



# Stop Sleepy Drivers

Truck driver fatigue management guide.






This publication entitled *"Stop sleepy drivers - Truck Driver Fatigue Management Guide"* was prepared by the Abu Dhabi Department of Transport. Every effort has been made to ensure the information contained in this document is accurate, however this does not guarantee the accuracy, or the completeness and usefulness of the information. Additionally the Abu Dhabi Department of Transport cannot accept liability for any loss or damages of any kind resulting from use of the information or guidance in this document.

## Contents

Who is this guide for?	2
Why the need for guidance?	2
The legal framework for managing truck driver fatigue	3
What are the benefits?	3
Roles and responsibilities	4
Company owners	4
Transport managers	4
Truck drivers	4
Buyers of transport services	4
Signs of driver fatigue	5
What should the Driver Fatigue Management Plan include?	6
Step 1: Driving, working and rest limits	7
Step 2: Monitoring and record keeping	9
Step 3: Incidents and improvements	9
Step 4: Employer-provided accommodation	10
Step 5: Training, instruction and communication	10
Case studies	12
Examples of ways to record truck drivers hours	12
Examples of company specific truck driving limits	12
Further information	13



This document is designed to provide guidance on how to develop and implement a **Driver Fatigue Management Plan.**

### ***What is a Driver Fatigue Management Plan?***

*It is a written document that provides information on how your organization combats truck driver fatigue.*

## **Who is this guide for?**

This guide is for transport managers or anyone in charge of or managing drivers of trucks. Its content applies to heavy and light goods vehicles alike. It should also inform those managers buying road transport services of their role in combating driver fatigue within their service provider's workforce.

## **Why the need for guidance?**

The management of truck driving hours is an important issue that needs to be urgently addressed. Of the many road accidents happening in Abu Dhabi, trucks contribute significantly.

One of the most common causes for truck accidents is the lack of sleep amongst drivers as a result of prolonged driving with insufficient breaks. Drowsiness or sleepiness results in poor judgement, slower reactions to sudden changes to driving conditions, reduced alertness and a marked decrease in necessary skills, all of which may result in a loss of vehicle control and a crash. In serious cases, the driver may fall asleep during driving.

*The risk of falling asleep at the wheel increases when driving occurs at times when drivers would normally be asleep, particularly in the pre-dawn hours. There is also an increased crash risk during the mid-afternoon or after-lunch hours.*

## The legal framework for managing truck driver fatigue

This document provides voluntary guidance and aligns with the (draft) Abu Dhabi Environment, Health and Safety (EHS) Centre Code of Practice no 25 concerning the management of driver fatigue. Managers of truck drivers should also be aware of laws in force affecting the working and driving time for truck drivers such as GCC Land Transport Safety Requirements and UAE Federal Labour Law No. (8) of 1980 regarding regulation of labour relations. It should also be noted that it is a specific offence under Article 10.7, Federal Traffic Law No. (21) of 1995 for a driver to operate a vehicle whilst under the effects of fatigue.

The Department of Transport intends to further research, develop and consult on more defined limits for drivers that will, over time, be given the force of law.



## What are the benefits?

Implementing a Driver Fatigue Management Plan has benefits for your company and its employees. These include:

- Reducing the risk of road accidents.
- Reducing insurance claims and costs.
- Improving company and industry reputation.
- Improving customer service.

## Roles and responsibilities?

It is very important that all employees of a company are aware of their personal role in avoiding unsafe driving due to fatigue. The employer or anyone controlling or influencing any truck driver should take all reasonable steps to ascertain that their business practices or policies will not cause the driver to:

- Drive on the road, or within any workplace whilst impaired by fatigue.
- Drive whilst in breach of any working hours or rest hours regulations.

### Company owners

The owner and senior management of any company needs to take overall responsibility for all operations within the company, the conduct and actions of employees including managers of drivers and the drivers themselves.

