

Baby Arousal and Sleep States

Quiet sleep is a time for resting and growing. The baby's cells are dividing, the body systems are developing and hormones are released in response to the baby's needs. During deep sleep it is normal for baby to be hard to rouse and only respond to very intense stimulation like loud sounds.



- Movements** * Nearly still, except for occasional startle or twitch.
- Eyes** * None.
- Face** * None, except for occasional sucking movement at regular intervals.
- Breathing** * Smooth and regular.
- Responses** * The infant's threshold to stimuli is very high; only very intense and disturbing stimuli will arouse the infant.

1 Deep or Quiet Sleep

What to Do...

Trying to feed an infant who is in quiet sleep is likely to be frustrating. Your newborn will be unresponsive. Feeding will be a more pleasant experience if you respect an infant's cycles and needs by waiting until your baby moves to a higher, more responsive state. Even if you use disturbing stimuli, chances are an infant will arouse only briefly, then become unresponsive as he or she returns to quiet sleep.

Light sleep is when your baby processes and stores new experiences. This is how we begin learning. It accounts for the highest proportion of newborn sleep and usually precedes waking.

- Movements** * Some body movements.
- Eyes** * Rapid eye movements (REM), fluttering of eyes beneath closed eyelids.
- Face** * May smile and make brief fussy or crying sounds.
- Breathing** * Irregular.
- Responses** * In light sleep, infants are more responsive to internal stimuli (such as hunger) and external stimuli (such as handling) than they are in quiet sleep.



2 Light Sleep

What to Do...

When stimuli such as noises occur, infants may remain in light sleep, return to quiet sleep, or arouse and cry or fuss for a short time and then begin sleeping again. It's fine to wait a little bit to allow your baby to fall back asleep. Even in a light sleep, when baby rests tummy down on your body, this can trigger feeding behaviors. When a lightly sleeping baby shows feeding cues, help her to the breast for "dreamfeeds."

From the **drowsy state**, infants may return to sleep or awaken further.

- Movements** * Baby will move limbs around and occasionally startle or twitch. Movements are usually smooth.
- Eyes** * Eyes occasionally open and close, are heavy-lidded or slit-like.
- Face** * May have some facial movements. Often none, and face appears still.
- Breathing** * Irregular.
- Responses** * Reacts to noises, lights and handling, although responses are delayed and state may change to quiet alert, active alert or crying. When offered the breast your baby may feed intermittently or steadily and appear to be sleeping.



3 Drowsy

What to Do...

This is a good time to offer baby the breast particularly during the evening and nighttime hours. Babies will often awaken with stimulation, but if left alone they may return to a sleep state.

During the **quiet alert** state, infants are most attentive to their environment, focusing their attention on any stimuli that are present: nipple, voice, face, or moving objects.

- Movements** * Minimal.
- Eyes** * Eyes brighten and widen.
- Face** * Attentive appearance.
- Breathing** * Regular.
- Responses** * During this state, infants are most attentive to the environment, focusing attention on any stimuli present.



4 Quiet Alert

What to Do...

In the first few hours after birth, many newborns experience a period of intense alertness before going into a long sleeping period. As babies mature, they spend more and more time in this state. Providing something for infants to see, hear, or suck will often maintain a quiet-alert state or help them enter a quiet-alert state from either a drowsy or active-alert state. Quiet alert babies provide so much pleasure and positive feedback to the people who love them. This is often a good time to see if your baby wants to nurse.

During **active alert**, infants' eyes are open, but their eyes and faces are not as bright as in quiet alert. Infants have more body activity in active alert than they do in quiet alert.

- Movements** * Baby will move limbs around and occasionally startle or twitch. Movements are usually smooth.
- Eyes** * Eyes are open, with dull, glazed appearance.
- Face** * May have some facial movements. Often none, and face appears still.
- Breathing** * Irregular.
- Responses** * Reacts to noises, lights and handling, although responses are delayed. With stimulation state may change to quiet alert or crying.



5 Active Alert

What to Do...

Infants may have periods of fussiness and become increasingly sensitive to disturbing stimuli (hunger, fatigue, noise, excessive handling). Your baby may become more and more active and may change to a crying state. Soothing interventions can help your baby to return to a drowsy or sleep state.

Crying is the infant state that presents the greatest challenge to the caregiver. This state is characterized by intense crying for at least 15 seconds.

- Movements** * Increased motor activity. Skin color darkens or changes to red or roddy.
- Eyes** * Eyes may be tightly closed or open.
- Face** * Grimaces.
- Breathing** * More irregular than in other states.
- Responses** * Infants are extremely responsive to unpleasant external or internal stimuli.



6 Intense Crying

What to Do...

It's often easier to feed a baby before they escalate into crying state or try soothing strategies and then offer the breast. A newborn has a very fragile and immature nervous system - it is predictable that newborn babies will become overwhelmed, overstimulated or overtired and cry. Sometimes babies can console themselves and return to active or quiet alert, drowsy, or a sleep state; at other times, they need your help. It's important to remember that NORMAL newborns cry and may be inconsolable. To better understand newborn crying please read the PDF on *Purple Crying*.

Compiled from "Understanding the Behavior of Term Infants" PDF by March of Dimes at www.MarchofDimes.com

For more information, please visit

www.NaturalBreastfeeding.com

DISCLAIMER: This is general information and does not replace the advice of your healthcare provider. If you have a problem you cannot solve quickly, seek help right away. Every baby is different, if in doubt, contact your physician or other healthcare provider.

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