

Highways Safety Hub Team Newsletter

August/September 2022

National Highways Putting Safety First with New Appointments

National Highways have announced that it will reassert its commitment to road safety with a series of key appointments.

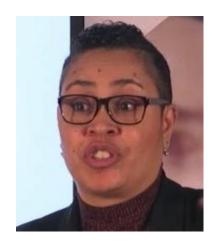
Five new high-profile posts will be created as part of on-going drive to cut the number of deaths and injuries on the strategic road network (SRN).

The recruits will help to expand the existing safety-based expertise and capacity within National Highways, ensuring that the company can operate effectively across all the "safe system" pillars – safe people, safe roads, safe speeds, safe vehicles, post collision response and effective safety management.

The roles include a new policy advisor tasked with leading the company's boost safety for "high risk" road users, some of which are disproportionally more likely to be involved in – or injured by – incidents on the network than other people. This includes cyclists and motorcyclists, those with disabilities and new drivers who have recently passed their test.

Additionally, it was also confirmed that Melanie Clarke has been appointed as the company's new Director of Health, Safety and Wellbeing. Mel, who has almost 20 years' operational experience in the roads sector, is currently Director of Customer Service in National Highways' Operations directorate. Her new role will be focused on the safe operation of the SRN, focusing on National Highways employees, the supply chain and road users.

Mel, who took up her new role on August 1, currently chairs National Highways fatal risks group and the Roads for All forum which leads improvements in the safety and journey experiences of vulnerable and disabled users.



As outlined in the second Road Investment Strategy, National Highways is committed to an ongoing reduction in the number of people killed or seriously injured on the network.

This includes a decrease of at least 50 per cent by the end of 2025 when compared with the average between 2005 and 2009. There is also a long-term ambition to ultimately cut the rate to zero. This will be achieved through a range of interventions including engineering solutions on the network itself as well as advances in vehicle technology achieved by motor manufacturers.

Jeremy Phillips, Head of Road User Safety at National Highways, said: "Safety is our number one priority and we're committed to continuing the long-term downward trend in the number of people killed or seriously injured on our network.

"These new appointments reflect our determination to further strengthen our work in this critical area over the coming years."

The five new posts are:

- Head of National Road User Safety Delivery
- Road User Safety Principal Advisor
- Team Leader Suicide Prevention
- Senior Policy Advisor High Risk Users
- Policy Advisor

The new roles, which will be filled via a recruitment process over the coming months, are being created specifically to address concerns that some groups are disproportionately affected by incidents that cause death or serious injury.

The move to bring in a senior member of staff to lead on suicide prevention is an indication of how seriously National Highways takes its safeguarding role in this regard. The position will support the company's objective of leading an industry-wide approach to preventing network users from harming themselves.

National Highways has already shown strong commitment towards improving the safety of the working environment for its employees and suppliers. It has a corporate aim – set out under the Home Safe and Well campaign – to ensure that no-one should be harmed while travelling or working on the network. Last year, the company also launched the Be The Change programme to encourage all staff and suppliers to think about their own safety, health and wellbeing – and that of others.

Commenting on her new appointment, she said: "I'm delighted to have taken up this exciting and challenging role. Our Home Safe and Well plan and Be The Change programme are laying the foundations for a transformed safety culture in National Highways, but there is always more that we can do to make sure road users, road workers – and everyone who works to support a roads network that connects the country – gets home safe and well."

Van Driver Toolkit

The operation of vans is a risky business. It is the most dangerous part of the day for any van driver regardless of any other duties they may have, and it is well-documented that vans are involved in more Killed or Seriously Injured (KSI) incidents than any other class of vehicle on our roads. They are also the fastest-growing class of vehicles on the road and this growth is showing little sign of slowing down.

National Highways Commercial Vehicle Incident Prevention team, with Driving for Better Business, have developed a comprehensive suite of free resources made available to van drivers, their managers and supervisors and leaders.

The resources cover over 35 topics relevant to the safe and legal operation of vans including distraction, fatigue, safe & legal loading, roadworthiness, speed limits and much more. Each topic is covered in a concise, punchy style identifying risks, repercussions and best-practice advice.

