Drum emptying using a drum pump	G213	

Your task involves **Chemicals causing harm via skin contact**. Hence the following Guidance Sheets are also recommended

Task Name	Guidance Sheet Title	Number	Download
General	General advice	S100	
General	Selection of personal protective equipment	S101	

<<Back      **New assessment>>**

# COSHH Essentials – Does it Work?

- Does it give the same advice as an expert?
- Do users like it?
- Is it used?
- Does it deliver target exposure ranges?
- Is it used properly?
- Has it improved control of exposure?  
i.e. has it reduced ill-health?

# COSHH Essentials

## Technical Credibility

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

## Usability

- Market testing
- Public consultation
- Presentations & feedback



# COSHH Essentials

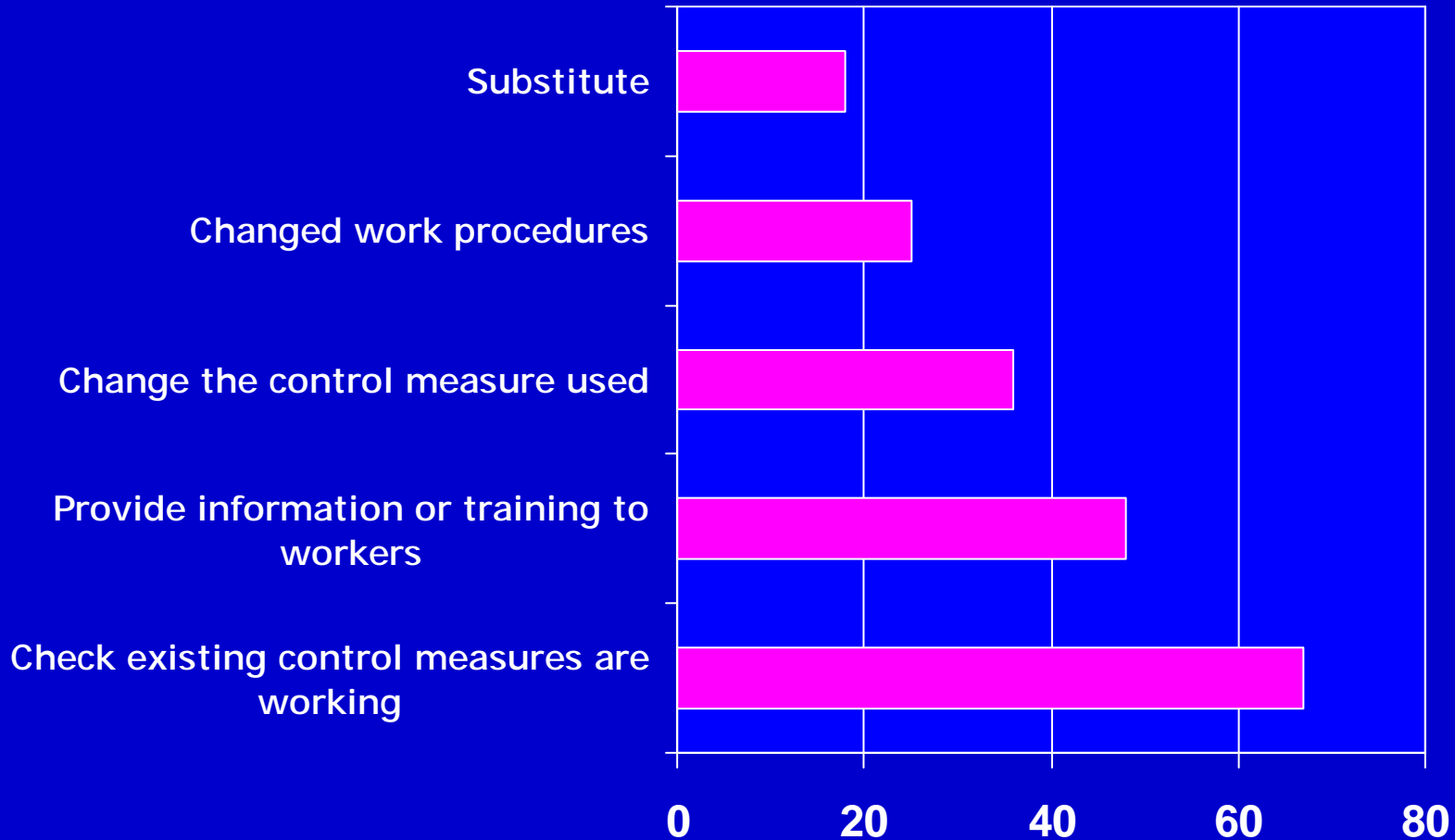
**Do users like it?**

**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?

- > 100,000 visitors to e-COSHH Essentials
- > 100,000 risk assessments

# 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

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# e-COSHH Essentials – Phase 2

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

Launched  
8 October 2003



- Home
- About COSHH Essentials
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- HSE
- hsedirect
- DTI Small Business Service
- Environment Agencies

## GETTING STARTED

You have 4 choices:

1. Find out what the law says and how COSHH Essentials works (we recommend that you choose this option first if you have not used COSHH Essentials before). [Go](#)


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2. Start a new assessment (to provide this information you will need a safety data sheet for each chemical to supply details such as risk phrases (R-phrases)). [Go](#)

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3. Return to an assessment you have completed during the last 30 days. Please enter here the assessment code that was generated by COSHH Essentials. [Go](#)

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4.  **NEW** Direct advice topics [Go](#)

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# COSHH Essentials – Phase 3?

