



HealthScreen UK

# The Big Book Of Occupational Health



Occupational health how to  
covering many industries

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# Introduction

Occupational Health Surveillance is an important part of any health and Safety Strategy

Kerry Budworth

Occupational Health Surveillance is an important part of any health and safety strategy. It moves the emphasis from reactive to proactive policies to protect your employees and your business.

In the following pages I will go through the concepts and surveillance options. I will also discuss specific health surveillance for some industries.

I hope you find it useful

# Chapter One

Occupational Health Surveillance,  
what is it and how does it work?

# What is Occupational Health Surveillance?



Occupational health has moved its focus from the treatment of occupational disease to the prevention of it in the first place. As part of this fundamental change in outlook it was realised that monitoring the health of the workforce on an ongoing basis could lead to early intervention and prevention. That in essence is what occupational health surveillance is all about, ongoing monitoring of the workforce for prevention of occupational disease. As an **occupational health surveillance provider**, we offer many **occupational health surveillance services**.

## A system of ongoing health checks

Occupational health surveillance is a system of ongoing health checks of your employees at prescribed times. Some of these health checks are required by law, for instance for employees who are exposed to noise or vibration, ionising radiation, solvents, fumes, dusts, biological agents and other substances hazardous to health, or work in compressed air.

## What can occupational health surveillance do?

Health surveillance can lead to many advantageous results for your business, most important among them is the following:

- Occupational health surveillance can detect ill-health effects at an early stage, so you can introduce better controls to prevent them getting worse
- It can provide data to help you evaluate health risks within your business
- It will enable employees to raise concerns about how work affects their health
- It can highlight lapses in workplace control measures, providing invaluable feedback to your risk assessment
- It can provide an opportunity to reinforce training and education of employees (eg on the impact of health effects and the use of protective equipment)

## Occupational health surveillance & your risk assessment

Your risk assessment should be used to identify any need for health surveillance of your employees. Occupational health surveillance is not a substitute for undertaking a risk assessment or putting in place effective controls of risk. However, sometimes occupational health surveillance can identify where more action needs to be taken to control risks.

## Occupational health surveillance is a legal requirement

Occupational health surveillance is a particular legal requirement within some industries. There are particular medical checks that have been proscribed by legislation, these do not cover the following :

- activities to monitor health where the effects from work are strongly suspected but cannot be established
- workplace wellbeing checks, such as promoting healthy living
- fitness to work examinations eg fitness to dive, operate cranes, forklift trucks or health assessments requested by night employees

## What are occupational health surveillance tests?

Occupational health surveillance tests are varied from industry to industry and risk to risk. For instance lung function tests and biological monitoring would be a strong component of health surveillance within the spray paint industry. The actual tests undertaken are based on the risk assessment, in this way resources are guarded and money is not spent on testing that is not needed.

## Do I need occupational health surveillance?

The answer to this question can be found in your risk assessment. Hopefully your risk assessment will have identified all of the hazards in your workplace, who is at risk and the measures you can take to control the risks. Where some risk remains and there is likely to be harm caused to your employees, you will need to take further steps. You should strongly consider occupational health surveillance if your employees are at risk from:

- noise or vibration
- solvents, dusts, fumes, biological agents and other substances hazardous to health
- asbestos, lead or work in compressed air
- ionising radiation

In the case of these particular hazards control measures may not always be reliable, despite appropriate checking and maintenance. It therefore makes sense to introduce health surveillance in order that any ill health is detected early. Health surveillance is required if all the following HSE criteria are met:

- there is an identifiable disease/adverse health effect and evidence of a link with workplace exposure
- it is likely the disease/health effect may occur
- there are valid techniques for detecting early signs of the

disease/health effect

- these techniques do not pose a risk to employees

## What sort of health surveillance do I need?

Again, this is based on the results of your risk assessment. Where your risk assessment has identified the need to implement health surveillance, you will need to put into place a programme that adequately addresses the risks and potential ill-health effects your employees may be exposed to.

HSE provides **a range of industry-specific guidance** and much of this includes advice on which jobs may require health surveillance and what you need to do in response. There are also a number of high-hazard substances or agents where the law requires that the health surveillance programme includes statutory medical surveillance. Statutory medical surveillance involves a medical examination and possibly tests by a doctor with appropriate training and experience. The doctor must have been appointed by HSE.

