

A Captain's Personal CO Experience

Captain Stan Plyler
Medical Officer
Bremerton Fire Department
Bremerton, WA

I had always thought carbon monoxide poisoning was something you read about in the newspaper; something that happened to other people. I assumed my background in the fire service gave me an advantage since I was more familiar with the signs and symptoms of CO poisoning. I was about to find out how wrong I was.

My personal experience with carbon monoxide poisoning started with my new fire department staff car (a small 2008 SUV) that I had just taken possession of at the end of August 2007. My usual day with the staff car consisted of an early morning ten mile commute from home to the department and the normal business of the day, including meetings and responses to emergency calls. I began to notice I had a persistent mild headache, fatigue and a general "blah" feeling. This was unusual for me as I am a non-smoker in excellent physical condition and rarely am ill, especially in the summer. I attributed the nagging headache and fatigue to stress or some other benign cause.

On September 13, 2007 I was required to drive an hour to attend a regional EMS meeting in the morning and later that day return back to a neighboring fire district to meet with a fellow County Medical Officer and the local sales representative from Masimo, Steve Conney, to see a demonstration on the Rad-57 Pulse CO-Oximeter.

At the meeting, Steve placed the RAD-57 on my counterpart Jay and got a normal SpCO reading. Next, Steve put the sensor on my right index finger my SpCO came back with a positive, moderate reading of 8%. Needless to say, the

first thought that popped into my head was that there was something wrong with the machine. We placed the sensor on the other hand and got the same reading. Steve questioned me on what I had been doing that day and how I had been feeling. I explained about the driving and that I had been having some mild symptoms lately, but only at work. We went through possible CO sources at home and work but nothing seemed likely. While we thought it was a long shot, we speculated that the new department car might have an exhaust leak.

After returning to my office I contacted our transportation division and made an appointment for the next morning to have the vehicle checked out. The mechanic found the exhaust system was in perfect working order with no leaks. He asked me if I had been driving with the windows down; I had not. During a more in depth examination of the car, he found the rear hatch glass rubber gasket seal had a gap of approximately six inches. This gap was allowing the car's exhaust to enter the vehicle and slowly poison me as I traveled down the highway. The gasket was replaced and the leak stopped.

Our agency has made the decision to purchase a RAD-57 in part from my experience but also from a recent case where it would have been extremely beneficial in the triage of several students and staff that had been exposed to carbon monoxide at a high school. Fortunately my case had a good outcome. The leak was fixed and my symptoms did not return. It was lucky I attended the Masimo demonstration when I did. My situation could easily have been much worse and I might not have figured it out until it was too late.



Bremerton Fire Department serves approximately 40,000 citizens on the Kitsap Peninsula in the Puget Sound Region of Washington State. The Department has 58 paid personnel, 8 staff officers, 2 support staff, 15 line officers who are also EMT-B, 15 Firefighter/Paramedics and 19 Firefighter/EMT-Bs. The Department has been active since 1902.