# The Bill Blackwood Law Enforcement Management Institute of Texas

The Effects of Night Shift Work on Police Officers

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By Mirtha L. Mendoza

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#### **ABSTRACT**

The effects of night shift work on police officers are relevant to contemporary law enforcement because sleep deprivation should be treated with the same regards as firearms safety (Pedersen, 2001). The effects of fatigue are similar to those experienced by the consumption of alcoholic beverages. Driving while drowsy and fatigued has resulted in a high number of accidents (Pedersen, 2001). It is a known fact that fatigue impedes proper levels of alertness, and it can have a negative effect on the community. When a police officer's mental and physical health are affected by fatigue, the community undoubtedly suffers a lack of proficiency demonstrated by that officer. Improper actions or delay reaction time place the community at risk of harm.

The purpose of this research is to bring attention to the need of law enforcement agencies to understand fatigue and the prevalence of police fatigue within their agencies. Agencies need to take responsibility for educating their officers on the potential dangers and negative consequences that can result when operating while fatigued. Agencies will see the need to establish policies and guidelines to protect their officers from excessive work hours (regardless of on duty or off duty assignments). The guidelines may protect the officers and the agencies from liability should the guidelines be ignored.

The method of inquiry used by the researcher included: a review of articles, Internet sites, periodicals, journals, and a survey distributed to 39 survey participants. The researcher discovered that 51% of the night shift officers in Travis County operate a vehicle while fatigued. The research also affirms the need to educate officers and the agency in the negative effects of police fatigue.

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#### INTRODUCTION

The problem or issue to be examined considers whether or not the impact and inherent consequences of night shift work on police officers has an adverse effect on the physical and physiological health of the officer. Fatigue in the workplace can lead to a lack of concentration, injuries, accidents, and physiological disorders. It is important to understand that numerous professions require coverage on a 24 hours basis. Employees do not always get a choice of the hours they work; their preferred hours may depend on the needs of their families.

In the U.S.A, shift work sleep disorders results in the loss of thousands of lives and loss of billions of dollars annually. Shift work night involves some of the most dangerous professions, such as firefighters, emergency medical services, and law enforcement officers. These professions are only a few of many that require millions of people to operate 24 hours, 7 days a week, and many of these professionals are operating under strenuous schedules that affect their personal as well as their professional life and health (Kulbarsh, 2008).

The relevance of this research to law enforcement is that law enforcement is the one profession where it is imperative that those performing this public duty maintain an adequate and healthy sleep pattern in order to perform their duties with the highest levels of vigilance. According to Pedersen (2001), 50% of traffic accidents involving police officers occurred between midnight and 6 a.m. Other problems associated with lack of sleep or interrupted sleep involves how police officers interact with the citizens, co-workers, spouses. On the other hand, it may also lead to depression, gastrointestinal problems, and insomnia.

The purpose of this research is to examine the adverse effects that night shift work may pose to the officer's overall health. It is also extremely important to address the issue of the significance of adequate sleep for effective law enforcement officer performance. It is not a new concept that tired people become irritable and patience diminishes. In other words, officers that are fatigued may become irritable, but, unlike the average citizen, these officers have power and authority and night sticks. The problems may include traffic accidents, citizen complaints, excessive use of force, health issues for the officer, loss of productivity for the department, and a lack of service to the community.

The research question to be examined focuses on whether or not some of these sleep disruptions and sleep disorders can be controlled. Some of these disruptions are due to the officer attempting to change his schedule on his days off; some are due to court appearances; some may be administratively controllable causes of fatigue. The intended method of inquiry includes books, professional journals, internet research, magazine articles, and a survey to be conducted among the Travis County midnight shift law enforcement division. The anticipated findings of the research include that failure by the agency and the officer to recognize that a problem exists may lead to adverse effects. Effects may include from physical and civil liability.

