

January 15, 2012

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I. New study confirms health/safety dangers of LEOs' poor sleep

Union reps, trainers, and human behavior experts who have been campaigning to get police fatigue recognized and addressed as a critical professional and public safety problem have been given an armory of ammunition for their battle by a comprehensive and complex new study of cops and sleeping disorders.

A team of 13 sleep specialists, headed by Dr. Shantha Rajaratnam of the Sleep Medicine Division at Boston's Brigham and Women's Hospital in Boston, surveyed a broad range of nearly 5,000 U.S. and Canadian LEOs through online questionnaires or on-site screening and found that:

- 46% had "nodded off or fallen asleep while driving";
- over one-quarter reported that this occurs 1 to 2 times a month and more than 6% said they typically fell asleep at the wheel at least 1 to 2 times a week;
- over 40% tested positive for 1 or more sleep disorders, most commonly (33.6%) obstructive sleep apnea (OSA), a potentially fatal affliction that causes the airway to close, leaving the victim choking or gasping for breath.
- by 1 screening method, more than half (53.9%) of officers working nights tested positive for shift-work disorder, which involves excessive wake-time sleepiness, moderate to severe insomnia, and repeated awakening during a sleep cycle.
- In most cases, the disorders, which also included restless-legs syndrome and narcolepsy with sudden muscular weakness, had not been previously diagnosed nor treated.

During 2 years of monthly follow-up monitoring, those identified with specific sleep disorders revealed significantly higher incidences of:

- important administrative errors;
- falling asleep while driving and during meetings;
- fatigue-related safety errors or violations;
- uncontrolled anger toward suspects or citizens while on the job;
- citizen complaints;
- frequent absenteeism; and
- mental and physical health problems, including depression, occupational burnout or emotional exhaustion, and increased likelihood of cardiovascular disease, gastrointestinal problems, anxiety disorder, and diabetes.

"Two hundred eighty-seven participants reported being in a motor vehicle crash during the follow-up period," the researchers report. Not surprisingly, crashes occurred more often among those who reported falling asleep while driving.

In some categories, cops with sleep disorders were more than twice as likely to experience negative consequences than sounder sleepers.

"We have great treatments for sleep disorders, we have great screening tools, the technology is there," said Dr. Michael Grandner of the University of Pennsylvania Center for Sleep and Circadian Neurobiology in an interview about the study by Reuters Health news service.

Sleep apnea, for example, can be treated with a breathing machine and mask used while sleeping, and insomnia, another common police complaint, often responds successfully to behavioral therapy.

But in law enforcement, as in much of society generally, there's a "cultural attitude [that] sleep is for the weak," Grandner observed. "When you're in an environment where signs of weakness are particularly discouraged, there may be a social pressure to not address sleep problems or to shrug them off."

Which, he pointed out, leaves not only sleep-impaired officers endangered but the public as a whole at risk because of the adverse effect of fatigue on tired cops' decision-making and performance.

A brief abstract of the study is available free at: <http://jama.ama-assn.org/content/306/23/2567.abstract>. The full 12-page report, "Sleep Disorders, Health, and Safety in Police Officers," which appears in the *Journal of the American Medical Assn. (JAMA)*, can be ordered for a fee at that site.

Of the officers participating, most were male and white, averaging about 39 years of age and nearly 13 years on the job. More than two-thirds were patrol officers who worked predominately for municipal, county, and state agencies. About 25% were assigned to rotating shifts, with nearly 60% working at least some nights. Nearly a third (31.3%)

worked shifts of 11-13 hours and a noticeable minority (14.5%) put in 14-16 hours per tour. Second jobs were reported by roughly 1 in 5.

The vast majority (94%) thought themselves to be in good to excellent health, although a great many (79%) were overweight. "Given that obesity is a major risk factor for OSA...the high prevalence" of that disorder among the study pool "could be anticipated," the researchers noted.

Interestingly, a block of study participants came from the Massachusetts State Police, and those subjects showed a lower prevalence of OSA and a lower mean body mass index when compared to another bloc of officers from a major U.S. metropolitan PD.

Among factors that might have caused the differences, the researchers suggest, are a departmental fitness program by the State Police that "provides fitness facilities and the opportunity to exercise at all stations during paid work time," plus an emphasis on regular physical fitness tests as a part of that agency's job performance standards and bonus system.