### Transport managers

Transport managers should also account for:

- The effect of likely traffic delays.
- Loading and unloading.
- Non-driving activity.
- Any other work duties the driver is required to perform.
- Any other delays (for example such as loading and unloading) that could be reasonably expected.
- The possible effects of religious observance on fatigue, such as fasting during the Holy Month of Ramadan.

If the drivers' duties, as required by their company, leads to exhaustion to the point that their driving is impaired, the company and its managers are in fact to be blamed of any resulting accident.

Although it is normal for companies to expect to set work schedules and require good productivity from their employees, this should not be at the expense of road safety.

A joint effort between managers and drivers can contribute significantly in reducing fatigue-related road accidents. Managers should have procedures in place to monitor drivers and assess them for signs of fatigue or any sleep disorder. They should also have a fair system of receiving feedback from drivers, and react supportively if a driver reports excessive fatigue.

### Truck drivers

Drivers should not drive, or continue to drive a commercial vehicle whilst impaired or likely to be impaired by fatigue. If they feel excessively tired, they must report this to their manager and should be confident that this will not be held against them. Drivers should know their schedule and should discuss and agree on any concerns before commencing their driving duties.

Drivers must also ensure that they do not put themselves at additional risk of fatigue by their lifestyle habits. Drivers have a duty to ensure that they are fully rested before they start their shift, eat healthily and exercise adequately to stay fit. Drivers should also be aware that some prescription and over the counter medicines may cause drowsiness; they need to check with their doctor or pharmacist for a non-drowsy alternative.

### Buyers of transport services

If a company is buying a truck transport service, either from a large transport company or sub-contracting to a small company or an owner driver, they have a responsibility not to require drivers to work or drive while impaired by fatigue.



## Signs of driver fatigue

Drivers cannot always predict when they will fall asleep. Driving sleepy, they place themselves and others at greater risk of a crash.

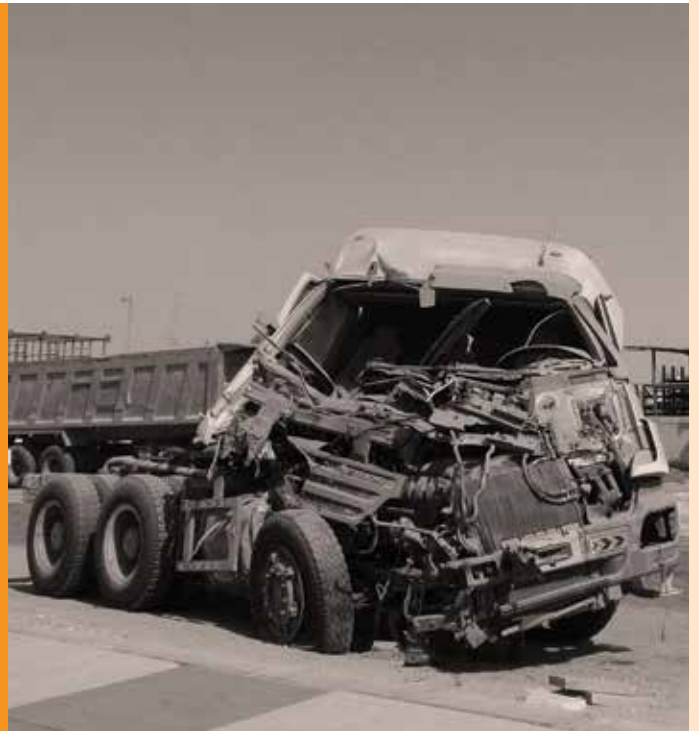
There are early warning signs when a person is sleepy. Drivers need to be trained about these signs. Driver drowsiness indicators include:

- Drowsy/sleepy feeling.
- Blurred vision.
- Difficulty in keeping eyes open.
- Head nodding.
- Excessive yawning.
- Repeatedly drifting out of the road lane.

Factors that predict longer term driver tiredness or fatigue include:

- Not feeling refreshed after sleep.
- A greater tendency to fall asleep while at work.
- More frequent naps during leisure hours.
- Extended sleep during days off.
- Increased errors and loss of concentration at work.