Medical surveillance is a legal requirement for the following workplace exposures:

- particular types of work with asbestos
- work with lead
- work with those substances hazardous to health that are subject to Schedule 6 of The Control of Substances Hazardous to Health Regulations 2002
- work with ionising radiation
- work in compressed air

If you have any questions about occupational health surveillance services in the UK, or you are looking for health and safety services in Leicester or across the UK, don't hesitate to call us on 01455 234 600.

# Do You Need Health Surveillance in Your Workplace?



## Occupational Health Surveillance as a legal requirement

In some cases that question is easily answered, if your employees work with certain substances or in certain situations then occupational health surveillance is required. Medical surveillance is a legal requirement for the following workplace exposures:

- particular types of work with asbestos
- work with lead
- work with those substances hazardous to health that are subject to

## Schedule 6 of The Control of Substances Hazardous to Health Regulations 2002

- work with ionising radiation
- work in compressed air

## The Control of Substances Hazardous to Health Regulations 2002

Before we move on, let's look at the regulations. Under the regulations, medical surveillance is ruled appropriate for the following substances and work. If your employees work in this manner with these substances by law you need to supply occupational health surveillance.

### Vinyl chloride monomer (VCM)

In manufacture, production, reclamation, storage, discharge, transport, use or polymerisation.

### Nitro or amino derivatives of phenol and of benzene or its homologues

In the manufacture of nitro or amino derivatives of phenol and of benzene or its homologues and the making of explosives with the use of any of these substances.

### Potassium or sodium chromate or dichromate

In manufacture. Ortho-tolidine and its salts. Dianisidine and its salts. Dichlorobenzidine and its salts. In manufacture, formation or use of these substances.

### Auramine. Magenta

In manufacture. Carbon disulphide. Disulphur dichloride. Benzene, including benzol. Carbon tetrachloride. Trichlorethylene. Processes in which these substances are used, or given off as vapour, in the manufacture of indiarubber or of articles or goods made wholly or partially of indiarubber.

## Pitch

In manufacture of blocks of fuel consisting of coal, coal dust, coke or slurry with pitch as a binding substance.

## Outside of Those Industries and Those Substances

What about outside of those industries and specific substances, is there a case for occupational health surveillance? The short answer is maybe, the health & safety regulations are all encompassing and you have a duty to take steps to protect the health of your employees and any visitors to your workplace. This is a pretty far reaching requirement and ignorance is not a defence, in fact ignorance is bound to be seen as negligence. With the recent changes in sentencing guidelines negligence would be disastrous for any business.

You can answer the question about occupational health surveillance with your health & safety risk assessment. A thorough risk assessment should have found out the hazards in your workplace, identified who is at risk and identified the measures you can take to control the risks. Where some risk remains (this can be unavoidable) and there is likely to be harm caused to your employees, you will need to take further steps. Occupational health surveillance could be one of those further steps, you should consider health surveillance if your employees are at any risk from:

- noise or vibration
- solvents, dusts, fumes, biological agents and other substances hazardous to health

In the case of these risks, control measures may not always be fully reliable. Even though you have instituted appropriate checking and maintenance. Occupational health surveillance can help make sure that any ill health effects or health issues in your employees are detected as early as possible.

## Do you need health surveillance?

The simple answer to that question is that if there is still a risk to health after the implementation of all reasonable precautions, you should

consider a health surveillance programme. The HSE says that **occupational health surveillance** is required if all the following criteria are met:

- there is an identifiable disease/adverse health effect and evidence of a link with workplace exposure
- it is likely the disease/health effect may occur
- there are valid techniques for detecting early signs of the disease/health effect
- these techniques do not pose a risk to employees

## Industries that should consider health surveillance

The HSE provides a range of industry-specific guidance and advice on which jobs and industries may require health surveillance, they include;

- Agriculture
- Motor Vehicle Repair
- Foundries
- Metal Working
- Ceramics
- Electroplating
- Timber treatment / wood working
- Food industry
- Beauty industry
- Printing industry
- Welding, hot work and allied processes
- General dust exposure
- Borehole sites and operation
- Construction industry

There are also a number of high-hazard substances or agents where the law requires that the health surveillance programme includes statutory medical surveillance. Statutory medical surveillance involves a medical examination and possibly tests by a doctor with appropriate training and experience. The doctor must have been appointed by HSE. If you are unsure about occupational health surveillance, or if you would like to discuss occupational health surveillance services, don't hesitate to call us on 01455 234 600

# What Are The Benefits of Health Screening

## Multiple benefits of health screening

An occupational health screening strategy and health promotion in your business can be a very effective way of increasing employee morale. It can also benefit the business by reducing sickness and corresponding absence levels. Let's take a deeper look at what the benefits are.

