



**BREATHE FREELY**



The Chartered  
Society for Worker  
Health Protection

Controlling exposures to  
prevent occupational lung disease  
in the construction industry



Do you  
breathe freely?

[www.breathefreely.org.uk](http://www.breathefreely.org.uk)

# 99% health

Approx 12,000 died from lung disease linked to past exposures at work



# 1% safety

111 fatal injuries to workers

These figures are for British Industry as a whole.  
However, the picture is likely to be the same in the Construction Industry.

HSE Statistics 2019/20

# Treat health like safety and **breathe freely**

Every year in the UK, about 12,000 people die from lung diseases which were linked to past exposures at work. In 2019/20, in comparison, 111 fatal injuries occurred at work. In other words, 99% of deaths caused by work can be attributed to ill health, and 1% to poor safety.

Furthermore, construction workers in the UK are 100 times more likely to die from an occupational disease than a workplace accident.

Just as surprising, though, is that we can protect workers' health and actually prevent most of these deaths *through good occupational hygiene practice*. Or to put it simply, by recognising the hazards, evaluating the risks, and controlling exposures.

People at work - that means everyone, employers and employees - need to recognise what the greatest hazards in the workplace actually are and properly understand the real risks these pose to workers' health. Then they need to control their exposures to them.

It's time to start managing health like we manage safety in our UK workplaces.

BOHS is the Chartered Society for Worker Health Protection; we're the professional society representing qualified occupational hygienists in the UK, and we understand the scale of the problem. We also know that it can change, and we know how to help make that change happen.

That's where our ***Breathe Freely*** campaign comes in.

## ***Breathe Freely***

### A collaborative approach

BOHS launched this initiative on 28 April 2015 in partnership with HSE, Land Securities, Mace and Constructing Better Health. In its first year, Breathe Freely has attracted unprecedented levels of support with over 60 partners and sponsors, including employers, trade unions and other influential people and organisations within the construction sector and elsewhere.



## ***Breathe Freely***

### Controlling exposures to prevent occupational lung disease in the construction industry

We have started with the construction industry. And specifically, we're tackling lung disease in construction. Why? Because we have to start somewhere and the facts about this sector are particularly shocking.

**There were 40 fatal injuries to UK construction workers in 2019/20. Each of these is an individual tragedy. But in the same industry and over the same period of time (a year), there were about 13,500 new occupational cancer registrations and of this figure 3,500 occupational cancer deaths are linked to construction workers. That's a considerably bigger tragedy.**

At BOHS we understand the scale of the impact of occupational ill health in construction. But we also know how important it is to generate better awareness of its causes as well as how to do something about it. So that everyone can *breathe freely*.

# Recognise, evaluate, control and **breathe freely**

## 1. Recognise the hazards and *breathe freely*

Construction workers could be exposed to some, many or all of the following:

- Diesel exhaust fumes
- Silica dust
- Wood and other dusts
- Asbestos
- Welding fumes
- Legionella and other biological agents
- Solvents
- Isocyanates, epoxy and other resin vapours and mists

These aren't the only dusts and chemical hazards you'll find on a construction site (or in any workplace). Lead is another, and there are physical hazards like noise, vibration, heat and light and radiation, and manual handling and other ergonomic issues. But these are just some of the substances which we know cause lung diseases. Serious, debilitating, irreversible, life-limiting and, in some cases fatal, lung diseases. Like lung cancer, pulmonary fibrosis (eg. asbestosis and silicosis), asthma, pulmonary oedema, pneumonia, and chronic obstructive pulmonary disease (COPD) which includes conditions such as chronic bronchitis and emphysema.

## 2. Evaluate the risks and *breathe freely*

Not every risk to health is a high risk. Low level exposures to some harmful substances may cause only temporary ill effects or none at all. But any exposure, even at the minutest levels, to other substances can lead to debilitating or chronic diseases. Some substances are hazardous only if exposure to them happens over a long time; others cause ill health immediately, or lead to worsening symptoms if exposure continues. Risks can also be reduced or increased depending on the workplace environment, the work tasks involved, the methods of working - all things which can affect exposures.

