



Safety Hour Discussion Pack

18 July 2017

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National NR Photo Competition - Final Results

June 2017

And the winner is

More than 5,000 votes cast in this year's Business Briefings photo competition



The winner of Network Rail's Photographer of the Year 2017: Daniel Tetstall, senior technical officer

This year's Business Briefings, hosted by route managing directors and featuring guest speakers including chief executive Mark Carne, concluded this week.

The events gave colleagues an opportunity to hear about the strategy and direction of Network Rail.

Colleagues were also given the chance to become Network Rail's Photographer of the Year 2017 with the theme Better Every Day.

The winner of Network Rail's Photographer of the Year 2017 was Daniel Tetstall, senior technical officer at Perth Delivery Unit.

1

2

An image worth a thousand words

Daniel said: "I was thrilled to hear that I had won the photo competition, especially after hearing that more than 5,000 votes were cast.

"All the pictures that made it to the final round were great and really showed the many ways that we can deliver Better Every Day."

Daniel's picture depicts effective clearance of vegetation and the significant safety benefits for the railway and the public.

He added: "The upgraded fencing prevents the public from straying onto a busy, fast section of track and also users of the foot crossing have a greater visibility in either direction prior to crossing. Further to this speed boards, whistle boards and signal sighting have vastly improved for drivers."

Finalists



Second place went to Sean Penny, technical officer, Infrastructure Maintenance. About the photo he submitted he said: "An emergency defect occurred within switches and crossings at Biggleswade.

"The repairs were completed with limited planning and within time, meaning that trains were able to continue running as normal and on time the following morning."

3

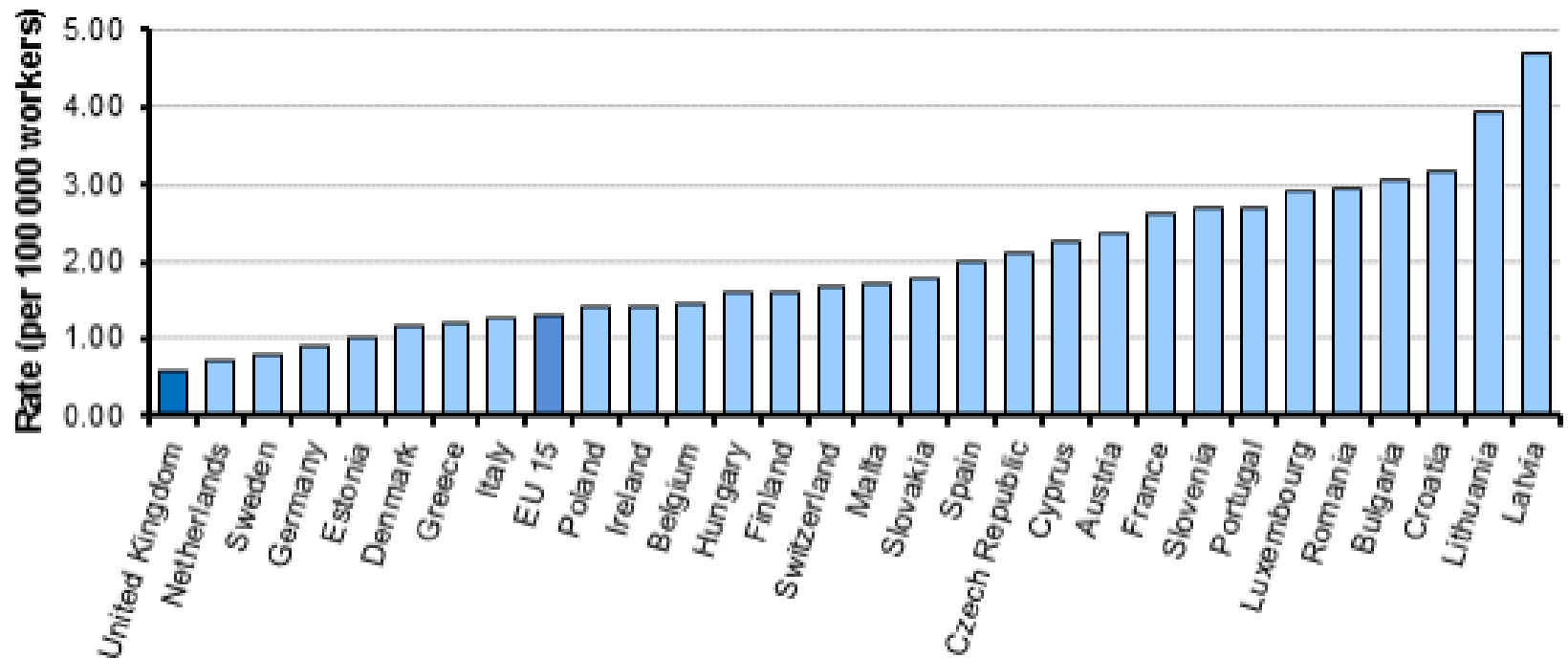
"The repairs were completed with limited planning and within time, meaning that trains were able to continue running as normal and on time the following morning."