The field of law enforcement will benefit from the research because it will show the need for training, education, and compensation. It is incumbent upon law enforcement agencies to address the welfare of their employees. Agencies will also realize that some problems with shift work and sleep deprivation may be administratively controllable. Some of the changes would include educating the officers,

so they are informed of the totality and seriousness of sleep deprivation. Another aspect may be that some administrative meetings may be videotaped or in PowerPoint presentations, so the officers working midnight shift may view them on their regular shifts. Another solution may be to address the courts, so officers working the night shift are given priority in notification in order to avoid sleep disruptions. A well-rested officer enriches the community he/she serves by being fully alert and ready to respond to emergencies.

#### **REVIEW OF LITERATURE**

The law enforcement community knows and understands the physical demands of the job. However, it seems that the law enforcement field is being recognized as one of many professions that has an inherent potential to negatively affect the personal and professional health of the officers due to shift work. The stress of the job is not only related to the obvious hazards that include life and death situations, but it also involves shift work and the negative side effects experienced by those officers working the night shift.

According to Cochrane (2001), a New Mexico police department hired a wellness unit to conduct a study of its officers to determine the problems of shift work. The study revealed that fatigue was rampant among officers assigned to the night shift. The study determined that those officers on nights endured the most serious negative effects. Officers displayed a diminished capacity to resolve issues of minor importance and conflict. Another cause of concern was that the effects tended to reflect on the officer's personal and social settings (Cochrane, 2001).

Sleep deprivation is dangerous to all human beings as it is a well established fact that a person needs a minimum of 8 hours of sleep to maintain adequate physical and mental health. Fatigue can have the same effects as driving while intoxicated (Moore, 2006). Law enforcement officers on the night shift are predisposed to sleep disorders due to the fact that they have irregular sleep patterns (Moore, 2006). Officers assigned to the night shift have to sleep during the day when the rest of the world is awake. Their normal "24 hour circadian rhythm is compromised" when they are forced to attempt to sleep when their body-clock is telling them to remain awake (Kulbarsh, 2007, p. 1).

Lack of sleep and being exhausted at work may result in lack of concentration, a higher number of accidents, and work related injuries or complaints (Kulbarsh, 2007). According to Kulbarsh (2007), another side effect of sleep disorders is that they can have a negative effect on reaction-time, which is exacerbated during night shift work. It is of no surprise that reaction time is extremely important for police officers. An officer's reaction time may make the difference between life and death, for the officer and members of the community he was sworn to protect. An officer is required to be able to have appropriate reaction times dictated by the developing situations at hand. It has been documented that police officers tend to suffer from shift work sleep disorders (SWSD), as well as "health issues such as high cholesterol, high blood pressure, heart disease, obesity, hypertension, ulcers, menstrual irregularities, and may even develop to sleep apnea and narcolepsy" (Kulbarsh, 2007, p. 1).

In a poll conducted by the National Sleep Foundation in 2005, 14% of Americans were employed on shift work (Drake, n.d., "Poll Data," para. 1). The National Sleep

Foundation also indicated that the people who work shift work had an inclination to operate a vehicle while physically and mentally tired. This tendency doubled their chances to fall asleep while driving, creating a potentially dangerous and deadly situation for themselves and others.

According to the National Highway Traffic Safety Administration drowsiness tends to be a factor in approximately 56,000 accidents annually, culminating in a total of 1,550 fatalities (as cited in Zalkin & Ibanga, 2008, p. 2). Another important point made by Moore (2006) is that lack of sleep is the most prevalent negative condition that affects police officers, and yet it seems to be unrecognized and undervalued. Moore (2006) made a strong and appealing comparison between "officers that have worked a minimum of 17 hours having a reaction time of a person with an estimated blood alcohol concentration of .05" (Moore, 2006, p 1). The number provided by the National Highway Traffic Safety Administration is important to law enforcement agencies because patrol officers tend to spend the majority of their time operating a vehicle and making potentially high risk decisions. It is also important because officers are sometimes required to exceed the posted speed limits while responding to emergency calls by the public.