"It's an impressive program and perhaps a model for the nation," one of the researchers told a reporter.

In commenting on its findings, the study team offers several important observations:

- Almost 90% of North American cops "regard drowsy driving to be as dangerous as drunk driving" and vehicle accidents are known to constitute a significant percentage of line-of-duty deaths. Yet excessive sleepiness at the wheel is "common in police officers." The risk of a vehicle crash is heightened 2- to 3-fold among individuals with OSA, the most common sleep disorder discovered in the study.
- The increased frequency of "actual and near-miss administrative errors and safety violations" among officers with sleep disorders should be considered in this context: "The loss of even 2 hours of nightly sleep for 1 week is associated with decrements in performance comparable with those seen after 24 hours of continuous wakefulness.... [L]ong work hours are also associated with decrements in performance and attentional failures."
- Uncontrolled anger toward suspects and citizens, as well as increased complaints reported against officers with sleep disorders, may be tied to changes in the brain's amygdala that make sleep-deprived individuals less able to "appropriately govern behavioral responses to negative emotional stimuli."
- Otherwise healthy individuals "scheduled to eat and sleep out of phase from their habitual times," such as rotating shift workers, tend to experience higher rates of "impaired cardiometabolic responses," which may "at least in part explain the increased risk of cardiovascular disease and diabetes" among shift-work officers.
- Depression associated with OSA and insomnia may be a factor of "significant implications" in the risk of suicide among LEOs.

More research is needed to explore the subtleties of sleep deprivation in public safety workers, the study concludes. But a pertinent question right now, notes a *JAMA* editorial, is "what police departments will do with [the] new information" this study already conveys.

Suggestions include on-the-job screening for sleep disorders, restraints on overtime and extra-long shifts, and mandates to assure that officers with sleep problems get help. Officers would have "a much better time doing their job if we were able to take better care of them," says Dr. Grandner.

[Sound of applause rising from the ranks!]

II. AELE: Beware the legal risks of spreading gory scene photos

You wouldn't do it, but let's say an officer of your acquaintance uses his personal cellphone camera to record the gore of a fatal traffic smashup and emails the bloody photos to some buddies and from there they eventually get posted forever on the internet. Any legal problems with that?

It's a good question, given the growing profusion of electronic recording devices--and their occasional irresponsible use--among LEOs. A new report by Americans for Effective Law Enforcement, the leading source of legal information and training for officers and their agencies, provides the cautionary answer.

You can read AELE's full documentation of the issue free of charge at <http://www.aele.org/law/2012all02/2012-02MLJ501.pdf>. The article highlights, among other things, officers' liability for privacy violations under such circumstances, administrators' obligation to prevent unauthorized file sharing, and questions about whether officers should be allowed to wear personally owned mini-cams.

Particular attention is focused on a precedent-setting civil suit brought by survivors of an 18-year-old female who was decapitated when her car crashed into a West Coast tollbooth at 100 mph. She was so gruesomely mangled that the coroner wouldn't permit her parents to see her body.

"For pure shock value," 2 officers emailed 9 "grotesque images" from the scene to friends and family members as a Halloween prank. The photos were passed around and ultimately spread across the internet "like a malignant firestorm, popping up in thousands of websites," such as www.bestgore.com.

An appellate court panel ruled that officers involved could be sued by family members for inflicting "extreme emotional distress" by violating the "common law privacy right in the death images of a decedent." AELE notes, "Liability can attach even if [disturbing] photographs or videos are viewed only by curious coworkers." Links are provided in the article to various pertinent cases.

The report also discusses wearable video cameras and provides reasons pro and con for departments permitting such devices that are personally owned vs. those that are department-issued.

Potential language for policies pertaining to mini-cams and audio-recording devices, both personal and professional, is also discussed.

In addition to its access through AELE, the article will also appear in the Law Enforcement Executive Forum for March, 2012, and in the IACP Net database.

Note: Visit the AELE.org website to register for free monthly email journals on law enforcement and corrections legal issues and for detailed information on the organization's popular training seminars.

III. %\$!# the pain: Latest research on the benefit of foul language

Swearing can help you better tolerate physical pain, provided you don't do much of it in your ordinary daily life.

That conclusion comes from a British research team reporting its latest findings on the analgesic benefit of cussing in *The Journal of Pain*, the official publication of the American Pain Society.

