



Highways Safety Hub



Highways Safety Hub Team Newsletter

August 2023

HAVE A SAFE

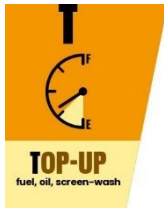


JOURNEY PLANNING - SUMMER CAMPAIGN 2023
Partner Toolkit



The campaign goal is to encourage drivers to plan their journey in advance, including all necessary vehicle checks as well as factoring in rest stops before they set off on long journeys this summer.

The campaign aims to reach all road users, but with a focus on families and young drivers. Families are a priority due to the likelihood of day trips and holidays in England this summer.



Fill up fuel, check your oil and screen-wash, ensure you're charged

Over 33% of breakdowns are caused by vehicles losing power, having engine issues or running out of fuel. Most of these problems can be avoided if you check and top up your vehicle's fluid levels.

Running out of fuel is serious and can leave you in a risky situation.

Before setting out, check your fuel levels and make sure you have enough to get to your destination. Or know where you can stop to fill up.

Check your oil level: use the dipstick to check and top up if required.

Check your screen wash is topped up so you can clear any debris or dirt off your windscreen and ensure you have good visibility.

[How to check your vehicle - National Highways](#)



Plan to take a break every 2 hours

To enjoy a comfortable road trip, you should take a break for at least 15 minutes every two hours.

To prevent tiredness and stay alert consider stopping somewhere you can go for a walk and get some fresh air. You can stop at a motorway services area or even have a picnic at a National Trust site or country park.

[Search for National Trust properties close to your route](#)

What are the risks of not taking regular breaks?

1. Falling asleep at the wheel
2. Your ability to detect threats decreases, and your reaction time increases.
3. Negative effects on your mood and behaviour behind the wheel.



Inspect your tyre tread and pressure

In July and August 2022, our traffic officer patrols dealt with more than 21,000 breakdowns on motorways, with August seeing the highest number of breakdowns in the year. One in five of these was caused by poor tyre maintenance.

Give yourself time to check your tyre treads and get them replaced if there is less than 1.6mm of tread (the legal minimum). If you're stopped by the police and your tyre treads are less than 1.6mm you could face a £2,500 fine and three penalty points per tyre.

Before setting off, check your tyre pressures. If they're over- or under-inflated - even by as little as 10% - it can affect your car's performance, making it more dangerous when braking and steering.

You may need to inflate your tyres to a higher pressure if you have more luggage or passengers than normal.

[How to check your vehicle - National Highways](#)



Prepare for the weather

Weather conditions can vary considerably throughout the year and can sometimes change at short notice.

To keep safe when travelling on our network, it's important to prepare for different weather types and understand how to adjust your driving for the conditions. Our advice pages will help you do this.

[Travelling in summer - National Highways](#)

Blue Star – Presentation of Certificate

Blue Star Presentation of Certificate - A30 Costain Team at Chiverton



Pictured left to right – Mark Blatchford, John Lee, Nicola Bell (Executive Director for Major Projects National Highways) and Nick Dyball

Nicola Bell presented a Blue Star Award during a site visit to the A30 for use of automated plant crossings. The use of the automated system allowed the safe crossing of 3 tractor and trailer units hauling heathland sections for circa 2 months without incident. The crossing has enabled the project to translocate heathland safely close to the Carland Cross windfarm. The crossing has avoided the need to drive 6kms to the nearest access point. For further details please see link:

[eliminating_harm_case_study_-_automated_plant_crossings_v2.pdf \(highwaysafetyhub.com\)](https://www.highwaysafetyhub.com/eliminating_harm_case_study_-_automated_plant_crossings_v2.pdf)

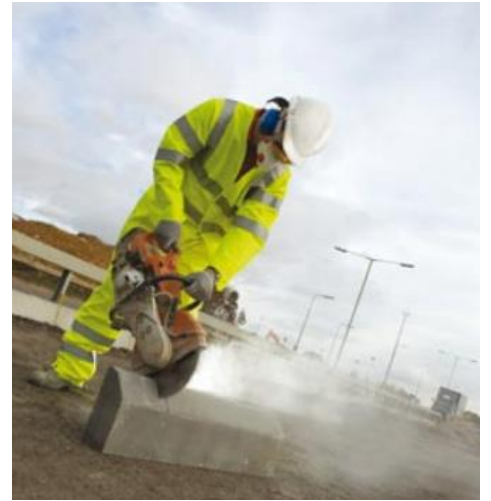
Health Risk Campaign – August 2023

Regularly breathing construction dust causes diseases like lung cancer, asthma, chronic obstructive pulmonary disease (COPD) and silicosis. Construction workers have a higher risk of developing these conditions because many common construction tasks create high dust levels. These diseases are debilitating, life changing and result in premature death.