In December 2006, a police officer in Palm Beach, Florida was involved in a traffic accident that was reported by a citizen and recorded on her dash camera. The officer was observed driving reckless and striking a fixed object. The officer also left the scene of the accident and was pulled over by another officer (as cited in Zalkin & Ibanga, 2008). When the officer made contact with the driver, the female officer stated that she was tired after working a long shift. Pedersen (2001) found that "at one police"

department...50% of traffic accidents involving police officers tend to occur between 12:00 am and 6 am" (p. 131). Another 20% occurred between 1:30 p.m. and 3 p.m. An investigation was conducted later, and it revealed that these officers were night shift officers on the way to court.

Police fatigue incidents present the command staff of law enforcement agencies with a serious but not new set of concerns. There is an extreme need to employ policies and program evaluations to determine the best way to develop adequate practices. Some of the problems with sleep deprivation may be administratively controlled and others may be minimized if true acceptance of the problem is expressed by both the agency and its officers.

A police department has a responsibility to educate, train, and take an active role in assuring that their officers are not overworked and fatigued. Some agencies have realized that providing a power nap for their officers in need of sleep may prove beneficial. A power nap at the office provides the officer with needed rest and assures his safety as opposed to forcing him to drive while drowsy and fatigued, risking his safety and the safety of the community. It is interesting that most police departments tend to hire new recruits by conducting a set of written, oral, and physical fitness tests accompanied by a full physical by a physician. However, most departments lack the proper intervention programs to follow up and help maintain the officer in good physical health. The bottom line is that the officer's health is compromised by a combination of the job, the stress of the job, the night shift work, lack of sleep and/or irregular sleep, overtime, and special assignments conducted outside of their regular schedule.

Although the author's survey did not inquire about any medical conditions, this is clearly an obvious concern. A study published in the Archives of Environmental & Occupational Health revealed that officers assigned to night shift had a greater potential to develop metabolic syndrome (Baker, 2009). Metabolic syndrome is a combination of health-risk factors that raise the potential for an officer to suffer a heart related illness. This author found little recorded evidence of large number of accidents involving officers and/or incidents involving alleged excessive use of force due to fatigue issues. This author believes that the research at this time is focused on health issues, and although no direct studies have been conducted on accidents or use of force incidents at this time, it is likely a matter that is going to be further explored in the near future.

#### **METHODOLOGY**

The research question to be examined considers whether or not fatigue affects police officers working the night shift to a higher degree and poses dangerous health and safety risks. In addition, it poses a question of whether or not law enforcement agencies are aware of the problem and if they have created intervention programs to assist the officers dedicated to this stressful occupation. The researcher hypothesizes that fatigue among officers working the night shift will be affirmed as a problem. It will also reveal that the officers themselves may not know how to recognize their degree of fatigue. As stated earlier, law enforcement agencies will find themselves in an urgent need to create intervention programs to address fatigue and the health and safety risks posed by night shift work.

The method of inquiry will include a review of articles, Internet sites, periodicals, journals, and a survey distributed to 39 survey participants. The instrument that will be

used to measure the researcher's findings will include a survey and statistical data found on previously conducted studies published in review articles, internet sites, periodicals and journals.

The size of the survey will consist of 10 questions, distributed to 39 survey participants from the Travis County Sheriff Department in Austin, Texas. This author also sent the survey to the Austin Police Department but received zero responses. The response rate to the survey instrument resulted in 100% response from the Travis County Sheriff's Office. The information obtained from the survey will be analyzed by percentage comparison presented on a chart.

#### **FINDINGS**

As stated earlier, one of the sources used in this study was a survey mailed out to 39 patrol officers assigned to the night shift with the Travis County Sheriff's Department in Austin, Texas. The author confirmed that a problem exists within the agency in relation to police fatigue. The survey response also confirmed that officers are not fully educated in the health risks posed by the shift work itself. This was evident in some of the conflicting responses given by some of the participants. For instance, one participant responded that he/she drove while fatigued yet had no trouble focusing at work and yet he/she responded that they suffered from mood swings. It is evident that this participant, like many of the others, did not understand the effects of fatigue and the danger that he/she was taking by driving while fatigued.