Back in 2009, Dr. Richard Stephens of the psychology school at Keele University in England experimented with volunteers whose hands were submerged in ice-cold water. He found that those who swore aloud could tolerate the painful discomfort longer than those who spoke "neutral" words.

Now with Claudia Umland he has repeated and refined that research. This time they had 71 volunteers, ranging in age from 18 to 46, fill out questionnaires on how frequently they swear in everyday life before being put through the icy-water test.

Results: Nearly 75% of participants were able to keep their hands in the water longer if they repeated a swear word. However, people who do not swear much during a typical day (not at all or "just a few times") were able to endure the water challenge for twice as long when they repeated swear words than when they shouted out neutral words. Yet those who swear frequently (up to 60 times) every day "derived no greater benefit from swearing" during the test.

"The higher was the daily swearing frequency, the less was the benefit for pain tolerance when swearing," the researchers report. "Our hypothesis is that by swearing, the speaker experiences an emotional response due to breaking a taboo, and the emotional response is sufficient to set off...an adrenaline surge...and increased pain tolerance.... Swearing seems to activate deeper parts of the brain more associated with emotions" than normal speech.

But habitual cursing tends to blunt and neutralize the pain-easing effect. Frequent swearers simply don't feel the same emotional response from cussing. "If you swear too often in everyday situations, the power of swearing won't be there when you really need it," Stephens explains. For infrequent cursers, however, "swearing can be an effective and readily available short-term pain reliever if you are in a situation where there is no access to medical care or painkillers."

Stephens and Umland offer no "recommended daily swearing allowance" and say it "remains unclear" whether certain swear words are more effective pain-relievers than others. "We are just scratching the surface" about the effects of swearing, Stephens says.

IV. Should civilian shooters get the same treatment as OIS survivors?

Ray Meyer, a retired sergeant of the California Highway Patrol, emailed this note to Force Science News:

Don't jump to conclusions on what I believe, but here's a question. We always treat the officer involved in an OIS as if it's a good shooting. Assume a citizen involved in a shooting has a concealed firearms carry permit or was acting in self-defense on his own property and based on his initial statement and initial review of the evidence the shooting appears justified.

What would you do if the citizen says he'll give you his firearm when he gets another one on and he tells you he will provide a full statement after he gets 2 sleep cycles and has his attorney present?

Do you give him a ride home to change clothes before taking him to the station for questioning and/or letting the press see him? Whatever you do for an OIS, would you do the same for a legally armed citizen? Is a team like an OIS team assigned, or are the on-call homicide detective and the standard CSI crew used? Should we care when a citizen with a concealed firearm carry permit is involved in a self-defense or threat-to-life shooting?

Retired after 32 years in law enforcement, I am authorized to carry a concealed firearm and I have a non-resident permit from the state where my daughter's family lives. So I'm curious about how I will be treated.

Dr. Bill Lewinski, executive director of the Force Science Institute, offers this response:

A legally armed civilian and a sworn peace officer are not comparable in the context of a shooting situation.

An officer is acting under the color of law and is generally performing his assigned role as society's representative when a shooting occurs and will likely continue in that role in some format after the shooting - subsequently the replacement of a professional instrument that is a required tool of the job. Further, as part of his selection process, he has been assessed on the basis of background checks, mental health and fitness evaluations, and training. His job performance is supervised and evaluated. He has a track record that is known to his department. He operates under a special duty and special regulations.

A civilian or retired law enforcement officer, even if legally armed, is likely not acting under color of law and may be an unknown entity to the investigating agency. In both cases, the shooting must be thoroughly and fairly investigated. But where an on duty officer is involved, a more specialized investigation is likely to be appropriate.

Because of the probability that it will be involved in a civil lawsuit, the department has a particular interest in the nature of an OIS investigation, apart from concerns about criminal violations. There may be Garrity issues, union and policy matters, media and community perceptions, and training considerations that don't apply to civilian actors.

Are officers really treated with the special sensitivity that Sgt. Meyer suggests?

They should be, because of their special status. But unfortunately, they still are not in many jurisdictions, given the same level of consideration of a citizen. To get rest, shower, change clothing and legal consultation prior to giving a statement, for example, all a civilian needs

to do is invoke his Miranda rights. The citizen, if they choose, could come back sometime later with their attorney and give a formal statement. For officers on many agencies who feel they are trapped in a pressurized and coercive environment after a shooting, that would be a procedural improvement!