

PAPER TRAILS

How you can get ahead and simplify
your fatigue management by making
the switch to an Electronic Work
Diary/Electronic Driver Logbook

Contents

In today’s business environment, fleet operators and managers don’t need to fuss with paperwork when they can go digital – from forms and checklists, to fatigue and documents. Digital transformation can streamline workflows, create efficiencies and minimise the errors that come with using paper.

In this eBook, you’ll find out a little bit more about the process of getting your fatigue digitalised with Teletrac Navman.

BACKGROUND

COMBATING THE DANGERS OF DRIVER FATIGUE.....

THE CONCERNS OF MANAGING FATIGUE.....

THE BREAKDOWN: THE BENEFITS OF IMPLEMENTING EWDs

HOW DOES THE SOLUTION WORK?.....

MANAGING CHANGE

PARTNERING WITH TELETRAC NAVMAN.....

3

4

6

7

9

10

11



Background

Fatigue is a silent killer. Research suggests that 20-30 per cent of fatal collisions involve driver fatigue, but its role is more difficult to quantify than speed or alcohol. This statistic is certainly an underestimate. Drill down into the data and the figures are startling.

According to the Transport Accident Commission (TAC), fatigue is the cause of approximately 50 deaths and 300 serious injuries each year in Victoria alone.* In New South Wales, fatigue contributed to 76 deaths in 2017, 90 per cent of which were on country roads.**

Meanwhile, in New Zealand there were 34 fatal crashes, 80 serious injury crashes, and 460 minor injury crashes where driver fatigue was a contributing factor. In these crashes, 44 people died, 110 people were seriously injured, and 606 people suffered minor injuries.***

Everybody from business owners and managers to employees, contractors and suppliers are part of the journey for the driver, and thus have a duty to help do what is possible to reduce the risk of fatigue-related violations that could cause serious harm. The consequences for failing to comply with regulations that apply to individuals and organisations can result in hefty fines or even prison sentences.

Did you know that fatigue could have the same effect as drink driving?

Driving after being awake for 17-19 hours is equivalent to driving with a BAC (Blood Alcohol Concentration) of approximately 0.05%. At this level, the risk of a crash is double than with a BAC of zero. Driving after 24-27 hours is equivalent to driving with a BAC of around 0.1%. At 0.1%, the risk of a crash is seven times greater than driving with a BAC of zero.

[Driving Low - Fatigue](#)

[The Ultimate Guide to Fatigue Management](#)

* Transport Accident Commission, <http://www.tac.vic.gov.au/road-safety/statistics/summaries/fatigue-statistics>

** The Land, <https://www.theland.com.au/story/5188700/fatigue-features-heavily-in-shocking-country-road-toll/>

*** Te Manatu Waka, Ministry of Transport, <https://www.transport.govt.nz/statistics-and-insights/safety-annual-statistics/sheet/fatigue#:~:text=for%20this%20factsheet.,Summary%20for%202022,606%20people%20suffered%20minor%20injuries>

**** NRSPP, <https://www.nrspp.org.au/resources/driving-low-fatigue/#:~:text=Did%20you%20know%20that%20fatigue,a%20BAC%20of%20around%200.1%25>



Combating the Dangers of Driver Fatigue

The cabin of a truck is one of the deadliest workplaces

The second highest fatality rate was the Transport, postal and warehousing industry with 8.7 fatalities per 100,000 workers. This is 16% higher than the five year average of 7.5 fatalities per 100,000 workers.¹

Similarly in NZ, in 2022 alone there were 62 deaths in crashes involving trucks and 44 deaths involved driver fatigue.² Furthermore, there were 80 collisions that caused serious injury and 460 collisions that caused minor injury, leading to 717 people suffering from serious or minor injuries.

There are many factors, but fatigue is one of the biggest hazards. Tight deadlines, over-scheduling and a lack of sufficient fatigue monitoring tools make it one of the hardest areas of risk to manage.

Up to **30%** of all fatal crashes in Australia are due to fatigue, a significant number over New Zealand's 9% of fatal crashes³

Over **80%** of truck drivers work more than **50 hours a week**

Long-haul workers report sleeping for **3-6 hours at a time**

20% of transport workers break safety rules to meet deadlines

The social costs of fatigue-related incidents is now reaching close to 300 million in New Zealand.⁴ In Australia, the estimated costs to the community is closer to \$2 billion every year.⁵

Fatigue doesn't just affect truck drivers, it's a risk for all road users!