The author was surprised that the survey results indicated that 51% of the officers assigned to the night shift drove while fatigued. Additionally, 25 out of 39 officers indicated that they slept four to six hours a day prior to work. Thirty-five out of

39 officers woke up more than two times whiles trying to sleep. Nineteen of 39 officers indicated personal and family duties as the reason for their sleep interruptions. Twenty of 39 officers indicated they relied on sleep aids. Twenty of 39 officers reported feeling fatigued two or three days out of their work week. Twenty-four of 39 were not comfortable talking to their supervisor about their sleep deprivation. Twenty-three of 39 officers responded that they had at some point driven past their destination while fatigued. Fourteen of 39 officers admitted to having trouble focusing while at work. Fifteen of 39 officers reported mood swings and irritability. And finally, 26 out of 39 admitted to driving while fatigued on a regular basis.

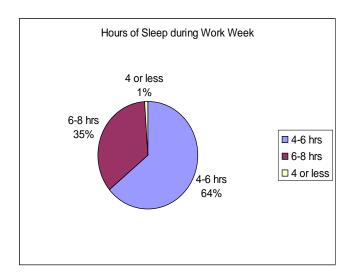


Figure 1. Percentages of how many hours of sleep an officer gets in a day.

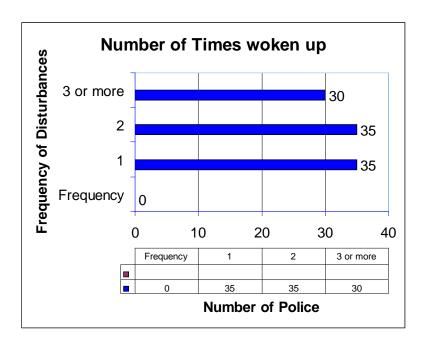
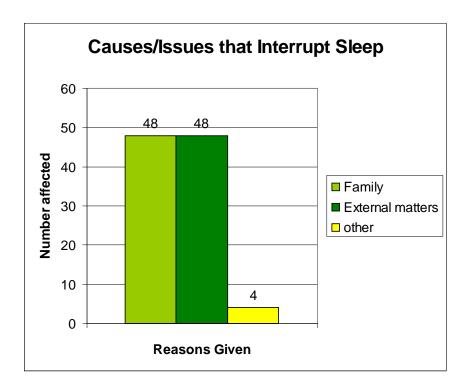


Figure 2. The number of times an officer wakes up while trying to sleep in a day.



**Figure 3.** Number of officers that responded with the different causes for their sleep interruptions.

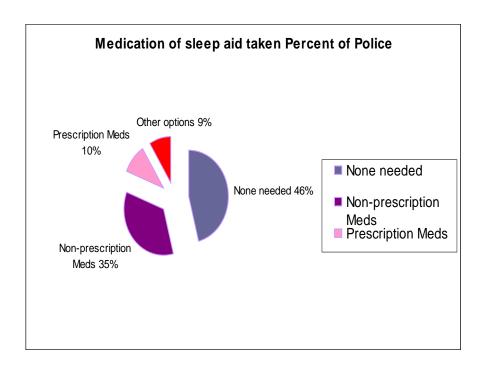
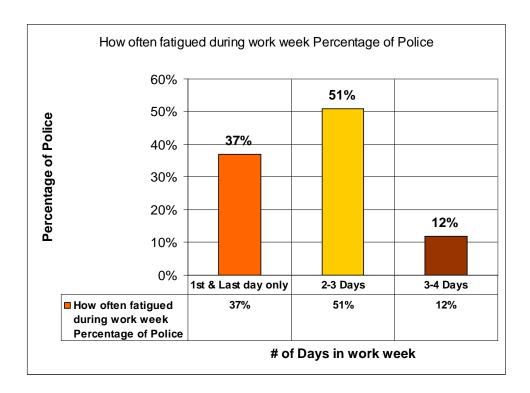
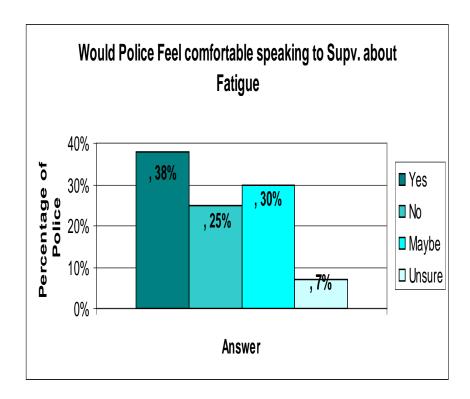


