Authorization for use of the Masimo Rad-57 Pulse Carbon Monoxide (CO) Oximeter

- Kern County Fire personnel may use the Rad-57 monitor on its personnel in the following manner:
  - At the beginning of the shift or work day, and when practicable, each member may measure his/her baseline $\text{SpO}_2$ and $\text{SpCO}$ level and document the readings (% $\text{SpCO}$ and % $\text{SpO}_2$).
  - Fire Fighters’ $\text{SpO}_2$ and $\text{SpCO}$ levels may be monitored on incidents where personnel are known to have been, or suspected to have been, exposed to CO
    - If a member is exhibiting signs and/or symptoms of CO exposure and the Rad-57 monitor measures his/her CO level in the “normal” range (possible false negative result) the probability of CO poisoning should remain as a concern and the member shall be treated accordingly.

- Kern County Fire personnel may use the Rad-57 monitor on EMS patients in the following manner:
  - To measure $\text{SpO}_2$ when indicated in accordance with Kern County Emergency Medical Services (KCEMS) policy or protocol (Note: if, during the routine monitoring of an EMS patient’s $\text{SpO}_2$, the Rad-57 $\text{SpCO}$ alarm activates, the patient should be considered to have elevated levels of $\text{SpCO}$ and treated appropriately. Fire personnel should also have a high index of suspicion that a CO source is present and react accordingly.)

- Common signs and symptoms of CO exposure/poisoning
  - Headache
  - Nausea and/or Vomiting
  - Dizziness
  - Chest Pain
  - Confusion
  - Weakness
  - Difficulty Breathing
  - Cyanosis (late sign)
In any instance where a subject is demonstrating signs and/or symptoms of elevated SpCO levels in a setting of known or suspected CO exposure, and if the Rad-57 monitor fails to detect elevated SpCO levels in the subject (potential false negative), the subject shall be assumed to have elevated SpCO levels and shall be treated accordingly. In the event of a suspected CO exposure with associated signs and symptoms, place the patient on oxygen, consider treatment utilizing higher level of care, and transport for further evaluation or treatment to appropriate facility.

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