

Dept of Neonatology

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# **APNOEA OF PREMATURITY**

## What is an apnoea?

Apnoea occurs when there is a pause in breathing of more than 20 seconds. If the pauses are long enough it may result in a bradycardia (drop in heart rate) or drop in saturations (oxygen level) which may result in the baby changing colour turning pale or blue.

# What is periodic breathing?

Periodic breathing is when brief pauses in breathing (5-10 seconds) alternate with a regular breathing pattern. This is common and normal in premature infants.

Who gets apnoea of prematurity?

< 30 weeks gestation	Almost all babies
30-32 weeks gestation	50% of babies
34-36 weeks gestation	10% of babies
Term infants	rarely

## Why do babies get apnoea of prematurity?

It is felt to be due to immaturity of the brainstem, the area of the brain that controls breathing. There may be other causes for apnoeas such as a decrease in the baby's oxygen level, infections, low blood sugar levels or if the baby is too hot or cold.

# How is apnoea of prematurity managed?

If the apnoeas are self resolving (baby recovers by him/herself) and infrequent no therapy may be required. A small amount of oxygen flowing into the cot may stop or decrease apnoeas. Nasal CPAP (continuous positive airway pressure) where small plastic prongs are placed in the baby's nose and provide oxygen and air under pressure can also decrease apnoeas. The brain stem (breathing control centre) can be stimulated by a group of drugs called methylxanthines. The drug most commonly used in our nursery is called caffeine. If all of the above treatments have not been effective in reducing the number and severity of apnoeas, your baby may need help with breathing from a ventilator.

#### Are apnoeas harmful?

The long-term consequences of apnoeas are not known. We treat apnoeas if frequent and severe because we are concerned they may be harmful. Evidence from trials has indicated that Caffeine is safe and beneficial for apnoea of prematurity.

#### Is this a risk for SIDS later?

Preterm infants may be at a slightly increased risk of SIDS, but apnoeas of prematurity do not seem to increase this risk. If your baby gets a respiratory virus in the first 6 months of life apnoeas may return during the acute illness. If you notice any apnoeas at home your infant should be reviewed by a medical officer as soon as possible.

If you have any further questions please ask the medical and nursing staff.

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