



'Spotlight on...' learning toolkits aim to raise awareness and drive change. The toolkits provide resources including guidance, case studies and best practice examples from across the industry and beyond to help the construction industry to address these issues and raise their standards in these important areas of concern.

**CONSIDERATE
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SCHEME**



Spotlight on...

occupational cancers

**BEST PRACTICE
HUB**



Spotlight on...

occupational cancers

‘Spotlight on... occupational cancers’ aims to raise awareness of the health risks involved in construction work, specifically those relating to occupational cancers and the importance of taking proactive measures to safeguard all employees within the sector.

There are various types of cancer which affect the workforce, but skin cancer and lung cancer have been identified as the two main types that significantly affect individuals working in the construction industry.

Skin and lung cancer can be caused by exposure to carcinogens and UV radiation in the workplace over a prolonged period of time. The causes can take various forms from solid substances to gases and dust. Without appropriate control measures in place, workers can be exposed to these harmful substances by breathing them in or absorbing them through the skin.

Due to the risks associated with the construction industry and the various harmful substances encountered on a day to day basis, workers within the industry are at a greater risk of developing cancer at work compared with any other industry group. Potentially harmful substances include asbestos, silica dust, diesel engine exhaust emissions, paint and prolonged exposure to UV radiation.

UV radiation and skin cancer are sometimes not considered an issue in the UK due to the weather, but whilst a higher number of people are diagnosed with skin cancer in Australia, the survival rate is higher than in the UK. This is the result of better public attitudes to sun protection and early detection of any skin changes due to Australia’s well-funded awareness campaigns which have spanned over 20 years, coupled with primary and secondary school education. The UK needs to take a more proactive approach to this health problem, which is particularly relevant for outside workers. It is difficult to determine the true extent of occupational cancers as in many cases individuals fail to develop any noticeable symptoms until many years later. Therefore, the industry may not prioritise work-related cancer as an immediate health and safety issue.

The industry has made great progress in recent years

in addressing the ‘safety’ part of ‘health and safety’, but there needs to be greater focus on the health of the workforce and how working conditions can contribute to ill health. The importance of protecting employees’ health and preventing work-related ill health needs to be carefully considered and addressed by all those involved in the construction industry.

FACTS AND FIGURES

The following facts demonstrate the scale of work-related cancers:

- Worldwide, **742,000** people die every year from occupational cancers, equating to one person every minute (IOSH, 2017)
- There were **2,446** mesothelioma deaths in 2018 due to past asbestos exposures (HSE 2020)
- In the UK there are **13,500** newly occurring cases of occupational cancer per year and **8,000** deaths from these diseases (HSE, 2016/17)
- In 2018/19 there were **18,000** new cases of breathing and lung problems caused or made worse by work (Health & Safety International, 2020)
- Over **40%** of occupational cancer deaths arise from the construction industry (HSE, 2016/17)
- **99%** of work-related deaths are caused by occupational diseases and **1%** by accidents at work (HSE, 2014/15)
- **Asbestos** is responsible for the largest proportion of occupational cancer (HSE, 2016/17)
- **1 in 4** construction workers have been exposed to asbestos (IOSH, 2018)
- Construction workers have a **6 times** greater risk of developing skin cancer than the general population (Construction Enquirer, 2015).

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Law and legislation

Occupational cancers are often included as part of the larger topic of health and safety at work, which is covered under legislation:

HEALTH AND SAFETY AT WORK ACT (1974)

This Act is the primary piece of legislation covering occupational health and safety in the UK. This law provides a legal framework for controlling exposure to occupational carcinogens and holds the creator of any potential risk substances responsible for its control.

For government guidance on the act, visit <http://www.legislation.gov.uk/ukpga/1974/37/contents>

THE INTERNATIONAL LABOUR ORGANISATION (ILO) CONVENTION NO 139 (1977)

This aims to prevent occupational cancers by calling for the application of the following control measures: Removing carcinogens from the workplace; the use of less hazardous alternatives; designating specific areas at a distance from the main working areas or by removing workers from areas where hazardous operations are underway; general ventilation; damping down dust with water and PPE.