*Drivers need to be aware that using the radio, air-conditioning, or other “tricks” to stimulate alertness, has limited effect and will not overcome fatigue. Stimulants, like caffeine, will provide a temporary boost but do not reduce the need for sleep. Sleep that is delayed will need to be made up later. The use of prescription or illegal drugs to try and overcome fatigue is NEVER permitted.*



## What should the Driver Fatigue Management Plan include?

Exactly how you structure your plan and the details within it will depend on many factors, however, there are some common themes and each plan should contain the following:

Steps		Supporting Information
1	Driving, working and rest limits	Go to page 7
2	Monitoring and record keeping	Go to page 9
3	Incidents and improvements	Go to page 9
4	Employer provided accommodation	Go to page 10
5	Training, instruction and communication	Go to page 10

Consider the following step-by-step approach to establish a Driver Fatigue Management Plan in your business.



If you already have a company policy on driver fatigue, review it against the guidance in this document and update your plan as required.



## Step 1: Driving, working and rest limits

### Basic principles for developing driving, working and rest limits

Before developing your Driver Fatigue Management Plan, consider the following principles and how they can be incorporated into your operations. Regulations that are in force should guide you:

- Decide on driving hours limits and the minimum break and rest periods.
- One or more rest breaks should be scheduled into a driver's working day.
- A schedule must permit a driver to have at least 8 continuous hours of rest in any 24-hour period, preferably between 10pm and 8am.
- Irregular or unfamiliar work schedules should be minimised.
- Give a driver at least one day notice to prepare for a day with longer than normal working time.
- It is better to operate flexible schedules to allow for sufficient breaks from driving or discretionary sleep.
- Minimise very early departures where possible.
- When drivers return from leave, minimize where possible night-time schedules to give them time to adapt to working long hours especially at night.
- Provide or agree on appropriate sleeping arrangements if drivers are required to sleep in the vehicle.
- When planning driver schedules, it is better to have the work commencement times rotating forwards rather than backwards.
- Ensure clear communication of the Driver Fatigue Management Plan to managers and drivers.
- Develop and communicate your policy for dealing with breaches of the plan.



There are a number of other factors such as sleep apnoea and stress that may affect a driver's alertness. Your Driver Fatigue Management Plan should set out what factors you will take into consideration and how you will enforce them.



## Identify and assess the driver fatigue risks

*In order to develop effective driving, working and rest limits, you must identify relevant risks from the outset. If a risk is not identified, then it is not possible to develop processes to reduce it.*

*Driver fatigue risks can vary depending on the operation of your business and the types of activities your drivers are involved in.*

*For example, if a large proportion of your vehicle movements are at night, then this is a risk that needs to be identified. If you do not operate vehicles during the night, then this risk is far less important for your business.*

*If you operate a business that requires long distance movements, the risk of a driver falling asleep may be higher than on shorter urban movements. Specific risk issues include:*

- *No fixed locations for overnight rest and facilities to ensure good quality sleep for the driver.*
- *No accurate method for recording and therefore managing driving or working hours.*

## Scheduling truck operations

A key factor in managing driver fatigue is how a company schedules or plans individual truck trips.



Scheduling practices should include appropriate pre-trip or forward planning to minimise fatigue. A driver should not be required to drive unreasonable distances in insufficient time, and without sufficient notice and provision for adequate rest.

Scheduling practices should not compromise drivers' safety or health by the concern to deliver a load. If your scheduling practices are inadequate, the rest of your system is meaningless.

The main risk factors for fatigue-related accidents are:

- Inadequate sleep for one or more nights.
- Working when the driver would normally be asleep.

Company procedures should recognise that at least 6 hours of sleep are required each night to minimize fatigue. A minimum of 8 continuous hours break should be planned for, to ensure a driver has the opportunity for at least 6 hours of actual sleep. This is an absolute minimum and may still lead to increased levels of fatigue over a number of days.

