## Night Work, Fatigued Driving and Traffic Law: The Case of Police Officers

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Abstract: Given the well-known difficulties in defining and detecting fatigue, it is a real challenge to incorporate it into either traffic or criminal law. Finnish traffic law forbids fatigued driving "only" on a general level concerning the driver's fitness to drive. We present several comments from Finnish traffic and local police officers regarding their own experiences of driving while fatigued. The comments were extracted from a larger survey of traffic (N=129) and local (N=100) police officers, and prosecutors (N=96). Although the main topic of the survey was the application of the law that forbids fatigued driving, some police officers raised the issue of their own behavior in this respect. We argue that many shift workers, including police officers, break the law, especially when driving home after a night shift.

Key words: Fatigue, Sleepiness, Shift work, Traffic law, Road accidents

Fatigue and sleepiness are major causes of road traffic accidents<sup>1)</sup>. The exact proportions of such accidents are unknown (mainly) because no validated and reliable device for detecting the level of sleepiness (cf. the breathalyzer for alcohol levels) exists, and there are no criteria governing the unambiguous detection of fatigue/sleepiness as a contributing factor in accident causation. Nevertheless, it is widely recognized that such accidents represent a significant safety problem, and various countermeasures such as safety campaigns, environmental interventions, and in-vehicle technologies are therefore constantly being developed. In recent years, considerable effort has been invested in the development of models for incorporating fatigue and sleepiness into either traffic or criminal law<sup>2)</sup>.

Article 63 (3.8.1990/676) of the Finnish traffic law, which addresses the driver's fitness to drive, explicitly forbids driving while tired: a person who does not meet the requirements for driving because of illness or tiredness or any other similar reason, or whose health condi-

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tion no longer fulfills the necessary requirements needed for obtaining a driver's license must not drive a vehicle (unofficial translation).

The Finnish law is not exceptional: Danish, Norwegian, and Swedish traffic law have quite similar formulations. The toughest and most detailed law regarding driver fatigue is the so-called Maggie's Law in the state of New Jersey, US. Under this law a driver who causes a fatal accident after being awake for more than 24 consecutive hours can be convicted of seconddegree vehicular homicide, sentenced to up to 10 yr in prison, and fined a maximum of \$100,000. What is specific to Finland is that the law is applied more often than one might expect given the general and unoperationalized definition of fatigue<sup>3)</sup>. We therefore decided to carry out a research project concerning police officers' and prosecutors' attitudes and opinions about fatigued driving and the law. A full report (in Finnish with an English abstract) was published recently<sup>4</sup>.

Data was collected from 96 prosecutors, 129 traffic police officers, and 100 local police officers with experience in traffic surveillance and accident investigation. We initially planned to include several questions con-

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390 I RADUN et al.

cerning police officers' own experience of fatigue, how they felt about shift work, and their sleep patterns, for example. However, given the large number of questions about fatigue and the law, which was the main theme of the survey, we had to leave police officers' fatigue aside. Nevertheless, almost ten per cent of the police officers (N=12) who gave comments (139 of 229) on various items in the questionnaire raised the issue of their own fatigue. Although the number of such comments was relatively small, the fact that these officers were writing about their own fatigue even though they were not specifically asked to do so, attracted our attention. The most interesting comments are given below.

- **TP 1 (Traffic police officer):** "Tiredness can come to some people while they're driving, but how could police officers on the night shift get home to sleep if they can't drive? In other words, people on the night shift always have to break the law that forbids fatigued driving."
- **TP 2:** "How does fatigue affect the work and driving of a police officer? The same as it affects other people, but how could this be addressed?"
- **TP 3:** "Police officers have 12-h shifts, and I'm certainly tired after 10 h. How could things be different for the so-called professional driver?"
- **LP 1** (**Local police officer**): "You should do a survey on how tired police officers are when they are told to drive long distances during the night shift? The new police-station districts mean that the distances are even longer."
- **LP 2:** "From my own experience of feeling tired while driving on duty, I can assure you that it's not always safe out there on the road."
- **LP 3:** "Is a police officer driving a police vehicle a professional driver? Driving a police car throughout a 12 h shift...feeling tired all the time...even now...on this night shift."
- LP 4: "So what is the deal with us police officers, ambulance drivers and others doing emergency driving as their job (while tired)? Are we somehow better drivers than other people? I haven't noticed anyone bothering about it at least. It's a familiar situation for many: two night shifts in a row and during the day you can't or don't sleep. You can't drink and drive in the police, but you can drive while you're tired."
- **LP 5:** "You should note that driving-time regulations concern professional drivers. The law does not concern police officers. Police officers do not have tachographs and driving time is not monitored in any way. They have to drive on the night shift when they are very often tired. I am no exception. I'm usually awake for more than 24 h. People in a state of heavy tiredness

drive emergency vehicles and take "controlled" risks. Tiredness in traffic has to be supervised — but "luckily" the supervision does not cover the supervising authority — the police..."

