DfBB Women in Transport Podcast: Nina Day

Anne-Marie: Welcome to the Driving for Better Business podcast celebrating women working in transport, fleet management, and road safety. I'm delighted to have Nina Day, Policy Advisor for the Health and Safety Executive with me today. Nina, welcome to the Driving for Better Business podcast. It's great to have you on the call today.

Nina: It's great to be here.

Anne-Marie: The Health and Safety Executive plays a crucial role in ensuring the safety of those in the workplace and your area of expertise is in road and workplace transport. What was your career route into this particular area?

Nina: You know, after nearly 23 years now I can still picture the job advert that got me applying to work for HSE. And I didn't really know anything about HSE back then and I certainly wouldn't have imagined my career developing the way that it has – but very much in a good way, I should say. When I first started in HSE I was carrying out incident investigations, so that was fatal and serious injury incidents in quite a wide-ranging number of sectors – manufacturing, construction, agriculture, offshore. I'd worked on a couple of incidents in the transport sector, but it wasn't really something that was on my radar. And after about 6 years, I decided I wanted to get more involved in the research side of things. I asked for a project that I could work on, and I did have my eye on something else – and I remember being quite disappointed when I was given a project on HGV travellers instead, I think I was probably quite annoyed at the time! But I gritted my teeth and thought I'll get through this, and then I'll never think about an HGV again.

And clearly, it didn't work out like that. I think within about 2 weeks of starting that project I was just fascinated by the industry in general. And I still am. It's such a critical industry sector for the country as a whole, and there are some absolutely incredible people working in it. A lot of technical innovation, a constant drive to do things better, and it's just great to work with. So, it's an industry that I've been very, very happy to work in for many years now. I moved into policy within HSE about 4 years ago, and that was a big change, but an exciting one. One of the best parts of my job is getting to work with HSE's external partners, whether that's industry groups or partners within government like DfT, the police, with National Highways… and I think having a non-policy background is actually quite helpful to me in some ways, because it's a different perspective. And having that technical, scientific background can be really useful when it comes to talking about something like load security, which can be quite a complex topic.

So, my career path to this point probably has been a little bit unusual, but I wouldn't change anything about it.

Anne-Marie: Fantastic – and you're quite right. Sometimes, looking at transport, it doesn't seem like it's a very interesting area or particularly wide-ranging. But actually, when you get into it, there is so much there. And you mentioned partnership – how important is partnership in getting things right in the workplace, or the driving for work area?

Nina: I think it is absolutely critical. I mean, certainly from HSE's perspective, we are talking about an area where you have overlapping areas of legislation, because you have workplace safety, road safety… you have different regulators working in that same space. And it's absolutely critical that we have an ongoing dialogue between us; that we work together closely. The engagement is also really important in terms of talking to industry and making sure it's a constant two-way discussion about how things can work, how they can work better. It is one of the great things about the industry, working in transport, is that you have so many parties involved. It's exciting. It's fun.

Anne-Marie: Yeah. You've already mentioned some of the things you've been involved in, and load security is actually quite important – we don't think of it so much and we've all seen things bouncing off of flat-bed trucks and stuff, because they haven't been tied down particularly well. It's important to understand how loads behave in on a moving vehicle, and it's not just about driving with loads but also but also the process around loading them safely. What are the most common causes and the most common vehicles involved in incidents with unsafe loads?

Nina: You're absolutely right, load security is a really important issue. And it's an issue that affects everybody. I think people often think "Oh, it's only HGVs that we have to worry about", but not at all. You can have issues in cars, in vans… it's really important if you're transporting goods on the road – whatever the vehicle, whatever the length of journey – are you managing that properly? Have you got a system in place to make sure that that load gets from A to B safely? I think it can seem very complicated to people sometimes – "Oh, there's lots that I need to do", but actually a couple of years ago I went back and looked at all the load shift incidents that I'd been involved and investigating over the years, and I made a shortlist of the causative factors. And it was very short. There is a very limited number of reasons why loads move.

