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**A Study of the Affect of Rotating Work Schedules by
Texas Police Departments**

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Abstract

The reality of working rotating shift work is a police problem in the world today! Without a doubt, we wonder what effect these long hours are having on officers and what potential danger, if any, we are facing from these people who are charged to be protectors.

In order to answer these questions, researchers from across the nation who write on the human body and effects of rotating shift work were studied. Listening to what the experts have to say on the matter as well as surveys of workers tell of many problems.

It is then understood that shift work and more particular rotating shift work, keeps the human body and mind off balance. This causes a great deal of stress and may be construed as a danger to the people who are working these rotating shifts and the public that they serve.

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Introduction

Historically police departments across Texas have used rotating work schedules to provide public safety service around the clock. Working late nights and weekends are not desired by anyone, however it's a necessary thing. Schedules range from 8 hours for five consecutive days to 12 hours for three consecutive days. Studies suggest that certain shifts may have detrimental affects in terms of depression, fatigue, and social burnout. This study will give law enforcement leaders an insight into physical and emotional effects, as well as safety issues effecting law enforcement officers today. The purpose of this study is to look at the effect different rotating work schedules have on the physical and emotional health of police officers that work them. The study will also look at safety issues and how they are related to stress brought on by extended working hours.

This article will focus on studies conducted by police professionals across the nation. It will visit the work of other professional people who work closely with law enforcement. A survey of police departments across the state will show types of work schedules being used today by law enforcement. It will also look at what shifts cause the most stress and when most accidents occur.

It is understood that while police officers prefer working longer hours for shorter periods of time many health and safety issues arise. The safety of the public and the well being of officers are on the mind of leaders in law enforcement and citizens today. It is believed that scheduling police officers to lesser shifts and giving them the rest they need to function at their very best, preserves health and protects the public. With safety in mind, law enforcement leaders across the nation should address these concerns to liability.

By taking these small steps, law enforcement managers can protect the public and provide a better working environment, and relieve stress in the public as well as the work place. The impact of liability issues on police departments brought on by mistakes made by officers make it necessary to conduct studies such as these, to determine if safety related issues can be reduced. This study may help relieve employee absence and provide more productivity. It may also add quality law enforcement to the public.

Review of Literature

It's plain to see something is happening to people who work shift work and rotating shifts. Something causes officers to be more stressed, tired, and even higher tempered. Research done by many professionals in the field shows just how rotating shifts effect police officers both on the job and at home.

Police officers use many different terms to describe shift work, including the most common descriptor "Graveyard Shift". It is this author's experience that this describes the feeling many officers have about working this shift, since typically after a few hours of being busy, things basically "die".

Officers who rotate shifts are frequently more fatigued, suffer sleep disorders, and are involved in more traffic accidents. (David Swenson, 1997) stated that officers also have a greater risk of cardiovascular disorder. "As early as 1978, concerns over the effect of shift work led the National Institute of Occupational Safety and Health to issue a warning that shift work and rotating shifts posed a significant health risk to workers" (Colligan, Tasto, Skjei & Pelly, 1978). Research shows that there are also more serious medical problems such as high blood pressure, epilepsy, and diabetes (Bonnet, 1990, 261-274). Approximately 63% of night-workers complain of sleep disturbances, which may rob an officer of energy and alertness. Officers also suffer what's known as micro sleep, which are periods of sleep ranging from 1 to 10 seconds without them ever noticing (Jaffe, Smolensky & Wun, 1996, 305). According to a study conducted for Shift worker Online, employees who work the night shift often average 4.6 hours of sleep vs. a day employee who averages 7.5 hours in a 24 hour period (Moore, 1995,9-11). Many officers pretend that they have had plenty of

sleep, when in fact they are tired stressed and may be having problems at home. Research shows that over the past 100 years, Americans have cut their sleep time by 20% (Swenson, 1997). During the last 20 years we have added about 158 hours (nearly a full month) to our work schedules (Bonnet, 1990). This suggests that officers are working longer hours with less rest.

