

Welcome to the SHINE Project!

We are pleased that you have joined us on this journey to improve your sleep and wellbeing. Being a parent is a life-changing experience. This booklet describes potential changes to your sleep during pregnancy and after your baby is born, which we hope helps you better prepare for the transition through the perinatal period.

Sleep Across Pregnancy – What to Expect?

Pregnancy and having a baby are associated with many changes to your sleep patterns. We've outlined the main features of sleep across pregnancy below, so you know what to expect.

1st Trimester (1-13 weeks)

- Some parents sleep longer and feel sleepier during the day.
- Some wake more at night and have lower sleep quality.

2nd Trimester (14-26 weeks)

- Daytime sleepiness improves.
- Nighttime sleep disturbance becomes more common.

3rd Trimester (27-40 weeks)

- Sleep becomes more disturbed because of the growing fetus.
- Physical discomfort and more frequent toilet trips at night are common.
- Most parents feel more tired during the day.

During the last few weeks of pregnancy, you may find it difficult to get comfortable in bed, and emotions associated with the arrival of your baby may also impact your sleep. It is important to maintain adequate sleep and rest during this time to prepare your body for labour.



During labour, most parents experience acute sleep deprivation.

- You might skip sleep for one or even two nights, with only brief moments of dozing.
- This is to be expected, as your body and mind are focused entirely on delivering your baby.

After giving birth, even though you may be exhausted immediately after delivery, you might not sleep longer than before. However, you will tend to have deeper sleep, as your body tries to recover from sleep deprivation and the birthing process. During this time, sleep and rest as much as you need, whenever you can, especially during the evening, and through the night.



Sleep on your side from 28 weeks of pregnancy

Research shows that going to sleep on ones side from 28 weeks of pregnancy

halves the risk of stillbirth compared with sleeping on ones back.

Why should I go to sleep on my side?

Lying on ones back in the last three months of pregnancy presses on major blood vessels which can reduce blood flow to the womb and oxygen supply to your baby.



Expecting parents can settle to sleep on either the left or the right side – any side is good from 28 weeks of pregnancy, and most people find side sleeping is more comfortable in pregnancy, especially in the last three months.

What if you wake up on your back?

It's normal to change position during sleep and many pregnant individuals wake up on their back. The important thing is to start **every** sleep (daytime naps and going to bed at night) lying on your side and settle back to sleep on ones side after waking up.

If you go to sleep on your back, what is the risk of stillbirth?

Stillbirth in the last three months of pregnancy affects about one in every 500 babies. However, research has confirmed that going to sleep on ones side halves the risk of stillbirth compared with sleeping on your back.

For more information, please contact your midwife, nurse, or doctor. This information has been sourced from the <u>Sleep on Side; Stillbirth Prevention</u> <u>Campaign</u>.

Habits that Impact Sleep

Healthy sleep habits help create an optimal environment for sleep, and make you more resilient to the sleep disruptions commonly experienced by new parents.

Caffeine

- Caffeine's stimulating effects last many hours, especially during pregnancy.
- Many things have caffeine: coffee, tea, chocolate, soft drinks and energy drinks.
- No caffeine after 3pm.

Alcohol

- During pregnancy, no known amount of alcohol is safe. Drinking while pregnant can lead to Fetal Alcohol Syndrome/Effects (lifetime and irreversible physical and mental birth defects).
- During postpartum, we strongly discourage using alcohol as a sleep aid. Although alcohol might be relaxing initially, as your body breaks it down, sleep becomes more fragmented, restless, and far less refreshing.

Nicotine

- During pregnancy, avoid smoking entirely.
- During postpartum, if you do smoke, never smoke around your baby. Nicotine is a stimulant for smokers, and can cause agitation, tension, and disrupted sleep. Therefore, avoid smoking at least two hours before bedtime.

Sound

 A quiet sleep environment helps sleep. Sudden, unexpected noises disrupt sleep.









Temperature

Not too hot and not too cold, 18°C is perfect.

• Dim light before going to sleep, and darkness

during sleep helps to promote better sleep.







Bed for just sleep:

• Keep non-sleep related activities outside of the sleeping environment (e.g., reading, text messaging, or surfing the net).



Food

Light

- Don't go to bed when you are too full or too hungry, both make you feel awake.
- Smaller meals distributed across the day provide nourishment and reduce nighttime discomfort.
- Heartburn: lying flat may result in acid reflux, if so discuss your eating patterns with your clinician. Sleeping with extra pillows to prop you up may ease heartburn.