The good thing there, I think, is that they were very simple and straightforward reasons, so they could be quite easily fixed. Things like the load was unstable on the load bed when it was loaded – and it shouldn't have been, it should have been stable. You can never make an unstable load safe. The load wasn't secured properly, or at all in some cases, and it shifted during the journey – that could have been fixed by tying the load down. So, the most common causes of fatal and serious incidents that we see in transport generally – aside from load shift – are being struck by a moving vehicle, being struck by a moving or falling object, falling from a height, or slips, trips and falls on level ground. And you get those with load shift. Those are the key reasons why people have incidents.

I think sometimes people assume that a load shift incident is just when something falls off the vehicle on the road, or falls out of the vehicle during unloading. But there are other types of incident as well. For example, a driver might climb up onto the load bed to deal with a load that has shifted during the journey, and then they fall off – that is quite a common type of incident. In a van, the driver or someone else might not realise how important the bulkhead between the driver and the cargo area is – it's there to protect the driver in case the load moves forward. And it needs to be in reasonable

condition, and the load behind it needs to be secured. I've seen vans where the bulkhead has been removed or it's had sections cut out of it, or it's been damaged and not repaired. And it can't do the job it was designed to do – to protect the driver.

So again, that's another type of incident. One type of incident that I've seen quite a few times recently is items falling off the forks of a forklift truck, or something has been pushed across the load bed by the forklift during loading and unloading. And it's fallen and struck somebody – the driver or another worker. Now, these things do happen. During loading and unloading, things do happen, and things do fall. But the key thing here is making sure there's no one in that area, so if it falls you've just got product clean-up. It's not going to be any more serious than that. If the driver doesn't need to be there, if the driver isn't supervising it and doesn't need to be directly next to the vehicle, put them somewhere else. Give them somewhere safe to wait so that they're not in the firing line.

I think a really important point I want to make here is – I hear this a lot from people, they say "I've never had an incident, I've been working in this job for a long time, I've never had a problem" … I think back to my experience earlier on in my career investigating incidents across a lot of industry sectors. No one sets out to have an incident. No one gets up in the morning and thinks "Today, everything's going to go wrong. That's what I want to do with my day.". And something can be unsafe for a very long time without a catastrophic event, until the day when it does go wrong. And it is such a common mistake that people make, they assume that because they've done this for a long time it will always be safe. And unfortunately it doesn't always work out like that.

Anne-Marie: Yeah. And I think safety isn't down to luck. Safety is down to people taking ownership and responsibility of what they need to do. Safety is never just luck. Those are really important things to focus on there.

Nina: Absolutely. And you can – I don't like to use the phrase 'get away with it' – but it is, it's luck, it's gambling every day that things will be okay, but unfortunately luck can run out and it is, I think, quite difficult when you're investigating an incident and you can see multiple points at which that could have been prevented. We can't forget the fact that the end result of these serious incidents is that a family has been bereaved. A worker has been left with very serious injuries that may affect them for the rest of their life. And that could have been prevented. It is a difficult topic and I think it can be very hard for the operators, for other workers in those businesses, when there is something that could have been done and unfortunately it wasn't at that point.

Anne-Marie: Yeah. It's interesting. We're going to move on to talk a bit about dangerous goods and abnormal loads. The approach should be exactly the same for anything we're doing with transport. Dangerous goods are an interesting one.

Firstly, what qualifies as 'dangerous goods', and secondly, are there any special precautions that need to be taken when transporting hazardous goods?

Nina: You've got an incredible range of substances that qualify as dangerous goods. I think it is really important that people understand what they're carrying. I go out quite often with the police and DVSA and I've seen people be tripped up because they didn't necessarily realise what was in the back and

didn't realise that it came under particular rules because of the type of load. So it is important to understand what you are transporting. The same general rules about load security apply to dangerous goods as much as they do to anything else. But it is understanding the characteristics of that load type. So for example, if you're transporting chemicals in an IBC and you're using ratchet straps to tie that load down, you will need two ratchet straps over your IBC instead of one. So that's something very specific to carrying an IBC.

You need to make sure that your packaging, the way that you've loaded that load into the vehicle, is sufficient to protect it from harm. So for example, if you're carrying a pressurised cylinder, you need to make sure that you protect the valve from damage – because if it does get damaged, potentially you have a missile on the load bed.