One thing is for sure, most officers can attest to the challenges that rotating patrol shifts place on their professional and personal lives (Moore, 1995). Researchers have found that there are no pros to rotating shift work. **In** fact there is every reason to start setting standards to go to a more uniform way of scheduling. The problem herein is that most departments continue the policy of rotating (Oginska, Pokorski & Oginski, 1993, 161-168).

In a study of 203 retired police officers, research focused on the effects of working long-term shift work (Swenson, 1997). The officers reported that the effects were actually worse than they had realized at the time. A large number of retired police officers have suffered long-term effects such as still not being able to sleep well (Neill & Cushing, 1990).

Research also indicates officers are much less satisfied with their work when they are exhausted. David Swenson (1997) also suggests that due to fatigue and mood swings brought on by shift work that relationships often end in separation or divorce. This is true even with happy and complete families. In an article from *The Thin Blue Line* a problem identified is that officers see time away from work as time to recuperate from the trials and tribulations of work (Anonymous, 1999). Their family

members see this as time together to do things such as shopping and/or recreation.

Over a long period of time, this can cause huge marital and personal problems.

Activities can also become restricted over time. Many shift workers do not even participate in any type of social activity within their community. This includes attending church. Officers also find it hard to participate in department -sponsored events without feeling agitated towards the agency (Moore, 1995). Too often they will often refuse to work within the community to gain better public relations (Smith & Folkard, 1993,299-305). With all this evidence of harm, there are a few people who thrive while working shift work. These people however are in no way the norm. These people will often be younger and be without family, they tend to be the ones who stay up late or all night during time off.

Officers who are suffering from a problem known as rotating shift syndrome, often face alcohol abuse due to the use as a sleep aid (Swenson, 1997). They also often face nutrition problems due to lack of the proper foods available at the times they are working.

Methodology

Are police officers being adversely affected by rotating shift work and is the public in danger from officers that are fatigued? A study of research conducted by police professionals and medical professionals across the nation suggest this could be the case. Research will show that police officers do indeed fight an ongoing battle of physical and emotional health brought on by working rotating shifts. They work long hours and get very little rest.

A survey of police professionals from different size agencies across the state of Texas will give information on what shifts are being used and how often these agencies rotate officers. The survey will also give insight into the types of problems and complaints departments are getting from the public as well as officers.

A random survey was conducted of 17 police departments across the state to determine the effects that rotating shifts have on police officers. The data was then analyzed to indicate the problems associated with working rotation shifts.

Findings

After studying research on shift work and rotating shifts, its plain to see that lack of rest and the general lack of sleep brought on by this type of work method does take its toll on the human body. Officers who are fatigued experience more frustration, irritability, and aggression. There seems to be a high rate of brutality complaints during those night shifts (Swenson, 1997). More particular, emergency services such as police patrol, which involve continuous operations, are particularly vulnerable to shift related fatigue. (Bonnet 1990)

Many factors play roles in just how the human body will react to rotating shifts. Some departments rotate about every 28 days, which keeps the human body thrown out of any chance of rhythm. Age also plays a large role in stress caused by shift work. People over the age of 40 show an increase in intolerance to shift work. (Oginska, Pokorski, & Oginski, 1993) Productivity of officers drops off a great deal as compared to officers who work a more stable shift with little or no rotation. This was found to be true in a study conducted by Chief Robert Metzger of the Zeeland Police Department in Michigan. Chief Metzger (1995) reported frequent shift rotation and insufficient rest time between shifts have a profound negative effect on productivity

Officers often report problems brought on by fatigue. According to a survey conducted in 1993, spouses of shift workers reported higher conflicts vs. dayshift workers (Smith & Folkard).

Many officers believe that their careers have become "capped" within the first 2 3 years because they are out of touch with the rest of the department and daytime

community (Swenson, 1997). This causes officers to become depressed and in some cases turn angry toward his/her own family.