The second main risk factor for fatigue related crashes is working when the driver would normally be asleep. People who work at night have trouble adjusting their body clocks. No matter how much sleep a person has beforehand, they will still feel sleepy between 1:00 am and 6:00 am.

Company procedures should recognise that driving during this period puts drivers and other road users at risk. Written procedures should be in place to stress that schedules are developed with this risk in mind, and that they are made to help put an end to driving under fatigue influence.

## Step 2: Monitoring and record keeping

Employers should keep records of all regular and irregular trips, drivers' schedules and rosters. These could be based upon electronic records produced by telematics systems, mechanical records produced by tachograph charts, or manual records from trip sheets or pay records and customer delivery notes.

Information should be recorded relating to:

- Working time.
- Breaks from driving.
- Non-working time.

This will show that the company and its commercial vehicle drivers are following the Driver Fatigue Management Plan.

Where possible, existing equipment, procedures and documentation can be used. However, if it is necessary to develop new forms, samples should be included as part of the plan. Any documentation and records should detail how the agreed operating standards are met.

Controls processes should also be explained for when the agreed standards are not met. All responsible people at a workplace, managers, supervisors and drivers should be trained to complete, maintain the forms and follow the documentation process.



## Step 3: Incidents and improvements

An incident reporting system increases the chance of a complete, competent and caring response to incidents. All companies should have an incident reporting system under which tiredness and fatigue incidents should be included. How this system works should be documented in your plan.

Tiredness related incidents to be reported should include those causing injury or damage. However, incidents with the potential to inflict injury or damage should also be reported. Sufficient information should be collected to target unsafe practices and prevent future injuries and damages.

### **Audit and review**

*A review should be conducted to check that the plan is as good as it can be and to ensure that it is being followed. The review should aim to provide sufficient information to support any further action to further reduce the occurrence of unsafe incidents to minimise any further harm or injury.*

*You may find it helpful to create standard forms for incident reporting and an audit checklist.*

## Step 4: Employer-provided accommodation

If a company provides accommodation to its drivers, it has to ensure that it is up to reasonable standards. All employer-provided accommodation is required to comply with the requirements of Abu Dhabi EHSMS Code of Practice 18 (Employer Supplied Accommodation) - General Requirements.

If a company employs night workers, the specific needs of these workers must be taken into account, ensuring that they have adequate rest between shifts without disturbance.

The factors that need to be taken into account when providing accommodation to night workers are:

- Providing suitable window tilting/coverage to prevent light in.
- The organisation and allocation of shared rooms to avoid disturbance of night time workers by day time workers.
- Arrangements for cleaning, maintenance, etc. to avoid disturbance to night time workers.
- Taking steps to reduce noise within accommodation to avoid disturbance of night time workers.
- Ensuring the temperature of the room allows for easy sleeping.

## Step 5: Training, instruction and communication

Training is very important in helping to ensure that correct procedures are followed by all employees. Your Driver Fatigue Management Plan should document your procedures for training, and refresher training.

The plan should encompass measures you take to constantly remind drivers of the signs of driver fatigue, and their duties and obligations not to drive when sleepy.

Training needs to be undertaken by drivers, and all employees whose work contributes to the management of fatigue. This may include workers who schedule trips and develop commercial vehicle driver rosters. The training must be carried out according to the written procedures of the company.



*Support a culture of awareness and training about the risks, predictors, and symptoms of driver fatigue by giving regular messages to your drivers, spoken briefings, posters on the office wall and drivers' hours recording sheets.*

*Deliver awareness messages to drivers about the impact of insufficient sleep, stressful situations, and the consumption of alcohol and other recreational drugs or medication on their well-being and capacity to work effectively.*

*These activities may affect tiredness and cumulative fatigue, and the capacity to drive safely.*

When new employees join the company, it is important that they undertake training to gain immediate awareness of the company's Driver Fatigue Management Plan.