Key industry stats (UK has the lowest number of fatalities in Europe)

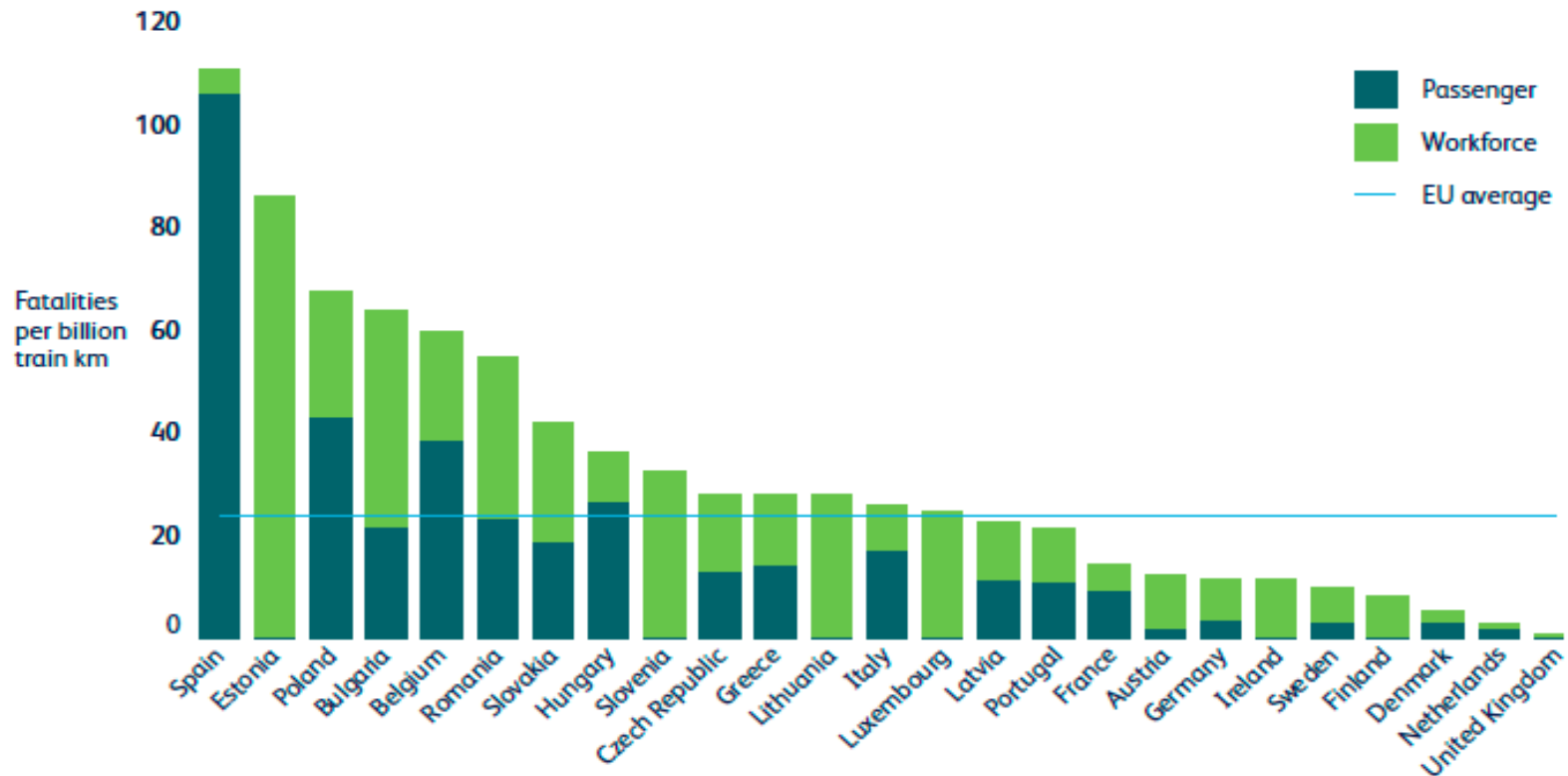
Figure 3: Standardised incidence rates (per 100,000 workers) of fatal accidents at work for 2012 (Eurostat)

Note: Figures exclude road traffic accidents and accidents on board transport in the course of work.



RSSB strategy – EU stats

Comparison with other European railways



HSE Strategy update-2017

Work-related stress, musculoskeletal disorders and occupational lung disease are priorities in HSE's Health and Work strategy.

Work-related stress

The second most commonly reported cause of occupational ill health in Great Britain, accounting for 37% of all work-related ill-health cases, and 45% of all working days lost due to ill health.

Musculoskeletal disorders

The most common reported cause of occupational ill health in Great Britain, accounting for 41% of all work-related ill-health cases and 34% of all working days lost due to ill health.

Occupational lung disease

It continues to lead to an estimated 12 000 deaths each year.

Work in partnership with employers, employees and the wider health and safety community to reduce the incidence rate and number of new cases for these priority areas.

Health update



The ORR Occupational Health Programme 2014-19: making it happen

file:///C:/_1%20-%20I%20O%20A%20N%20N%20I%20S/PERSONAL/HSE%20Regulations%20and%20guidance/Health%20Strategy-ORR-2019.pdf

Healthy job design and culture

Better management of health and well-being brings increased employee engagement and productivity, as well as better safety performance. The McNulty report recognised the need to 'increase the focus on occupational health, which will reduce levels of sickness and absenteeism as well as encouraging a healthier workforce'. Independent RSSB research suggests a total cost to the industry associated with the direct and indirect cost of absenteeism to be about £320m pa. and an additional £480m pa cost for presenteeism. Network Rail has recently estimated direct and indirect cost associated with health and well-being at around £180m.

Canadian study finds link between work stress and five cancers

8 February 2017

Prolonged exposure to work-related stress has been linked to an increased likelihood of lung, colon, rectal, and stomach cancer and non-Hodgkin lymphoma (NHL) in men, research carried out in Montreal, Canada, has found.



📷 The Canadian study found that firefighting was perceived to be the most stressful job | Image credit: ©iStock/asiseeit

The associations were observed in men who had been exposed to occupational stress for more than 15 years. The link was not found in participants who had been in stressful jobs for less than 15 years.