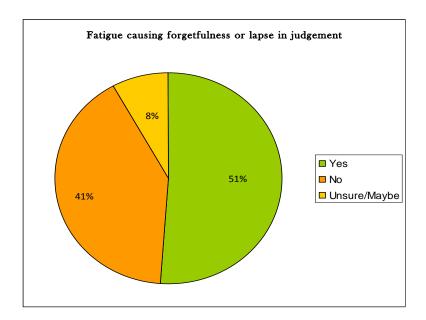
Figure 4. Number of officers that rely on sleep aids



**Figure 5.** How often officers feel fatigued during the work week.



**Figure 6.** Number of officers that may feel comfortable talking to their supervisor about their sleep deprivation.



**Figure 7.** Number of officers that have experienced inattentiveness while operating a vehicle.

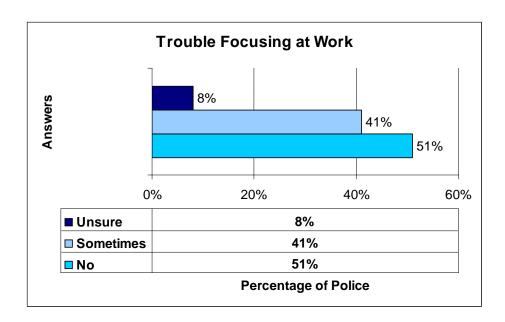
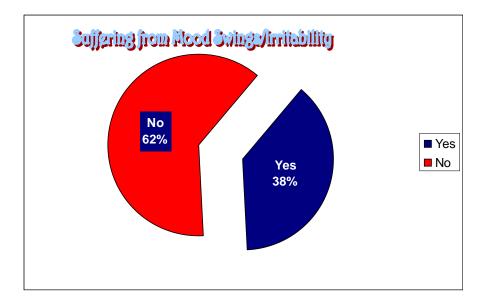


Figure 8. Number of officers that have trouble focusing at work.



**Figure 9.** Number of officers that experience mood swings or irritability due to sleep deprivation.

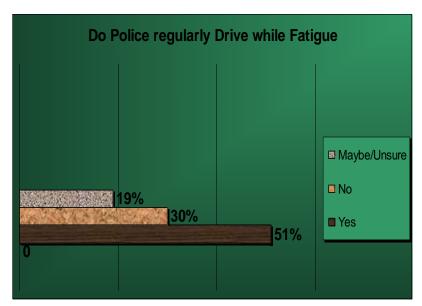


Figure 10. Number of officers that drive while fatigued

#### DISCUSSION/CONCLUSIONS

The problem or issue examined by the researcher considered whether or not fatigue had a negative physiological effect on officers working night shift. The purpose of this research was to address the need for law enforcement agencies to develop intervention programs to educate, train, and assist officers suffering from fatigue. The research question that was examined focused on the effects of night shift work on police officers. The main concerns focused on sleep deprivation and the safety hazards posed by officers on duty while fatigued.

The researcher hypothesized that law enforcement agencies will be addressing this issue with seriousness and a determination to keep the officers and the public safe. Tired officers are as dangerous as a driver under the influence of an alcoholic beverage. This researcher concludes that the officers on patrol are not intentionally operating a vehicle with intent to cause harm. However, this researcher believes that the officers lack knowledge about the serious potential health hazards. This author believes that if

officers receive further training and education and if they feel that their agency supports intervention, education, and an assistance program, they would participate in an effort to address and resolve the issue within reason.