Shift work is not normal. The "rotating shift" schedule is very taxing on an officer's life. Our bodies are adjusted on what is called "circadian schedules" which is a repetitive daily cycle. Our bodies like to have a regular eating time, sleeping time and walking time, etc. An officer doing shift work never gets a chance to stay on a schedule. This upsets the routine patterns that are needed in a healthy marriage and for family development. Strong marital and family development is based on rituals, like dinners together, "inside jokes," repeated activities, etc. The rotating shift worker has a less chance to develop these rituals and his/her relationships suffer. This predisposes the officer's family to potential problems ranging from divorces, to children acting out. Rotating shift work puts a terrible strain on the human body, both physical and emotional. Although some officers work late nights and rotating shifts with little or no problem, the majority of individuals suffer greatly.

A survey of 15 police agencies of different sizes within the state of Texas shows that at this time a variety of shifts are used. These range from traditional 8 hour shift to a variation of 12hour shifts and a general mix of many others. Out of the 15 different departments surveyed 51 % rotate and the remainder bid shifts on an annual basis. All departments report that they have noticed problems with rotation, including complaints of sleep loss, lack of routine and some family problems (See Figure 1). Only 4 out of 15 agencies surveyed showed no complaints of night shift employees missing work. (See Figure 2) Another problem that exists is the number of complaints received on night shift workers vs. dayshift workers. Of the 15 agencies

that responded, 76.44% more complaints during the evening shift. (See Figure 3) In addition, 58% of the agencies responding indicated that they perceive a problem with rotating shifts. (See Figure 4)

All across the nation people are working around the clock to keep up with demands from the public, yet all signs are pointing to problems with this method of working rotating shifts. The public is at risk from police officers that are fatigued to the point of anger. All research supports the argument that shift work with rotating shifts are taking their toll on the human body.

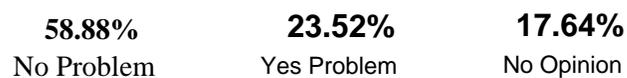


Figure 1. How many officers have more personal problems when assigned to nightshift?

58.88%	23.52%	17.64%	5.88%
Yes	No	No Opinion	50/50 Split

Figure 2. How many Police Departments reported a higher degree of absenteeism with officers that work the night/evening shift?

76.44%	11.76%	5.88%	5.88%
Evening shift	No Rotation	Day Shift	Night Shift

Figure 3. What shifts have the most complaints, Days, Evenings or Nights?

58.88% 23.52% 5.88% 5.88%

Figure 4. How many Police Departments see problems with shift rotation?

Discussion / Conclusions

What effect does rotating shifts have on officers, in both the physical and emotional health? The purpose of this research paper was to look at what experts in the field are saying with regard to this problem. What is happening to our officers when they rotate shifts with very little rest, are they dangerous or just tired?

It is thought that working rotating shifts does take a toll on the human body, thus causing both physical and emotional problems. All research shows a direct correlation between shift work and health. Issues such as sleep disorders; aggression and even suicide are common things occurring with shift work. Professionals across the world are telling the public that there is a danger. Although it's known that with police officers, a higher degree of complaints are generated because of aggression. However, most complaints are handled by internal agencies within the department thus making it hard to get an accurate count of actual complaints.

It is clear from the research that people do change as a result of rotating shift work, including a higher degree of absenteeism. Officers working night shift are suffering a higher degree of health problems. Departments who responded to the survey all report that working rotation shifts seems to be unhealthy. Officers are showing a higher degree of fatigue, which led to mistakes, and poor attitudes thus causing complaints from citizens. Officers make poor a choice in some cases and in

other cases the officers are taking a hard stance with violators; this causes the officer to appear as though he or she is better than the violator. When talking with supervisors from different departments from across the state, one thing that is common among officers assigned to evening shifts is the complaint that they have no family time. This is true because all their family members are in school during the day and spouses are working, officers say family members are like ships in the night, they pass on their way out to work. When supervisors of evening shift officers speak, they maintain that spouses are left to tend to chores such as housework and children even though a lot of these spouses work full time jobs. Thus leaving them to feel as though the officer they married doesn't care or is worthless. When asked in a survey about absenteeism on night shifts versus day shifts, there was a sharp increase. Supervisors agree this could be caused by officers trying to be with their spouse or children in order to gain missed family time.

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