Jobs that were perceived to be the most stressful were firefighters, followed by industrial and aerospace engineers, mechanic foremen, and vehicle and railway equipment repair workers.



Mates in Mind - Latest News - July 2017

Mates in Mind, the UK construction industry mental health charity, recently completed the pilot of the innovative '**Start the Conversation**' awareness sessions for construction workers.

The sessions, developed by the British Safety Council, one of the founding partners of Mates in Mind, helps break down the stigma associated with mental health, and get people talking.

Solar Radiation

<https://www.iosh.co.uk/News/New%20research%20reveals%20scale%20of%20skin%20cancer%20among%20outdoor%20workers%20and%20lack%20of%20awareness%20about%20risks>



The number of people in the UK diagnosed with or dying from the deadliest form of skin cancer because of sun exposure at work is revealed

(23 April 2017)

Research commissioned by the Institution of Occupational Safety and Health (IOSH) suggests that malignant melanoma kills nearly **50 people** each year in the UK because of exposure to solar radiation at work, with 240 new cases being registered. It is now known as many as five people a day on average in the UK are being diagnosed with a form of skin cancer contracted at work.

Research into work attitudes to sun in the construction sector found that two thirds of construction workers outside for an average of nearly seven hours a day thought they were not at risk or were unsure if they were.

Researchers also found a **macho culture** in some parts of the industry and **misconceptions** about the threat of UVR in climates like the UK's – cloud cover does not completely protect against solar radiation.





Developing **sun safety strategies**:

- 1) include regular updates on the UV index from weather forecasts
- 2) minimising sun exposure in the middle of the day
- 3) employees to wear long-sleeved, loose-fitting tops
- 4) tinted glasses to be issued and encourage their use
- 5) high-factor sunscreen is helpful but should not be relied on as the only barrier to the harmful rays



Pledge to take action

Join the growing number of businesses leading on this issue and sign up to the pledge.

-  You'll get recognition as a responsible, **forward-thinking business** on the campaign website and in our campaign communications.
-  You'll be able to use the pledge as part of your in-house OSH or OH programme, building support around your own action plan and commitments.
-  When you've made your pledge, you will be eligible for an IOSH certificate demonstrating your commitment. You can also request an annual reminder to review and revise your action plan.
-  To help get you started with your pledge, IOSH has shown how a **large company** and a **smaller business** customised their pledge.



RBS/NATWEST MENTOR



First name *

Last name *

Email *

Submit



WORKING TOGETHER TO BEAT OCCUPATIONAL CANCER

About	News and events	Free resources	Get involved
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About
News and events
Free resources
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Pledge to take action
Support the campaign
Supporters A to I
Supporters J to Z ▼
Gradient Consultants
Leo Lynch
Ask the experts

Network Rail

Network Rail is supporting IOSH’s No Time to Lose campaign as we are committed to the health and wellbeing of our people.

We recognise the benefits of taking a collaborative approach to engaging with our staff and supply chain to raise awareness levels, identify improvement opportunities and promote good practice.

Lisbeth Fromling
Chief Health and Safety Officer



THE LAW

You'll need to check legal requirements for the country you operate in. In the UK, there are three pieces of legislation that can be interpreted as applicable to sun safety.

Under the Health and Safety at Work Act employers should assess and control health and safety risks. The Management of Health and Safety at Work Regulations, with an emphasis on risk assessment, can similarly be interpreted in the context of sun exposure. The Construction (Design and Management) Regulations are also relevant here, especially the regulation referring to outdoor work and protection from the weather.

Managing health and safety in construction

Construction (Design and Management) Regulations 2015

Regulation 34 Temperature and weather protection

Regulation	34
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(1) Suitable and sufficient steps must be taken to ensure, so far as reasonably practicable, that during working hours the temperature at a construction site that is indoors is reasonable having regard to the purpose for which that place is used.

(2) Where necessary to ensure the health or safety of persons at work on a construction site that is outdoors, the construction site must, so far as is reasonably practicable, be arranged to provide protection from adverse weather, having regard to—

- (a) the purpose for which the site is used; and*
- (b) any protective clothing or work equipment provided for the use of any person at work there.*

BE UV AWARE



SKIN CANCER is the **MOST COMMON** form of **CANCER IN THE UK**

OUTDOOR WORKERS have a **HIGHER RISK** of developing **SKIN CANCER**



Wipe clean with damp cloth only

TODAY'S UV LEVEL IS:



PROTECT YOURSELF WHEN THE UV LEVEL IS 3 OR ABOVE

UV INDEX	1-2	3-5	6-7	8-10	11+
LEVEL	LOW	MEDIUM	HIGH	VERY HIGH	EXTREMELY HIGH

TO FIND OUT TODAY'S UV LEVEL VISIT: www.metoffice.gov.uk

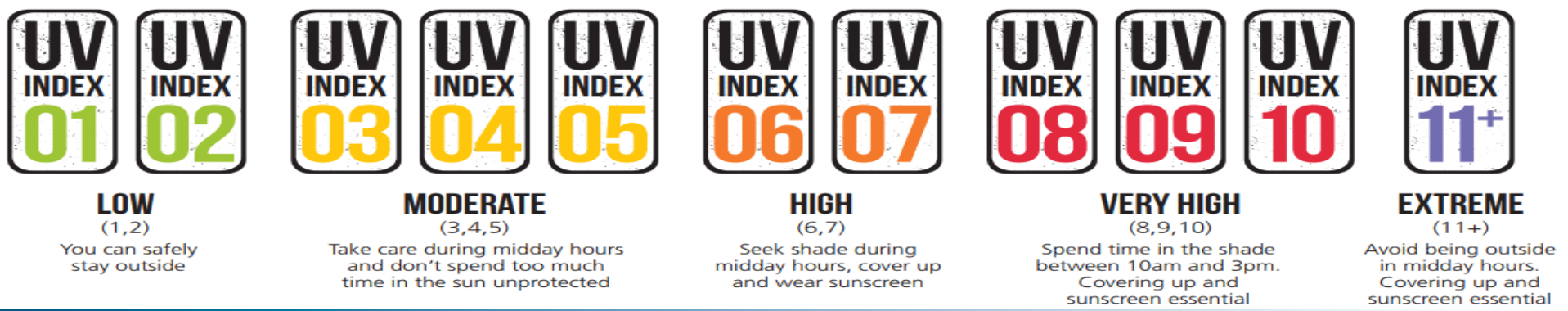
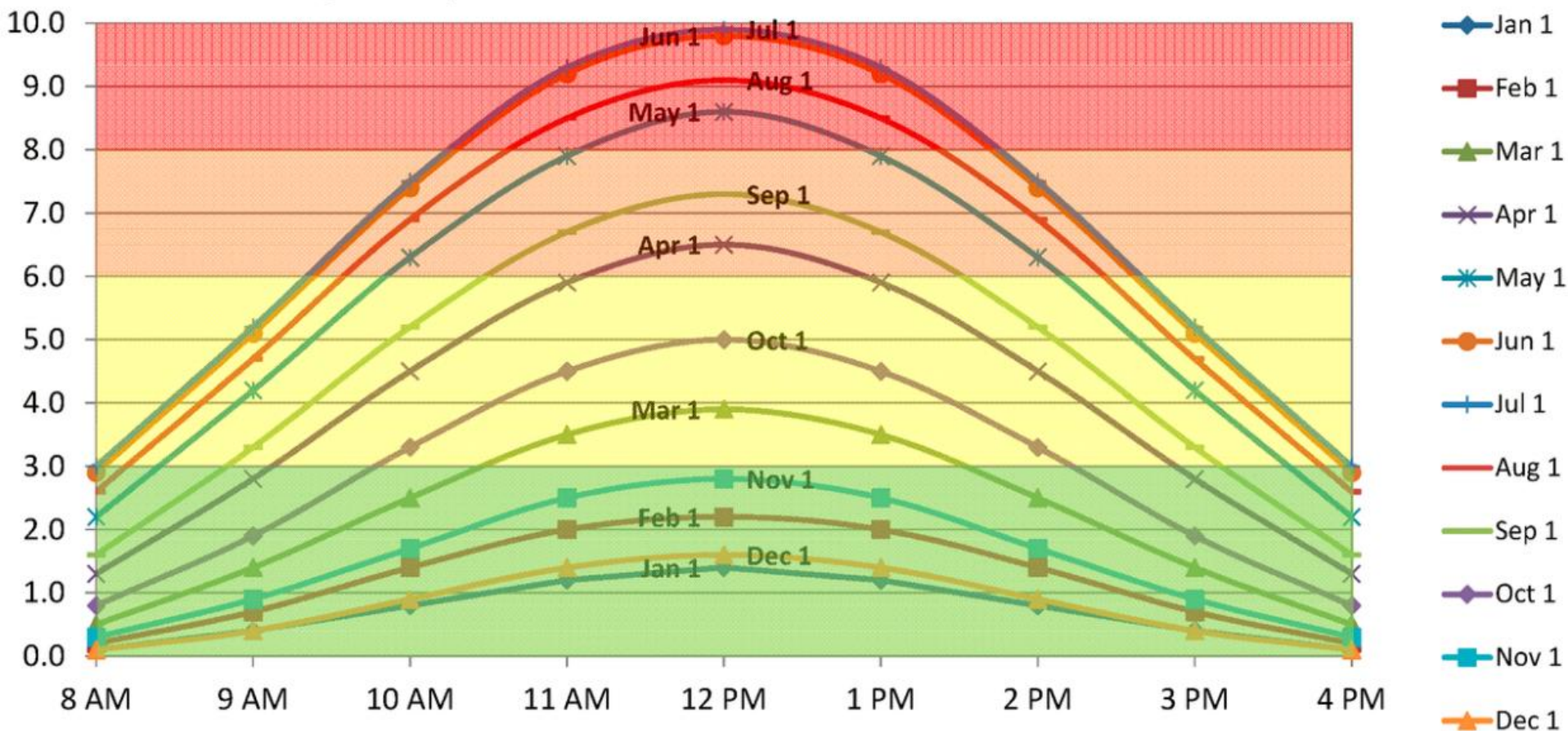