If there are any changes to procedures as the result of an investigation into an incident, or driver feedback, employees must be re-trained to ensure they can meet the revised procedures. Refresher training at intervals for all employees should also be undertaken.

### Form and content of training

Training should consist of formal, written and on the job instruction. This helps to combine theory with practical applications. For training to be effective, there must be an objective way of assessing the driver, to ensure that the person being trained has acquired the necessary competencies.

This could take the form of a supervisor observing first-hand that the person being trained follows the procedures correctly. In the case of a driver, it could include reviewing the trip records to assess the correct application of the procedures.

#### *The training should include information on:*

- *Details of the duties imposed on drivers and the company by the company policy.*
- *General duties imposed by the GCC, UAE Federal Law, Abu Dhabi regulations and EHSMS requirements.*
- *Company and legal penalties associated with failure to comply with these.*
- *The causes of driver tiredness and fatigue, its symptoms and particular effects on road safety.*
- *The policy and procedural factors that may increase the risk of driver tiredness during operations.*
- *The management of commercial vehicle driver fatigue including the use of napping and strategies for making lifestyle changes.*

The level and type of training should be delivered to an agreed standard and enable a trainee to reach the required skill level. Not only should the trainer have the required technical skills and knowledge of relevant truck operations, but also the training skills to impart this knowledge to others.

It is important to use practical examples from within the workplace. It is also important to recognise that some employees, owing to language and cultural barriers, may not easily understand written instructions. A briefing or training session would assist them overcome any problems they may have. Providing the training in the drivers' first language, or having first language support available is a sensible and useful strategy.

It is not effective to simply post a new procedure on a notice board or insert a new instruction in a manual.

## Case studies

The case studies in this section have been taken from companies in the logistics, heavy haulage and construction industries in Abu Dhabi.

### Examples of ways to record truck drivers' hours

Companies in Abu Dhabi currently use different ways to record and monitor driving hours.

#### Advanced technology:

*Company A – Tachographs are installed on approximately 50% of the truck fleet. However, on-board computer systems are now being installed that communicate directly to the office with full details about driving hours and driver behaviour without the need for driver involvement.*

*Company B - An on-board computer is fitted to all of their trucks. This system can generate a daily report for every vehicle showing the hours spent driving.*

#### Manual recording:

*Company C – Driving hours are recorded by the driver manually filling out a daily log book of his working hours and breaks.*

*Company D – The transport manager maintains a log book of driver activities on a daily basis.*

#### Some companies even use a combination of approaches:

*Company E – Driver's hours are recorded and monitored using a manual driver timesheet and a tracking device on the vehicles.*

These five ways of recording driver's hours can all be effective ways to monitor driving hours if implemented correctly.

### Examples of company specific truck driving limits

Currently, some companies in Abu Dhabi limit the hours of their drivers to enhance road safety.

Company	A	B	C
Max shift*	11 hours	10 hours	11 hours 30 mins
Max driving per shift	8 hours	10 hours	9 hours
Max driving before break	4 hours	4 hours	2 hours 30 mins
Minimum break time**	30 mins	1 hour	45 mins
Minimum daily rest	10 hours	12 hours	8 hours

\* Including breaks

\*\* Federal Law No. (8) of 1980 states that 1 hour total break is required after no more than 5 hours duty time

### Evidence from these company examples show that limitation sets are quite consistent:

- Maximum shift - Varies from 10 to 11 hours and 30 mins.
- Maximum driving per shift - Varies from 8 to 10 hours.
- Maximum driving before break – Varies from 2 hours and 30 minutes to 4 hours.
- Minimum break time – Varies from 30 minutes to 1 hour\*\*.
- Minimum daily rest – Varies from 8 to 12 hours.

Company's decision-maker should decide on the driving limits suitable for their business. As you can see, they vary for different businesses; setting a time limit reduces the likelihood of accidents due to fatigue or other work stress related reasons.



### Further information

For more information and further material to support your Driver Fatigue Management Plan please visit [www.freight2030.ae](http://www.freight2030.ae)