



the heart of health and safety

# IOSH No Time to Lose campaign – spotlight on silica

**Dr Karen McDonnell**

IOSH President



the heart of  
health and safety



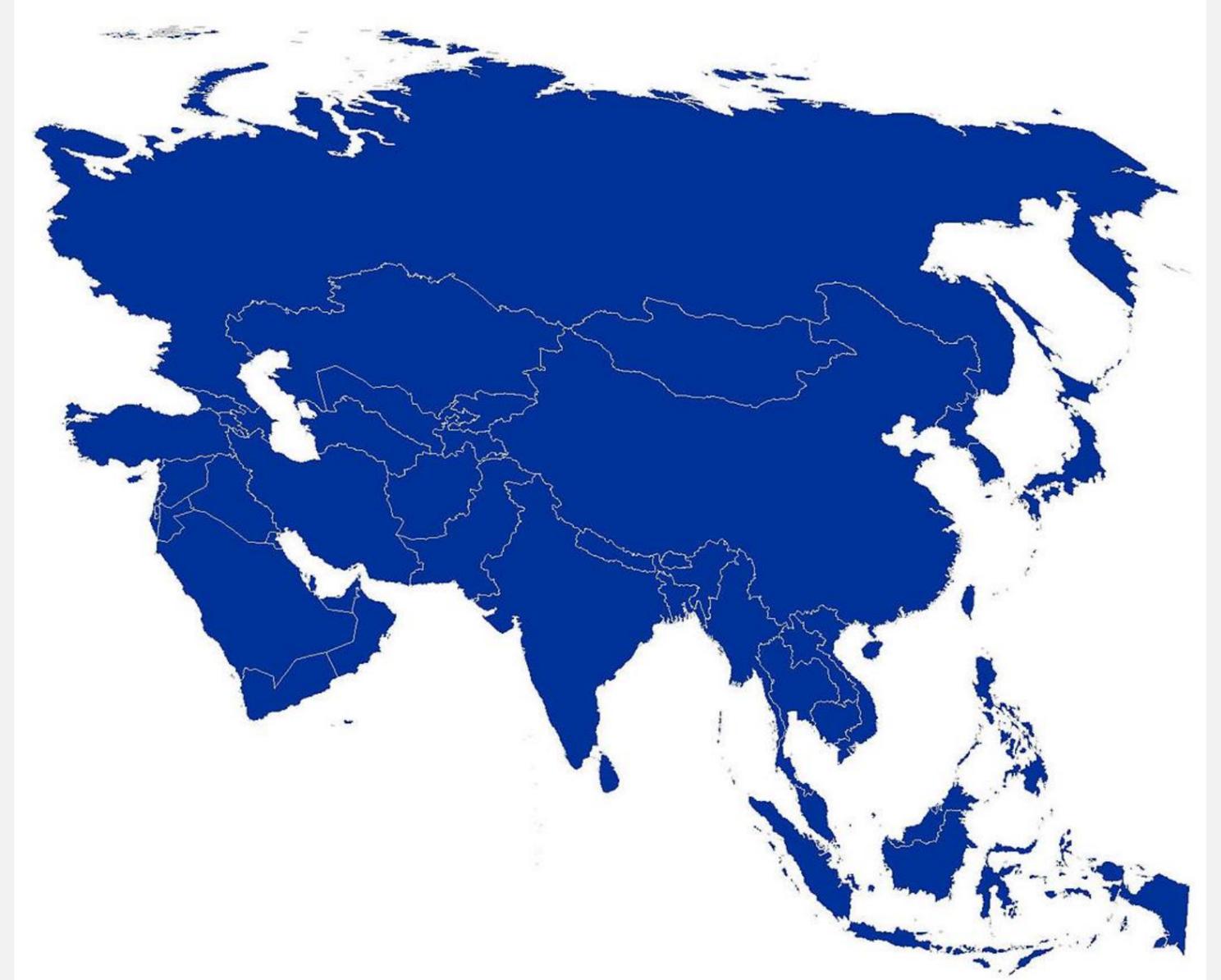
# Lung cancer deaths from silica dust exposure at work – Global estimate