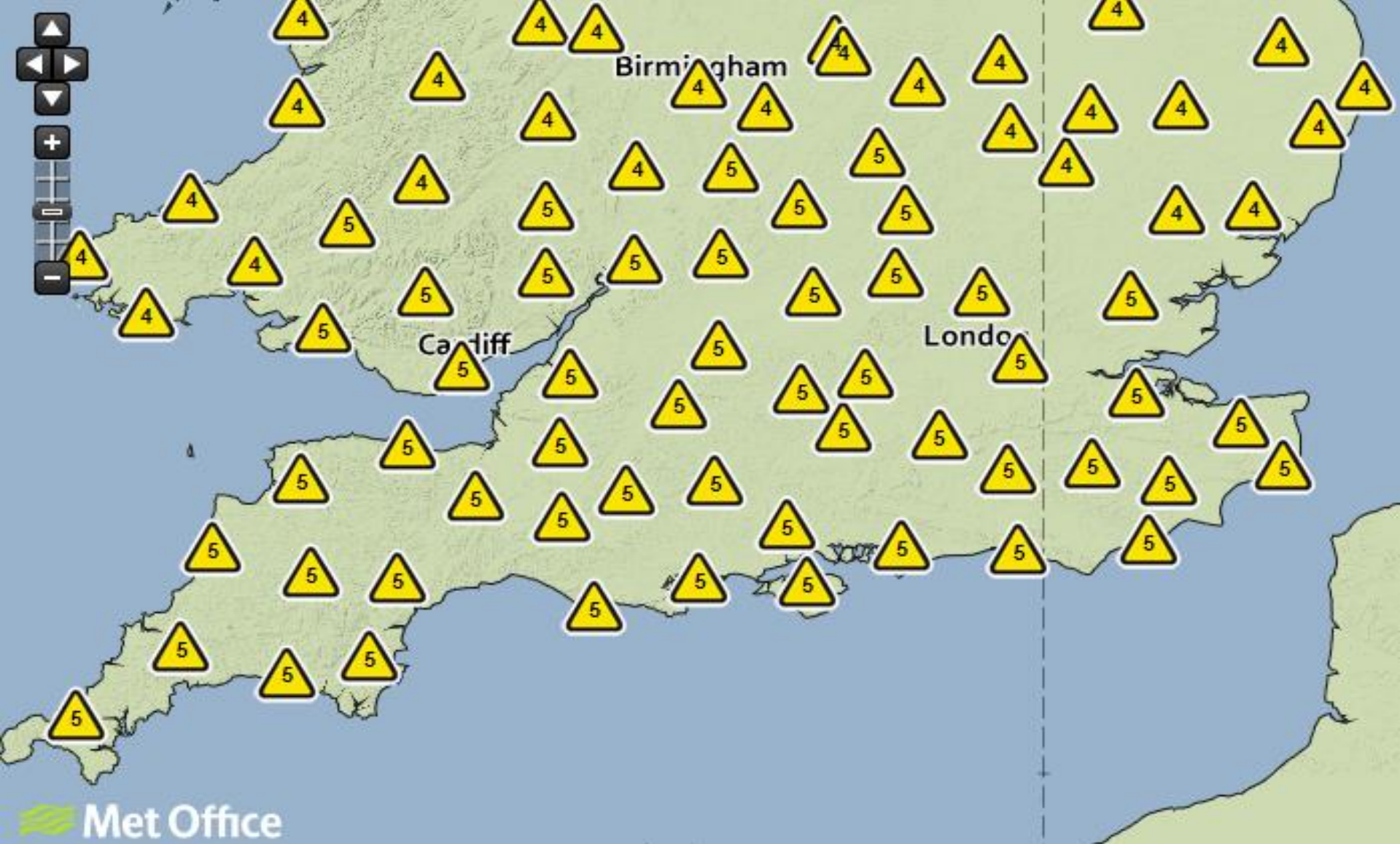
www.debgroupp.com

Best practice

UV station which includes today's UV levels, UV risk index (also see below), a mirror to identify signs of burn and sun protection cream.

assuming clear sky, thinned ozone, horizontal surface, FastRT UV Calculator





www.metoffice.gov.uk/public/weather/uv-index-forecast/#?tab=map&map=MaxUVIndex&zoom=7&lon=-1.60&lat=51.24&fcTime=1498014000

THE FITZPATRICK SKIN TYPE SCALE

I
IVORY

Characteristics
Pale skin, light or red hair, prone to freckles. Burns very easily and rarely tans

Sun protection
At the greatest risk of developing skin cancer. Needs to protect skin, preferably with clothing



II
BEIGE

Characteristics
Fair skin, likely to have light hair, blue or brown eyes. Some have dark hair but still have a fair skin. Usually burns but may gradually tan

Sun protection
At the greatest risk of developing skin cancer. Needs to protect skin, preferably with clothing



III
LIGHT BROWN

Characteristics
Light olive skin with dark hair and brown or green eyes. Burns with long exposure to the sun but generally tans quite easily

Sun protection
Should protect themselves in strong sunshine



IV
MEDIUM BROWN

Characteristics
Brown eyes and dark hair. Burns with very lengthy exposures but always tans easily

Sun protection
Should protect themselves in strong sunshine



V
DARK BROWN

Characteristics
Naturally brown skin, brown eyes and dark hair. Burns only with excessive exposure to the sun. Skin easily darkens further

Sun protection
Should protect themselves when outdoors in the sun for a long time



VI
VERY DARK BROWN

Characteristics
Black skin with dark brown eyes and black hair. Burns only with extreme exposure to the sun. Skin very easily darkens further

Sun protection
Should protect themselves when outdoors in the sun for a long time



DID YOU KNOW?

Ultraviolet (UV) rays...



Are carcinogenic
(cancerous)
to humans



Are not
related to
temperature



Cannot be
seen or felt



Can pass
through clouds



Bounce off reflective
surfaces such as metal,
concrete, water & snow



Can pass
through loosely
woven material



Above: sun screen applied on exposed body parts like arms.

Left: sun screen is applied on skin sensitive areas such as the ears or neck.

Right: breathable long sleeves are recommended to reduce UV exposure to the arms.



