

# Tired Cops: The Prevalence and Potential Consequences of Police Fatigue

*by Bryan Vila and Dennis Jay Kenney*



**A** Michigan police officer working nearly 24 hours straight crashes his cruiser while chasing a fleeing motorist. He is critically injured. In California, a sheriff's deputy working alone drifts off a deserted highway and is killed instantly when his patrol car crashes into a tree. An officer in Florida, who has had trouble staying awake, runs a red light in her patrol car and crashes into a van driven by a deputy sheriff, injuring him severely. A police officer driving home from work in Ohio nods off at the wheel, begins swerving in and out of traffic, and runs off the road, striking and killing a man jogging down the sidewalk. These are just a few of the

## about the authors

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news stories about tired cops that come in from around the Nation with distressing regularity.

Accounts of tragedies associated with police fatigue are not new. The National Commission on Sleep Disorders Research heard testimony in 1991 from officers who described

terrible work schedules, high stress, and overwhelming fatigue. But the Commission had no way of determining whether or not the witnesses' experiences were representative of police officers in general because of a lack of scientific data documenting the prevalence of police fatigue. Now, data are available from the first comprehensive research on the topic—and the news is not good. (See "About the Tired Cops Study.")

Weary from overtime assignments, shift work, night school, endless hours spent waiting to testify, and the emotional and physical demands of the job—not to mention trying to patch together a family and social life during irregular breaks of off-duty time—police officers fend off fatigue with coffee and hard-bitten humor. The authors of the study spoke to hundreds of officers, supervisors, and managers, most of whom reported personal experiences with fatigue, exhaustion, and extreme drowsiness.

## About the Tired Cops Study

Beginning in 1996, the authors conducted studies in four mid-sized municipal law enforcement agencies located in different parts of the United States. The agencies were representative in terms of staffing levels, work-shift arrangements, calls-for-service, and other potentially relevant variables. The National Institute of Justice funded the research, and staff from the Police Executive Research Forum conducted the study. The goals were to identify effective strategies for measuring fatigue among police officers and to better understand the prevalence of fatigue among field police officers. The authors also wanted to identify the causes of fatigue in the police environment and begin to evaluate the impact of fatigue on officer performance, health, and safety.

With the help of executives, supervisors, and officers, the researchers collected information about the number of hours worked by individual officers, the regularity of their work hours, and related accident and on-the-job injury data.

To obtain an objective measure of the level of fatigue at the start of each day's shift, the authors used a computerized device called the FIT™ Workplace Safety Screener. With this tool, the researchers could test the officers' involuntary pupil responses and the speed of voluntary eye movements. Both measurements are sensitive to the performance and risk factors associated with excessive sleepiness and are almost impossible for subjects to falsify.

The authors also surveyed the officers using the Pittsburgh Sleep Quality Index, a well-validated questionnaire that clinicians use to diagnose sleep disorders. The officers answered questions about how they perceived their own level of fatigue and that of their peers. They also responded to questions about how much of their fatigue should be attributed to their jobs and how they thought fatigue affected their job performance and family life.

## What's Causing Police Fatigue?

The work hours in many professions (for example, airline pilots and truck drivers) are standardized and regulated. No such structure exists for police officers. There are scattered reports of officers working stupendous amounts of overtime or extra-duty details. *The Boston Globe's* detailed review of timekeeping records for one police agency found 16 officers who each *averaged* more

than 80 total work hours per week (including regular and overtime hours) during a 12-month period. Two officers averaged more than 100 hours per week. And another officer once worked 130 hours in a single week—averaging less than 6 hours off each day. A few officers in both Florida and Massachusetts jurisdictions reportedly work overtime or moonlight as many as 3,000 hours per year in addition to their regular work shifts.<sup>1</sup>

A series of surveys conducted in 1999 with police chiefs and supervisors supports the idea that overtime work contributes greatly to police fatigue.<sup>2</sup> The results, compiled from more than 60 jurisdictions in the United States, reveal that at least a few officers in most departments work substantial amounts of overtime and that more than half of the officers in many departments moonlight. Among 49 respondents from the largest of the surveys, the authors found that, on average, patrol officers worked a reasonable 17.5 hours of overtime per month. In all, about a third of the departments reported that their officers work 20 or more hours of overtime per month. At the high end, one department reported that its officers worked an average of 100 overtime hours per month, and two reported an average of 40 overtime hours per month. However, none of these findings tell how evenly the overtime was distributed. Experience suggests that overtime seldom is evenly distributed—some officers work extreme amounts of overtime while others work little or none.

On average, officers attributed 35 percent of the overtime they worked to off-duty court appearances; 20 percent to making late arrests or writing reports; 11 percent to taking extra shift assignments to fill in for someone who was sick, on vacation, or disabled; and 9 percent to cover-

ing special circumstances, such as crowd control, parades, or missing children.