20% Australians admit to **falling asleep behind the wheel**

1 in 5 New Zealand drivers admit to momentarily **falling asleep at the wheel**⁶

5% have been in **fatigue-related collisions**

The top 3 causes of fatigue:



Lack of Sleep



Body Clock Disruption



Time Spent Driving

Fatigue creeps up but once it sets in, you're not the same driver. Here's what can happen:



3-5 Second Micro Sleeps



Slower Reaction Times



Poor Lane Tracking



Impaired Speed Maintenance



Late Braking



Missing Road Signs



Straying Concentration

Signs of fatigue. If any of these warning signs occur, you need to immediately pull up and rest:



Constant Yawning



Excessive Blinking



Chin to Chest



Slouching in Seat



Eyes Glazing Over

Long haul drivers working through the night are fighting natural circadian rhythms telling their body to shut down for rest. Don't be a hero in the face of fatigue.

The Concerns of Managing Fatigue

Managing fatigue amongst the complexities and responsibilities of a modern transport operation is challenging. While your drivers may be comfortable with the current process and the paper logbook, they can be fraught with inaccuracies and rely on an individual's interpretation of the fatigue rules and the understanding and ability to calculate work and rest period requirements.

These complexities are vast, and can often differ between business, but overall they all boil down to a few main areas:

- While compliance is key, creating a safe environment for your drivers is paramount
- Too much paperwork – no digital system to help manage the workload
- Difficulty keeping track of all the fatigue rules as set out by law to which drivers must comply
- Managing audits, non-compliance and training is cumbersome
- Scheduling and rostering jobs is difficult without a real-time view into work and rest hours
- Logbook is potentially incorrect or often goes missing making the paper trail impossible

Depending on your driver's schedules, you may not see the logbook for a little while, which is often too late to address any violations or problems directly. Furthermore, keeping track of complicated legislation within Australia can be a job itself, especially when considering all the other facets of compliance and workplace health and safety you are required to keep track of. Certain states like Western Australia have their own fatigue rules, creating confusion for those crossing the border.

These challenges can be overcome with the use of Electronic Work Diaries (EWDs), which deliver a multitude of safety, cost and time-saving benefits. Today, EWD solutions are available and approved by the National Heavy Vehicle Regulator (NHVR) that can be solely used to manage driver fatigue.

[Insert Image]

"We've seen a huge decrease in fatigue breaches using the Electronic Work Diaries. They let us better keep track of driver hours. We match up the real data with the physical logbooks and the drivers are getting better and better at logging their time and maintaining safe hours." Ange Marlow, Administration Manager, Porthaul

[Driver Fatigue Management – The Ultimate Guide >](#)



The Breakdown: The Benefits of Implementing EWDs

An EWD is a solution that operates within a device mounted in the vehicle itself as a tool for the driver. The driver can view their current fatigue status, tap to start work or rest during every journey and view rest break calculations, available hours, and all relevant data directly on the device, which doesn't require communication with a server to give the driver real-time information. An EWD offers several advantages over paper-based logbooks.

No more paper!

When it comes to fatigue, paper-based and manual processes get old fast. They're fraught with inaccuracies, can be falsified, can easily be lost or damaged, and manually having to calculate hours worked and rested based on the fatigue rules is complex. With a digital system, your business can automate the entire process. Instead of spending hours calculating hours, wondering if schedules fit, or getting in touch with drivers while they're on the road, an EWD can give you a real-time into everything you need to know about fatigue across your fleet. With real-time alerts, both the driver and the back-office can get proactive and manage fatigue with ease, taking away the complexities and getting safely on the road.

No more compliance red tape

Calculating work and rest hours of all your drivers is difficult and a full-time job in itself, and it's what you're required to do to comply. Staying compliant with these regulations, and not just the body clock, is important. Leaving it to luck can mean something can go wrong very quickly. With an electronic work diary, managing compliance becomes simpler. You gain dashboards filled with visual insights into real-time and historical driver work and rest hours helping you manage potential violations ahead of time and get on top of missed breaks instantly. Reports can be set up and scheduled ahead of time, helping you stay on top of audits and, most importantly, help you reduce the risk of potential hazards and incidents.