**28,000 people die** every year from lung cancer caused by exposure to silica dust at work



# Lung cancer deaths from silica dust exposure at work – Asia estimate

**17,000 deaths** a year from lung cancer caused by silica dust exposure at work



# What is silica?

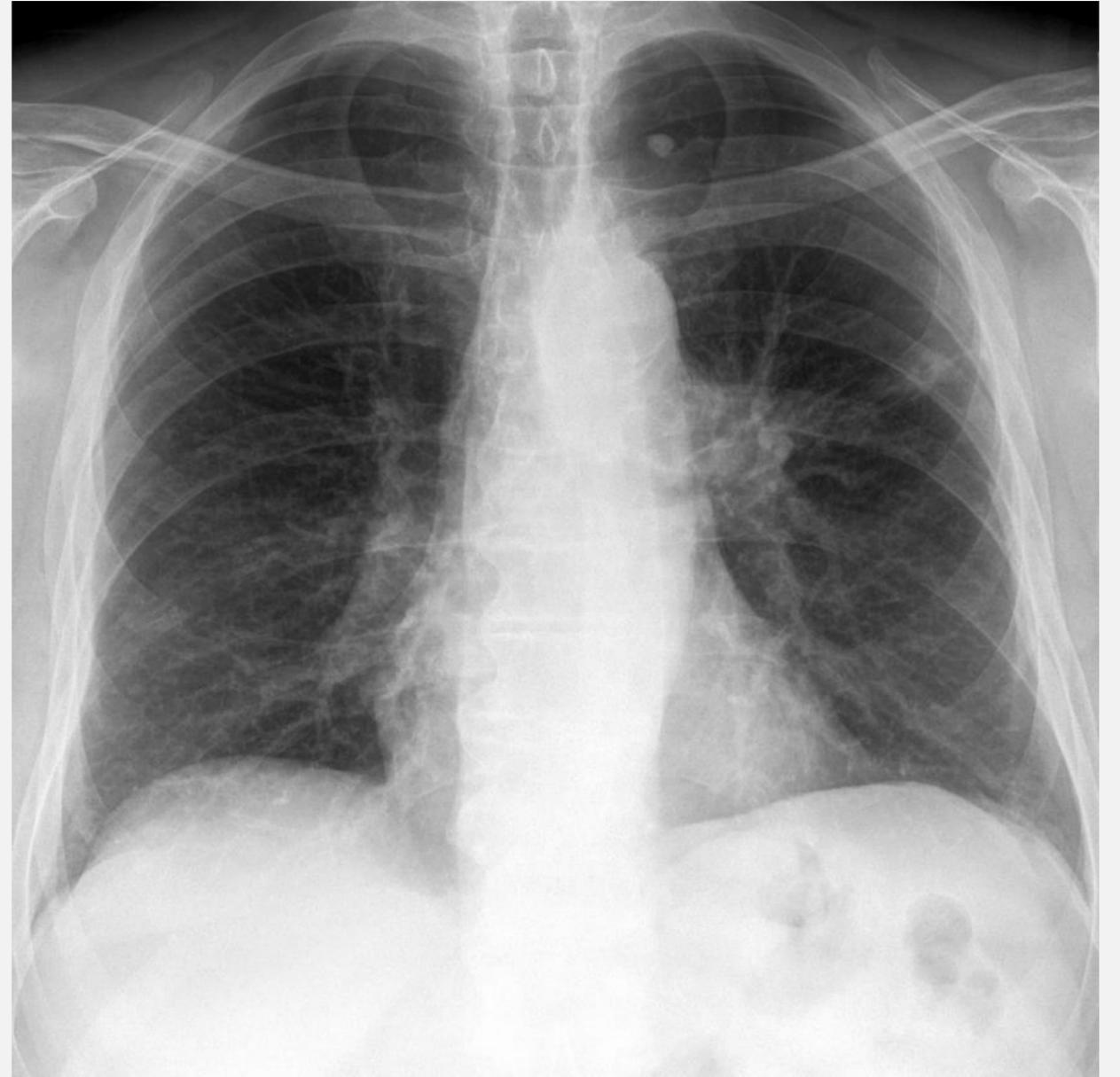
- Crystalline silica is a natural substance found in stone, rocks, sand and clay, as well as materials like bricks, tiles, concrete and some plastic composites
- Left alone, silica is safe. But if you work on materials that are made up of silica, you'll be releasing dangerous silica dust
- **Silica dust is the second most significant cause of occupational cancer after asbestos**

A close-up photograph of a construction worker using a circular saw to cut a concrete block. The worker is wearing a yellow safety vest and gloves. A large, dense cloud of white dust is rising from the point where the saw blade meets the concrete. The background shows a sandy or gravelly ground surface.

Why is silica dust dangerous?

# Why is silica dust dangerous?

Silica dust can cause **lung cancer, silicosis** and diseases like **emphysema** and **bronchitis**



# Silica dust at work



# People who could be at risk

- Bricklayers
- Ceramic and pottery workers
- Construction workers
- Digger drivers
- Engineers
- Grinding operatives
- Sandblasters
- Tunnel workers
- Welders

# IOSH 'Construction dust – an industry survey'

The survey highlights that a lack of priority is given to dust control by companies



# IOSH silica virtual focus group

The top five barriers to effective silica exposure control cited by focus group respondents are:

1. Lack of understanding or awareness of the significance of silica dust as a hazard
2. Resistance from employees to use controls
3. Ineffective implementation of control measures in practice, despite the existence of safe work systems and equipment
4. Not prioritised as a significant hazard by employers
5. Lack of training in using controls effectively

# Controlling exposure

- Design out the risks
- Use a different product
- Monitor or assess exposure if you can't design it out, and identify the jobs that need better controls
- Choose engineering solutions
- Train anyone who could be affected
- Wear personal respiratory protection



# Cross-industry approach to control dust



# New IOSH resources

**NO TIME TO LOSE**

## RESPIRABLE CRYSTALLINE SILICA: THE FACTS

Facts and figures • Find out more • Free resources

**IOSH**

WORKING TOGETHER TO BEAT OCCUPATIONAL CANCER

**NO TIME TO LOSE**

## DUST TO DUST?

Silica dust can kill you.

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

**iosh**

## DUST TO DUST

Silica dust can kill you.

Each year in Britain, 900 people get lung cancer after breathing in dust from materials such as stone, mortar and bricks.

You make silica dust when you do things like drill, saw, cut, sand or grind stone, concrete, slates, tiles, some plastic composites and many other materials. Tiny amounts of this fine dust can damage your lungs permanently.

Keep dust down by using one of these every time:

- local exhaust ventilation on a fixed piece of equipment
- on-tool extraction device on a hand-held power tool
- water suppression

Protect yourself by wearing a respirator to stop unhealthy dust getting into your lungs.

**NO TIME TO LOSE**

WORKING TOGETHER TO BEAT OCCUPATIONAL CANCER  
The Institution of Occupational Safety and Health is campaigning to stop thousands of untimely deaths to work-related cancer – find out more at [www.notmetolose.org.uk](http://www.notmetolose.org.uk)

**NO TIME TO LOSE**

## CUT THE DUST

Controlling silica dust exposure cuts the risk of getting lung cancer, silicosis and emphysema

# DUST DOWN

**GOOD PRACTICE CASE STUDY**

## IMPLEMENTING A DUST AWARENESS CAMPAIGN

**IOSH**

The Wates Group, a construction, development and property services company, devised and implemented a dust awareness campaign in 2014 called 'Sil the bronchus', which aimed to minimise the amount of dust produced on its sites. The organisation-wide campaign successfully saw an improvement in how dust was captured at source on sites.