For guidance on the act, visit http://www.ilo.org/safework/info/publications/WCMS_236179/lang-en/index.htm

THE PERSONAL PROTECTIVE EQUIPMENT AT WORK REGULATIONS (1992)

Under these regulations, employers are responsible for providing personal protective equipment (PPE) to the workforce, free of charge. It is important to remember that PPE should only be used as a last resort, where exposure to risks cannot be adequately controlled otherwise.

For government guidance on the act, visit <http://www.legislation.gov.uk/uksi/1992/2966/contents/made>

THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS (1994)

These regulations affirm that organisations in the construction industry must ensure that health and safety risks are fully considered during a project's development so that the risk of harm to those who have to build, use and maintain structures is limited.

For government guidance on the act, visit <http://www.legislation.gov.uk/uksi/1994/3140/contents/made>

THE PROVISION AND USE OF WORK EQUIPMENT REGULATIONS (1998)

These regulations require equipment provided for use at work, including PPE, is adequately maintained. Employers must ensure that individuals who operate the work equipment have information, training and instruction to safeguard their health and safety.

For government guidance on the act, visit <http://www.legislation.gov.uk/uksi/1998/2306/contents/made>

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THE MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS (1999)

These regulations require the employer to conduct a suitable assessment of the risks to the health of their workforce, including UV radiation. They further state that it is the responsibility of the employer to remove any risk. If this is not possible, other ways of preventing or reducing exposure must be identified, including protective equipment, and where protective equipment is required this must be supplied free of charge.

For government guidance on the act, visit <http://www.legislation.gov.uk/uksi/1999/3242/contents/made>

THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH HIERARCHY (2002)

COSHH is the statutory instrument implementing the EU's Directive on Control Substances Hazardous to Work. COSHH's objective is to prevent or adequately control exposure to substances hazardous to health.

For HSE guidance on the act, visit <http://www.hse.gov.uk/coshh/basics/control.htm>

REGISTRATION, EVALUATION, AUTHORISATION AND RESTRICTION OF CHEMICALS (REACH) (2007)

REACH is a European Union regulation which aims:

1. To provide a high level of protection of human health and the environment from the use of chemicals.
2. To make the people who place chemicals on the market responsible for understanding and managing the risks associated with their use.
3. To allow the free movement of substances on the EU market.
4. To enhance innovation in and the competitiveness of the EU chemicals industry.
5. To promote the use of alternative methods for the assessment of the hazardous properties of substances.

For HSE guidance on the act, visit <http://www.hse.gov.uk/reach/whatisreach.htm>

THE CONTROL OF ASBESTOS REGULATIONS (2012)

These regulations address the control of asbestos in the workplace.

For HSE guidance on the act, visit <http://www.hse.gov.uk/asbestos/regulations.htm>

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External resources

There are a number of campaigns and resources available to help individuals understand the topic of occupational cancer, including guidance and practical advice to help safeguard the workforce:

ORGANISATIONS

Cancer Research UK provides information about cancer risks in the workplace.

<http://www.cancerresearchuk.org/about-cancer/causes-of-cancer/cancer-risks-in-the-workplace>

Health and Safety Executive (HSE) website outlines the issue of **occupational cancer** in general and **cancer in the construction industry**. The HSE's '**Go Home Healthy**' campaign encourages employers to commit to protecting their workers' health. The statistics below are mostly drawn from the HSE's 2012 report '**The burden of occupational cancer in Great Britain**'.

<http://www.hse.gov.uk/cancer/>

The Institute of Occupational Safety and Health (IOSH) launched their **No Time to Lose Campaign** in 2014. This campaign aims to raise awareness of the top five causes of occupational cancers: diesel engine emissions, solar radiation, asbestos, shift work and silica dust. The campaign website provides a number of downloadable resources and case studies focusing on these causes of cancer.

<http://www.notimetolose.org.uk/>

Macmillan at Work provides training, resources, a cancer toolkit and consultancy for employers, to equip individuals with the skills to effectively support those in their workforce who have been affected by cancer.

<https://www.macmillan.org.uk/about-us/what-we-do/how-we-work/work-and-cancer/macmillan-at-work>

Safety Groups UK Health Risks at Work initiative provides information to help small businesses manage key health at work risk areas, with a focus on: breathing; skin; muscles, bones and joints; hearing and touch; wellbeing.