### Benefits for employers

Looking after the long term health of your employees is good business sense. Employees are the lifeblood of any company, their morale and health is important to the continuity and profitability of the business. HealthScreen UK have years of experience offering a range of health and wellness programmes to companies both large and small across the UK.

The benefits of providing health screening to your employees are as follows:

1. Provides your employees with clear information about their health
2. Raises health awareness in the workplace
3. Gives you an understanding of your exposure to future health risks
4. Allows you to encourage preventative action
5. Decreases in absenteeism
6. Increase in staff morale

### Benefits for employees

HealthScreen UK provides a customised, state of the art health screening service, giving you complete control of your scheduling, the choice of testing and secure online access to your results. There are clear benefits that are delivered to employees which include the following:

1. It can help to identify any pre-existing health conditions they are unaware of
2. It can assess their risk of developing different diseases
3. It will provide advice on health and healthy living

The key is that your employees understand that early recognition of underlying health problems can contribute to better outcomes or even avoidance of those problems entirely.

## Prevention is better than cure

The comprehensive Health screening undertaken can assess each employee's risk factors for disease and screen for existing conditions. If appropriate we can also provide recommendations and lifestyle advice to employees so they can make informed health and lifestyle decisions.

## Nationwide service

Our service is nationwide and we can come to your workplace making it convenient for you and easily accessible for your employees. We have a range of health screening procedures which are designed to deliver a comprehensive overview of the health of each participant.

## An on-site screening

Our screening programme is carried out by one of our qualified professionals at your premises, and provides you with an overall picture of your employees' lifestyle, diet, fitness and general wellbeing. While the health screening is carried out on site, any blood tests taken are sent to an accredited laboratory for analysis. The results of the blood tests are sent back to us where they are combined with the other tests and reviewed by a specialist physician.

## What is the process?

First we will discuss the different health screening options with you and find one that best meets your company needs. After the actual health screening options are decided on we will task one of our local occupational health Nurses or Doctors to fulfill the assessments. To begin the process you simply need to contact us and fill in an employee referral form. The appointment will be scheduled and once it is undertaken we will send a report within a couple of days.



# Designing Health Surveillance For You

## Set up and design health surveillance according to need

As an employer and under the relevant health and safety regulations, the obligation is on you to decide if health surveillance is needed and to institute it. There are definitive regulations that cover health surveillance for certain industries and particular working practices. Health surveillance may be required by law if your employees are exposed to noise or vibration, solvents, fumes, dusts, biological agents and other substances hazardous to health, or work in compressed air.