Wates Group is a family-owned construction, development and property services company that has been operating for almost 120 years. The business employs around 2,700 employees directly and works with approximately 10,000 supply chain operators and partners. Wates has delivered projects for many clients, including retail giants such as John Lewis and Marks & Spencer, as well as many city councils, local authorities and public and private landlords. Works range from large-scale, new-build construction projects and refurbishing office and retail premises, to undertaking planned and reactive maintenance works in the housing sector.

As part of its vision to create a zero-harm environment on every site, the Wates Group wanted to reduce the amount of dust on its sites. Kelly Osborne, Occupational Health Manager and IOSH Graduate Member, said: "Within our industry, construction dust is not only a nuisance but a hidden killer, causing irreversible respiratory damage to a staggering number of those who are exposed to it over long periods of time. The nature of our work means the workforce will come into contact with many types of dust, ranging from low toxicity dusts, such as gypsum, to wood dusts, and to one of the most toxic dusts – silica. Silica, as we know, is present in a wide range of construction materials, such as bricks, tiles and concrete, and becomes airborne through cutting, drilling and grinding, and even sweeping dusty floors. This means that we as an industry need to work hard to prevent people from being exposed."

As a UK-wide contractor, Wates has a £1.2 billion turnover and prides itself on working in collaboration with customers, consultants and supply chain partners to ensure projects are delivered safely, on time and on budget.

Noise and dust control enclosure in action

**GOOD PRACTICE CASE STUDY**

## TACKLING SILICA DUST IN TUNNELLING

**IOSH**

To protect employees undertaking sprayed concrete lining (SCL) works, Crossrail put in place a number of strategies to minimise their exposure to silica dust. Modifications to the standard processes and material substitutions were considered from the outset to minimise the use of silica and the risk of dust exposure. A wet spray mixture, with low silica concrete, was used where possible. To reduce the volume of the mixture used, spraying was carefully controlled, and pre-cast concrete segments or in situ cast lining were specified for sections of secondary lining.

In addition, de-duster units, forced ventilation, spray misters and tools fitted with spray systems were used to dampen the dust when necessary. During spraying, exclusion zones (areas not accessible to people) were used to protect against falls of SCL, and restricted zones (areas that are limited to authorised access only) were used to minimise exposure to the dust. The general use of personal respiratory equipment against dust in an underground environment should be regarded as a last resort and the primary emphasis should be on prevention and dust suppression. Personal respiratory protection is still, however, often required.

All Crossrail employees working in the tunnels during excavation had to wear disposable dust masks and those working in the restricted zones during SCL works had to wear positive pressure, full-face masks with a higher assigned protection factor. Staff using the tight-fitting respiratory protection were face-fit tested, and all other respiratory protective equipment used was disposed of after each shift.

In addition, a programme of personal and environmental monitoring was implemented to measure levels of dust, individual exposures and the effectiveness of the controls. This started with initial surveys carried out by an occupational hygienist to assess the likely levels of exposure and the development of an ongoing monitoring procedure. Resources were generated on the monitoring data and recommendations for improvements implemented. Through these controls, the risk of silica dust exposure has significantly reduced, occupational health management has been optimised and the programme of works has progressed effectively.

Crossrail good practice in tunnelling

Do you have a good practice initiative to share? Get in touch with us at [campaigns@iosh.co.uk](mailto:campaigns@iosh.co.uk).

**Crossrail** **iosh** **WORKING TOGETHER TO BEAT OCCUPATIONAL CANCER** [www.notmetolose.org.uk](http://www.notmetolose.org.uk) **#silicasafe**

**iosh** **NO TIME TO LOSE**

## LET'S TALK DUST – ENGAGEMENT DISCUSSION

An engagement discussion allows the facilitator to achieve the learning objectives for the session by working closely with the participants so that they feel fully part of the process, come up with their own answers and 'own' their learning.

Running a discussion-based session rather than a traditional toolbox talk or training slot can help people really think about the issue, develop their understanding and share ideas and solutions. Even partial insights and wrong turns are part of the process. And because it's interactive and involves lots of input from the participants themselves, the results are more memorable.

**Engagement discussion resources**

- Grab cards – select from our range of 16 cards to match your learning objectives
- Facilitator notes – each grab card has corresponding information to help steer the discussion
- PowerPoint file – this isn't designed to be delivered as a traditional presentation. If you want to use PowerPoint to help focus your group on each discussion topic, or to run a 'paperless' session, just select the points you want to use in our PowerPoint file. Each slide includes the relevant facilitator notes in the presenter 'notes' area

**Running your engagement discussion**

- 1 Choose a selection of the grab cards to match the points you want to cover, or part of the range.
- 2 Work your way through the themes and points, encouraging everyone to get involved. Each grab card includes facilitator notes to help inform the discussion.
- 3 Supplement your session with an activity or film – have a look at our 'Ideas' box.
- 4 Use our '5-minute briefing', 'Dust down' pocket card or 'Dust to dust?' employee leaflet to consolidate learning. Hand out or show relevant IOSH resources during your session – the facilitator notes include a few suggestions.
- 5 Make sure that you agree 'takeaways' to capture what's been discussed at the close of your session. Test participants' understanding of what you've talked about at this stage too.

**TIP** During your session, you could swap the word 'silica' for the products or materials most relevant to your organisation – for example referring to 'brick dust', 'stone dust' or 'ballast dust'

**TIP** Familiarise yourself with all the facilitator notes so that you're able to cover any extra points or questions that come up during a grab card discussion.