<http://www.safetygroupsuk.org.uk/campaigns/hraw/>

Society of Occupational Medicine released a report in May 2017 entitled '**Occupational health: the value proposition**' detailing the business benefits of ensuring employee health. The report is supplemented by leaflets for **company directors, line managers & HR professionals** and **workers**.

<https://www.som.org.uk/>

Trade Union Congress published their '**Occupational Cancer: A Workplace Guide**' to enable employers and employees understand the issue.

<https://www.tuc.org.uk/sites/default/files/occupationalcancer.pdf>

Fit2Fit is a respiratory protective equipment (RPE) test provider. The Fit2Fit accredited Face Fit Testers can ensure a consistent testing service across all multi-site organisations to ensure the RPE selected is adequate for the hazard and suitable for the wearer. This is important because around 50% of RPE is not fitted correctly, putting workers at risk of developing occupational lung disease.

<http://fit2fit.org/>



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SafeTea Break provides organisations with the toolkit and platform to engage the workforce in a discussion about health, safety and long latency occupational diseases. The kit provides open questions to present the workforce in a breakout session that will generate debate across health optics, driving a useful action plan and a better understanding of the health risks and consequences of noncompliance.

<https://safetynetwork.3m.com/blog/safetea/>

ASBESTOS

Over 2,500 construction workers a year die from asbestos-related cancer (HSE, 2012).

Asbestos: The Truth Conference is held annually and is the UK's only asbestos event, showcasing seminars and workshops. This event provides a platform for industry professionals to network, learn about changes to legislation and discover new solutions to support them in their roles.

<http://www.asbestosthetruth.com/>

The British Lung Foundation provide information on asbestos and its impact on the lungs, along with guidance on what to do if you have been exposed to asbestos. BLF hosts **Action Mesothelioma Day** each July. This calls for greater investment in research and raises awareness of mesothelioma. Mesothelioma is a tumour of the mesothelium; this is the thin lining that covers the outer surface of most of the body's organs.

<https://www.blf.org.uk/Home>

HSE's Beware Asbestos campaign helps tradespeople protect themselves from the dangers posed by asbestos. The campaign offers **reference cards** and a free **Beware Asbestos web app** to help individuals identify if asbestos is likely to be in their workplace, while also providing practical advice on how to protect themselves from the dangers and when and how to get experts involved.

<http://www.beware-asbestos.info/>

IOSH's **asbestos resource pack** provides factsheets, posters and presentations on the health hazards of asbestos exposure.

<https://www.notimetolose.org.uk/free-resources/asbestos-pack-taster/>

DIESEL ENGINE EMISSIONS

230 construction workers a year die from cancers (including lung and bladder) caused by exposure to diesel exhaust emissions (HSE, 2012)

The HSE provides a **short leaflet** outlining the hazards posed by diesel emissions and the precautions employers can take.

<http://www.hse.gov.uk/pubns/indg286.pdf>

IOSH's **diesel exhaust resource pack** provides factsheets, posters and presentations on the health hazards of diesel emissions.

<https://www.notimetolose.org.uk/free-resources/diesel-pack-taster/>

Unite has an online register of diesel exhaust emissions for workers to report high levels of diesel exposure. Unite also offer downloadable posters and leaflets highlighting the dangers of diesel exposure.

<http://www.unitetheunion.org/campaigning/diesel-exhaust-can-kill--report-it/>

SILICA DUST

600 construction workers a year die from cancers caused by silica (HSE, 2012)

The industry has collaborated to form the **Construction Dust Partnership (CDP)**. The partnership aims to raise awareness within the industry about the risks of lung disease related to hazardous workplace dust, while promoting good practice to prevent individuals undertaking such risks.

<http://www.citb.co.uk/health-safety-and-other-topics/health-safety/construction-dust-partnership/about-construction-dust-partnership/>

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The CDP and IOSH published the findings of their **industry survey into construction dust** in 2014. Among the key findings were that When asked what priority they think the industry currently puts on the control of construction dust risks, 44% thought the industry puts 'very little' priority on the control of construction dust risks, and only 12.5% said they felt it was 'a priority health issue'.