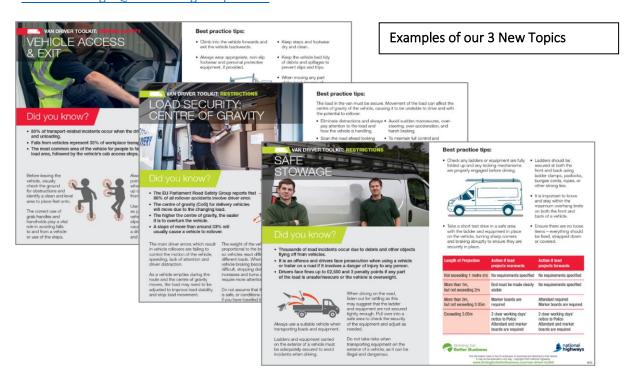
Each topic is covered in the equivalent of a double-sided 'flash card' which, although being delivered primarily in digital format via a dedicated website (<u>vandrivertoolkit.co.uk</u>), can be downloaded in a print-ready version - an option being used by a number of operators.

The website also contains an html version of the 'flash card', an app-ready version and a short video highlighting the key take-home messages.

The 'flash cards' will soon be supported by a series of readymade, template toolbox talks which in turn is supported with video of a driver trainer delivering the talks to camera. This is designed to give operators options in how they deliver the information to their drivers.

I'd encourage you to share the resources with your drivers and contractors. We also have an 'appready' format which makes adding the resources to any of your pre-use check apps a doddle!

Mark.Cartwright@nationalhighways.co.uk — Head of Commercial Vehicle Incident Prevention



Significant Highway Code Changes

Tougher punishments for drivers who kill someone have been added to an updated version of the Highway Code.

A change in the law that means there are now stiffer sentences for those found guilty of causing death by dangerous driving or causing death by careless driving under the influence of drink or drugs.

Changes to the Police, Crime, Sentencing and Courts Act, which were officially applied on June 28, mean judges can now hand down heftier penalties for those who harm someone when behind the wheel of a vehicle.

The Highway Code - Annex 5. Penalties - Guidance - GOV.UK (www.gov.uk)

The offences are;

- Causing death by dangerous driving
- Causing death by careless driving under the influence of drink or drugs

Both offences have had the maximum prison sentence increased from 14 years to life imprisonment, with obligatory disqualification increased from 2 years to a minimum of 5 years.

In addition, a new offence of causing serious injury by dangerous driving has been introduced which carries a maximum penalty of 2 years imprisonment, unlimited fine and obligatory driving ban.



Every 40 seconds, someone dies by suicide.

Where can we help? What are the signs we can pick up on?

We can all play a role in listening, prevention and raising awareness. Together we can strengthen understanding, reduce stigma, and break down the barriers.



Join Jacobs ahead of World Suicide Prevention Day as part of our Mental Health Resiliency series of interactive calls to explore the possibilities, discuss real-life experiences, share the signs, and learn how to support and signpost someone in need.

Download invitations for our two live broadcasts on Thursday 08 September 2022:

https://urldefense.com/v3/_https://lnkd.in/gb-RHSuw_;!!B5cixuoO7ltTeg!AHgqG931qMnUfmn6yBGdnwa_O-XbHWuZi_SkUoMgVaxzxpH6PcXfRmAkHRwMvYS5MgTzNLtD8RledGn\$



New Research Van Rolled Out to Detect Dangerous Driving

New mobile technology capable of automatically detecting motorists who fail to wear a seatbelt or hold mobile phones at the wheel is being trialled in the UK for the first time under plans to boost road safety.

A new van packed with detection equipment has hit England's motorways and major A-roads as part of a research project carried out alongside Warwickshire Police to understand the scale of the problem around these dangerous motoring offences. As part of this



work, drivers will be sent warning letters in partnership with the police force, informing them of the dangers of their actions.

The 'sensor test vehicle' is equipped with multiple cameras which can record footage of passing motorists. Images captured by the cameras are processed using artificial intelligence (AI) to determine if motorists were using a handheld mobile phone and drivers and passengers were without a seat belt. The van is also capable of being kitted with additional technology to detect tailgating offences, although this system does not form part of the latest trials in Warwickshire. The vehicle, which will be stationary at the side of the road while in use, is being trialled over a period of almost three months.

The warning letters, issued by police, will remind drivers that they could be fined up to £500 for not wearing a seat belt in addition to penalty points. Drivers will also be asked to complete a short survey which will be used to inform National Highways' research. Using the technology in a van will allow National Highways to test it across different types of road to better understand driver behaviour across the network.

The van is initially being employed for around three months. Findings will inform the next steps and any future deployment.

This research forms part of National Highways' commitment to road safety as its number one priority. England's motorways are already among the safest roads globally and the company has an ambitious strategy to further improve safety over the coming years. This includes a long-term commitment to cutting the number of people killed or seriously injured on the strategic road network to zero by 2040.