Follow the campaign at [twitter.com/NTTL](https://twitter.com/NTTL) [www.notmetolose.org.uk](http://www.notmetolose.org.uk)

**NO TIME TO LOSE**

## SILICA DUST MYTHBUSTER QUIZ: FAKE OR FOR REAL?

**IOSH**

Follow the campaign at [twitter.com/NTTL](https://twitter.com/NTTL) [www.notmetolose.org.uk](http://www.notmetolose.org.uk) **START**

# Good practice: Network Rail

Transport giant Network Rail put in place controls to reduce exposure to silica dust in ballast right from the quarry to the track



**NetworkRail**

**Ballast Dust.**  
**Are you exposed?**

*Move away from the area if you are not involved in the task.*

*Do you have the correct protective equipment for the task?*

**everyone home safe every day**

Produced in conjunction with the Ballast Dust Working Group (BDWG).

The poster features a background image of a quarry with a large pile of ballast and a misty atmosphere. In the bottom left corner, there are two small images of workers wearing protective gear: one in a full-body orange suit and another in a white hard hat and orange safety vest. The Network Rail logo is in the top right corner, and the slogan 'everyone home safe every day' is in the bottom right corner.

# Good practice: Wates Group

The Wates Group implemented a dust awareness campaign called '**Bin the broom**', which aimed to minimise the amount of dust produced on its sites



Wates

## DUST CAN KILL

Brooms circulate dust in the air. Inhaling harmful airborne dust can cause serious, even fatal, lung disease.

Think smart. Eliminate dust. Make your site a safer place to work.

**Bin the BROOM** There are better ways to control dust. Ask your Wates SHE advisor or site supervisor.

Our values are in our DNA... Above all, it's about people

# Good practice: Berkeley Homes

Berkeley Homes provides employees with industrial hoovers to capture the dust at source



# Good practice: Willmott Dixon

Willmott Dixon has been working with both staff and supply chain partners on educating managers, supervisors and employees on the importance of wearing the correct levels of protective equipment



# Good practice: Dave Cottle Civil Engineering Ltd

Dave Cottle Civil Engineering Ltd attached copies of the resources from IOSH's silica pack to the weekly payslips of the workforce



# No Time to Lose: campaign on occupational cancer



# No Time to Lose: campaign on occupational cancer

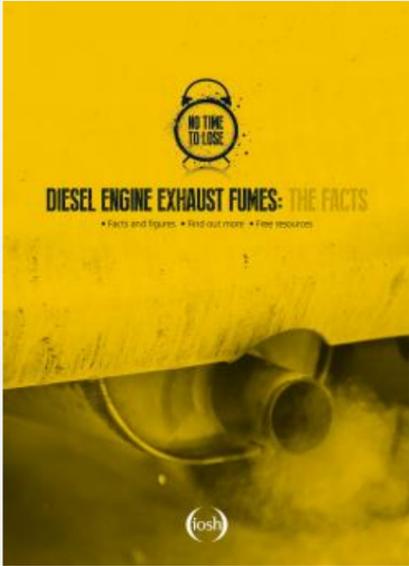
- **raise awareness** of a significant health issue facing employees
- suggest some **solutions** on how to tackle the problem
- offer **free, practical, original materials** to businesses to help them deliver effective prevention programmes

# The campaign

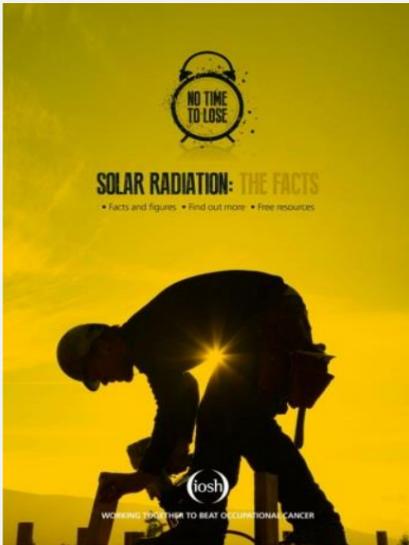
- 50+ work-related carcinogens – focusing on a 'top five':
  - Diesel engine exhaust emissions
  - Solar radiation
  - Silica
  - Shiftwork
  - Asbestos

# Free practical resources

## Diesel engine exhaust emissions pack



## Solar radiation pack



# How can businesses get involved?

- **Pledge to take action** on carcinogenic exposures using our six-point action plan
- Receive a certificate
- Get recognition as a responsible business showing leadership on this issue
- Join these forward-thinking companies...



# How can organisations get involved?

- **Endorse the campaign** with a statement and your logo
- Receive a supporter pack
- Spread the word within your company and supply chain
- Join more than 130 organisations and companies...



# Campaign highlights

**WORK-RELATED CARCINOGENS**  
HAVE BEEN HIGHLIGHTED  
TO AT LEAST  
**400,000**  
EMPLOYEES



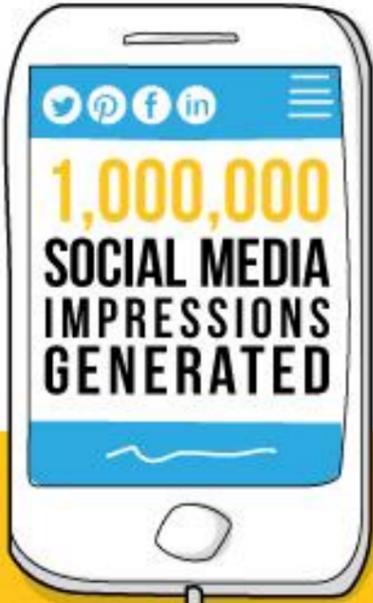
**55,000 VISITORS**  
HAVE EXPLORED  
[WWW.NOTIMETOLOSE.ORG.UK](http://WWW.NOTIMETOLOSE.ORG.UK)



**130 ORGANISATIONS**  
HAVE FORMALLY SUPPORTED  
**THE CAMPAIGN**  
AND HAVE AGREED TO RAISE AWARENESS OF  
**OCCUPATIONAL CANCER**