These are very interesting remarks and raise several issues, some of which relate to police officers' work and some to all shift work.

It is clear from the comments that even these well trained, physically and mentally fit shift workers, which police officers have to be because of the nature of their job, are not immune to the effects of sleep deprivation and long working hours. It can be assumed that police officers avoid habitual and heavy drinking, which is not necessarily the case with professional truck drivers<sup>5</sup>, for example. We can imagine the risk professional truck drivers run given also their high prevalence of obesity, sleep apnea, and lower physical activity<sup>6</sup>, <sup>7</sup>).

Secondly, the comments are in the line with the findings from several other countries suggesting that fatigue might not be uncommon among police officers worldwide. For example, it has been reported that US police officers are more fatigued than other occupational groups<sup>8)</sup>, and that a large proportion of police officers report disturbances in subjective sleep quality<sup>9)</sup>. Similarly, 50 percent of police officers surveyed in Sweden reported having insufficient sleep<sup>10</sup>. In the UK, 40 percent of police officers surveyed noted that stress-related problems (e.g., fatigue and job demands) contributed to the number of collisions<sup>11)</sup>. However, the link between fatigue and accident involvement among police officers is not clearly established, although such a possibility has been repeatedly mentioned<sup>12, 13)</sup> and there is plenty of anecdotal evidence<sup>14, 15)</sup>.

Another matter, which affects police officers worldwide and was ironically pointed out in one of the above comments, is that the police are responsible for monitoring the working and rest hours of professional drivers, but there are no rules and regulations prescribing the amount of driving police officers are allowed to do. Similarly, most states in the US have no regulations covering the working and rest hours of police officers <sup>14</sup>). It was found in one US study, for example, that police officers "routinely worked more consecutive hours per one-day, two-day, or seven-day period than would be legal if they were nuclear power plant operators or truck drivers"8). As William C. Dement, a leading sleep researcher, said: "It is totally reprehensible that the cops we expect to protect us, come to our aid, and respond to our needs when victimized should be allowed to have the worst fatigue and sleep conditions of any profession in our society"15).

Nevertheless, it seems that the chances of police offi-

cers falling asleep while driving on duty are not very high if they work in pairs, which is typical practice at least in Finland. It is unlikely that a police officer would fall asleep at the wheel without his or her colleague noticing inconsistent driving or other behavior beforehand. It is worth noting that in many cases drivers who fall asleep at the wheel are either alone in the car, or their accompanying passengers are asleep<sup>16</sup>). In any case, fatigue and sleepiness can significantly increase the risk of losing concentration, failing to anticipate situations, and making wrong decisions<sup>17, 18)</sup>. On the other hand, with the possible exception of patrolling on main roads during quiet nights, police work is not generally associated with monotony and boredom -factors that are known to increase the risk of falling asleep while driving<sup>1)</sup>.

Driving while tired and on duty is one aspect of police fatigue. Another, which affects all shift workers, is driving home after the night shift. This may be especially problematic if it involves monotonous driving for more than 20 min<sup>1, 19)</sup>. For example, several studies have reported high rates of fatigue-related incidents and accidents among medical interns and nurses during their commuting, especially while traveling home after the night shift<sup>20, 21)</sup>.

It seems to us that many shift workers, including police officers, may be breaking the existing traffic law in Finland (and other Nordic countries) when they are driving to and from work. Sleepiness under these conditions should thus be carefully considered when the shift system is evaluated, and moreover, preventive measures should be developed (e.g., the employer could offer transport). Employers should also be mindful of their possible liability in cases in which an employee causes a traffic accident while driving home that could be attributed to work-imposed impairment<sup>22, 23</sup>).

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392 I RADUN et al.

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