Many respiratory hazards cannot be seen by the naked eye. And many ill health effects don't appear until many years later. Often, published workplace exposure limits and guidance surrounding known hazards can provide the information you need to assess the health risk. Sometimes though, only specialist exposure monitoring techniques, like air or biological monitoring, can determine the level of risk for particular workers to particular diseases.

There are a multitude of construction trades, all facing a combination of different levels of different health risks, all of the time. It's clear that not everybody on site everywhere understands this. But we do.

## 3. Control exposure and *breathe freely*

When you understand the health hazards and have evaluated the risks, then you're in a position to effectively control exposures.

This might mean sourcing different products and materials in the first place, changing work methods and habits, segregating work areas, implementing engineering controls like dust extraction tools and ventilation, and introducing PPE.

It should also mean training and communication, supervision, maintenance and testing of controls and ongoing monitoring. A good control method becomes a poor one if it's broken or not used properly, or at all.

The invisible  
nature of  
many of  
the toxic  
substances  
that workers  
breathe in



The long  
latency  
of their ill  
effects



Controls  
are often  
frequently  
ignored

# Consult the experts and **breathe freely**

At BOHS, we believe that construction employers - managers and supervisors - have a key role to play in minimising health risks. **YOU** can protect your employees by making sure hazards are recognised, risks are evaluated and exposures are effectively controlled.

And we can help you do that by providing the information, resources and signposting to the advice and expertise that we know you sometimes need.



## The Health in Industry Management Standard

*If you want to know what “good” looks like and what standards need to be met – sign up to our **Health in Industry (HI) Management Standard**. It has been developed specifically for the construction industry so you can raise your standards and keep them high. The most recent version of the Standard offers a unique level of user-friendly detail, including sample questions and evidence points, to truly guide managers through the process of achieving the HI Standard.*



*To see who's doing what well, and how - we have developed case studies and good practice. We have 20 fact sheets each highlighting the main hazards, highest risks and preferred control options for all the key construction trades. We have case studies from actual construction projects which show real benefits from control solutions. We've put occupational hygiene into a construction site context so you know what an occupational hygienist can help you with.*



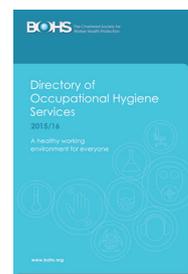
*For practical help - there is a toolkit for managers covering common risks, an audit checklist, toolbox talks and COSHH guidance.*



*And for anyone who still needs convincing - we have evidence that good occupational hygiene is good for business and the right thing to do. Our Good Business Case sets it all out clearly.*



*Bringing it all together is our web-based information hub, an accessible centre of excellence on exposure control. All our campaign materials will be available on this website [www.breathefreely.org](http://www.breathefreely.org) with new ones being added over time to reflect the growing reach of the initiative.*



Links take you to more detailed guidance and regulations, other sources of relevant information, and to the **BOHS Directory of Occupational Hygiene Services**, which is the definitive list of UK companies able to provide qualified and experienced occupational hygienists and specialist occupational hygiene support services.



The Chartered  
Society for Worker  
Health Protection

Controlling exposures to  
prevent occupational lung disease  
in the construction industry

## Breathe Freely - helping you take control

Occupational hygiene is about recognising, evaluating and controlling risks to health in the workplace.  
Occupational hygienists have the knowledge and skills to help you protect your employees.

Let's get going by deciding to treat health like safety.  
Sign up to our HI Standard and commit to a contract for health.

Then begin to *breathe freely*.

Join us and be part of the solution  
[www.breathefreely.org.uk](http://www.breathefreely.org.uk)

### PARTNERS



### SPONSORS