**MEDIA COVERAGE**  
HAS REACHED AN  
AUDIENCE OF  
**OVER 56 MILLION**



**40,000 RESOURCES**  
DOWNLOADED

**74 BUSINESSES** HAVE PLEDGED TO  
**MANAGE HARMFUL EXPOSURES AT WORK**



THE UK, SCOTLAND AND NORTHERN IRELAND  
GOVERNMENTS ARE BACKING THE  
**NO TIME TO LOSE CAMPAIGN**

The campaign  
has been  
presented at  
75 events

**16,000**  
**FILM**  
**VIEWS**



**10,000**  
CAMPAIGN PACKS  
DISTRIBUTED





Campaign highlights – presented in countries around the world

# Pledged businesses raising awareness

## DELIVERING A NEW SUN SAFETY STRATEGY

GOOD PRACTICE CASE STUDY

NO TIME TO LOSE

Delivering letters and parcels to more than 29 million addresses across the UK, six days a week, means that a significant number of Royal Mail workers spend the majority of their working day outside, come rain or shine. It follows that the Group naturally covers weather conditions as part of its overall safety and health risk management programme.

Solar radiation risks feature as part of the Royal Mail Group's severe weather guidance – it covers floods and icy and snowy conditions as well as sun exposure and heatwaves. The guidance and online risk assessment tool allow local managers to make judgment calls about the conditions they face, based on personal experiences and data from organisations including the Met Office, Environment Agency and Highways Agency. Accounts from employees on different shifts and in different locations are also considered. The idea is to give the responsibility to local managers to assess the risks facing their teams and to take the right action, from briefing sessions with their teams, right through to suspending a collection or delivery. The risk assessment tool used across the business is more focused on extreme conditions, and because Royal Mail recognises that solar radiation exposure at even moderate levels can be a risk, it supplements the severe weather guidance with additional specific advice on sun safety on its intranet and business screens.

Royal Mail Group offers wide-brimmed hats, long-sleeved tops and trousers as part of its uniform – all approved by the British Association of Dermatologists for ultraviolet radiation protection. Staff working outside are encouraged to use them during the higher UV months. Covering up with the right clothing is seen as the best protection tactic for most outdoor workers in the business. The Group doesn't provide sunscreen – research has shown that offering sun cream can lead to more sun risk-taking activity (for example, relying on sunscreen

exclusively for protection rather than covering up, or forgetting to reapply sunscreen frequently enough). Research has also suggested that those most exposed are the least likely to follow guidance on applying sun cream. In addition to providing the right clothing, the focus at Royal Mail is on awareness-raising and education to help change behaviour.

**NEW SURVEY**  
This year has seen the Royal Mail approach to sun safety refined and developed further. Shaun Davis, Group Director of Safety, Health, Wellbeing and Sustainability, says: "When I joined Royal Mail three years ago it quickly became apparent that there was an opportunity to strengthen our wellbeing and sustainability strategy in the area of outdoor worker protection. Because of the predominantly outdoor nature of our work and the absolute requirement to keep our people safe and healthy, sun safety was an obvious area for me to explore. I've done this via a formal research study, allowing me to not only develop our sun safety strategy, but also share our organisational findings through an academic journal" so that others can learn from and build on the work we've done here."



Royal Mail Group's sun safety strategy now puts even more emphasis on raising awareness of the risks of working in the sun without protection, and encourages thousands of workers to cover up during periods of powerful UV radiation

## 試想下吸一大口這些柴油廢氣？

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記住，柴油廢氣可以致命

- 當有柴油引擎正在運行時，請使用局部抽氣通風裝置
- 為久沒使用的引擎熱身時記住要在通風良好的地方進行
- 久沒使用的引擎會排放較多廢氣
- 如果通風設備有損壞或故障，報告情況

吸入劣質柴油廢氣可能會引致肺癌或動脈硬化，每年有數以千計的人因工作時吸入柴油廢氣而患上癌症，最後甚至死亡。不要讓柴油廢氣奪去你的生命。

齊心協力預防職業性癌症

英國職業安全健康學會 正積極防止工人因職業性癌症而過早死亡

香港鐵路有限公司及其他有遠見的企业承諾致力防止工人接觸有害物質

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



## 你的呼吸防護口罩合身嗎？

iosh

如果你的呼吸防護口罩不合身，它便不能發揮效用。

吸入劣質柴油廢氣可能會引致肺癌或動脈硬化，每年有數以千計的人因工作時吸入柴油廢氣而患上癌症，最後甚至死亡。不要讓柴油廢氣奪去你的生命。

如果你需要佩戴呼吸防護口罩以減少吸入柴油廢氣，必須確保合身。如有疑問，請向你的僱主查詢。



齊心協力預防職業性癌症

英國職業安全健康學會 正積極防止工人因職業性癌症而過早死亡

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

## GET TO KNOW YOUR SKIN

Checking for signs of skin cancer is as easy as A, B, C (and D). Be aware of how your skin normally looks – that way, you'll notice changes that could be signs of skin cancer.

- Found a new mole?
  - Noticed any changes to the size, shape or colour of an existing mole or patch of skin?
  - Noticed a new growth or sore that doesn't heal?
  - Found a spot, mole or sore that hurts or itches?
  - Seen a mole or growth that bleeds, crusts or itches?
- Remember to check your neck and back too if they've been exposed – in men, this is where melanoma is most likely to occur. Use a mirror or get someone else to help you check.