### Do you need health surveillance?

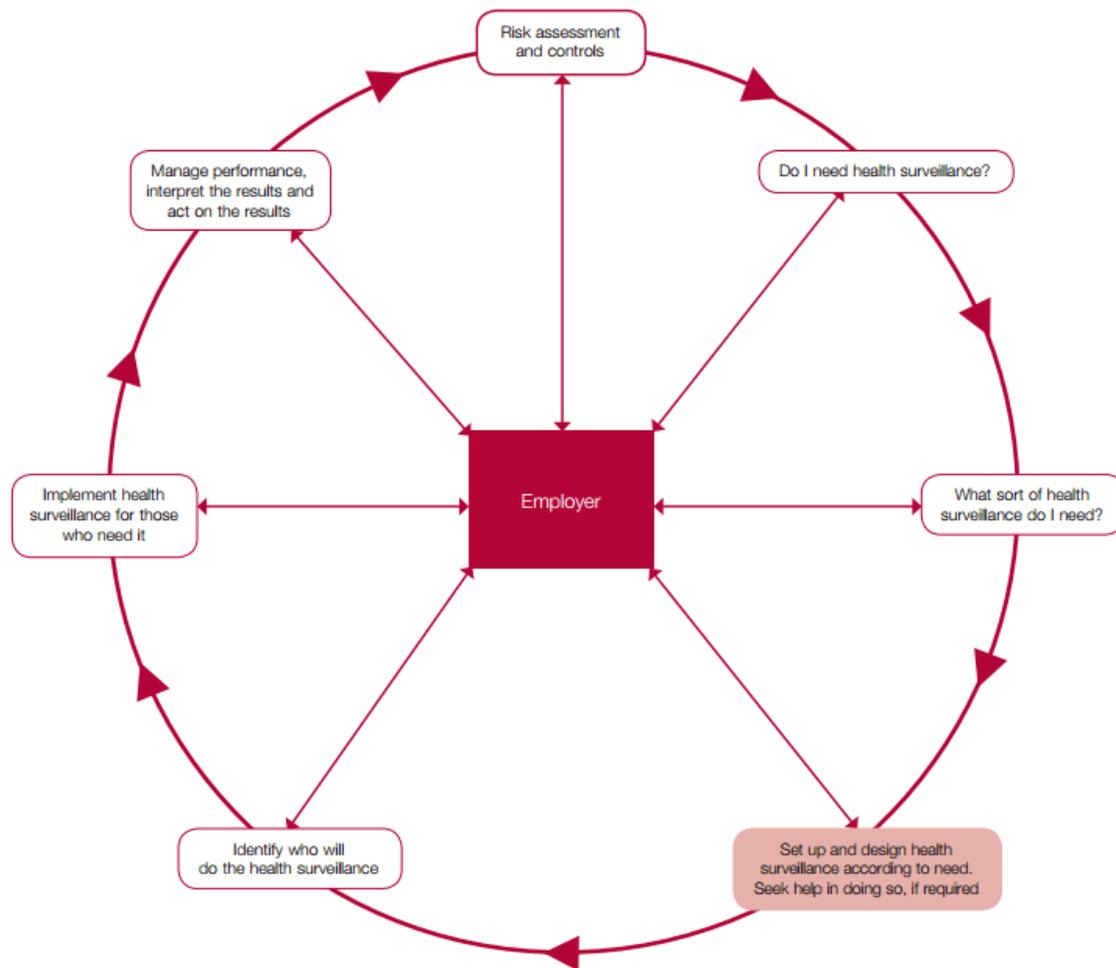
The stipulations for occupational health surveillance can be quite broad, so it is important for you as an employer to understand them and how they may apply to you. We discuss the details in our article

<http://www.healthscreenuk.co.uk/occupational-health-surveillance-is-it-needed-your-workplace>

and it is worth your time reading it. Where health surveillance is required, the obligation is on the employer to have a central role in every stage of health surveillance.

### The Health Surveillance Cycle

The HSE has designed a tool called the Health Surveillance Cycle, it is a useful infographic for the purposes of understanding how health surveillance is designed implemented and undertaken. Your initial step is to undertake a risk assessment of your workplace. We talk about identifying and controlling risks in your workplace in the following article



## Health Surveillance Cycle, Copyright HSE

### What sort of health surveillance do you need?

The third step is for you to identify what type of health surveillance you might need. This will be based on the work processes undertaken by your employees. For instance, if their work exposes them to noise, the hearing screening is something you need to consider. If they work with harmful substances, then biological monitoring and possibly lung function testing are something you need to consider.

### Setting up occupational health surveillance

When designing and setting up your health surveillance strategy, it is important to involve your employees and their representatives at the earliest stage. Your strategy will only be effective with the full co-

operation of your employees. They also need to understand their own duties and requirements. Involvement in the process will also allow them to understand the purpose of the health surveillance.

## Identify who will do the health surveillance

As an employer you are responsible for putting in place the most appropriate health surveillance programme for your business. You should involve a qualified person to undertake your health surveillance. If you do this from the beginning of the process it may make the process easier. One way or the other, when you institute the strategy, an appropriately qualified person will need to undertake the health surveillance. By understanding a little more about what you need and what they can offer, you can make good decisions about the right health surveillance services. In synopsis, to put an effective programme in place you will need to:

- involve your employees
- appoint a responsible person within your business
- appoint a competent medical professional (where appropriate)

## Review your strategy constantly

Keep your health surveillance process under review, to make sure that it is still appropriate and to maintain the quality.

