



# INTERACTING WITH YOUR BABY STATES OF AROUSAL

Babies have a range of arousal states, both in sleep and when awake.

Your baby's 'states of arousal' will vary depending on their gestational age and the stage of development. For most preterm babies their states will become clearer and easier to distinguish from approximately 34 to 36 weeks gestation.

As your preterm baby matures, they will be better able to regulate their state of arousal, for example to wake up when ready for a feed or cry when they need attention. They will be able to move between different sleep and wake states more smoothly and develop periods of focused alertness. Understanding your baby's arousal state will assist you to support their current stage of development and understand what interactions your baby may be ready for.

## Sleep states

### 1. Deep sleep signs

- Eyes closed, no obvious eye movement
- Regular breathing
- Little movement – occasional startles, jerky movements

Deep sleep is important for growth and recovery. During deep sleep, your baby is better able to shut out many outside noises. It is important to support your baby's periods of deep sleep. Skin-to-skin care may help babies to settle down into a deeper, more secure sleep. Setting up the environment can also help (for example, minimise light, noise and movement around your baby's cot). Also, if your baby is in a deep sleep, try not to disturb them unnecessarily.

### 2. Light sleep signs

- Eyes closed, brief eye opening may occur
- Rapid eye movements can be noticed under closed lids
- Some small body movements may be seen
- Breathing can be irregular
- Sucking movements can occur

Light sleep is also important for growth and brain development. Your baby is asleep but may appear more 'restless' when they are in a light sleep and can be more easily disturbed by what is going on around them.

It remains important to support sleep. If your baby is disturbed, they may be resettled using your voice or touch.

## Awake states

### 3. Drowsy signs

- Eyes may be open (but dazed and heavy lidded)
- Body movement generally smooth
- Minimal or delayed reactions even when eyes open
- May show some fussing/start making noises

This is a transitional state where your baby may move either back into sleep or become more aroused and awake.

Try to allow your baby time to decide what they want to do before thinking they are going to wake up. Using your gentle voice or a few reassuring pats may be enough to help your baby resettle back to sleep.

## Awake states

### 4. Quiet alert signs

- Eyes open – bright and engaged look
- Changes in facial expressions in response to stimuli such as sound, light and temperature
- Baby generally calm and relaxed with minimal body movement
- Baby may show feeding cues such as mouthing, licking or sucking

This is the best state for socialising with and feeding your baby. In general, as preterm babies grow closer to their term age, they will begin to spend more time in an alert state.

Your baby may only spend a short time in this state and as they mature, these periods get longer. You can support them by using a nest, a wrap or a well-supported position. Watch for signs they have had enough.

Early interactions may include:

- Looking at faces or simple black and white shapes
- Gazing around the room
- Listening to a story, singing or humming

#### *Signs your baby wants to interact/play:*

- Eyes gently open (not hyper-alert or startled looking)
- Turns to your voice
- Gazes at your face
- Relaxed body
- Minimal movement

#### *Signs your baby may need a break:*

- Turns head away, or closes eyes
- Spreads fingers/ puts hand out
- Yawns or hiccups
- Changes in skin colour
- Increased movement - agitation

### 5. Active awake signs

- Eyes generally open
- More body movement and activity
- Responds to different stimuli in the environment
- Baby may fuss and make some noises
- More obvious feeding cues

Babies are more physically active in the active awake state. They may be communicating needs such as tiredness, wanting to feed, or needing a break from interaction. Babies find it harder to feed, interact and engage when becoming fussy.

Using voice or touch may help calm a fussy baby and they may return to a quieter state. If more unsettled, wrapping and more containment may help your baby to calm.

### 6. Crying

- Eyes may be closed – and eyelids may flutter
- Generally intense, loud, rhythmic crying
- Some babies will show intense periods of fussing/brief cry vocalisations but may not cry

Young babies cry to let us know that they need something (e.g. reassurance, a change in position, food, a nappy change or change to their environment etc.)

Babies born very preterm may not achieve a strong or loud cry until they are a little older, with more mature lungs. Sometimes babies will cry quietly, or even silently. It is important to look at your baby's face and behaviours to understand how they are coping, so that you can offer the appropriate comfort and support.