Government figures show that there were 420 collisions on British roads in 2019 in which the driver was using a mobile phone at the wheel. Separate figures show that failure to wear a seatbelt has been attributed to one in four road deaths.

National Highways Head of Road Safety Jeremy Phillips said:

"Safety remains our top priority and we want everyone to get to their destination safely. Sadly, there are still drivers who do not feel the need to wear a seatbelt, become distracted by their phones or travel too close to the vehicle in front. We want to see if we can change driver behaviour and therefore improve road safety for everyone. Our advice is clear; please leave enough space, buckle up and give the road your full attention."

Dr Jamie Uff, Technical Director - Strategic Consultancy, Transportation, AECOM, said:

"Despite the often-reported dangers of distracted driving and failing to wear seat belts, the numbers of people killed or seriously injured as a result of these behaviours remain high. The technology AECOM is deploying makes detection straightforward and is providing valuable insight to the police and policy makers on the current level of road user behaviour. We are really keen to use this equipment to raise awareness and help improve road safety for all."

Inspector Jem Mountford of Warwickshire Police said:

"We are really excited to see the impact that this new technology has on the behaviour of drivers in Warwickshire.

"Our officers deal with the tragic circumstances of collisions where often innocent people have been killed or seriously injured because a driver was distracted by a mobile phone, or someone was not wearing a seatbelt. These collisions are preventable, but we need all road users to do the right thing and comply with the law to make our roads safer.

"During the trial the most serious breaches may be prosecuted, with others receiving warning letters, giving us the opportunity to explain how they have been caught and asking them to change their behaviour. Next time they may not be so lucky."

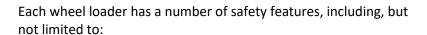
Around 25% of road deaths were linked to not wearing a seatbelt in 2018. In the same year, 117 people were killed or seriously injured in a collision where the driver was found to have been distracted. A recent trial of new static road side tailgating cameras on a stretch of the M1 captured 60,343 occasions of vehicles driving too close, in just one year.

The advice from National Highways is clear: leave plenty of space, buckle up and leave your phone alone.

FM Conway Strengthens Fleet with Innovative H&S Technology

The company has introduced these vehicles as part of its Big Ten in 10 Strategy, with the aim of eliminating risk for its workforce, with a particular focus on Traffic and Pedestrian Interface.

Each wheel loader features a number of intelligent safety solutions that move away from object detection and focus on human recognition systems that can operate even in tight city worksites.



- Active personnel detection at the rear
- Adaptive working lighting
- A roof camera system for 360° monitoring
- An integral tyre pressure monitoring system

The active personnel detection system is linked to the vehicle's braking system and monitors the rear area of the wheel loader to automatically apply the vehicle's brakes and warn the operator of dangers by both a visual symbol on the display and a noise.

The innovation of the system lies in its ability to differentiate between people and objects without people needing to be equipped with sensors, leading to earlier warnings, a reduction in false alarms and safer working practices.

The system can log any intervention on a mapping system so the location of activation can be mapped and analysed for risk hot spots, as well as automatically reporting the high-consequence harm near misses to the

business. This allows for a constant monitoring of the working processes so that further adjustments and control measures can be implemented.

The vehicles also feature a 360° camera system, which operates through the use of four additional cameras that capture images all around the vehicle and create a bird's eye view of the machine's entire working environment on the operator's cab display.

Through a combination of innovative safety solutions, the new wheel loaders offer a much greater level of efficiency, productivity, and ultimately, health and safety for FM Conway's workforce.

Details of the human recognition system can be seen on the following page.





THE MOST ADVANCED PEDESTRIAN DETECTION SOLUTION

- The only industrial-grade AI camera able to detect and localize pedestrians in real time.
- Alerts the driver to the danger and helps to prevent serious accidents on industrial sites.
- No pedestrian tags needed.
- Able to detect any postures (i.e standing, crouching, or in partial view) to prevent collisions with vehicles, whether driving forward or in reverse. Set up a proper danger zone distance for your fleet.







COMPACT, ROBUST & EASY TO INSTALL

- Industrial-grade solution, operational in harsh and tough environments, e.g. strong vibration, high impacts, wide temperature variance (-40°C to +85°C/ -40°F to +185°F).
- Waterproof and dustproof (IP69K sensor head).
- Compatible with all types and brands of industrial vehicles (forklift trucks, wheel loaders, excavators, etc.)
- Compact and easy to integrate.
- Future-proofed: online maintenance & remote software updates.