The researcher concluded from the findings that shift work is not going to go away. This researcher believes that training, education, and intervention is the best way to address the problem and maintain the officer's physical and mental health, as well as protect the health of the agency and the public whom law enforcement has sworn to protect. It is imperative that agencies and their personnel understand the hazards of sleep deprivation. It is recommended that both sides, agencies and the officers, take responsibility to ensure that they understand their role in maintaining public safety while ensuring that their personal health is also a priority.

This author also confirmed the need for agencies to educate their command staff and their officers on the dangers, risks, and intervention programs to deal with fatigue. This author believes that there is a potential for civil liability if agencies fail to address, educate, and create intervention programs to detect and assist officers who may be suffering from fatigue. This author concludes that it is the agency's responsibility to ensure that their officers are educated on the hazards of sleep deprivation.

The findings of the research did support the hypothesis. The reason(s) why the findings did support the hypothesis is probably due to the fact that the survey conducted by this author confirmed some of the negative effects of sleep deprivation as a result of shift work. Police officers have long been the center of concern due to their dangerous profession. The public cares about law enforcement because law enforcement affects

every aspect of society. If the officer's ability to make decisions is diminished due to fatigue, the entire community may suffer.

Limitations that might have hindered this study are due to the fact that some officers fear that being honest in regards to their sleep deprivation might result in loss of their job or assignment. They also fear that admitting to sleep deprivation and fatigue may reflect poorly when seeking a promotion. There is plenty of research on both accidents and use of force, but there is no clear-cut evidence that all those incidents were the direct result of fatigue or shift work. Agencies do maintain use of force records but most do not reflect if officer fatigue might have been a factor in the use of force. This author does not believe that the issue of fatigue and use of force can be clearly documented since it involves a liability on the part of the department and the officer if such issue is ever confirmed.

The study of the effects of night shift work on police officers is relevant to contemporary law enforcement because fatigued officers place themselves, the public, and the agency in danger when they operate or work while fatigued. The officer's proficiency is diminished and their ability to make quick and accurate decisions is equally affected. Society as a whole stands to benefit by the results of this research, but only if law enforcement agencies develop and employ intervention programs and help their officers maintain good physiological health. Having knowledge of the problem is not enough; agencies must act collectively to ensure that they intervene for the sake of all.

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## **APPENDIX**

a) 4 or less

### SURVEY

## **Effects of Night Shift Work on Police Officers**

1) How many hours of sleep do you get each day during your work week?

	b) 4-6 c) 6-8 d) 8-10
2)	Do you often wake up while trying to sleep, if so, how often?  a) 1  b) 2  c) 3  d) 4 or more times
3)	What causes/issues interrupt your sleep?  a) work matters ( define this / phone calls,pages, what?) b) family/personal (define,examples like child care,school pick up,yard work) c) secondary employment d) external or unrelated matters, (just can't sleep??,take care of personal issues?)
4)	If you feel the need to take medication or any other form of sleep aid in order to fall asleep, what is your preferred aid?  a) prescription b) non-prescription c) therapy d) none needed
5)	How often during one –week work period, do you feel that you are fatigued at work?  a) 1 day b) 2-3 days c) 3-4 days d) First day or last day of week only e) 0

6)	If you feel you did not get enough sleep, would you feel comfortable in talking to your			
	supervis	or about it?		
	a)	yes		
	b)	No		
	c)	Maybe		
	d)	Unsure		

- 7) Have you ever driven to work and suddenly realized that you have missed your turn, or passed your intended destination?
  - a) yes
  - b) No
  - c) Maybe
  - d) Unsure
- 8) Do you have trouble focusing at work?
  - a) Yes
  - b) No
  - c) Maybe
  - d) Unsure
- 9) Do you suffer from mood swings or irritability?
  - a) Yes
  - b) No
- 10) Do you regularly drive while fatigued?
  - a) Yes
  - b) No
  - c) Maybe
  - d) Unsure