The Triage Tool

Russell Chisholm Firefighter /Paramedic Miami Beach Fire Rescue Miami Beach, FL

The call: Food poisoning

On October 23, 2006 Rescue 1 'C' shift was dispatched to a suspected food poisoning call at a hotel on Ocean Drive. Upon arrival, we knocked on the door and had to wait several minutes before the guest, who could barely walk, was able to answer the door. He was very altered, complaining of nausea and a really bad headache. We found the patient's wife, who was on the commode, in the same state of mind as her husband. Both patients

Miami Beach Fire Rescue Miami Beach Fire Rescue serves a 7.1 square mile barrier island in Dade County. Florida, which hosts over 7.5 million tourists annually. Beach populations usually run from 90,000-92,000, swelling to 200,000 on a normal weekend, and rising to 500,000 on holidays and special event weekends. The department is comprised of 200 firefighters divided into 3 shifts, with each shift running 6 ALS onboard. They have two 100 ft. ALS ladder trucks and four ALS engines--all staffed with firefighters/paramedics. The department responds to 20,000 calls per year, 85% of which are medical.

were severely incontinent and their skin was a blotchy red color.

Patients' SpO2 saturations in the low 90's, crew suffer headaches

Both patients' SpO2 levels were in the low 90's. Our crew had only been in the room for about five minutes before we started getting headaches. There was a distinct stale odor in the room so the windows were opened for some ventilation. Both patients were moved into the hallway, placed on high flow O2 and within 5-10 minutes started to feel better.

Masimo Rad-57s called to the scene

We called for the four gas meter and one of two Masimo Rad-57s in field that night to be brought to the scene. (The other nine Rad-57s were going into service the next day.) The equipment arrived as the two rescue units were transporting the patients to Mt Sinai Medical Center in Miami Beach. Upon arrival at the ER, we alerted the nursing supervisor to the suspected CO poisoning. She took the initiative to run ABGs.

Rad 57 helps triage 60 guests

We transported another patient to the same hospital 45 minutes later. The RN showed us the blood gas report on the two patients- the male was 38%, the female 37%. The hotel was immediately closed down and the guests evacuated. The Rad-57 was used to triage the 60 guests, who ranged from a low of 3% to a high of 21%. There were two families

of four who were transported to the hospital, with the parents' CO levels in the low teens and the children anywhere from 6% to 10%. In total, 14 people were transported for CO poisoning. All patients taken to the hospital had blood gas CO levels almost identical to the Masimo Rad-57 readings.

The cause: hot water heater venting stack

The suspected cause of the incident was a hot water heater on the north side of the building whose venting stack ran under the crawl space and up the south side of the building. The facility was closed for three weeks while repairs were made.

Masimo Rad-57 proved invaluable to patients, rescue personnel and hospital

The City of Miami Beach is now actively trying to get an ordinance passed that would require CO detectors in all buildings and would be part of the annual fire inspection. This call could have had a disastrous outcome if everyone from the hospital staff to the rescue crews, engine and ladder crew, and the command staff didn't work together. The Masimo Rad-57 was immensely helpful with the triage of a large number of patients. If we only had the four gas meter to base treatment decisions off of, we could have tied up rescue units transporting patients who did not need transport or worse yet, left people on scene who really needed to go to the hospital.