INCREASED PRODUCTIVITY & BETTER WORKING CONDITIONS

- Generates only relevant alerts for the driver, avoiding nuisance alarms and alarm fatigue.
- Avoids incurring costs related to downtime, workplace accidents or fatalities.



INTEGRATED CLOUD-BASED SOLUTION 'BLAXTAIR CONNECT'

- · Monitors & reduces risk of accidents.
- Highlights the most dangerous machines and determines the time and place where the risk of accident is highest.
- Measures the effectiveness of the preventive actions implemented to prevent accidents between vehicles
 bedestrians.





HOW TO GET BEST-IN-CLASS EDGE AI & DETECTION PERFORMANCE?

- Industrial market leader in pedestrian detection.
- 12+ years of experience in Artificial Intelligence and vision based pedestrian detection on the field.
- · High edge processing power.
- Unique & large learning dataset for feeding Al algorithms.
- Arcure Blaxtair is a member of the working group to create the first Al certification.
- 12,000+ Blaxtair in operation in 2022.
- 2000+ industrial sites equipped in 50 countries.

BLAXTAIR ORIGIN: MAIN COMPONENTS

- Sensor head: captures images.
- Processing unit: recognizes and localizes people in danger thanks to Al algorithms.
- 6 LCD screen or Flash Beacon: alerts the driver by a visual and audible alarm when people are detected on the trajectory of the machine, at the rear as well as at the front of the vehicles.
- Customized interface:
 Pedestrians can also be alerted thanks to voice buzzers or customized accessories.



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Living with Diabetes – Jeremy Blom Shares His Blog

In the UK, 700 people a day are diagnosed with Type 2 diabetes. 1 in 14 people in the UK are living with diabetes, 5% with Type 1. One million people don't know they have diabetes!

Jeremy Blom shares his experience of living with Type 1 Diabetes.

My life with Type 1 Diabetes

There are many types of diabetes, the main three being Type 1 (Insulin controlled), Type 2 (Controlled by diet and / or medication) and Gestational Diabetes (Can occur in some women while pregnant).

I've been a Type 1 Diabetic for nearly 39 years, having been diagnosed 1 month before going to university, which meant an extra steep learning curve of moving away from home and learning how to manage this constantly changing condition.

Type 1 diabetes means my pancreas no longer produces any insulin, so I have to inject insulin to enable my body to manage the sugars generated from the food I eat. Type 1 diabetes is classed as a "chronic condition", its cause is unknown, and anyone can get it at any age, although predominantly it's during childhood or as a young adolescent. Type 1 is not related to your eating habits or lifestyle but often occurs after a physical or mental trauma; in my case sever food poisoning following a month backpacking around Europe.

Initially I used plastic syringes to inject my insulin twice a day, but this meant I should eat a set amount of carbohydrate at set times. For those who know me, and remember I was starting Uni, this was never going to happen! What about drinking, cooking for myself, exercise, parties, pizza at 3am etc. etc?

Somehow I survived, and to-date I don't have any of the complications people can get from poor control, like kidney failure, amputations, blindness, loss of driving licence, etc.

Changes in diabetes management

In the late 90's diabetes management changed and rather than 2 injections a day I started using a "pen". This was a life changer, it meant I could eat what I wanted, when I wanted but I had to do an injection every morning, every night and every time I ate; about 12 per day! And every time I ate, I should weigh the food / count the pints, and calculate how much carbohydrate was in it and then how much insulin I needed depending on the time of day. Thankfully I like maths.

The next evolution for me was 8 years ago when I changed to an Insulin Pump, which is stuck to me 24/7 and lasts for 3 days before being changed. The pump delivers a continuous drip feed of insulin, more like normal people, and then I use a controller (looks like an old mobile phone) to give myself a boost of insulin when I eat, but it calculates how much insulin I need, so far less maths. Just think, I went from at least 12 injections a day to just 1 every 3 days – Freedom. It's also far easier and more discrete, no need to drop my trousers to inject or inject through them as I used to do(!), and it enables far better control of my diabetes.

As well as having to inject insulin, I need to monitor the sugar levels in my blood. Originally this was done by weeing on a little stick and comparing the colour of the test strip to a chart on the bottle. Simple but not very convenient and not very accurate. About 35 years ago technology improved and I could prick my finger, get a drop of blood and test that using a meter. Great, as well as the injections I now had to stab my finger at least 8 times a day!