### Other Possible Causes and Correlates of Fatigue

Specific causes and effects are difficult to establish for something as complex as fatigue. But when the findings from the Tired Cops study are combined with what is known from the research on sleep and fatigue in general, the following causes and correlates take shape:

**Shift length:** In the two departments that used compressed shifts, officers appeared to have significantly fewer sleep problems and reported significantly less fatigue at the beginning of their work shifts.<sup>3</sup> Officers who worked 10- and 12-hour shifts for fewer days repeatedly empha-

sized that such shifts were less fatiguing.<sup>4</sup>

**Shift assignment policies:** People are less able to cope with fatigue and sleep disruption as they age.<sup>5</sup> Thus, the way in which departments assign people to their shifts tends to affect older and experienced officers more. Age and experience explained a substantial amount of the fatigue reported by night-shift officers in departments that made shift assignments based on department needs alone. The reverse was true in departments where preference in shift assignment was based on seniority. In brief, older officers who could select their own shift tended to be less fatigued.

**Personal circumstances:** No relationship was found between marital status and fatigue, although many of the officers who were surveyed listed having young children at home as a major source of fatigue and sleep

To summarize, the research still is a long way from fully explaining the role fatigue plays in police officer accidents, injuries, and citizen complaints—but the limited data available suggest that fatigue contributes to these problems. Prudence suggests that we take concrete steps to manage police fatigue and better understand its causes and circumstances.

## Federal Support to Identify and Reduce Stress

In 1994, the U.S. Congress authorized the Law Enforcement Family Support (LEFS) program to assist in reducing the harmful effects of stress experienced by law enforcement officers and their families. The National Institute of Justice was given administrative responsibility for the program. After the Department of Justice Office of General Counsel clarified the term “law enforcement personnel” to include correctional, probation, and parole officers, the program was renamed Corrections and

Law Enforcement Family Support (CLEFS).

To date, NIJ has awarded 34 grants, totaling more than \$3 million, that meet the objectives of CLEFS. These awards have focused on expanding knowledge about the development, implementation, and coordination of services; the feasibility and efficacy of specific program elements and approaches; and the causes, consequences, and nature of officer and family stress.

The subsequently developed services and studies have included critical incident stress debriefing and management techniques, peer support services, police organizational change and well-being, stress management training methods, police psychological services referral networks, police chaplaincy services, rookie stress counseling, and spouse academies.

For more information about NIJ’s CLEFS program, visit <http://www.ojp.usdoj.gov/nij/clefs/welcome.html>.

disruption. Although women officers tended to show poorer quality sleep on standard scientific measures than men, few women reported feeling tired at the start of their shifts.<sup>6</sup>

**Commuting:** Longer commutes are significantly related to more self-reported fatigue and to lower quality sleep for day-shift officers, but not for officers on other shifts. The authors theorize that this is because day-shift commuters encounter more traffic. Overall, there was a moderately strong, positive correlation between commuting distance and fatigue-related impairment, as measured by a computerized eye movement/pupil response test that is nearly impossible to falsify.<sup>7</sup> This finding was consistent for evening shift officers in all departments and among officers in the department located in an area with some of the worst traffic in the United States.

**Work-hour regularity:** The study revealed one finding that is counter to research on the fatigue-inducing effects of schedule disruption: Officers with regular work hours

(i.e., whose regular work schedules were disrupted less often by overtime or extra shift assignments) reported significantly more tiredness at the beginning of their work shifts and significantly poorer quality sleep. One possible interpretation of this finding could be that the officers who were having problems with fatigue were actually avoiding or minimizing overtime work—perhaps by making fewer arrests or court appearances. It also is possible that these officers had outside jobs, child-care responsibilities, or other external demands on their time that encouraged them to keep regular hours, yet also promoted fatigue.

To summarize, the research still is a long way from fully explaining the role fatigue plays in police officer accidents, injuries, and citizen complaints—but the limited data available suggest that fatigue contributes to these problems. Prudence suggests that we take concrete steps to manage police fatigue and better understand its causes and circumstances.

## What Can Be Done

Although there is still much to learn about police fatigue, enough is known to begin developing policies and programs to address these critical issues safely and constructively. At a minimum, the existing research suggests four steps every police agency can take to assess the extent to which fatigue puts its officers and the community they serve at risk:

- Review the policies, procedures, and practices that affect shift scheduling and rotation, overtime, moonlighting, the number of consecutive work hours allowed, and the way in which the department deals with overly tired employees.
- Assess how much of a voice officers are given in work-hour and shift-scheduling decisions. The number of hours officers work and the time of day they are assigned to work affect their personal, social, family, and professional lives. Excluding officers from decisions affecting this

arena increases stress, which in turn reduces their ability to deal with fatigue and tends to diminish their job performance and ability to deal with stress.

