

The Rescued Mother

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The call: Unconscious female

On a fall morning, Snohomish County Fire District 1 received an emergency call from two young children who said their mother had passed out. Fire District 1 responded with an ALS Ladder, Medic Unit and an MSO (EMS supervisor). On arrival the children sent us to the upstairs bathroom where we found the mother unconscious but breathing, with signs of seizure activity.

The source of the problem

While moving her into the bedroom, one of the firefighters/paramedics noted a faint odor of exhaust. After 5 minutes in the house, other firefighters started to complain of headaches. Some of the crew searched the house and discovered a running car inside the closed garage, directly below the upstairs bedroom.

Masimo Rad 57 reveals high CO level

The Masimo Rad-57 was placed on the patient. Her initial CO reading was 80% (manufacturer's note: the Masimo Rad-57 accuracy is specified to a range of 0-40%). The four gas meter read 400ppm inside the bedroom. We evacuated the patient and her children from the residence. The kids were evaluated with the Masimo Rad-57 and found to have very low levels of CO.

Patient transported to ER, CO level drops to 37%

Inside the medic unit the patient was RSI'ed and transported to an emergency room 20 minutes away. A later Rad-57



Snohomish County Fire District 1

Located 20 miles north of Seattle, along the I-5 corridor, Snohomish County Fire District 1 serves a community of 160,000 residents, including the cities of Mountlake Terrace and Brier. The district has eight stations, 150 firefighters, a HAZMAT and rescue team. They respond to over 13,000 calls annually and provide BLS and ALS transport. The district originally bought two Masimo Rad-57s to monitor their own firefighters during fire rehab, but they're now used mainly for EMS responses.

reading showed that the patient's CO level had dropped to 37% while the hospital's blood gas CO-Oximeter read 36%.

Masimo Rad-57 showed mild CO exposure in response team

While still at the hospital, the firefighter/paramedics that had been in the house checked their own CO levels with the Rad-57. The battalion chief, who carries our second Rad-57, responded to the station where the ladder is housed to evaluate the crew for CO exposure. Our responders did have a mild CO exposure; however we did not

have to place any units out of service. The battalion chief returned to the station a few hours later to assure that the crew's CO levels had dropped to normal.

Masimo Rad-57 provided fast, accurate CO diagnosis

The Rad-57 helped to quickly, and with certainty, diagnose a very sick patient. By knowing the identity and severity of what we were dealing with, it allowed us to provide treatment for the carbon monoxide poisoning much more effectively than if we weren't able to measure for CO.