Exercise

- Tiring yourself out at bedtime is a bad idea, as it wakes up your nervous system.
- Exercise in the morning, late afternoon, or early evening.



Make healthy sleep habits a part of your lifestyle. They help you stay strong in face of challenges to your sleep.

Preparing for Your Baby's Sleep

Over the first few months of your baby's life, your baby will wake during the night. These awakenings are likely to involve feeding and soothing/settling, meaning that some of the time you will need to be awake with your baby.



If you have other children in the house:

- Plan ahead. If possible, prepare older children to sleep independently before your new baby arrives.
- Speak to your children about what your new baby's sleep may look like, so they are prepared for the different sleep/wake behaviours of newborns.
- Make the older children's bedtime routines sacred. If you have a partner
 or support person, work as a team, with one of you attending to the new
 infant, and the other spending time with the older children.



If you are expecting twins or multiples:

- It's common for parents to wonder whether their twins should share a room. One advantage to room sharing is if they sleep in the same room from birth, they will likely learn to tune out each other's noises.
- Try and have your twins on the same sleep schedule, regardless of whether they are sharing a bedroom or not. When they get older (e.g., 6 months or older) you could try placing a toy with each baby so that if one awakes s/he can play with the toy instead of waking the other.

Infant Sleep Safety

Once your baby is born it's important to create a "safe" sleeping space for your baby, which can reduce the risk of Sudden and Unexpected Death in Infancy (SUDI), including Sudden Infant Death Syndrome (SIDS).



Infants 2-4 months are at the highest risk; however, you should create a safe sleeping space for your baby from birth. Here are some things you can do to keep your baby safe:

- Place baby on back to sleep
- Keep baby's face clear (no pillows, blankets near face)
- Regarding co-sleeping, <u>here are key things to think about</u>
- Breastfeed where possible
- Do not smoke (both parents)

Your Baby's Sleep: What to Expect?

Your baby is not born with the ability to sleep through the night. Newborns undergo major changes, moving from within the womb with the consistency of your body and your daily routines, to a constantly changing external world. Once born, your baby has many "first time" experiences:



- Constantly changing temperature, light, and noise.
- New stress experiences like hunger and tiredness.
- New positive experiences like social interaction and comfort.

All of this learning requires a lot of energy, so your new baby will need to sleep again shortly after awakening.

In the first few weeks, there is already a natural tendency to sleep more during the night than during the day. However, it **takes some months**, for your baby to fully learn the difference between night and day.

Your baby gradually develops a body clock, which helps them become attuned to day/night signals and regulate sleep and wake. Organisation of your baby's 24-hour sleepwake pattern will take time, as it depends on:

- The maturing brain system.
- Cues from the environment, such as light and dark.
- Sleep-related social cues, such as nighttime routines.

Therefore, your baby will wake frequently for feeding, changing, and comfort.

For babies born preterm, their sleep generally mirrors that of full-term babies, but preterm babies sleep more and have fewer and shorter awakenings during nighttime sleep than comparable full-term infants. They do not awaken as easily.

Below is a summary of what you can expect for your baby's sleep-wake patterns during the first year. It is important to remember that these developmental milestones are <u>based on averages</u>, and in reality, babies may be very different from one another.

Newborns typically sleep

- 9-18 hours per day,
- in blocks of 1-4 hours,

• separated by 1-2 hours of wake

3-months

- Your baby is gradually beginning to sleep a little more at night than during the day, and your sleep might be a little better than in the previous few months.
- Infants become more sensitive to the natural lightdark cycle, sleeping more at night, and waking more during the day.
- Social cues (e.g., night routines) also begin to influence sleep-wake patterns.
- Many babies sleep up to 5-hour blocks, but some still sleep less than 5 hours each time.

6-months

- Your baby continues to learn the differences between day and night and becomes more sensitive to the natural light-dark cycle and social cues such as bedtime routines.
- Your baby will gradually spend more time awake during the day, and more time sleeping at night.
- Babies typically sleep 9-12 hours at night-time by 6 months.
- Usually in two blocks divided by one night-time feed (awakening).
- The longest sleep block is typically 6 hours (on average).
- Babies' sleep patterns still vary greatly from day to day at 6 months, so don't worry if your baby's pattern differs.
- If you are unsure about your baby's developing sleepwake cycle, please ask your maternal health nurse for guidance.







8-months

- 60-70% of babies can now fall back to sleep without help.
- This is called **Self-Soothing.**
- Your baby may self-soothe at some awakenings but not others, and may still signal for attention during the night at 8 months.
- **Separation anxiety** around 6-12 months may increase resistance to going to sleep, which is normal.