I IVORY	II BEIGE	III LIGHT BROWN	IV MEDIUM BROWN	V DARK BROWN	VI VERY DARK BROWN
Characteristics: Fair skin, light or red hair, prone to freckles. Burns very easily and rarely tans.	Characteristics: Fair skin, likely to have light hair. Hair is brown or grey. Burns, but dark hair has oil that acts as a shield. Usually burns but rarely gets tanned.	Characteristics: Light skin with dark hair. Hair is brown or grey. Burns with long exposure to the sun but generally tans easily.	Characteristics: Brown skin and dark hair. Burns with long exposure to the sun but tans easily.	Characteristics: Usually brown skin, brown eyes and dark hair. Burns only with extreme exposure to the sun. Skin may rarely darken further.	Characteristics: Dark skin with dark brown eyes and dark hair. Burns only with extreme exposure to the sun. Skin may rarely darken further.
Sun protection: At all times. All or almost all of the body's skin cancer needs to be protected, particularly with clothing.	Sun protection: At all times. All or almost all of the body's skin cancer needs to be protected, particularly with clothing.	Sun protection: At all times. All or almost all of the body's skin cancer needs to be protected, particularly with clothing.	Sun protection: At all times. All or almost all of the body's skin cancer needs to be protected, particularly with clothing.	Sun protection: At all times. All or almost all of the body's skin cancer needs to be protected, particularly with clothing.	Sun protection: At all times. All or almost all of the body's skin cancer needs to be protected, particularly with clothing.

## 滿口廢氣？柴油引擎排出的廢氣可以致命



# CHECK IT OUT

iosh

In association with

# Supporters raising awareness

## OCCUPATIONAL CANCER

**1. HEALTH HAZARD**   **2. ASBESTOS**   **3. RISK OF SUNBURN**   **4. CHEMICALS**   **5. VEHICLE EXHAUST**   **6. NOISE THE AIR**   **7. IONIZING RADIATION**   **8. BENZENE**   **9. BENZENE**

**INTRODUCTION**  
Occupational cancer is a malignant disease which is noted in exposure to a substance or causative agent at work: essentially a disease resulting from the course of someone's employment.

**WHAT CAUSES OCCUPATIONAL CANCER?**  
Occupational cancers occur through exposure to discrete substances or causative agents: substances can be natural or man-made and can be gases, liquids or solids. Examples in each physical state include:  
 • Radioactive gases, such as radon or vapours such as diesel vehicle exhaust gases.  
 • Chemicals, such as benzene.  
 • Mineral oils, especially used engine oil.  
 • Crystallites in herbicides.  
 • Tobacco smoke.  
 • Solids such as asbestos or metal particulates in welding fume.  
 Agents include naturally occurring exposure such as UV radiation in sunlight, microwave and ionizing radiation, shift work and certain lifestyle factors. There is also a synergistic effect in terms of lifestyle choices and occupational factors between substances and agents such as smoking and exposure to chemicals and asbestos. Some impacts of carcinogens can affect DNA and cause mutagenic changes affecting chromosomes which come to light in future generations.  
 No matter what the numbers are, these are all deaths that can be prevented or avoided.

**WHAT TYPES OF CANCER OCCUR?**  
The four most prevalent types of cancer fatalities occur, in the number recorded in the UK, through lung cancer, mesothelioma, breast cancer and bladder cancer.

**EXTRA SPECIAL CONTROLS APPLY TO CHEMICALS, UV LIGHT, DIESEL FUME and MAINTENANCE WORK**  
Read the chemical MSDS and be aware of relevant risk and safety phrases such as: R45 - May cause cancer and R49 - May cause cancer by inhalation. Wear supplementary PPE and don't eat or drink in work areas where chemicals may be present.

**ROUTES OF ENTRY TO THE BODY**  
All the routes of entry to the body are viable for carcinogenic agents and substances.  
 • Inhalation.  
 • Ingestion.  
 • Absorption.  
 • Injection.

**GENERAL CONTROL PRINCIPLES**  
After elimination of known carcinogens in the workplace much can be done to introduce engineering controls, process safety and procedural or managerial controls and PPE to mitigate the risk and reduce the exposure dose. Dose reduction is in terms of reducing concentration or intensity of the exposure, and the time over which exposure occurs or the frequency (how often?) of occurrence.  
 General engineering and process safety controls applicable to all agents and substances include containment, separation and segregation, general dilution and local exhaust ventilation and minimisation of quantities. Managerial and procedural controls include health surveillance, avoiding ladders at work and infection risks. Other managerial and procedural control measures include:  
 • Be aware of factors specifically in your workplace.  
 • Publicise and raise awareness of hazards and controls.  
 • Follow the risk assessment for the process and the agreed hierarchy of controls: eliminate, substitute, engineering controls, managerial, process and procedural controls and good quality, appropriate and well-fitting PPE.  
 • Avoid synergistic effects such as smoking and a complementary risk factor and any cumulative effects or factors which may exacerbate the dose.

**WHAT TO DO NEXT?**  
Work with your line manager and supervisor to understand the risk assessments undertaken on your potential exposure to cancer at work. It is a rare occurrence, but nevertheless should be considered fully. If not simply to eliminate it from the list of workplace Zero Harm Fatal Risks. Participate in health screening and health surveillance if this is necessary and also 'Tool Box Talks'. If you are in any doubt about your own health see an occupational health nurse or your Doctor. For further information regarding strategies to eliminate occupational cancer from your workplace contact your occupational health adviser or Director of Safety. Look at these websites for additional information:  
[www.hse.gov.uk](http://www.hse.gov.uk)  
[www.norimetolose.org.uk](http://www.norimetolose.org.uk)  
[www.iosh.co.uk](http://www.iosh.co.uk)  
[www.quiltwithhelp.co.uk](http://www.quiltwithhelp.co.uk)  
 And also Divisional Standards 016 and 036.

