



Veterinary Capnography (EtCO₂) Monitoring

This document does not replace the Operator's Manual for NONIN's LifeSense Vet or RespSense Vet. All users of these products must read and understand the Operator's Manual, with special attention to "Warnings, Cautions, and Contraindications" prior to using the device.

The NONIN LifeSense Vet and RespSense Vet monitors incorporate MedAir's sidestream technology for end-tidal carbon dioxide (EtCO₂) monitoring.

The straight t-connector adapter is placed between the ET-tube and the patient circuit. As the patient exhales, the EtCO₂ graph and digital readout are displayed on the monitor. On inhalation, the EtCO₂ graph should return to zero.

Listed below are some of the indications for EtCO₂ monitoring:

» Verify ET-Tube Placement*

As soon as the t-connector adapter and monitor are connected to the patient, there should be an EtCO₂ graph displayed with each exhaled breath. If this is not the case, verify that the ET-tube is properly placed. Also verify that the straight t-connector adapter is properly connected to the ET-tube and patient circuit.

» Continuous Airway Monitor*

If the ET-tube dislodges during a procedure, the "No Breath" alarm will sound after 20 seconds. This alarm will also sound if the ET-tube is properly placed but the patient slows down to a respiratory rate below the "Low Respiratory Rate Alarm" setting, if the patient stops breathing, or if the breathing circuit becomes disconnected.

» Hyperventilation*

If the patient starts to wake up during the procedure, they may start gasping or breathing faster, which may cause the EtCO₂ to decrease. The monitor may display an increased respiratory rate and/or a lower EtCO₂ reading.

» Hypoventilation*

These patients may be breathing very shallow. EtCO₂ will start to rise because they are not exhaling a normal tidal volume. As the concentration of CO₂ increases in the exhaled air, the EtCO₂ graph will begin to rise and the EtCO₂ value will increase.

» Useful During CPR*

This monitor can be very helpful if you need to do CPR on a patient that is intubated and has the airway adapter in place. When you ventilate the patient, and on exhalation the EtCO₂ rises a little, this may be an indication that cellular metabolism is present. If there is a successful return of spontaneous circulation, the EtCO₂ should rise to more normal levels. (Warning: The LifeSense Vet and RespSense Vet must be disconnected from the patient prior to using a defibrillator.)

*As reported by veterinary professionals.