The Safety Hub's Health Risks Campaign focuses this month on the hazard of Dust and particularly what we can do to eliminate this hazard through better design and better mitigation controls.

Please use the presentation and resources here, to promote discussions around this important topic:

[Health Risks 2023 \(highwaysafetyhub.com\)](https://www.highwaysafetyhub.com/Health-Risks-2023)



Adding Social Value

At the M1A1 DBFO contract in Leeds we've just completed our first "Work Experience" trial with a young offender from Wetherby Young Offenders Institute.

This young man has been with us for two weeks, working as a highway operative under the guidance and supervision of our experienced team.

He's worked hard, got on well with the team and we like him so much, **we've decided to keep him** for the next few months, hopefully until his sentence is completed.

We are also working closely with HM Prison Wetherby to put him through training which requires agreements on his licence of release in advance for each activity.

Thanks to the **EDI Community of Practice and HMP Prison Leavers** working groups for their support in getting this set up.

We'll be having more young men come through this work experience route in the coming months and we cannot wait.



Significant Risk Thinking

Many of you will have attended various technical Significant Risk Webinars over the past couple of months. If you've missed them, you can find the content of the webinars here:



[Significant Risk Education \(highwaysafetyhub.com\)](https://highwaysafetyhub.com)

There are some actions now that suppliers need to take to drive the significant risk thinking strategy forwards.

If you have not yet completed your organisation's Significant Risk Profile using the Workbook, please do this first to identify your top risks. The worksheet is downloadable here: [significant_risk_profiling_-_worksheet.xlsx \(live.com\)](#)

In addition, ALL Tier 1 suppliers are required to develop a Significant Risk Strategy which includes:

- A commitment to Significant Risk Education
- A commitment to Significant Risk Profiling
- A commitment to the application of these two models
- A commitment to Significant Risk Leading Indicators
- A commitment to Significant Risk Health and Safety Performance
- A commitment to share the philosophy and learning
- Details of relating to governance
- Roles and responsibilities
- A commitment to monitor and review this approach

Completed Risk Profiles and Significant Risk Strategies must be returned back to the SCSLG Performance Group by the September 10th. Please email into Natalie Mansell:
Natalie.Mansell@atkinsglobal.com

If you have any further questions, please feel free to reach out to any of the performance group below:

Andrew Sharp - andrew.sharp@carnellgroup.co.uk

Andrew Cox - andrew.cox@fmconway.co.uk

Teresa Moss – teresa.moss@nationalhighways.co.uk

Natalie Mansell - Natalie.Mansell@atkinsglobal.com

Phil Gregson - Phil.Gregson@volkerfitzpatrick.co.uk

Neil Wilson - Neil.Wilson@octaviusinfrastructure.co.uk

Lee McBride - Lee.McBride@skanska.co.uk

Plastic Free Overshoes

As part of the Projects' plastic-free initiative the A428 Team are trialling reusable shoe covers, also referred to as overshoes. These reusable covers will replace the blue single-use plastic shoe covers we're more familiar with. As with the traditional ones, these new overshoes are designed to go over site safety boots when inside the office and welfare unit areas to keep them clear and free from construction mud and dirt.



These new overshoes are made from recycled polyester Taslan, and each pair contains six recycled plastic bottles. Using these will reduce the current reliance on single-use plastic shoe covers.

Penny Roberts, Environmental Lead at the A428 said: "This is an exciting trial. While there's a significant price difference between the single-use plastic overshoes and the reusable ones, the cost difference is recovered well within the expected lifetime of a pair of reusable overshoes which last many weeks.

"If a colleague uses only two pairs of single use overshoes per day over a five-day working week the cost of the reusable ones are recovered after just eight weeks. Over that eight weeks a colleague would use 80 pairs of single use overshoes compared to only one pair of reusables."

Other plastic free activities that took place at the A428 scheme over the past month included a plastic free tea morning and swapping all single use plastic cups from the water machine and permanently replacing them with reusable biodegradable bottles.

