Breathe Freely Campaign – Improving Worker Health Protection in Construction & Manufacturing

Neil Grace MSc CFFOH CMIOSH AFAAM
BOHS President 2018-19
What is Occupational hygiene?
Well it’s nothing to do with...

I clean toilets.
But only on weekends.
Because if I did it every day, it would become, you know, just a job.
What is Occupational hygiene?

*Occupational Hygiene* is concerned with the...

...*anticipation, recognition, evaluation, elimination or control* of biological, chemical, ergonomic or physical factors that may present a hazard to health in the workplace’

OR

*Worker HEALTH Protection!*
ALL INDUSTRIES

Every year

12,000

Estimated deaths caused by occupational respiratory disease

13,000

Estimated total deaths from work related illness

8,000

Estimated deaths caused by asbestos related diseases or Chronic Obstructive Pulmonary Disease (COPD) such as bronchitis and emphysema
>500 workers die from exposure to silica dust
3,500 cancer deaths
5,500 cancer registrations each year
About 13000 died from work related disease

99% health

148 workers died in accidents at work
Campaign Objectives

- Raise awareness of risks with employers
- Highlight solutions
- Provide tools and resources

Controlling Exposures to Prevent occupational lung disease in the construction industry
HOW
Controlling Exposures to Prevent occupational lung disease in the construction industry

BOHS

Media partners

Trade Unions

HSE

Other professional bodies

Politicians

Relevant charities

Trades associations

Construction clients

Construction companies

Commercial providers

BOHS
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Do you breathe freely?
Controlling Exposures to Prevent occupational lung disease in the construction industry

28 April 2015, Worker’s Memorial Day
Controlling Exposures to Prevent occupational lung disease in the construction industry

Web based information hub

www.breathefreely.org.uk
Controlling Exposures to Prevent occupational lung disease in the construction industry

HI Standard Self-Assessment Tool
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Roadshows

www.breathefreely.org.uk
Controlling exposures to prevent occupational lung disease in MANUFACTURING

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**MANUFACTURING INDUSTRY**
Every year

4,000
Estimated number of people suffering from breathing and lung problems caused or made worse by their work

2,200
Estimated number of deaths from cancer caused by past work in manufacturing industries*

Number of people currently suffering with work related breathing or lung problems

141,000
who have ever worked

36,000
who have worked in the last 12 months

Rates of occupational asthma*

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<th>Manufacturing Industry</th>
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Welding

• 190,000 workers exposed to welding fume
• **152 deaths** from cancer every year
• Plus illness - pneumonia, metal fume fever, COPD, asthma
Controlling Exposures to Prevent occupational lung disease in the construction industry

25 May 2017
EEF HQ London
Breathe Freely in Manufacturing

Controlling Exposures to Prevent occupational lung disease in the construction industry

in partnership with

BOHS

and other partners:

eef The manufacturers’ organisation
TUC
TWI
HSE
JCB
BAE Systems
TOYOTA
Controlling exposures to prevent occupational lung disease in manufacturing

Manufacturing workers are at high risk from fumes given off by welding and hot cutting processes which give off very fine particles that cause cancer, COPD and an increased susceptibility to pneumonia.

Roadshows 2018..
FREE BREAKFAST ROADSHOWS TO BE ANNOUNCED
Including South Wales Early 2018 Date & Venue TBC.
Controlling exposures to prevent occupational lung disease in MANUFACTURING

WELDING FUME CONTROL SELECTOR TOOL
Answer the simple task related questions for the optimum control solution.

START →
Controlling exposures to prevent occupational lung disease in MANUFACTURING
Controlling exposures to prevent occupational lung disease in MANUFACTURING

Fume Extraction: Local Exhaust Ventilation (LEV)

Extracted Bench (or downdraught bench)

Extracted Bench at a glance

- MMA
- MIG
- TIG
- Oxy-gas cutting
- Oxy-acetylene cutting
- Air-cooled gouging

Appropriate workplace size:
- Small (up to 1.5m x 1.0m)
- Medium (up to 2.0m x 1.0m)
- Large (up to 2.0m x 4.0m)
- Extra large (> 2.0m x 4.0m)

Pneumatic systems and other costs:
- Supply and installation: £4000 ex VAT per bench
- Running costs: £450 per annum for through examination and testing
- Filters: £200 - £300 per year

Effectiveness rating: 5 stars

Top tips: How to use the LEV effectively
- Welding must be undertaken on the bench, or within the partial enclosures fitted, to maintain efficiency.
- fume extraction ducts should be maintained by the user. Airborne indicators are a good method to give the user confidence the system is continuing to perform.
- The bench area should be kept free of clutter.

Limitations and other considerations
- The positioning and shape of the workplace is critical to ensure effective removal of contaminants.
- The system needs to be used correctly and maintained and tested on a regular basis.
- The work area must also have good general ventilation.
- Supplementary PPE may be required depending on the toxicity of the fumes and duration of exposure.
- Air monitoring and health surveillance might be needed to confirm effectiveness as part of a programme to monitor ongoing performance.
- Workers should be trained on the correct use of the equipment.

Acceptable alternative control solutions
- With MIG/Welding, local exhaust extraction is an acceptable alternative. PIP: stainless steel or "laced" nickel respiratory protection will also be required to supplement the on-term solution.
- During specific tasks it may be acceptable to solely use respiratory protection; for example, non-routine maintenance tasks. However, all alternative options should be explored and there is ultimate general ventilation is inadequate for the task and time present.
Action

• Scottish Parliament - what action can you take to reduce occupational ill health in Scotland?

• Scottish employers – action on respiratory disease?

• All - share & support BF initiative
BREATHE FREELY

Join us and be part of the solution

www.breathefreely.org.uk