*Your health surveillance programme should be designed according to the specific needs of your workplace. It does not have to be a blanket approach, the health surveillance should only be undertaken for those employees who need health surveillance, as defined through risk assessment.*

## Implement health surveillance for those who need it

Your next step is to implement your health surveillance programme. Keep your health surveillance programme under review, to make sure that it remains appropriate and to maintain quality.

It is important to you, your business and your employees that you make

sure your health surveillance strategy stays up to date. You need to ensure that all of your health and safety precautions and risk analysis are a continuous, ongoing process. This will help you to keep risks as low as reasonably possible.

# Chapter Two

Occupational Health Surveillance  
For Specific Industries

# Occupational health in the Food Manufacturing Industry

Although Health Surveillance and Occupational Health is similar across different industries. The Food Manufacturing Industry has its own peculiar issues.

Kerry Budworth



Occupational health risks across different industries are often similar, but each industry has its' own risks that are peculiar to that industry. It is often the case that some occupational health topics and concerns are more important in some industries than others. In this article I would like to explore the topics that are most prevalent in the food manufacturing industry.

5% of the food manufacturing workforce annually affected

Every year, in the food and drink manufacture industry, around 19,000 workers (nearly 5% of the workforce) suffer from ill health caused or made worse by work. The risk of suffering occupational ill health is around twice that of sustaining an injury that is reportable under regulations.

## Common ill health in Food Manufacture

Almost 60% of occupational ill health in the food manufacture industry involves musculoskeletal injury such as back injury from repetitive lifting or work-related upper limb disorders (WRULDs) from repetitive tasks. It is interesting to note that work-related stress, which is often cited as a cause of mental ill health, is another major issue causing almost 30% of ill health.

Occupational asthma and rhinitis, related mainly to exposure to flour and bakery dusts, causes around 8% of ill health followed by occupational dermatitis (4%) and noise-induced hearing loss (1%).

**Occupational rehabilitation, sometimes known as sickness absence and return to work**, has become an essential part of running an efficient business to ensure sickness absence is managed and return to work times reduced.

## Occupational health priorities

Each industry has its own occupational health priorities. The priorities are usually somewhat peculiar to the industry involved. These priorities should frame your occupational health strategy and the services that you use. The occupational health priorities for you in the food manufacturing industry are as follows:

- ○ Musculoskeletal disorders (MSDs)
  - Work-related stress
  - Occupational asthma and rhinitis
  - Occupational dermatitis
  - Noise-induced hearing loss
  - Occupational rehabilitation
  - Exposure to disinfectants

## Main causes of occupational ill health in food/drink manufacture

It is important that you are aware of what are the main causes of occupational ill health in your industry. Although they may be similar to other industries, the underlying causes may well be different.

Again, your awareness of these problems can help you shape your occupational health strategy and the services you use. The main causes in food manufacture are:

- Musculoskeletal disorders
- Work related stress
- Asthma
- Dermatitis
- Noise
- Rehabilitation

## Main causes of injury in food and drink manufacture

In manufacturing of any type there are similar causes of injury. Again there are some causes of injury that are peculiar to the food manufacture industry. Each year over 5000 injuries in food and drink manufacturing industries are reported to HSE. It is interesting to note that this represents about a quarter of all manufacturing injuries reported. Around 90% of these injuries occur in food manufacture, the remainder in the drinks sector.

Close to 16% of the injuries are 'major injuries' resulting in broken bones, hospitalisation etc. mostly due to slips, falls from height or machinery. The remainder are 'over-3-day absence injuries' mostly caused by lifting and handling, slips and trips and being struck by objects such as hand-knives or falling objects. The causes of injury in food manufacture are as follows:

- Manual handling
- Slips on wet or food contaminated floors
- Falls from height
- Workplace transport (including FLT's)
- Struck by something (eg sharp knives or falling objects)
- Food processing machinery

- Packaging machinery

## Protecting Your Staff

In order to protect your staff and indeed your business you need to put in place a comprehensive health and safety strategy that covers all of the topics we have discussed. You also need a deeper understanding of those issues as they apply to your industry and your business.

# Occupational Health in The Motor Vehicle Repair Sector

As with other industries, the Motor Vehicle Industry has hazards and risks peculiar to it. Therefore Health Surveillance needs to be customised for that workforce



## Occupational Health Surveillance in The Motor Vehicle Repair Industry

There have been over 7000 injuries and 33 deaths in the motor vehicle repair (MVR) industry over the last 5 years according to the HSE website. Because of the nature of the materials used, there is widespread potential for work-related ill health in MVR body shops. Many of the substances used require careful storage, handling and control. It makes sense to have a strong occupational health strategy to protect your

employees and your business.