- Assess the level of fatigue officers experience, the quality of their sleep, and how tired they are while on the job as well as their attitudes toward fatigue and work-hour issues.
- Review recruit and in-service training programs to determine if officers are receiving adequate information about the importance of good sleep habits, the hazards associated with fatigue and shift work, and strategies for managing them. Are officers taught to view fatigue as a safety issue? Are they trained to recognize drowsiness as a factor in vehicle crashes?

If this review and assessment uncover problems, the agency should develop fatigue or alertness management policies and programs and implement them.<sup>8</sup>

Police fatigue presents managers with a unique set of thorny problems. It also provides an excellent example of the importance of partnerships between practitioners and researchers. Involving qualified researchers in policy analysis and program evaluation can help departments develop the best practices possible. It also may help limit civil liability associated with fatigue-related accidents, injuries, and misconduct by providing evidence that a department has conscientiously attempted to ensure that its officers are not impaired by fatigue.

## Looking Forward

Fatigue is a serious, challenging problem—the kind of problem that requires creative leadership.

“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.”

William C. Dement, M.D., Ph.D.

Researchers and police managers need to work together to minimize the threat fatigue poses to our communities and to our officers.

Distinguished sleep researcher William C. Dement<sup>9</sup> summed up the problem this way:

Police work is the one profession in which we would want all practitioners to have adequate and healthful sleep to perform their duties at peak alertness levels. Not only is fatigue associated with individual misery, but it can also lead to counterproductive behavior. It is well known that impulsiveness, aggression, irritability, and angry outbursts are associated with sleep deprivation. 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.<sup>10</sup>

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## Notes

1. A 40-hour per week job with a 4-week vacation totals 1,920 work hours per year.
2. The largest of these surveys was conducted through the Police Executive Research Forum (PERF) with Lorie Fridell, PERF's Director of Research. These surveys were not part of the Tired Cops study.
3. A compressed shift compresses the traditional 40-hour work week into fewer than 5 days.
4. In this study, the authors couldn't test how officers on compressed shifts compared with those on regular 8-hour shifts within the same agency. Thus, it is not known if it was compressed shifts that caused less fatigue or some other factors associated with the departments themselves.
5. This is consistent with a substantial body of research indicating that adults have more difficulty

adjusting to the challenges of shift work as they age.

6. The Tired Cops study administered to 298 officers the Pittsburgh Sleep Quality Index, a well-validated questionnaire that clinicians use to diagnose sleep disorders.
7. The FIT™ Workplace Safety Screener was used to test officers' involuntary pupil responses and the speed of voluntary eye movements. Both of these measurements are sensitive to the performance and risk factors associated with excessive sleepiness and are almost impossible for subjects to falsify.
8. Many of the resources listed in the "For More Information" section of this article will be helpful in this regard. *Tired Cops: The Importance of Managing Police Fatigue* provides a step-by-step plan for developing fatigue and alertness policies and programs.
9. William C. Dement, M.D., Ph.D., is the Founder and Director of the Stanford University Sleep Research Center. He served as Chairman of the National Commission on Sleep Disorders Research in 1991.
10. Vila, Bryan, *Tired Cops: The Importance of Managing Police Fatigue*, Washington, DC: Police Executive Research Forum, 2000: xiv.

## For More Information

### Books and Articles

- William C. Dement and Christopher Vaughn, *The Promise of Sleep: A Pioneer in Sleep Medicine Explores the Vital Connection Between Health, Happiness, and a Good Night's Sleep*, New York: Delacorte Press, 1999.
- Bernard K. Melekian, "Alternative Work Schedules and the 12-Hour Shift," *Subject to Debate* 13(1999): 1–3.
- Mark R. Rosekind et al. "Managing Fatigue in Operational Settings 1: Physiological Considerations and Countermeasures," *Behavioral Medicine* 21(1996): 157–165.
- Mark R. Rosekind et al. "Managing Fatigue in Operational Settings 2: An Integrated Approach," *Behavioral Medicine* 21(1996): 166–170.
- Bryan Vila, *Tired Cops: The Importance of Managing Police Fatigue*, Washington, DC: Police Executive Research Forum, 2000.

### Web Sites

- Alertness Solutions, <http://www.alertness-solutions.com>.
- NASA Ames Research Center Fatigue Countermeasures Group, <http://human-factors.arc.nasa.gov/zteam>.
- National Sleep Foundation, <http://www.sleepfoundation.org>.
- PMI, Inc., Fitness-for-Duty Impairment Screener (FIT), <http://www.pmifit.com>.
- Police Executive Research Forum, <http://www.policeforum.org>.
- University of North Carolina Highway Safety Research Center, <http://www.hsrb.unc.edu>.