Skanska contact: Penny Roberts penny.roberts@skanska.co.uk

Slot Drain Update – Principal Designers Working Group

Problem Statement

- National Highways Major Projects and their supply chain are incentivised to reduce the capital cost of projects. There is significant pressure to deliver to the capital enhancement affordability envelope.
- National Highways Operations and their supply chain are incentivised to reduce operational costs of running the network. There is significant operational funding pressure which has a flat profile.
- Slot drains are cheaper to construct than other forms of drainage and can create a lower cross-sectional area for a new road which brings additional savings. Therefore, they are the preferred drainage solution on major projects and have been used extensively on Smart Motorways as well as some other new schemes such as A14.
- Slot drains are more costly and harder to maintain than V drains and therefore are not the preferred solution for Operations.
- The DMRB Design Standards allow their use and provide guidance on their application but this can be widely interpreted.
- In the absence of a clear direction, project teams and operational colleagues routinely get into a disagreement about whether slot drains are approved. This costs time and generates friction at a working level.
- We need to agree clearer direction for all our teams so as to reduce the time lost during the disagreement, create greater clarity for the situations in which slot drains are an acceptable solution and help improve the working relationships.



Decision

1. That slots drains are not the National Highways preferred solution and should not be used.
2. We will update the design requirements to remove the use of slot drains. Once updated the use of slot drains will only be agreed via a departure from standard request.
3. We will develop a Major Project Instruction to support the preferred solution and confirm that any proposal to use slot drains should be justified via a Departure which should include a Type B Safety Risk Assessment and Whole Life Cost assessment. The

Type B Safety Risk Assessment will convene a Safety Control Review Group that must include representation from SES Technical Advisors and Operational colleagues. A generic safety risk assessment template will be produced to act as guidance.

4. Cost estimating for projects and scope baselines should not be based on Slot Drains unless a departure in place.
5. Where a project is in delivery and has agreed to the use of slot drains as part of the scope and that was approved PCF Stage 3 SGAR then slot drains will continue to be approved and used. [Evidence should be that slot drains are in the PCF Stage 3 approved scope book and approved estimate].
6. All other projects shall adhere to the approach described in 1, 2 and 3 above.

Next Steps

1. Update DMRB design requirements to remove the use of slot drains. Process as a priority change, if necessary via an England National Application Annex.
2. Develop and issue a Major Project Instruction that reflects the above approach.

Raising the Bar Checklist

This will help check compliance with the guidance by highlighting significant elements. A link is posted below that will direct you to the Highways Safety Hub website where there are also a lot of interesting items. Also consider joining the Twitter group which gives out lots of useful information regarding changes and uploads including the latest safety alerts.



<https://www.gov.uk/government/collections/health-and-safety-for-major-road-schemes-raising-the-bar-initiative>

Remote Acoustic Monitoring

Noise is a highly subjective topic. What may be deemed acceptable to one person can cause another mental health issues or sleep deprivation. The continuous hum of road traffic may no longer affect the resident that has become used to it, but the occasional ADT beeping or road sweeper vibration might (even if it is quieter than normal noise levels) jar them into action. To combat this all residents that could be impacted from noise along the A30 scheme were identified in the baseline environmental statement (ES). Over 200 locations were given a pre-construction noise level in decibels (dB), a construction level, and an operational level. Unfortunately this level changes depending on the time of day as does the amount of time that needs to be measured in order to determine if a construction limit has been breached. If the resident disagrees all of the above becomes redundant and Cornwall Council has to intervene.



Therefore, proving that noise is being created and that it is reaching unacceptable levels can be a bit of a dark art. Residents identified as higher risk to nuisance could be identified and mitigations can be put in place and still this is not enough. Individuals have their own agendas, their own perceptions and unless you can disprove them with raw data, they are valid and justified. Of course the reverse is also true and as part of the considerate construction scheme it is of critical importance we find out quickly what negative impacts the scheme could be having on the local community.

	<p>Technical Overview</p> <p>Five SVANTEK 307 (auto calibrating) Acoustic solar powered noise monitors were deployed across the scheme. These were set up on tripods built by the Costain Digital team and installed by the Worle office engineers. The strategic locations were determined through the more “sensitive” receptors who are impacted by noise created, especially during night works on the A30 and approved by Cornwall Council. The data from these monitors can be reviewed in real time and 1-minute data can be recorded sending alerts to the SHE team whenever a breach is recorded.</p>		<p>Challenges</p> <ul style="list-style-type: none"> ● Challenge 1. Identifying the key locations to place the monitors so they have the most impact. i.e where is the complaint likely to come from. Which activities are going to be noisiest. ● Challenge 2. Ensuring the monitors remain powered during the long Cornish Winters. No electricity on site. ● Challenge 3. Guaranteeing the accuracy and reliability of the data for Costain and the local residents.
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Action Taken

Without these acoustic monitors the project had some difficulties proving that we were not creating noise pollution. The best case scenario would be hand held or temporary monitoring which required a specialist or trained individual to take noise monitoring readings. The results from which depended on the individual taking the reading and how long they decided to do it for. Without consistent data potential incidents were frequently missed and the relationships between residents and contractor became strained. Ultimately at a certain point this would not have been acceptable with Cornwall Council.