## Occupational health strategy

Because of the nature of the MVR industry there is a need for a cross surveillance approach in any occupational health surveillance strategy. By that we mean that employees should be monitored for multiple conditions as part of your strategy. There should be **lung function testing**, **biological monitoring for isocyanates exposure** and **dermatological surveillance**. This surveillance monitors employees for the occupational diseases and problems that most feature in the MVR industry. The diseases are occupational asthma, occupational dermatitis and exposure to isocyanates.

## Isocyanates & occupational asthma

In particular, isocyanate-containing paints have been the biggest cause of occupational asthma in the UK. The MVR industry is also in the top 10 industry's for cases of disabling dermatitis. Paints containing isocyanate are used extensively in MVR as almost all motor vehicle repair body shops use 2-pack or "2K" isocyanate-containing paints. Isocyanates are also used in some water-based paints, most base coats and almost all lacquers. It is important that you are aware that water-based does not mean isocyanate-free. It just means that it is an emulsion based paint and has reduced levels of solvents.

The spraying of 2-pack isocyanate paints is the main cause of occupational asthma in the UK. Paint sprayers in the industry have about a 90 times higher risk of getting asthma compared with the rest of the UK working population. According to the figures on the HSE website, every year around 50 sprayers are diagnosed with isocyanate asthma and most have to leave the industry.

It is not just a problem for paint sprayers, other workers in body shops are also sometimes affected. There have been cases of maintenance personnel, managers and others who work in close proximity to spray booths/rooms getting isocyanate asthma. This spray mist containing isocyanate may also worsen existing asthma. Once people are affected even very low exposure levels can trigger an attack. Significant skin contact with isocyanate hardeners may cause dermatitis.

Over a number of years HSE have worked with representatives from the MVR industry to explode the myths and explain why even the best air-fed visor can fail to protect people. Below are some key tips for vehicle paint sprayers and owners of motor vehicle repair body shops.

## Vehicle paint sprayers

1. The risk of developing occupational asthma occurs because paint spraying produces a lot of invisible airborne mist that you can breathe in. Never spray paint outside the spray booth or room.
2. Your spray booth/room takes time to clear of mist, so know the clearance time and make sure that everyone else does too.
3. Always wear air-fed breathing apparatus (BA) when spraying and know how to safely leave or enter your booth or room during the clearance time.
4. Your employer should check the controls are working by measuring your exposure to isocyanate. Currently the only way to do this (and accepted by the MVR industry) is by providing a **urine sample for analysis**. See Sector Information Sheet 03/2012/01 - Reducing ill health from isocyanate exposure in motor vehicle repair (MVR)
5. You need regular health surveillance i.e. **lung function testing** and **skin checks**. This is to identify early symptoms and signs of occupational asthma and dermatitis (skin rashes).

## Body shop owners / managers

1. Spraying 2-pack isocyanate paints creates fine, invisible, airborne mist that can cause occupational asthma
2. It spreads through the air like smoke.
3. Your spray booth or room takes time to clear of fine paint mist.
4. Measure the clearance time (information below) using a smoke/fog generator, clearly mark it on the entrance door(s) and make sure everyone who uses the booth/room knows what to do. For information on smoke generators and advice on how to conduct a clearance time measurement please see Measuring paint spray booth clearance time.
5. The research report 'An automated system for indicating spray clearance times of MVR spray booths and rooms - RR742' describes the design and assembly of a device consisting of a timer switch, programmed with the clearance time, which is triggered by a sensor that detects when the spray gun is turned on and off.

6. Two types of sensor are evaluated and recommendations made for different operational setups. The system is relatively inexpensive and can be retrofitted to existing spray booths/rooms.
7. Make sure the booth/room runs at slight negative pressure so that if there are any leaks, air is drawn into the booth/room rather than paint mist leaking out into the workshop
8. Make a list of simple daily and weekly checks to be done in the booth/room, appoint someone to do them, record the findings and act if things are wrong
9. Check exposure is properly controlled by arranging for the analysis of urine samples of vehicle paint sprayers. See Sector Information Sheet 03/2012/01 - Reducing ill health from isocyanate exposure in motor vehicle repair (MVR)
10. Arrange regular health surveillance for those potentially exposed to isocyanate paints such as sprayers. For more information on health surveillance for occupational asthma see HSE guidance publication 'Health surveillance for occupational asthma (G402)'
11. Use the COSHH paint spraying and allied tasks and other published advice to help you reduce exposures to isocyanates.

