



# Prevention and health guidelines for **safe driving**

The causes and effects of tiredness and drowsiness

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Driving requires that we maintain high levels of both alertness and attention which can gradually deteriorate, or sometimes fall suddenly, if we are tired and this in turn affects our concentration at the wheel and our ability to react quickly and safely enough to dangerous situations which may arise on the road.

#### **Tiredness**



A tired driver is often affected by two phenomena which may be difficult to distinguish; **tiredness** and **drowsiness**, which build up over the course of the day or in any case at work. These conditions reduce our cognitive abilities and our **resistance to stress**.

# Characteristics of road accidents linked to tiredness and drowsiness

Accidents caused by driver tiredness and/or drowsiness are amongst the most serious and have a higher death rate, precisely due to the reduced efficiency in the evaluation of danger and the reactions required to prevent the accident happening...





In this accident we can see certain typical **signs linked** to **driver drowsiness and tiredness**. Let's reconstruct them by looking at the pictures:

1. It's well after dark, the driver is alone, the road is monotonous and the weather and visibility are good: the monotonous drive and the conduciveness to sleep have made the driver drowsy. The presumed tiredness resulting from a long day at work can also have exacerbated the driver's condition.



The highest risk of falling asleep comes during nighttime hours and in the early afternoon, between two and four o'clock, regardless of whatever meals you may have had.

- 2. The driver suddenly **changes lane** without seeing that there is another car just ahead: tiredness and drowsiness have probably made the driver nod off or lose his concentration.
- 3. At the scene of the accident there are no signs of mechanical breakdown which could have caused the collision: the car shows no particular signs of any fault or unusual features. Furthermore there are no skid marks to show that the driver tried to brake to avoid the collision and his blood alcohol content is well within the limit.



The effects of drowsiness and tiredness are not just shown through falling asleep at the wheel, but also with a loss of concentration, bad memory, bad moods, and adversely affected eyesight and the associated worsening of ability to judge road conditions.

### The perception of drowsiness while driving

We don't always notice that we are getting drowsy. So-called **"latent drowsiness"** or in other words that condition where we are more likely to drop off without realizing, can - above all when driving on monotonous roads - make us more likely to drive badly and make mistakes and cause us to fall asleep at the wheel.





- You should recognize the "warning signs" which accompany impending drowsiness.
- Get to know your own rhythms, asking yourself for example what part of the day you feel more active and when you usually feel more like having a nap.

### The effects of stress on our driving

Stress amplifies and worsens the effects of tiredness and drowsiness and can affect our ability to make decisions.



The effects of stress often show themselves in changes in perception:

- Of our personal needs;
- and unexpected events.



### The causes of tiredness and drowsiness

Drowsiness and tiredness can be **caused** by:

1. Factors associated with a **bad lifestyle**.

Factors which interfere with our internal biological clock	Working when we should be asleep. Sleeping when we should be awake.
Factors arising from work	Long working hours. Insufficient rest time.
Factors connected to sleep	Not enough sleep. Poor quality of sleep.

2. Health problems which interfere with the proper functioning of the brain, which needs, by means of the blood supply, an adequate quantity of oxygen and sugars.

Sleep disturbances	Insomnia.
	Obstructive sleep apnea syndrome (OSAS).
General pathology	Abuse of medication.
or clinical conditions	Alcoholism.
	Anaemia.
	Asthma/nocturnal asthma.
	BPCO (bronchitis and emphysema).
	Headache.
	Depression.
	Diabetes.
	Hyperthyroid conditions.
	Osteoarthritis.
	Allergic and non-allergic rhinitis.
	Anxiety.
	Chronic pain.
	Metabolic syndrome/obesity.
	Heart problems.
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