Simplify the complex

It's no secret that the fatigue rules and regulations are complex. When there's so much more going on in the business, calculating hours across all your drivers requires time and thought to get right. Leaving it to manual processes or paper logbooks means you can often be relying on guesswork and diary sheets coming back to you late. With a fatigue management solution, the complexities of calculating hours is taken away, so you can focus on more strategic initiatives instead of worrying about driver hours. With alerts for upcoming rest breaks, drivers know exactly when they need to take a break. The system gives you a complete view of hours work broken down by rules and events, both past, present and future, to help you understand the day ahead for both the driver and the fleet manager.

Get on the schedule

When it comes to scheduling work ahead of time or even urgent ad hoc jobs from your clients, doing so without an EWD and fleet management solution is difficult. You have no insight into your drivers' current hours, no idea of possible violations, and can't track drivers to see whether they can complete the jobs. On top of that, contacting your drivers while they're on the road is dangerous. Getting a real-time view of hours available for all your drivers so you can schedule work safely. If spur-of-the-moment jobs come through, you know your driver's status and location instantly, meaning you can allocate to the right person to get the task completed productively.

All-in-one, one for all

The struggle when it comes to telematics and fleet management is having too many independent systems working against each other. With Teletrac Navman, the same device that delivers you the EWD solution also centralises a variety of tools for drivers, providing a platform where they can complete checklists, receive messages, record progress of jobs and complete necessary forms – all on a single device. It streamlines your entire business to help you become more productive, safe, and look to reduce costs in areas of opportunity.

"The administration side of things has improved 100 per cent. Previously, we were doing double the data entry, as drivers would compile their own information and back-office staff would have to enter it into our systems. Now, this no longer has to be done twice, and staff have more time to concentrate on what they're supposed to be working on."

Scott Guthrie, Systems Manager, Mt Noorat Freighters

[Electronic Work Diaries](#)





Tackling Fatigue with Electronic Work Diaries

1

When you have installed the telematics across your fleet, each of their drivers will have a login into the device with a unique pin. If you've used another EWD solution in the past, the last 28 days of driving history will pull in automatically based on this ID.

Being awake for more than 17 hours has a similar effect on driver performance as having two standard drinks



2

Before activating the EWD, confirm the details for each of your drivers, including location home base and fatigue rule sets.

3

To get started, you simply need to tap the 'work' button to let the device know that they've started for the day. They can then set particular rules, select a home location and begin their record keeping.

Around 20% of fatal road incidents involve driver fatigue



4

As you travel, the EWD automatically alert when a rest break is needed based on work time and fatigue rules. The driver hits the 'rest' button when they're taking a break – don't worry, location information is automatically captured.

5

Drivers select 'rest' and prepare for an overnight break. The next day, they sign off on the previous day's work. Once signed off, this data cannot be changed.

30% of severe single vehicle crashes in rural areas involved the driver being fatigued



6

This data is made instantly available to your back office. By gathering insight into performance data, you can then accurately schedule jobs and provide feedback to your driver. No data is shared with any jurisdiction unless the driver is asked for it at roadside or it is requested from the record keeper.

Managing Change

A digital fatigue management solution can completely replace a written logbook in your transport operation, and while introducing this technology might present challenges, they can be easily overcome. Change can often create uncertainty, so it's important to have a strategy in place for rolling out EWDs. This will minimise resistance and help your business to take the leap. Here are some tips to get everyone on board:



INVOLVE

Everyone in the organisation needs to know why you're introducing technology and EWDs along with an explanation on how it will affect them. Drivers may feel as if the technology is being used to spy on them.



COMMUNICATE

Let all your staff know what is happening and when, so they understand the implementation process and what is required of them. Clearly explain how EWDs will make their job easier and safer, helping drivers avoid fines and a loss of licence.



TRAIN

EWDs should be written into new processes and procedures to help staff make full use of them. While they are simple to use, that doesn't mean that training won't be beneficial. This should include initial training, ongoing training and induction sessions for new staff. It may also involve hands-on sessions with the technology, or mentoring.



