



# NEWBORN APNEA



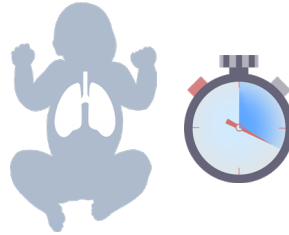
## Normal newborn breathing

- Periodic pauses in breathing are normal.
- No signs of respiratory distress present



Breaks in breathing do not exceed 5–10 seconds.

## Newborn apnea



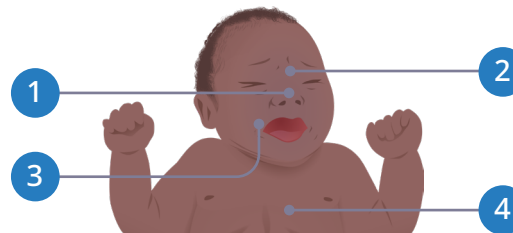
Cessation of breathing for > 20 seconds OR shorter break in breathing with signs of respiratory distress

## Brief resolved unexplained events (BRUEs)

This term is applied when:

- An infant is brought to a provider by caregivers after experiencing symptoms at home.
- The infant is asymptomatic on presentation.
- There is no explanation for the reported symptoms after history and exam.

BRUEs usually involve a combination of the following symptoms:

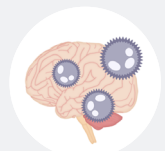


1. Apnea
2. Color change
3. Choking or gagging
4. Bradycardia

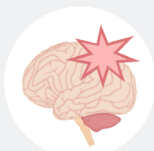
## Types of apnea

### Central apnea

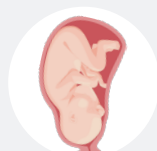
Cause: neurological



CNS infections



Head trauma



Birth asphyxia



Maternal drug use



Metabolic disorders



Prematurity (< 28 weeks)

Prematurity is the most common cause of central apnea.

### Obstructive apnea

Cause: physical blockage



Airway infections



Congenital anomalies

### Mixed apnea

- Combination of central and obstructive apnea
- Most common type of apnea in premature infants

## Treatments

- Fix underlying cause
- Supplemental O<sub>2</sub>
- Breathing assistance
- Medications (e.g., caffeine)
- Surgical