<https://ccsbestpractice.org.uk/wp-content/uploads/2015/09/MEM1871-Dust-survey-1.pdf>

IOSH's **silica dust resource pack** provides factsheets, posters and presentations on the health hazards of silica dust. IOSH progress report into addressing silica – **'Tackling respirable crystalline silica together: A cross-industry commitment'** was released in November 2017.

<https://www.notimetolose.org.uk/free-resources/silica-pack-taster/>

Unite the Union has recently launched a **'Silica Dust Register'**, which is an online register for workers who have been exposed to the substance to register their exposure and to assist with any potential future legal cases should they experience long-term health problems.

<https://unitetheunion.org/news-events/news/2019/august/unite-launches-silica-register-to-protect-workers-whose-health-could-be-damaged-by-dust-inhalation/>

SOLAR RADIATION

7 construction workers a year die from cancers caused by exposure to solar radiation (HSE, 2012). The national figure, at 2,500, is much higher (Cancer Research UK, 2014).

Cancer Council Australia published a **guide** for preventing skin cancer among outdoor workers, with information about the risks and advice for employers.

<https://ccsbestpractice.org.uk/wp-content/uploads/2015/09/Skin-cancer-outdoor-workbooklet.pdf>

IOSH's **solar radiation resource pack** provides factsheets, posters and presentations on the health hazards of exposure to solar radiation. IOSH worked with the University of Nottingham to produce the report **'A safe place in the sun: Evaluating a sun safety intervention for the UK construction sector'**.

<https://www.notimetolose.org.uk/free-resources/solar-pack-taster/>

The Karen Clifford Skin Cancer Charity (Skin) aims to raise awareness of skin cancer and to promote the importance of sun safety and early detection through educational initiatives and targeted campaigns.

<http://www.skcin.org/>

'Slip, Slop, Slap!' is a health campaign launched by Cancer Council Victoria in 1981 to encourage Australians to protect their skin. Over the years the message has been expanded to 'Slip! Slop! Slap! Seek! Slide!'

<http://www.cancer.org.au/preventing-cancer/sun-protection/campaigns-and-events/slip-slop-slap-seek-slide.html>

WHAT IS THE INDUSTRY DOING?

There are various organisations offering specific guidance to the industry in relation to dealing with occupational cancers.

The Scheme's **Code of Considerate Practice** consists of five sections. The 'Value their Workforce' section focuses on how registered sites, companies and suppliers consider the health and wellbeing of their workforce, addressing occupational health risks, weather protection etc.

<https://www.ccscheme.org.uk/ccs-ltd/code-of-considerate-practice-2/>

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British Occupational Hygiene Society (BOHS)

launched their **Breathe Freely campaign** to control exposures and prevent occupational lung disease in the construction industry. This campaign is a collaborative initiative led by BOHS to provide guidance, tools and resources that aid the recognition, evaluation and control of exposures in the workplace. BOHS hosts an annual **Occupational Hygiene conference** which focuses on occupational hygiene and the prevention of occupational ill-health and disease. The conference brings together a range of experts, including, researchers, practitioners and regulators.

<http://breathefreely.org.uk/>

The **BSIF (British Safety Industry Federation)** has released a document '**Tackling Work Related Respiratory Illnesses**' that covers changes to public health allocations, work related illnesses in Britain, local action plans and recommendations.

<https://ccsbestpractice.org.uk/wp-content/uploads/2015/09/BSIF-Tackling-Work-Related-Respiratory-Illnesses.pdf>

Health in Construction Leadership Group comprises contractors, clients, professional bodies and other industry organisations to unify the industry in its approach to worker health protection.

<http://www.healthinconstruction.co.uk/>

HSE carried out a site inspection initiative between September and October 2015 which revealed a misunderstanding of what occupational health actually means and how it should be incorporated properly, with more than 200 health-related enforcement notices issued. The initiative also uncovered that 46% of construction sites visited have been found responsible for poor standards or dangerous practices. In response, the HSE provided a guide written by CONIAC and IOSH to offer assistance with this issue: '**Occupational health risk management in construction**'.

<http://www.hse.gov.uk/aboutus/meetings/iacs/coniac/coniac-oh-guidance.pdf>

Speedy launched the 'Safety from the Ground Up' campaign focusing on dust control. This campaign provides information consisting of **four posters** focusing on competence, **a supervisor's guide**, **a pocket guide** and a **toolbox talk presentation**.

