

# The Missed Diagnosis

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## The call: Dizziness

On November 11, 2006 at 2307 hours, Tuolumne Medic 41 and a California Department of Forestry engine were dispatched out to a 58 year-old female complaining of dizziness. Upon arrival, we found the patient sitting in a recliner in her mobile home, complaining of severe dizziness that had caused her to fall four days ago. The prior fall resulted in an ambulance transport and an emergency room visit with repair of soft-tissue injuries to her face. She returned home after the ER visit and continued to have problems with dizziness which remained undiagnosed.

## Masimo Rad-57 reveals SpCO level of 13%

The patient had a very extensive respiratory and cardiac history. She answered questions appropriately (GCS 15) and did not appear to be in severe distress. When the Masimo Rad-57 sensor was applied to obtain the SpO<sub>2</sub> reading, the alarm began to sound due to a SpCO level of 13%. Given that the patient's SpO<sub>2</sub> was 83%, her fractional saturation was at best 70%, so it was no surprise she was dizzy. The room was filled with cigarette smoke and after further questioning, we discovered that her husband had turned on their furnace for the first time that season about five days before.

## The problem finally diagnosed

The patient was removed from the house, placed on a non-rebreather oxygen mask at 15 liters and taken to

the local hospital. She continued to improve throughout transport. Her O<sub>2</sub> saturation came up to 96% and her SpCO fell from 13% to 7% over the 45 minute transport. Upon our arrival at the hospital, the patient had no complaint of dizziness and continued to improve during her emergency department stay. The hospital did not have a CO-Oximeter in the facility and relied on the Masimo Rad-57 readings to make their assessment and treatment decisions.

## Masimo Rad-57 saves wife and husband

The Masimo Rad-57 helped us identify the CO poisoning that had most likely been missed four days prior by fire, EMS and ER crews. While a SpCO of 13% by itself is not terribly high, combined with her complex medical history the patient's condition became dangerous. The positive CO reading from the Masimo Rad-57 led to the woman's prompt diagnosis and treatment, prevented her condition from continuing or worsening, and kept her husband from becoming the next patient.

## Tuolumne County Ambulance

Tuolumne County Ambulance service is the exclusive ambulance provider for Tuolumne County and is based in Sonora, California. They are located in the Sierra Nevada mountain range of Central California which includes a large portion of Yosemite National Park. Ambulance services are provided from four locations throughout the county including a new joint operations center for both ambulance and fire service in Sonora. The ambulance service covers over 2,000 square miles with an annual call volume of just over 6,000 calls.