



A new model for studying a rare disorder caused by abnormal heme production, porphyria cutanea tarda, was reported by Dartmouth biochemist Peter Sinclair, Ph.D., in the journal *Hepatology*.

## Why paramedics go for the punch(line)

For most people, there is nothing funny about a motorcycle accident or a heart attack. But for paramedics, and other emergency medical service (EMS) professionals, morbid humor is essential to managing their work-related stress.

"The biggest coping mechanism that we have is dark humor," says Victoria Corum, a flight paramedic for the Dartmouth-Hitchcock Advanced Response Team (DHART), which supplies ground and air medical-transport services all over New England. "I've worked in various states, and it's constant throughout EMS. . . . Everybody does it."

Corum—who has 10 years' experience, seven of them as a flight medic—wanted to know what other, perhaps less obvious, coping strategies were common in her profession. So as part of earning her bachelor's degree in emergency-health services, she conducted a study about ways her colleagues cope with the kind of trauma most people see only in the movies. She surveyed paramedics in New Hampshire and Vermont, as well as members of the National Flight Paramedics Association.

**Study:** The 608 respondents to Corum's survey ranged in age from 20 to 64 and had an average of 15 years' experience. Almost 90% admitted to using dark humor. Other coping mechanisms respondents listed were talking with colleagues (37%), spending time with family and friends (35%), and exercising (30%).

Corum was not surprised that talking with colleagues ranked second, after dark humor. "If we get back from a really yucky flight, the first thing we do, probably even on the way home, is debrief the flight," she says. "It's usually informal. We start with the crew, and then we have an official debriefing" back at the hangar. Reviewing what went well on a call and what didn't helps the medics learn from each trip.

"You can work for five years and have

the same kind of patient, then one patient will click with you for some reason," Corum says. And what affects one member of the crew often affects the others, given the close confines of their work. "Basically it's just the three of us," a pilot, a nurse, and a medic, she adds, "and we have to rely on each other."

**Let go:** The nature of their work means EMS workers must be able to focus in intense situations and then just let go. That dichotomy is what makes dark humor a beneficial coping mechanism. "As long as it's done in an atmosphere where no one is offended by it, and it's helping you and your partner to get through your day, then I think it's a positive thing," says Corum. "It may sound crass that you are laughing at someone else's misfortune, but that's the way you have to deal with it."

The key, she says, is to "get through your day so that with your next patient you're thinking about *that* patient and not your previous one. You need to be there for *that* patient." ANNE VILLENEUVE

MARK WASHBURN



Paramedic stress was the focus of a recent study.

### Nerve ending

The results are in from an eight-year study on the safety and efficacy of vagus nerve stimulation (VNS), a treatment for epilepsy that can't be controlled with medication or surgery. In the trial, conducted at DHMC and a hospital in Belgium, 7% of VNS patients were free of seizures with impaired consciousness and 50% had their seizure frequency halved.



There were no serious side effects, though 15 of 131 patients experienced hoarseness and gagging. The verdict: "VNS proved to be efficacious and safe," the authors wrote in the *Journal of Clinical Neurophysiology*.

### Breath of fresh air

A team of DMS pharmacologists has discovered an enzyme that may help prevent lung cancers, which kill more than 150,000 people a year in the U.S. The enzyme, UBE1L, seems to keep a particular protein, cyclin D1, in check. Since cyclin D1 is often abundant in lung cancers, the finding means that UBE1L may be a good target for chemopreventive strategies. Smoking cessation and prevention will ultimately reduce the number of lung-cancer deaths, the researchers wrote in *Cancer Research*, but in the meantime, "there is a need to understand better how to prevent lung cancers in those [already] at high risk." ■