So, it is quite interesting when I do go out with the police or DVSA – quite often, the issues aren't with operators who are transporting under the ADR rules all the time. It's with people who are carrying dangerous goods, either under limited quantities or it falls outside ADR completely. So gas cylinders – very, very common – a lot of people are carrying gas cylinders in their vehicles. And they're not always secured very well. It's quite alarming really, because as I said, if the valve gets damaged, potentially you have a missile on the back of your vehicle. It's not something that you want to sit in front of.

So it's really, really important in any transport operation to plan, and to make sure you've got a system in place to do it safely. But if you are transporting dangerous goods, you need to be really sure that that is going to be in a safe condition all the way through to delivery.

Anne-Marie: Yeah, and that leads us on to talking about abnormal loads. Not quite the same as dangerous goods in the same sense but the potential for harm when carrying abnormal loads. We're seeing some emerging issues – the right paperwork not being in place and inappropriate route planning, are amongst some of the issues reported. What qualifies as an abnormal load and, with so many people involved in that chain of safety, where does the responsibility lie?

Nina: With any transport operation you've got to think about the process. With abnormal loads this gets really critical, because it can be very complicated. If you have something that is oversized, very heavy… you've got to give notifications and plan your route very carefully, because there will be roads that your load simply doesn't fit down. You've got a lot of arrangements to make in advance. And, we have seen issues with this recently, I think it's fair to say. Load security issues as well, which is slightly alarming because some of these loads are very, very heavy. Any load shift has the potential to be deadly, even something that is very small and light could kill in certain circumstances. But when you've got a very heavy load, the potential for disaster is very high, and you really need to make sure that that load is secure, and it is not going to go anywhere.

In terms of the responsibility – and again, this applies to anything – from a legal point of view, I think the responsibilities are quite clear. So, you've got Section 40A of the Road Traffic Act, which is the section that applies to the movement of a load on the road. That sets out a division of responsibility between the driver of the vehicle and anyone who causes or commits the vehicle to be on the road. And everyone has a responsibility to make sure that the vehicle itself, and the load it carries, are safe. Under Health and Safety legislation, of course, employers have a general duty to ensure the health and safety not just of their own employees, but also of anyone else who might be affected by their work activities. So you've got this division between all parties. It's not enough to just say "Oh, the

driver's responsible – that's it. Once it's out of the gate, it's all on the driver". There is always a chain of responsibility from the point of loading right through to unloading.

Anne-Marie: Yeah, thank you for that. I want to talk now about HSE investigations. About 1/3 of injury collisions involve someone who is driving or riding for work. And in 2019 we saw 1495 at-work-drivers and 556 passengers of those drivers were killed or seriously injured in road crashes. So investigating fatal and serious collisions is part of your remit as the HSE. When do the HSE become involved in investigation?

Nina: Well, HSE generally doesn't get involved in the investigation of road traffic collisions as such, because the police will take the lead. So you have this overlap of legislation, this overlap of enforcement responsibilities. And it's exactly that situation – you have the police, DVSA, HSE… and we have agreements between us on where our enforcement remit is. It does depend – I'm not being evasive here at all – but it does depend on the particular circumstance of the incident. So the police may ask for HSE assistance in some cases. That may be technical assistance… or the police and HSE may carry out a joint investigation. Sometimes the police initially will take the lead but then hand the investigation over to HSE. It really does depend on the circumstances. And where, and how, that incident happened.

Anne-Marie: Providing advice and help with investigating fatal and serious collisions is just one part of your role – you also carry out research projects into different aspects of vehicle, driver, and load safety. How has this shaped the polices of the HSE and helped to reduce risk?

Nina: I'm a mechanical engineer by background, and it's been really interesting to me over the years that a lot of the issues we see are not really to do with things going wrong mechanically, they're to do with people. And how people react to things. So, I led a research project about 11 years ago now, looking at vehicle rollaway. And that research led to working with trade associations and other groups who produced the 2014 Safe Coupling Guidance, which is really good guidance. As I said before, people don't set out to have an incident. Serious incidents can happen to experienced, well-trained drivers because people are human beings and they get distracted. They might be having a bad day or they're tired and they forget to apply the trailer park brake.

