

The Great Test

The Call: Industrial Worker Passed Out

In April 2008, a Basic Life Support crew from Wayne, NJ, received a 911 call for a female employee who had a syncopal episode while at work at the industrial center on the Hamburg Turnpike. The crew arrived on the scene and within a few minutes the alarm from a personal air CO meter, which was inside the first aid bag of a crew member, began sounding. The alarm alerted the crew to carbon monoxide and prompted the evacuation of the building. After assessing each of the evacuated employees, the crew found that 30 other employees had the same complaints—headache and nausea—and called in reinforcements.

The Mobile ICU of St. Joseph's Regional Medical Center responded to the scene and our team of paramedics began to assess situation.

Rad-57 Used To Quickly Triage Large Numbers of Patients

We set-up the triage area a safe distance outside the building and began to measure the CO blood levels of the 30 identified patients using our new Rad-57 Pulse CO-Oximeter. We used the measurements from the Rad-57 to determine how we would treat the patients. The medical resident, who came with us to the scene, gave the direction that any symptomatic patient with a CO level of 5% or greater should be transported to the hospital. Patients with CO levels less than 5% taken to the triage waiting area outside—allowing them to get fresh air. The original female patient who passed out had a SpCO of 15%. She was one of several patients who were hospitalized for CO poisoning.

Call Inspires New Clinical Interest

The Rad-57 gave us the ability to provide a more comprehensive on-site triage screening process for these patients. We were able to more accurately determine how sick people were ensuring that the more critical patients were transported quickly to the most appropriate facility. Without the Rad-57, we would have had to rely on guesswork and patient symptoms, which do not always correlate with the severity of poisoning. The medical resident on scene was so intrigued by the noninvasive Pulse CO-Oximetry technology that he is now using the Rad-57 to conduct a clinical study. We plan to use the results of the study in an educational tool that we are developing for other mobile response units to demonstrate how well the Rad-57 works on the scene to identify CO poisoning and triage patients.

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St. Joseph's Regional Medical Center is a 651-bed academic medical center that treats over 1.3 million patients a year. In addition to its main campus located on Main Street in Paterson, St. Joseph's encompasses facilities in Passaic, Essex, Bergen, and Hudson Counties—providing comprehensive care to residents of northern New Jersey. Whether the task has been to aid those who have been injured, provide maternal care, or heal those suffering from disease, St. Joseph's has remained committed to the fundamental values of the Sisters of Charity: dignity, justice, excellence and stewardship.