## Measuring paint spray booth clearance time

Knowing how long it takes for your spray booth/room to clear of fumes is an important factor in your occupational health strategy. The HSE has guidelines to measure the clearance time using a party fog machine or professional smoke machine. They recommend that the test should be undertaken just before the filters in the spray booth or room are changed. This allows you to assess a worst-case time. It is recommended that a clearance time test should also be included in the 14-month thorough maintenance examination of the booth or room. The guidance is as follows:

1. The spray booth or room should be empty when measuring the clearance time. This is because the volume of the car will effectively reduce the volume of a booth or room and give a lower clearance time. In addition, the smoke generated is made of a glycol aerosol and may leave a greasy deposit on any vehicle or body part in the booth/room.
2. The booth or room should be set up for normal spraying operations except with the ventilation deactivated (see No. 3) and the lights on maximum to enable the smoke aerosol to be seen.

3. Ensure that the extraction system is turned off. There are two reasons for this:
  1. in a booth with the ventilation running it would be very difficult to fill the room completely;
  2. Filling the booth with the extraction turned off will give a clearance time showing the worst case scenario ensuring the room is clear before anybody enters, or sprayers remove their RPE.
4. Fill the room with smoke, making sure to distribute smoke evenly throughout the room (an extension lead may be useful in allowing all areas of the room to be reached).
5. The room shall be regarded as full when the facing wall is no longer visible when viewed across the short axis of the room. Depending on the fog machine used, it may cut out and require time to reheat one or more times before this is achieved.
6. Switch on the ventilation system and start a timer.
7. During the smoke test the opportunity should be taken to do a visual inspection of the exterior of the booth and any associated ductwork to check for any leaking air.
8. The room shall be regarded as clear when smoke is no longer visible in any part of the room. A lamp (viewed from a narrow angle towards the beam of light) may be useful in judging this, though ensuring that the room is truly full at the start of the measurement is more important than precise judgement of when the smoke has cleared. The difference between clear by eye and clear using a lamp is typically 30 seconds longer.
9. Note the time at which the room is judged to be clear of smoke. This time should be rounded up to the next quarter minute. This should be put on a notice and displayed on the door or entrance of the booth or room, and all personnel who need to know should be told.

# Occupational Health in The Construction Sector



## Occupational Health Needs & Problems in The Construction Sector

### The Second Highest Rate Of Self Reported Illness

HSE estimates that two million people within the the Uk currently suffer from an illness caused by , or made worse by their working environment. Ill health can have a significant impact on the person affected but through loss of productivity, it can also have a dramatic effect on the business. According to the HSE, sickness absence costs the Uk economy an estimated £12 billion per annum. The construction industry is no different than any other industry in this respect

## Inherently dangerous work & workplace

However, because of the inherent danger in both the work undertaken and the work place, injury, absence and deaths are high. In 2005/2006, the construction industry had the second highest rate of self reported illness attributed to work at 3,800 cases per 100,000 employed persons (Health and Safety statistics 2005/06 HSE Books 2006). Construction workers also have a high overall mortality rate, independent of social class. Brick layers and labourers are recorded as having the second highest mortality rate.

## Not just injury

The construction sector is a complex environment as both the workplace and the workforce are constantly in motion. Nonetheless, there are common requirements of Health and Safety legislation and objectives for occupational disease reduction that apply to the sector. There have been big improvements over recent years in reducing the number and rate of injuries to construction workers.

Most people know that construction is a high-risk industry and accounts for a high percentage of fatal and major injuries. Often though, what is less recognised is that construction is a high-risk industry for occupational health issues too. Below are some key points about these risks and why they are so significant.

