Troubleshooting hypoxemia

Check patient

Does the cat have a pulse, auscultable heart beat or Doppler pulse signal?

No

Proceed to CPR

Yes

Give manual breath and listen with stethoscope for air movement through trachea and lungs

Check for:
- Airway obstruction
- Gurgles indicating mucus plug
- Crackles, congestion, wheezes, bronchoconstriction

Absence of airway noise may indicate pneumothorax

If respiratory system is OK

Verify oxygen is getting to patient

Check for:
- Tubing disconnection
- Leak in cuff
- Extubation
- Esophageal intubation

If oxygen supply and delivery is OK

Check SpO2 probe

- Move SpO2 probe to new site: tongue, lip, toe, metacarpus, prepuce/vulva, flank skin fold or ear. Moist tongue is most reliable location
- Wrap tongue with single layer of gauze to improve signal quality
- Moisten tissue under SpO2 probe
- Cover probe to prevent interference by bright light
- Test probe on your own finger
- Use a reflectance probe for rectal, femoral or tail sites

This algorithm is from the AAFP Feline Anesthesia Guidelines, published in JFMS in July 2018 and available at catvets.com/guidelines

Key
- CPR = cardiopulmonary resuscitation
- SpO2 = oxygen saturation of hemoglobin