**FOR FURTHER ADVICE OR OCCUPATIONAL CANCER CONTACT**

**ZEROHARM**   **Balfour Beatty**

ΕΠΙΧΕΙΡΗΣΗ ΑΣΦΑΛΕΙΑΣ ΚΑΙ ΥΓΕΙΑΣ ΚΥΠΡΟΥ  
**ΑΣΦΑΛΕΙΑ & ΥΓΕΙΑ**  
 ΤΕΥΧΟΣ 37  
 ΜΑΡΤΙΟΣ  
 2015  
 ΣΥΝΔΕΣΜΟΣ ΑΣΦΑΛΕΙΑΣ ΚΑΙ ΥΓΕΙΑΣ ΚΥΠΡΟΥ  
[www.cysha.org.cy](http://www.cysha.org.cy)

**● Διαχείριση Αμιάντου**  
**● Domino Accidents in Process Industries**  
**● Υγιεινό και Βιώσιμο Περιβάλλον**  
**● Ασφάλεια & Υγεία στο Εκπαιδευτικό Σύστημα της Κύπρου**

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**ENSHPO NEWS**  
 THE NEWSLETTER OF THE EUROPEAN NETWORK OF SAFETY AND HEALTH PROFESSIONAL ORGANISATIONS [ ISSUE NO 4, SUMMER 2015 ]

NEWS

### Skin cancer warning from IOSH

The Institution of Occupational Safety and Health (IOSH), which with 44,000 members is the world's largest professional organisation for health and safety professionals, has launched a campaign to raise awareness of cancer as an occupational health issue.

The Institution has issued a warning that around 60 people die in Britain each year as a result of skin cancer caused by working in the sun.

The finding emerges from research undertaken by Imperial College London for the IOSH 'No Time to Lose' campaign, which is aimed at raising awareness of cancer as an occupational health issue.

The research found that 2% of all cases of cutaneous malignant melanoma in Britain can be attributed to occupational exposure to solar radiation. In a typical year 46 people die because of such exposure and 239 new cases of malignant melanoma are recorded.

The researchers found that the construction industry accounts for a large number of these cases: 44% of deaths and 42% of new case registrations. Other sectors of concern are agriculture, public administration, defence, and land transport. Men are more likely than women to be affected.

Earlier research carried out for the British Health & Safety Executive found that in a typical year about 12 people die from non-melanoma skin cancer as a result of exposure to solar radiation. Because non-melanoma cancer cases are under-reported, the IOSH report suggests the figure of 122 deaths a year is conservative.

Malignant melanoma is a skin cancer that begins in cells called melanocytes. These can grow together to form benign cells, but when there is a change in size, shape or colour, a mole can be a sign of melanoma. There are two common types of non-melanoma skin cancers: basal cell carcinoma and squamous cell carcinoma. (see: [www.norimetolose.org.uk](http://www.norimetolose.org.uk))

# Good practice case studies

## DELIVERING A NEW SUN SAFETY STRATEGY

GOOD PRACTICE CASE STUDY

NO TIME TO LOSE

Delivering letters and parcels to more than 29 million addresses across the UK, six days a week, means that a significant number of Royal Mail workers spend the majority of their working day outside, come rain or shine. It follows that the Group naturally covers weather conditions as part of its overall safety and health risk management programme.

Solar radiation risks feature as part of the Royal Mail Group's severe weather guidance – it covers floods and icy and snowy conditions as well as sun exposure and heatwaves. The guidance and online risk assessment tool allow local managers to make judgment calls about the conditions they face, based on personal experiences and data from organisations including the Met Office, Environment Agency and Highways Agency. Accounts from employees on different shifts and in different locations are also considered. The idea is to give the responsibility to local managers to assess the risks facing their teams and to take the right action, from briefing sessions with their team, right through to suspending a collection or delivery. The risk assessment tool used across the business is more focused on extreme conditions, and because Royal Mail recognises that solar radiation exposure at even moderate levels can be a risk, it supplements the severe weather guidance with additional specific advice on sun safety on its intranet and business screens.

Royal Mail Group offers wide-brimmed hats, long-sleeved tops and trousers as part of its uniform – all approved by the British Association of Dermatologists for ultraviolet radiation protection. Staff working outside are encouraged to use them during the higher UV months. Covering up with the right clothing is seen as the best protection tactic for most outdoor workers in the business. The Group doesn't provide sunscreen – research has shown that offering sun cream can lead to more sun risk-taking activity (for example, relying on sunscreen

exclusively for protection rather than covering up, or forgetting to reapply sunscreen frequently enough). Research has also suggested that those most exposed are the least likely to follow guidance on applying sun cream. In addition to providing the right clothing, the focus at Royal Mail is on awareness-raising and education to help change behaviours.

**NEW SURVEY**

This year has seen the Royal Mail approach to sun safety refined and developed further. Shaun Davis, Group Director of Safety, Health, Wellbeing and Sustainability, says: "When I joined Royal Mail three years ago it quickly became apparent that there was an opportunity to strengthen our wellbeing and sustainability strategy in the area of outdoor worker protection. Because of the predominantly outdoor nature of our work and the absolute requirement to keep our people safe and healthy, sun safety was an obvious area for me to explore. I've done this via a formal research study, allowing me to not only develop our sun safety strategy, but also share our organisational findings through an academic journal" so that others can learn from and build on the work we've done here."



Royal Mail Group's sun safety strategy now puts even more emphasis on raising awareness of the risks of working in the sun without protection, and encourages thousands of workers to cover up during periods of powerful UV radiation

## BUILDING A BETTER OH MANAGEMENT STRATEGY

GOOD PRACTICE CASE STUDY

NO TIME TO LOSE

Multinational construction and engineering company Laing O'Rourke has recently taken a new approach to its occupational health management strategy, capitalising on its high number of directly employed workers to create a programme to meet the challenges posed by a multi-site, multi-discipline business.

Laing O'Rourke, operating in Europe, Canada, the Middle East, South East Asia and Australasia, offers the full range of engineering, construction and specialist services capabilities. It works with some of the world's most prestigious public and private organisations. Recent high profile construction projects include London's Francis Crick Institute and the Leadenhall Building, and Fort Botany Terminal 3 in Sydney. The business stands out in the construction sector, with a 6,500-strong workforce employed directly in its Europe hub alone, over 3,500 staff and another 7,000 operatives across its supply chain. Having such a large direct workforce means that the business can establish a much stronger positive culture than many other companies relying on higher numbers of sub-contracted workers. Building expectations – and standards – is simpler and quicker, and also delivers more direct results.