Keep your top on

Health risks from working in the sun



Advice for outdoor workers from the Health and Safety Executive and the Health Departments in England, Scotland and Wales

INDG 147

**Industry publications,
research and
guidance on sun
protection**

Sun safety in construction

Evaluation of a sun safety intervention for the UK construction sector

Report submitted to the IOSH Research Committee

Jonathan Houdmont PhD
Paul Madgwick MSc
School of Medicine, University of Nottingham



INDG 337





Health and Safety
Executive



Fatal injuries arising from accidents at work in Great Britain 2017

<https://www.ioshmagazine.com/article/gb-workplace-death-rate-still-plateau>

file:///C:/_1%20-%20I%20O%20A%20N%20N%20I%20S/PERSONAL/Safety%20regulations%20and%20guidance/Stats-fatalities%20and%20accident%20data-2017-HSE.pdf

GB workplace death rate still on plateau



The Health and Safety Executive's (HSE) newly-published statistics on fatal injuries in UK workplaces reveal that **137** people were killed (all sectors) in the 12 months to the end of March 2017.

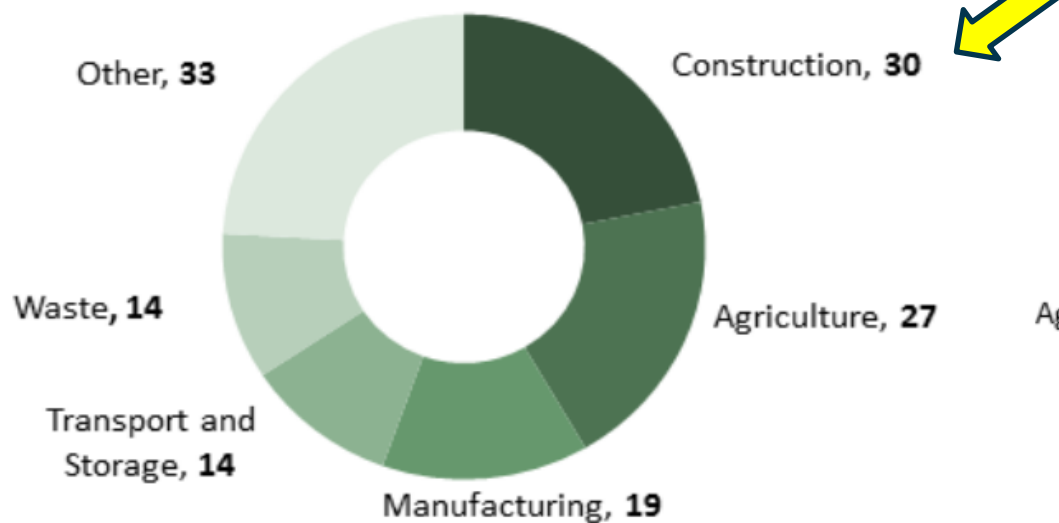
This corresponds to a rate of 0.43 deaths per 100,000 workers and is broadly level with the **average** five-year (2012-13 to 2016-17) rate of 0.46 per 100,000 workers, or 142 deaths.

30 construction workers sustained fatal injuries last year, the lowest number on record for the sector despite accounting for the largest share. 47 people were killed in 2015-16 compared with the previous year's total of 35 in 2014-15 with an **annual average of 39**.

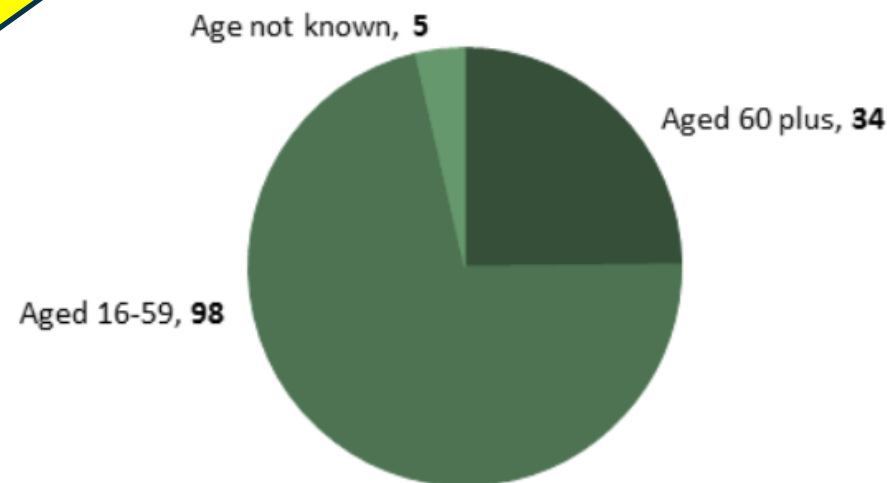
31 workers were killed by moving vehicles, **25 deaths from falls from height**, 20 employees were fatally struck by a moving object. Electrocution accounted for 8 deaths.

92 members of the public were killed in accidents connected to work. Almost half of those occurred on **railways**.