<https://ccsbestpractice.org.uk/wp-content/uploads/2015/09/dust-control-posters.pdf>

Examples of Best Practice

The Scheme aims to improve the image of construction through sharing best practice with the industry. Below are a number of best practice examples that have been witnessed by the Scheme's Monitors on their visits or submitted directly by registered sites, companies and suppliers:

- Toolbox talks were held about occupational health risks, covering the topic of occupational cancer and protection against harmful substances like asbestos, silica dust and diesel fumes.
- Sun cream dispensers were made available on site so workers could protect their skin during sunny weather.
- The site equipped operatives with personal air quality monitors to track their exposure to harmful air.
- All operatives were provided with PPE and RPE to protect them from dust inhalation.
- The site participated in fundraising events for cancer charities, which in turn raised workforce awareness of occupational cancers.
- Dust training was held with all subcontractors and operatives to ensure dust exposure was minimised.
- Weather protection was provided in the summer, including 'brim clips' attached to the hard hat which protected workers from the sun.
- MDF was banned on site due to its carcinogenic properties
- UV bracelets were introduced on site which changed colour when exposed to UV, therefore measuring operatives' exposure to the sun.
- Similarly, a hard hat sticker which was sensitive to UV light was trialled on site.
- Face fit mask training was offered for free to all operatives, ensuring effective protection from hazardous substances.
- A 'no broom' policy was adopted on site, favouring vacuum equipment for dust suppression.

To view all Best Practice Hub entries relating to the 'Spotlight on... occupational cancers' learning toolkit visit: <https://ccsbestpractice.org.uk/spotlight-on/occupational-cancers/>

Case Studies

The Scheme has received case studies from a number of contractors on how they provide help and support with regards to occupational cancers.

 <p>A-one+ Integrated Welfare Services</p>	<p>A-one+ has acknowledged the risks that over-exposure to UV radiation can have on their workforce. In response they launched a campaign to encourage their employees to stay safe in the sun.</p> <p>https://ccsbestpractice.org.uk/wp-content/uploads/2022/11/A-One-3.pdf</p>
 <p>GallifordTry</p>	<p>Galliford Try has focused on the importance of sun safety on site by using resources supplied by IOSH's 'Stay Safe in the Sun' campaign and issuing UVProtectA to their operatives.</p> <p>https://ccsbestpractice.org.uk/wp-content/uploads/2015/09/UV-Protect.ppt</p>
 <p>Landsec</p>	<p>Land Securities has acknowledged the challenges facing the construction industry in making health a priority.</p> <p>https://ccsbestpractice.org.uk/wp-content/uploads/2022/11/Land-Securities.pdf</p>
 <p>MORGAN SINDALL</p>	<p>Morgan Sindall produced a brochure to introduce the 6 Ss of summer working to identify the best ways for workers to protect themselves in the summer months.</p> <p>https://ccsbestpractice.org.uk/wp-content/uploads/2022/11/Morgan-Sindall-1.pdf</p>
 <p>VolkerWessels</p>	<p>VolkerWessels UK has provided an insight into how the issue of occupational cancers is addressed onsite. To read more, click here.</p> <p>https://ccsbestpractice.org.uk/wp-content/uploads/2022/11/VolkerWessels-1.pdf</p>



What can you do?

The construction industry cannot afford to overlook the topic of occupational cancers. As highlighted above, work-related ill health is a major challenge facing the industry, with devastating long term effects.

A good understanding of the risks and factors which contribute to occupational cancers is vital to be able to appropriately manage and minimise the hazards and effectively safeguard the workforce.

Each employee has a personal responsibility to implement measures to minimise the risks to their health and the health of colleagues. Employers also have a responsibility to provide a safe work environment to ensure that employees are not being exposed to hazardous substances or UV radiation.

On every site, before work commences, a risk assessment should be conducted and measures to minimise the hazards found should be implemented and effectively communicated to the workforce.