So we incorporated a lot of the lessons from research and from incidents into the HSE Workplace Transport Safety Guidance. A lot of that is about trying to design out human error. People do make mistakes, it's inevitable. It happens to everybody. And if there are ways that we can design that out, it's always going to be a safer system.

And again, going back to an earlier point, one of the things I really like about the transport industry is this constant drive for innovation and making things better. When I look at the equipment that's available for operators now, it's a completely different world to how it was in 2007, 2008. Drivers who aren't climbing up on the load bed – they don't need to anymore, because things are being done different way, or different equipment means they don't have to – are not going to fall off the load bed. It doesn't matter if a driver forgets to apply the parking brake if there is an interlock that does it for them.

And it's that kind of innovation, that dialogue with industry, the two-way communication, that is really important. Not only in terms of shaping HSE's policy and the advice that we give to people, but also to driving the industry forward, and helping them to innovate and come up with new ways of working, new equipment. I quite regularly get emails and phone calls from people who have come up with a new way of doing something, or have invented a new system – and it's great. It's fantastic because people are constantly thinking about these things – "how can we do that better"?

From HSE's perspective, we don't say to people – for the most part – the way they must do it. There are certain things you must do, for example if you have lifting equipment, you must inspect that equipment at regular intervals. But generally speaking, we say "this is the level of safety that we want you to reach. How you get there is up to you. We will help you help you and give you advice – but ultimately it is what suits your business".

And certainly in the transport sector, people rise to that, and come up with their own ways of working that suit their business. And they reach that level of safety.

Anne-Marie: That's great, and it's really refreshing to hear that people are coming up with their own, new ideas on how to make workplace transport safer. Because it is a very changing environment, especially when we look now at the different types of vehicles offered for use in the workplace, on the roads, electric vehicles, autonomous vehicles, and the whole range of new technologies that are coming on board. That innovation is really refreshing to hear, and I'm really encouraged.

There's more understanding now that workplace safety extends to work activities on the road as well, just as much as it does in a fixed building or workplace. And the HSE refreshed its guidance on driving and riding for work, 3 years ago. That's been really well received. We use the term 'guidance', but it's more than guidance. So what happens if employers don't follow that HSE guidance?

Nina: Well HSE guidance is there to explain what employers need to do. What they must do to comply with the law. For example, we say an employer must assess workers' health and safety capabilities and competence before they operate a work vehicle. And we say they should make sure the vehicle is road-worthy before it goes onto the public highway.

If an employer chooses not to do those things – so let's say they allow someone who doesn't have a valid driving license to take out a work vehicle, or they send them out in a vehicle with bald tyres – then not only are they putting that individual and other road users at risk, they're also committing specific road traffic offences, under the Road Traffic Act, and the Construction and Use Regulations.

So we do provide that guidance to help people comply with their responsibilities, with their legal responsibilities – whether that's under road traffic legislation or under workplace safety legislation. As I said before, we are a goal-setting regulator. We don't necessarily tell people exactly what they need to do. We let people devise their own system to do that. And that is why we do produce so much guidance – if you go onto the HSE guidance website I think we've produced guidance on just about everything. And we're always happy to help people if they have queries, because it's so important that people have a system that works for them, that isn't imposed by somebody else – it works for them and their business. And that's what we try to help them to do.

Anne-Marie: Brilliant, thank you. Nina, this has been really eye-opening. I could talk much more about this subject because the range of topics that we could discuss in this area is huge. Thank you so much for joining us today. If people want to get more information about anything they've heard today where should they go to find that information?

Nina: There are lots of places they can get information – so the HSE website has lots of information, DVSA have lots of information themselves, and of course National Highways do, and the Driving for Better Business website.

Anne-Marie: Brilliant, thanks Nina. For everything that you've heard today, like Nina says – there's information on various websites. We will certainly put links to the Driving for Better Business website in the shownotes. Thank you for listening, and thank you Nina.

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