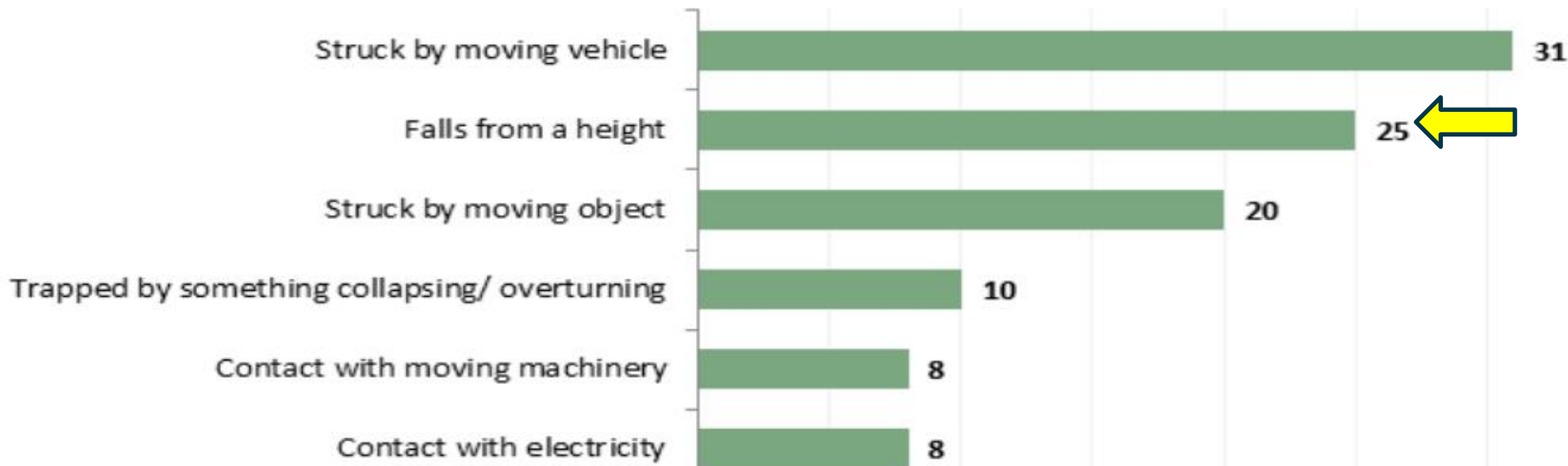
Fatal injuries to workers by main industry



Fatal injuries to workers by age



Main kinds of fatal accident for workers





Workshop: Safe Use and Selection of Hand Knives





How to reduce hand knife injuries

HSE information sheet

Plastics Processing Sheet No 12 (Revision 1)

Introduction

This information sheet is one of a series produced by HSE's manufacturing sector. It gives practical advice to anybody involved in managing the risks of using hand knives as a part of their work, eg managers and supervisors.

Hand knife injuries still account for a significant number of injuries according to trade association statistics for the plastics industry. They occur in all parts of the industry, including film production, moulding, extrusion and fabrication.

What action do I need to take to reduce hand knife injuries?

The most reliable course of action is to eliminate the use of hand knives. Where this is not possible, more proactive control will be required. Work through each of the following steps for every task where hand knives are currently used:

Step 1 Elimination

Where possible, try to eliminate or reduce the use of hand knives from all or part of the task by:

In 2016 a knife injury occurred to an operative who was working alone. He lost 2 pints of blood when he accidentally cut into his hand and severed an artery. This could easily have had a tragic outcome but for the assistance of someone in an adjacent work site. Since this incident and further knife incidents later in the year, the prohibition of open blade knives remains a topic of much discussion.

The HSE sets a hierarchy for knife selection which, if followed correctly, would eliminate many knife incidents. It gives guidance on:

- Eliminating the risk where possible.
- Specifying the right knife, and sets a hierarchy for knife selection:-
 1. Bladeless cutter
 2. Concealed cutter
 3. Fully automatic blade retraction (pressure sensitive auto retracting blade)
 4. Spring loaded blade retraction
 5. Manually operated blade retraction (last resort).
- Ensure to specify the right PPE such as CAT 5 gloves that increase protection.



Maximum safety



Very high safety



High safety



Basic safety

The Management of Health and Safety at Work Regulations 1999 requires a risk assessment to be carried out to consider knife injuries. As a knife is work equipment the Provision and Use of Work Equipment Regulations act 1998 also applies. This act requires that work equipment should be suitable for the task it is being used for. Both of these regulations require you to select the safest knife or tool for the job.

Questions	Criteria
What type of work is it?	<p>This should include:</p> <ul style="list-style-type: none"> ▶ Type of material to be cut ▶ Location and conditions it is being cut in ▶ The duration of the work ▶ Frequency and complexity of the cuts required ▶ The surface that the work is being done on e.g. work bench.
Who is involved?	<p>This is associated with the training and competence of the person carrying out the job. People who may also be in the vicinity (authorised or unauthorised) should also be considered. Recognise people who may be more vulnerable to the risks than others such as young workers or trainees who are inexperienced.</p>
What is the hazard? What type of knife are you thinking about using and why?	<p>Always consider whether a safer tool or knife could be used to complete the task. Explain why you need to use this type of knife and why you can't use another tool.</p>
What is the risk?	<p>What are the risks involved in carrying out this task with this knife (such as lacerations or puncture wounds)?</p> <p>Who (else) is at risk?</p>

How to reduce hand knife injuries

Group 3 – (fully automatic blade retraction) knives are designed to not rely on the operator to retract the blade. Knives that qualify for this category are relatively new and are sometimes called intelligent cutters. With these knives it doesn't matter whether the thumb slider or squeeze lever is held in the blade extend position; once the blade leaves the material being cut it automatically and immediately retracts into the handle.

Group 4 – (spring-loaded blade retraction) knives benefit from a spring-loaded blade, but it is a relatively weak spring. Once the thumb slider has extended the blade and the process of cutting has begun, the operator removes their thumb from the slider. The blade will remain engaged with the material being cut, but as soon as the blade leaves the material – whether by design or fault – the spring will immediately pull the blade back into the safety of the knife handle.

Minor Works is committed to meet and where possible, exceed standard regulatory requirements.

As a result, when using knives on Minor Work sites the expectation is to adopt Group 3 or 4 type knives as per HSE's guidance PPIS 12.

Deviations from the standard rule, have to be formally risk assessed to determined alternative, less safe tools.