The following control measures can be utilised to minimise harmful exposure to carcinogenic substances and UV radiation:

1. SITES NEED TO PROACTIVELY ELIMINATE HARMFUL SUBSTANCES – WHEN THIS IS NOT ACHIEVABLE, WORKING METHODS AND EQUIPMENT MUST BE SUBSTITUTED FOR SAFER ALTERNATIVES

Removing carcinogens and hazardous substances from the workplace is the most effective method to counter the risks posed to employees on site. In situations where this is not possible, sites should adopt less hazardous alternatives. For example, additives or exhaust filters can be fitted to diesel machinery to minimise the toxicity of emissions.

2. SITES SHOULD ISOLATE HIGH RISK AREAS

Specific areas should be designated at a distance from the main working area or workers should be removed from areas where hazardous operations are underway.

This will minimise the number of workers exposed, and those who are exposed can be properly protected during operations such as cutting timber or cement blocks.

3. SITES COULD INTRODUCE CONTROLS TO REDUCE EXPOSURE

Measures to minimise the exposure to dust include implementing a general ventilation system or installing local exhaust ventilation systems on woodworking machinery. Dust bags could be integrated on power tools for sanding or cutting or providing an enclosure for hazardous operations such as spray booths. Controls could be introduced to reduce operatives' exposure to UV radiation, such as providing shade, sun cream protection, reflective PPE, modifying reflective surfaces and using window tinting on vehicles.

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4. SITES SHOULD REVIEW AND UPDATE SAFE WORKING PROCEDURE

Outdoor work can be rescheduled to ensure that it does not take place in the middle of the day when UV levels are at their strongest. Jobs could be moved into shaded areas, outdoor tasks shared and staff rotated so the same person is not always working outside in the sun. Given the damage caused by diesel fumes, sites should consider changing working procedures to minimise workers' (particularly those operating plant machinery) exposure to these emissions. Emergency procedures should also be planned in the event that an operative is exposed to an excessive or dangerous level of hazardous substance.

5. PERSONAL PROTECTIVE EQUIPMENT SHOULD BE ADAPTED TO MATCH THE WORKING CONDITIONS

PPE should be used alongside other control measures and typically includes dust masks and respirators to protect against fumes. Gloves, overalls, neck protectors, sun cream and sun hats could also be provided for the workforce. PPE is not a case of one size fits all, for example some respirators will not filter certain particulates. Therefore, consideration must be given as to whether the correct PPE is being used for the chemicals that operatives are being exposed to. Furthermore, it is also important to ensure PPE is routinely checked so damaged PPE can be disposed of and replaced.

6. SITE MANAGERS SHOULD RAISE AWARENESS OF OCCUPATIONAL CANCERS AND OFFER APPROPRIATE SUPPORT AND ADVICE

In the long-term, the construction industry should be aiming to acknowledge and address occupational cancers. Sites should educate and inform the workforce about the dangers of occupational cancers via regular toolbox talks, nurse visits, posters and leaflets. A clear message needs to be communicated to everyone and equipment should be provided and made available to ensure that workers are able to protect themselves. The attitude in the UK amongst many people that we 'don't get any sun' so we are not at

risk of skin cancers needs to change immediately. UV radiation is very damaging and outside workers are at particularly high risk. Breathing in dusts or harmful air also cannot be ignored as this can lead to long-term health problems later in life.

As well as the information above, it is also advised to use the resources provided in the 'External resources' section of this learning toolkit, which offers a plentiful amount of resources from other organisations and companies that cover the full spectrum of the topic.

Although the Scheme has been able to identify a number of campaigns and best practice, it is clear that health still does not have the same priority as safety concerns on site. It is apparent that there is a heavy focus on basic protection, but there is a lack of awareness and adequate provisions to tackle the risk of work-related ill-health. The importance of protection for the long-term health of the workforce needs to be carefully considered and reinforced amongst workers. If the industry is to better safeguard against occupational cancers, further awareness, guidance and support will certainly be of great benefit.

If the industry wants to improve its image and attract talented new recruits, it must ensure it is doing everything it can to provide a safe working environment for today and the future, considering both the short-term and long-term health effects of construction work.

The Scheme will continue to update this page as new initiatives and case studies are identified. If you would like to share your efforts in addressing occupational cancers, please contact the Scheme by emailing enquiries@ccsbestpractice.org.uk