- *Cancer*: The Construction Industry has the largest burden of occupational cancer amongst all of the industrial sectors. It accounts for over 40% of occupational cancer deaths and cancer registrations in the UK. It is estimated that past exposures in the construction sector cause 5,000 occupational cancer cases and approximately 3,700 deaths yearly. The most significant cause of these cancers is asbestos (70%), followed by silica (17%), working as a painter and diesel engine exhaust (6-7% each).
- *Hazardous substances*: Dusts, chemicals and potentially harmful mixtures (paints etc) are common in construction work. Some processes emit dusts, fumes, vapours or gases into the air and these can be significant causes of **occupational respiratory disease**, breathing problems and lung diseases. A number of construction-related occupations also have high rates of dermatitis from skin exposures to hazardous substances.

- *Physical health risks:* Skilled construction and building trades are one of the occupations with the highest estimated prevalence of **back injuries and upper limb disorders**. Manual handling is the most commonly reported cause of injuries that last for over seven days in the industry. Construction also has one of highest rates of ill health caused by noise and vibration.

## Underlying causes

The underlying causes of these occupational health problems are varied. However, it goes back to the work and the environment being a inherently dangerous place. There are many reasons but they include:

- *The construction site environment:* The construction workplace is very different to a factory, construction work takes place in a lot of very different environments. Different work sites can present a range of different health risks, including existing ones like asbestos. The extent of these risks can also vary between areas of the same site. This is why each site needs a thorough assessment of all risks.
- *The dynamic nature of the work:* Building sites are constantly changing and a large number of trades may all be carrying out tasks at the same time. These tasks can be potentially dangerous to their health and that of others. This is why safety should be be a constant concern and certain work should be controlled.
- *Risk appreciation:* Within the construction workforce, there is generally a low awareness of health risks and the controls needed. It can take many years for serious ill health conditions from occupational exposure to develop. Because of this, the immediate consequence of a harmful workplace exposure may often be dismissed as not significant in comparison to the immediate impact of injuries caused by accidents.
- *Employment Conditions:* In the construction industry many jobs are sub contracted. This means that many workers are either self-employed or work for small companies. Many employees also frequently change employers. Others work away from home. These situations can make it difficult for workers to easily look after their own health and they often have little or no contact with occupational health professionals.

## Common principles across industry

The risks of occupational ill health in the Construction Industry can be managed just as they can in other industries. Ill health can be prevented, it is both possible and practical to carry out construction work without causing ill health. The steps you follow to avoid ill health follow a few essential common principles

- *Treat health like safety:* Managing health risks in the construction workplace is no different to managing safety risks. Follow the Assess, Control, Review steps.
- *Everyone has a role to play:* Everyone involved in construction has a responsibility in managing risks to health. Each must take ownership of their part of the process. Everyone should be aware that they bear responsibility for their health and the health of others.
- *Control the risk, not the symptoms:* monitoring and **health surveillance programmes** are excellent, however, they are not enough in isolation. While they are an effective part of managing health risks, the first priority is to end risk exposure if possible or limit the damage caused.
- *Manage risk, not lifestyles:* The law requires steps to be taken to prevent or adequately control work-related health risks. Helping workers tackle lifestyle issues like smoking or diet may be beneficial but is not a substitute for this.

## What could it cost your business?

While the focus on safety within the industry is very strong, not controlling health risks can be possibly even more costly to you and your business. The costs are simple:

- *Human cost:* Every case of occupational disease in the statistics is someone who is needlessly suffering. Occupational diseases can be prevented, the suffering can also affect friends and loved ones.
- *Financial cost:* There is a real financial cost to the mismanagement of workplace health. There are real costs to losing skilled staff, employee absences and insurance claims. Managing workplace health helps you retain experienced and skilled workers. It also helps employees maintain productive employment. Failing to do this can be costly, HSE also operates the Fee For Intervention scheme. Under The Health and Safety (Fees) Regulations 2012, those who breach health and safety

laws are liable for recovery of HSE's related costs, including inspection, investigation and taking enforcement action. This could have a massive impact on your business.

- *Reputational cost:* HSE treats non-compliance with health issues very seriously. HSE places enforcement notices on the Public Register and this could wreak havoc on your reputation as trustworthy service provider or contractor. The consequences can be even more significant when HSE takes prosecution action and cases are listed on the Public Register of Convictions.

# In Finishing

Health Surveillance makes sense for many industries as part of their overall health and safety strategy. In the long term, the proactive approach protects employees and the businesses they work for. If you have any questions please call us on 01455 234 600 or contact us online

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