- Asthmagens – other eg glutaraldehyde, colophony
- Process generated – other eg welding
- Silica
- Printers
- Skin
- RPE
- Gases

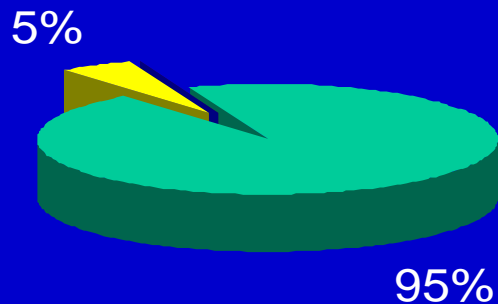
# New COSHH Reg 7 ?

Without prejudice ... blah de blah ... control ... shall only be treated as adequate if:

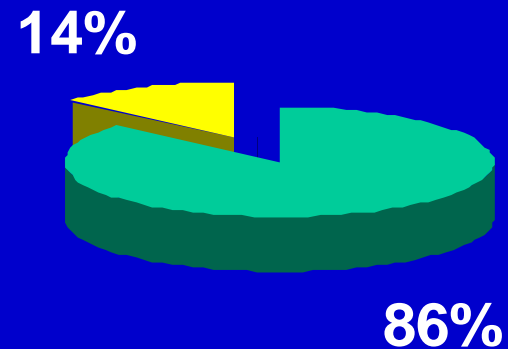
- a) the principles of good practice for control of exposure are being applied and
- b) any workplace exposure limit is not exceeded and
- c) exposure to carcinogens is reduced ALARP

# Providing Good Practice Advice

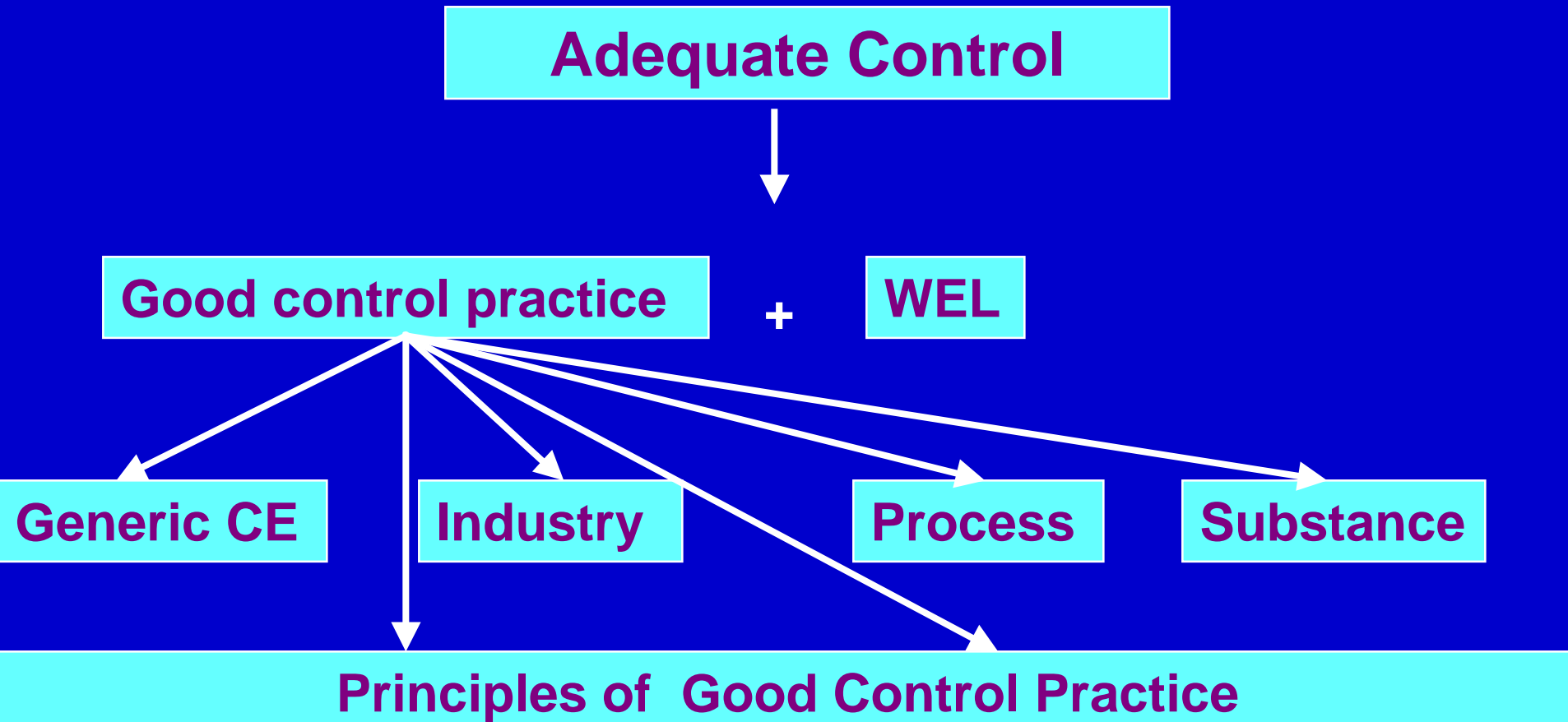
Supporting use of *COSHH Essentials* as source of good practice advice



Electronic package linking WELs, COSHH Essentials, COSHH guidance useful



# OEL Proposal



# Linking COSHH Essentials to WELs



# Control Banding

## Summary :

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# Control Banding

Any Questions?