REWARD

The best way to generate enthusiasm for a new technology is to offer incentives. Rewards could include employee-of-the-month awards, gift vouchers, time off and, in the case of drivers, being able to have their pick of the fleet (or which run they want to do).



EVALUATE

Check-in with staff to see how they're getting on and address any shortcomings in training. Make sure to identify any tweaks that need to be made to make processes as smooth as possible. It's a constant cycle of refinement to ensure ongoing success.

[Why going electronic is more important than ever >>](#)

"Managing complex change is often challenging and has to be done in a careful manner, but we found the Teletrac Navman platform was really easy to use which helped us get buy-in from staff. We found when the platform was successfully adopted, it allowed people to explore other capabilities beyond the fundamental functionalities of GPS tracking, speed control and driver fatigue management."

– David Haoust, Director, Go West Tours.

[Changing gears, your guide to successfully implementing new fleet technologies >](#)

Partnering with Teletrac Navman

Teletrac Navman is a global leader in telematics, compliance and fleet management.

Teletrac Navman is a leading software-as-a-service (SaaS) provider leveraging location-based technology and services for managing mobile assets. With specialised solutions that deliver greater visibility into real-time insights and analytics, Teletrac Navman helps companies make better business decisions that enhance productivity and profitability. Its fleet and asset management technology uncovers information that would otherwise go unseen, helping customers reduce risk and confidently move their business forward with certainty.

What sets us apart

Our customers don't just choose to work with us because of our range of solutions. They also get a trusted business partner, access to industry expertise and an unparalleled level of support. Here are some of the reasons to partner with us.

INNOVATORS

We've got a long history in technology and the industry, and we're always looking at new ways to help you get your job done. We're considered trailblazers in fleet management for our innovative work in safety and efficiency and are regularly first to market with new solutions designed for your needs.

SUPPORTIVE

When you implement our solutions, we become your partner. With full on-boarding and installation support, we provide tips on how to change staff perception. Our dedicated customer success team helps you get the most out of the technology and provide ongoing support and training.

EXPERTS

Our team consists of industry experts who are passionate about your business success and will guide you through implementation and change management. Whether it's sector authorities or topic specialists, their expertise is part and parcel of the service we offer to you – not an additional cost.

FLEXIBLE

With solutions designed to suit your requirements, you can pick and choose applications, choose custom integrations that fit your needs and our flexible API lets you connect our system with other important business systems.

LOCAL

We think local for a globally operated company. We've got state-based industry experts, regional networks of support staff, dealers and installers that allow us to be responsive no matter where your business is based.

TRUSTED

We have over 25 years of experience in fleet management, which has helped us to serve over 40,000 customers around the world and track over 130,000 vehicles across Australia and New Zealand.

COLLABORATIVE

We partner with peak industry groups and government bodies so that we're always involved from the ground up and stay informed. Our team understands the challenges and trends that are impacting your industry.

"The drivers really like the applications, particularly the EWD, because it gives them feedback about their status and the number of hours they have left before a break or the end of a shift. We get the same information back at the office, so in terms of allocating fleet we can make sure we are meeting our legal requirements for fatigue."

Jeff Sherriff, National Transport Manager, Fulton Hogan



Get in touch with your local Teletrac Navman dealer today to learn more about keeping your drivers safe and your business compliant.

Tel: 1300 111 477

TeletracNavman.com.au

Teletrac Navman aims to be the driving force behind the industries that transform and sustain our futures by offering simple and intelligent solutions that enhance efficiency, safety, and sustainability. As a connected mobility platform for industries that manage vehicle and equipment assets, Teletrac Navman simplifies the complex so that its customers can transform the way they work through cloud-based solutions that leverage artificial intelligence to unlock the power of operational insight. Teletrac Navman manages more than 700,000 vehicles and assets around the world. The company operates globally, with offices worldwide and headquarters in Northbrook, IL.

Teletrac Navman is part of Vontier, a global industrial technology company uniting critical mobility and multi-energy technologies and solutions to meet the needs of a rapidly evolving, more connected mobility ecosystem. For more information visit www.TeletracNavman.com.