

Critical Congenital Heart Disease Screening Program:

# Performing Pulse Oximetry (Pulse Ox) with the Infant Patient: EDUCATION FOR PROVIDERS



## Pulse Ox - DOs

1. If you are using disposable pulse ox sensors, use a new, clean sensor for each infant. If you are using reusable pulse ox sensors, clean the sensor with recommended disinfectant solution between each infant. Dirty sensors can decrease the accuracy of your reading and can transmit infection. A disposable wrap should be used to secure the sensor to the site if you are using reusable sensors.
2. The best sites for performing pulse ox on infants are the great toe, thumb, and the outer aspect of the palm and the foot. An infant pulse ox sensor (not an adult pulse ox clip) should always be used for infants.
3. When placing the sensor on the infant's skin, there should not be gaps between the sensor and the infant's skin. The sides of the sensor should be directly opposite of each other.
4. Nail polish dyes and substances with dark pigmentation (such as dried blood) can affect the pulse ox reading. Assure that the skin is clean and dry before placing the sensor on the infant. Skin color and jaundice do not affect the pulse ox reading.
5. Movement, shivering, and crying may affect the accuracy of the pulse ox reading. Ensure that the infant is calm and warm during the reading. Swaddle the infant and encourage family involvement to promote comfort while obtaining the reading. If possible, conduct screening while the infant is awake.
6. Pulse oximeters have different confidence indicators to ensure that the pulse ox reading is accurate. Determine the confidence indicators for the pulse oximetry equipment that you are using.
7. If an infant requires pulse ox monitoring for an extended amount of time, assess the site where the sensor is placed at least every two hours. Monitor for signs of irritation.

## Pulse Ox - DON'Ts

1. Never use an adult pulse ox clip when obtaining a pulse ox reading for an infant. Using an adult clip on an infant will give you an inaccurate reading.

2. Blood flow is needed to obtain an accurate pulse ox reading. Never attempt to obtain a pulse ox reading on the same extremity that you have an automatic blood pressure cuff.
3. Bright or infrared light, including bilirubin lamps and surgical lights, can affect the accuracy of the reading. Ensure that the infant is not placed in bright or infrared light while pulse ox is being performed. You may cover the pulse ox sensor with a blanket to ensure that extraneous light does not affect the accuracy of your reading.
4. Do not use tape or your hand to apply the pulse ox sensor to the infant's skin.

## Pulse Ox - CAUTION!

1. The pulse is needed to determine the oximetry reading. Pulse ox is not accurate if the patient is coding or is having a cardiac arrhythmia. Remember: No pulse, no oximetry!
2. Pulse ox readings are not instantaneous. The oximetry reading that is displayed on the monitor is an average of readings over the past few seconds.