

One Woman's Drive to Make a Difference for Tired Truckers

By Josh Gaby, *ENA Connection*

Call it Karen Heaton's awakening. Thirty-two years ago, when Heaton, PhD, CEN, FNP-BC, was a student nurse, a friend from high school (also a nurse) died in a sleep-related crash in rural Alabama while driving home from a night shift. Heaton later cared for another emergency nurse in a similar accident who died from his injuries, and she had some close calls behind the wheel herself.

Her husband, Tim Dickerson, was a long-distance truck driver when they first met, so she has long known about those drivers' sleep issues and their complicated access to health care.

And that's how the road to research began for Heaton, who first helped to explore sleep deprivation as a crash-risk factor while she was a doctoral student at the University of Kentucky in 2003. Her studies on fatigued driving and obstructive sleep apnea continued during her year as a Kentucky faculty member and at the University of Alabama at Birmingham, where she's been an assistant professor at the UAB School of Nursing since 2008. Last summer, the National Institute for Occupational Safety and Health awarded her \$380,900 in funding for a two-year study that will expose about 80 truckers to an Internet-based program designed to teach



Karen Heaton, PhD, CEN, FNP-BC

and manage safer sleep habits. Fewer than 15 percent of research applicants receive NIOSH funding.

It has been a fruitful career trek for Heaton, who started in intensive-care nursing, progressed to the emergency department, spent time as a flight nurse and a family nurse practitioner and still works two shifts a month at a Birmingham-area emergency department to keep her skills sharp. For many nurses, research may be a career destination, she said.

"I started out green as grass in the emergency department, scared to death that I was going to make a mistake at triage and miss something that was going to hurt someone, and with a lot of learning and a lot of opportunities, I've come to this point in my career," Heaton said. "For me, the greatest achievement of all has been earning

my doctorate, my PhD, and learning the techniques to do research where you could potentially influence the safety and health of hundreds of thousands of people."

That's precisely where her NIOSH-funded research is headed. Government regulations prohibit commercial truckers from driving more than 11 hours in a 24-hour period, with a 10-hour off-duty period. Factor in other tasks such as paperwork, maintenance and loading, and there's a 14-hour work limit in a 24-hour period. That can leave minimal time for sleep, and the pressures on drivers to keep going are huge.

"When they're moving, they're making money. When they're sitting still, they're not making money," Heaton said.

While most do their best to follow regulations, Heaton said it is estimated that up to a third of the 1.5 million commercial heavy truckers in the United States routinely violate the rules and drive on reduced or interrupted sleep. Sleep deprivation has the same effect on driving as alcohol intoxication, she stressed.

Previous educational programs targeting truckers have been lecture- and classroom-based, not exactly the best method for men and women constantly on the move. So Heaton and her research-

ers will connect with drivers through their laptops and cell phones for 12-week periods starting this summer, during which they'll receive a series of online modules about "sleep hygiene," interact through self-checks and quizzes and log their sleeping time and conditions. Participation is voluntary; the truckers will be recruited largely at trade shows and divided into two study groups to see if the Internet delivery method works and if their sleep habits improve.

"If this method of health information is useful and effective with

them, the implications for it are tremendous," Heaton said, "and it could potentially help not only this group of workers but many other folks out there as well who either prefer Internet-based information or have limited access to information delivered via other methods, such as the traditional classroom."

The opportunities to get into research are "marvelous," she said, noting that fewer than 1 percent of nurses are doctorally prepared with either research preparation (PhD) or clinical practice/systems expertise (DNP). There will be roles to fill as older faculty members

approach retirement. Emergency nurses have the right makeup because they've already been exposed to patients of all ages and populations, and they have a broader world view of health issues that lend themselves to research.

"It's important for emergency nurses to use their voices," she said. "I'm trying to use my voice to advocate for this group of folks, truck drivers, through research, but all of us, regardless of what we do in emergency nursing, need to use our voices to advocate for the people whom we're caring for."