Group 3 – 'Intelligent or Smart' Retract Cutters



Group 4 – Spring Retract Cutters



Safe Use and Selection of Hand Knives Workshop (NR Basingstoke, 17 July 2017)

Safe use of ladders

(NR, Wessex Minor works-July 2017)

Ladders on Minor Works are **NOT** banned.

Minor Works are strictly following the Working at Heights Regulations which dictate that, a suitable assessment has to be in place for the use of a ladders which are the last resort; like on emergencies or examinations of remote assets or other areas where space is restricted, etc.

On multiple occasions Principal Contractors and their Subcontractors have been questioned as per the use of ladders and the absence of a suitable risk assessment.

We need to take a firm stand with ladders and employ the "*reasonableness*" test for their use. There are genuine occasions that their a ladder is required; but some times ladders are used because of bad planning, convenience or lack of education.

In terms of NR procedure to remove sharps or dead animals there are two phone numbers to keep on your phones:

Inner: 020 7979 3903

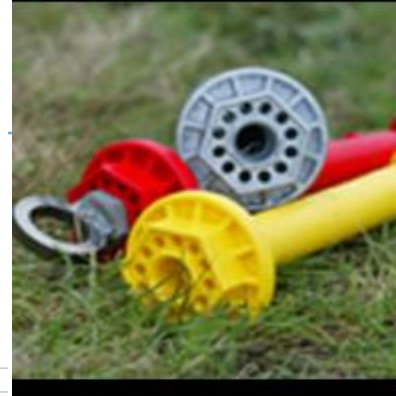
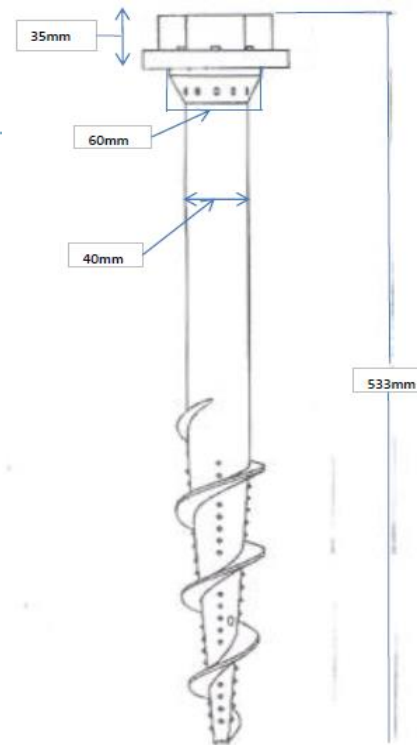
Outer: 020 7979 3905

Note: do not attempt to remove any dead (or alive in that matter) animals or any sharps from site.

Mark and seal the area where possible. Inform others and your line manager. A photograph might help the collection service identify the exact location once on site. Giving the operator an accurate detail is important to get the job done swiftly.

Photo is of a dead fox found at Southampton and Southsea. Response time to remove the body was within the hour.

Testing Equipment & Communicating Good Practice



As a ground anchor, Terra-Bolt is made of robust composite plastics that make it light and easy to use. It screws into the ground using a standard 65mm socket which can be turned by hand or machine. The head allows fittings to be attached to meet the user's specific requirements. These may be ring attachments, fencing braces, sign posts or anchoring heads for attachment to any object. It operates successfully in all soil types, is quick to install and requires no specialist tools for operations. It is also non conductive of electricity.

Minor Works and B&M Wessex are trailing 27 April 2017



Screwed in soil is assisted by a short bar. Unit has to go in until the top lip comes in full contact with the ground.

A pull test device is put into place to test the kN the unit/soil can resist. Target number is 5kN (manufacturers test result)



Test results demonstrate that the ground screw can vertically stay into position at slightly above the recommended test number reaching 6kN (611kg force)

Test results on a sharp vertical pull the ground screw easily achieved 300+ kg force. As it's a restrain system the average max force is estimated at about 40kg.



‘Well Done’ **recognition award**

Recognition awards are designed for NR B&C Minor Works Principal Contractors operating on the Wessex Route. Results have been shared, communicated and agreed with the Acting RPM, Route Asset Manager, H&S, and other members of the NR Minor Works Team.

1) **Organised sites** (site with most positive NR PGIs, with careful consideration to the Life Saving Rules and Home Safe Every Day initiative, suitable and sufficient RAMS, clear signage, forward planning, risk foreseeability, consideration to the public, saving costs through innovative methods but still achieving the right product, etc).

Darren Clarke from Osborne was recognised for having the best run sites with minimal issues. Always friendly and willing to listen to suggestions and take things forward by promoting others and letting less experienced professional learn through the process.

2) **Professional response** (acting in the interest of safety following an unplanned event. Acting in the interest of H&S with clear communication during the process.)

Joe Osborne from D&B who correctly decided to stop the final 30 minutes of a job because a low level scaffold of 1.5m had moved by 500mm was recognised for his professional response. On the day, he immediately contacted his line manager reporting it as a close call and NR was informed within minutes. A quick response with swift mobilisation and good decision making.

3) **Upcoming professional** (manager/supervisor/operative. Positive praise from others outside of the direct team. Building effective relationships within the wider team. Demonstrate high levels of integrity, decision making, best practice and positively influencing others).

Aiden Bevan from B&M was a newly promoted supervisor who has demonstrated repetitively excellent H&S ethos, good decision making with a positive, friendly attitude that impacts on the workgroups attitude. A new upcoming supervisor with a bright future.



Thank you



Ioannis Toutoungi-H&S: Buildings & Civils, CEFA, Waterloo Maintenance

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