Therefore the installation of five acoustic monitors, (which can be integrated with weather and dust monitoring) was able to demonstrate, infatigably, that we were not (or we were) responsible for any noise. This has worked dramatically in our favour as many complaints can be attributed to road traffic, weather or other activities. It also gives us an early warning if works are getting too noisy before the receptors determine it for themselves. In this way we can establish better mitigation strategies to reduce nuisance across site. Better yet – because these monitors were purchased by Costain central (rather than the A30 specifically) the monitors can be taken on to the next project as necessary rather than being lost in transition or returned to the supplier/subconsultant as everything is done in house.

The Results

The results are quite simple. Since their installation the A30 have a continuous stream of noise data from each of these monitors. When a challenge is made or a complaint received, we can look at the corresponding monitor, download the data and determine if there was a construction related exceedance made during this time. This has proven highly useful at certain locations where we have minute by minute data of the noise produced and, in some instances, even a recording to prove that we did not breach limits. This has been invaluable with our relationship with Cornwall Councils Environmental Health Officer and ideally should be incorporated on all projects going forwards.



The Human Factors of Work at Height

Controlling the influence of human factors on those that work at height is a major challenge for employers, duty holders and OSH professionals. How do you begin to create safe processes that account for people's imperfections?

People are unpredictable. No matter the precautions taken, or measures imposed, they break the rules – accidentally or intentionally. Situational, exceptional, and routine violations often occur, and there will be reasons behind each.



Physical ailments can influence performance, as can the mental state. Other factors can also contribute, such as lack of leadership and commitment to occupational safety and health (OSH) from the top, lack of safety culture, poor communication, poor management of health and safety principles and lack of well-established OSH management systems.

As well as organisational and individual factors, working environment can also impact behaviour. These parameters proportionately have their own levels of influence on how people behave in a particular work setting. Human error is normal – but anything normal is also, by definition, predictable.

This is the idea at the heart of 'human factors': individual, organisational, and environmental characteristics that mould work behaviour in a way that can affect safety and health. It is especially relevant to working at height, where errors can have fatal consequences.

Of the 123 workplace fatalities in Britain in 2021-22, the most common cause was a fall from height: 29 deaths. And of the 61,713 non-fatal injuries reported by employers, 8% were falls from height – the equivalent of just short of 5000 incidents (GB Health and Safety Executive, 2022a; 2022b).

The risks that human factors can create when working at height include fatigue, distraction, rushing and complacency. Other factors can also have an effect, such as lack of appropriate PPE, poor training in PPE use, poor supervision, poor safety culture and peer pressure. These failings can be organisational, personal or job factors.

Accidents (injuries) can have profound consequences when working at height: falling from height can cause lasting injury or even death and falling objects such as tools and building materials pose a threat to anybody below. As the Work at Height Regulations 2005 (WAHR)

state: 'You are working at height if you: work above ground/floor level.' Even working at height of one metre (3.3ft) poses a risk.

WORKING AT HEIGHT: GETTING A GRIP ON HUMAN FACTORS

Understand the job

The job must fit the physical and mental abilities of the worker, from time allocated to equipment design. Do all elements of the job encourage people to do the right thing?

Train the individual

Most workers would agree that falls are bad but may not understand the role of human factors. Targeted training or assessments can help adjust their perception.

Educate the supervisors

As the link between organisation and worker, they can remind workers of safe practice and potential hazards and help them to adjust to changing conditions.

Examine the system

Human factors are fundamental to all organisational structures and cultures. Regularly review all processes to ensure they neither promote nor normalise risk. Does planning do enough to address human factors? For example:

- Have ergonomic matters – access, lighting and so on – been considered when designing work areas?
- Is the PPE, such as harnesses, fit for purpose?
- Are welfare facilities available?
- Are workers involved in the decisions and procedure design that affect their safety?

Source: IOSH