"Having such a big workforce allows us to retain good people for longer. It also allows us to communicate key health and safety messages very visibly – and constantly reinforce them," explains Silvana Martin, Health, Safety and Environment Strategy and Best Practice Manager at Laing O'Rourke.

The business has around 120 workplaces to manage at any one time, a mixture of construction and infrastructure workplaces, manufacturing sites and plant depots. Operations span building, transportation, power, water and utilities, and include a number of safety-critical roles.

Laing O'Rourke started a behavioural engagement programme around safety and health risks 10 years ago. Getting traction on safety risks has proved successful, largely down to achieving



Laing O'Rourke workers at 122 Leadenhall, London. The building, completed last year, is 225m high and has been dubbed the "Cheesegrater"

## IMPLEMENTING A DUST AWARENESS CAMPAIGN

GOOD PRACTICE CASE STUDY

NO TIME TO LOSE

The Wates Group, a construction, development and property services company, devised and implemented a dust awareness campaign in 2014 called 'Bin the broom', which aimed to minimise the amount of dust produced on its sites. The organisation-wide campaign successfully saw an improvement in how dust was captured at source on sites.

Wates Group is a family-owned construction, development and property services company that has been operating for almost 120 years. The business employs around 3,700 employees directly and works with approximately 10,000 supply chain operatives and partners. Wates has delivered projects for many clients, including retail giants such as John Lewis and Lloyds Banking, as well as many city councils, local authorities and public and private landlords. Works range from large-scale, new-build construction projects and refurbishing office and retail premises, to undertaking planned and reactive maintenance works in the housing sector.

As a UK-wide contractor, Wates has a £1.2 billion turnover and prides itself on working in collaboration with customers, consultants and supply chain partners to ensure projects are delivered safely, on time and on budget.

As part of its vision to create a zero-harm environment on every site, the Wates Group wanted to reduce the amount of dust on its sites. Kelly Osborne, Occupational Health Manager and IOSH Graduate Member, said: "Within our industry, construction dust is not only a nuisance but a hidden killer, causing irreversible respiratory damage to a staggering number of those who are exposed to it over long periods of time. The nature of our work means the workforce will come into contact with many types of dust, ranging from low toxicity dusts, such as gypsum, to wood dusts, and to one of the most toxic dusts – silica. Silica, as we know, is present in a wide range of construction materials, such as bricks, tiles and concrete, and becomes airborne through cutting, drilling and grinding, and even sweeping dusty floors. This means that we as an industry need to work hard to prevent people from being exposed."



Noise and dust control enclosure in action

## TAKING ACTION TO CONTROL SILICA DUST EXPOSURE

GOOD PRACTICE CASE STUDY

NO TIME TO LOSE

Network Rail implemented a number of initiatives to improve the control of silica dust exposure caused by ballast. The control measures to manage exposure were introduced after engaging with senior management, employees, trade unions and key industry stakeholders.

Network Rail manages, maintains and develops Britain's rail tracks, signalling, bridges, tunnels, level crossings, and many key railway stations. With nearly 1.7 billion passenger journeys made a year, the company aims to deliver a railway that is safer, more reliable and more efficient than ever before, and that will help to build a thriving, sustainable future for the country.

The company believes that outstanding business performance and outstanding safety performance go hand in hand. Network Rail's vision is for a culture in which everyone working on the railway makes safety their number one priority.

With depots and work sites across Britain, the company employs around 35,000 people directly, and manages over 100,000 industry colleagues across the supply chain.

Network Rail aimed to improve the control of exposure to silica dust in railway ballast, as employees who work in the quarries and on the track, as well as those who handle and transport ballast, are at risk of exposure.

Neil Roberts, Programme Manager within the National Supply Chain at Network Rail said: "We procure around 2 million tonnes of new ballast each year. One of the things we noticed was that we don't just have a ballast dust issue at the quarry and during its transit to the site. We saw evidence at engineering work sites where plant operators were dropping the ballast from significant heights – 15 to 20 feet – when unloading rail wagons, thus significantly increasing the potential for dust to be released into that work environment. Simple instructions were introduced to remedy this – plant operators were briefed to lower the buckets to the ground before tipping out the ballast in order to reduce the amount of dust being released into the immediate area."



Water dousing at a local distribution centre

# Campaign website – [www.notimetolose.org.uk](http://www.notimetolose.org.uk)

**NO TIME TO LOSE** WORKING TOGETHER TO BEAT OCCUPATIONAL CANCER **iosh**

About News and events Free resources Get involved Ask the experts

## A wake up call for work cancer

Cancer caused by work claims 666,000 lives a year worldwide

IOSH's No Time to Lose campaign aims to get the causes of occupational cancer better understood and **help businesses take action**.

[Find out more](#)

## Raising awareness of silica dust exposure

#silicasafe

Each year in Britain, nearly 800 people die from lung cancer caused by breathing in silica dust at work. Worldwide, millions of employees are exposed to the carcinogen.

[Read how we aim to tackle this issue](#)

### IS YOUR BUSINESS AFFECTED?

Get free resources to help tackle the problem

### PLEDGE YOUR SUPPORT

Join these forward-thinking businesses

Thames Water JAGUAR LAND-ROVER MTR Royal Mail LAMINEX

### NEWS AND EVENTS

Keep up to date with the campaign activity

### REAL LIFE STORIES

Hear from those that have been affected

### READ OUR CASE STUDIES

See the initiatives organisations have developed

### ASK THE EXPERTS

Get advice on work-related cancers

Follow the campaign!

Thank you

[campaigns@iosh.co.uk](mailto:campaigns@iosh.co.uk)