Then, seven years ago came the next evolution, a "patch" with a small canula stuck to my arm. This lasts 14 days before changing and reads my blood sugar level every 5 minutes, Bluetooth's the reading to my phone so I can always see what it is, shows when my control is good or bad, and it even alarms to warn me I'm going high or low. Some of you will have heard the annoying alarms, sorry.

What an improvement, from a peak of about 12 injections for insulin and at least 8 finger pricks for blood tests each day, I'm down to just 12 pricks a month! (10 insulin pump changes and 2 blood test readers).

A balancing act

Managing diabetes is a balancing act between how much food you eat, how much insulin you take, how active you are, how well / ill you are, how stressed you are, how anxious you are, is it a hot or cold day, time of the month it is (for ladies). etc. In fact, doctors believe there are at least 27 things that can affect how you react to the insulin and whether your blood sugars will go high or low at any time of day or night.

High blood sugars from too much food / not enough insulin, generally result in increased thirst, headaches, trouble concentrating, blurred vision, frequent peeing, fatigue / feeling tired or irritable, and over the long term cause the complications mentioned above.

Low blood sugars from too much insulin / not enough food / too much exercise etc. make you go "Hypo" (hypoglycaemic), which can make you irritable, anxious, shaky, sweaty, struggle to concentrate, look pale, blurred vision, appear drunk and many, many more. Several of these signs are the same as for a high blood sugar, making it hard to know whether I'm high or low, and especially difficult for others to "diagnose"! Amazingly most diabetics, and often those close to them, learn quite quickly to identify these signals, and whether they're going high or low, but some do struggle, or they lose the signals over time.

Although high blood sugars need to be avoided because over the long-term, they cause the serious complications; hypos are far more embarrassing and can be dangerous to the diabetic or those around them. Hypos can creep up on you and if you ignore the signals because you're too busy, too embarrassed to help yourself or don't notice them, you can go past recognising them and become aggressive, appear to be drunk or even slip unconscious in serious cases; none of which are good, especially on a construction site.

I try to keep my blood sugar close to 6.0mmol/l, (a non-diabetic is around 4.5mmol/l), with an acceptable range of between 4.5 and 10.0. I'm not allowed to drive if it's below 4.5. Pat on back to self:- over the last three months I'm "in target" 80% of the time which is pretty good when my doctor wants at least 70%, but that just challenges me to try even harder.

If you see me eating jelly babies, drinking coke or orange juice, you know my blood sugar is low and I may be struggling to concentrate or be a bit irritable. If I'm helping myself, I should be ok in about 10 minutes but please just keep an eye out and be patient. If you see a diabetic looking pale, not really

"with it" appearing drunk or collapsed; give them sugar, ideally a sugary drink so they don't have to chew, but they may resist as when hypo we can become aggressive, very strong willed and totally unresponsive to reason. If it's a low blood sugar they'll recover about 15 minutes after the sugar; if it's a high blood sugar they won't get any worse, but you'll have to call an ambulance. **Never** give a diabetic insulin, if they need it, they'll sort their own.

Yes, Type 1 diabetes is very hard to manage, you never get a day off, and it can be extremely frustrating at times, but it's never stopped me doing anything, it never will, and it's just part of life. Research around the world is improving life for diabetics and their families but there still isn't a cure. The latest tech, "Closed Looping", enables the blood sugar reader to "talk" to the insulin pump and almost automatically control things. I've got the tech but I'm not yet brave or clever enough to link it all together!

Thanks for reading my blog, but how can we all help?

In the workplace

Allowing diabetics time and space to check their blood sugars, take their insulin / medication discretely, and to eat when needed, significantly reduces their risk of a hypo, helps improve their control which helps their physical and mental health.

Diabetes is a 24/7 balancing act where a little support and consideration can help the diabetic stay safe and healthy.

Things to ask yourself in the workplace:

- Are you aware of the diabetics in your work team?
- Would you recognise the signals that they may be going hypo (low blood sugar)?
- Do you know what to do if they are going hypo? [Give them fast acting sugar like coke or orange juice]
- Have you provided facilities for them to manage their diabetes discreetly? (Not just the toilet!)

Where to get help and support

- Speak to your GP if you have noticed or are worried about any of the symptoms.
- Speak to your employers health and wellbeing team, who will guide and signpost to onward support.
- Speak to other diabetics.
- Search for and join a local Diabetes group.

Useful resources

- <u>Diabetes UK</u> has a wealth of information for living with diabetes, support available and resources
- www.diabetessafety.org for information for employers and companies.

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.

 $\underline{https://www.gov.uk/government/collections/health-and-safety-for-major-road-schemes-raising-\underline{the-bar-initiative}}$