



Amherst Fire District Procedure

Pulse Oximetry

Clinical Indications:

- Patients with suspected hypoxemia.

Procedure:

1. Document initial saturation percentage on room air if possible.
2. Turn the machine on and allow for any self-tests.
3. Apply sensor to patient's finger or ear lobe as recommended by the device manufacturer. Several sensors are available for use depending on patient size, age, level of activity, reading errors, etc.
4. Allow machine to register saturation level.
5. Verify pulse rate on machine with actual pulse of the patient.
6. Monitor critical patients continuously until arrival at the hospital. If recording a one-time reading, monitor patients for a few minutes as oxygen saturation can vary.
7. Document percent of oxygen saturation every time vital signs are recorded and in response to therapy to correct hypoxemia.
8. In general, normal saturation is 97-99%. Below 94%, suspect a respiratory compromise.
9. Use the pulse oximetry as an added tool for patient evaluation. Treat the patient, not the data provided by the device.
10. The pulse oximeter reading should never be used to withhold oxygen from a patient in respiratory distress or when it is the standard of care to apply oxygen despite good pulse oximetry readings, such as chest pain.
11. Factors which may reduce the reliability of the pulse oximetry reading include:
 - Poor peripheral circulation (blood loss, hypotension, hypothermia)
 - Excessive pulse oximeter sensor motion
 - Fingernail polish (may be removed with acetone pad)
 - Carbon monoxide bound to hemoglobin
 - Irregular heart rhythms (atrial fibrillation, SVT, etc.)
 - Jaundice

Certification Requirements:

- Successfully complete an annual skill evaluation inclusive of the indications, contraindications, technique, and possible complications of the procedure.