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1-year

- One-year olds typically sleep 14-15 hours per day, with 1-2 daytime naps
- Night waking may increase, even if previously sleeping through the night.
- This is completely normal and thought to be related to separation anxiety, which is also present at this age.



Colic

- Not much is known about the causes of excessive crying, but colic is one condition in which a baby cries frequently and
 - for long periods without identifiable reason.
- If you suspect your baby has colic, ask your doctor about it.
- Make sure you get some breaks for yourself during the day. If your baby is difficult to console, you will need extra support.
- Babies with colic have the same emotional and intellectual development patterns as babies who cry very little.



A few strategies for settling your baby

Babies get unsettled for many reasons, such as going through **developmental stages**. Crying **does not necessarily mean** your baby is hurting or that something is wrong.

The first step when responding to your baby is to check if they are tired, hungry, or uncomfortable. You can try changing baby's nappy, feeding your baby, or putting baby to bed if they are crying/fussy.

Below are some additional tips to help soothe a crying baby. Some of these tips are recommended because they mimic the soothing environment that your baby was used to when in utero, and include rocking, swaddling, white noise, and touch.

Rocking

Your baby experienced constant movements in the womb, meaning that steady and gentle rocking outside the womb provides familiar and comforting feelings. You could try gentling rocking your baby in your arms, a baby carrier, or a sling.



Swaddling

Your baby is used to being wrapped warmly and securely in the womb, and swaddling him/her can have a calming effect. Click here to find out how to swaddle your baby, and here for how to make swaddling safe.

Consistent Noise

Believe it or not, noise at a constant level, such as the sound of blow-dryers and vacuum cleaners, can be calming and soothing for your baby. This is sometimes called 'white noise'. This is because when in the womb, noise is all your baby heard! You may use items that are already available in the house or use white noise soundtracks that are available online. One catch: make sure the sound is not louder than conversation (i.e., 50 dB).

"Shhhh"

'Shhh" noises are a form of white noise. You can combine this with other strategies, such as saying "Shhh" whilst your baby is swaddled and you are gently rocking them.

Talking

Speak quietly and calmly to your baby with reassuring and comforting words.

Singing

Sing a soft lullaby.

Touch

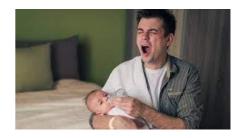
Gently and repeatedly pat your baby's back or bottom, at the same rate as a heartbeat. You can also try gently stroking your baby's head.



Your Baby's Sleep and You

Most new parents will experience some frustration as they navigate their baby's sleep needs, as well as their own. This is a period of major change for you both. Protect your sleep, and be aware of the important role sleep plays for both you, and your baby's wellbeing during this time.

Frequent night-time awakenings and sleep deprivation can affect all of us, and the period around labour and postpartum is a time of physical and psychological vulnerability.



Lack of sleep can bring:

- · Low mood, irritability, anxiety.
- Fatigue and low motivation.
- Difficulties with alertness, thinking, memory, and decision-making.

With enough rest and sleep, you'll have more energy and feel better prepared to handle the challenges that come your way. It might even be easier for you to feel positive emotions, helping you be more emotionally available to your baby and family.



So remember, protect your sleep when life's demand is high. Adequate sleep and rest is what both you & your baby will thrive on.

Consider looking after yourself the way you would a loved one. This may include:

- Eating a balanced diet.
- · Getting sufficient sleep and rest.
- Enjoying plenty of fresh air.
- Engaging in physical exercise and social interactions.



Fatigue

- Fatigue is very common during the first year of parenthood. If you find yourself feeling tired and sleepy during the day, take it easy and be gentle with yourself.
- Take a power nap before driving, even if it's just a short drive to the grocery store.

When extra help is needed...

If you have trouble sleeping more than three nights a week, are distressed about your sleep, and find it difficult to function during the day, you might benefit from seeking professional help.

If you are thinking about seeking help, your GP is the best place to start.

The Australian Government's "Better Access" initiative allows you to see mental health professionals through Medicare, which includes seeing a psychologist for Cognitive Behavioural Therapy for Insomnia (CBT-I). You can also visit the the <u>Sleep Health Foundation</u> or the Australasian Sleep Association's <u>website</u> and find <u>sleep services</u> near you.

We hope this booklet helps you and later your baby during this important stage of your life. Please keep either a digital or hardcopy of this booklet somewhere accessible, so you can refer to it later.

And finally...

For questions, assistance, or information about the <u>SHINE Project</u>, you can contact our research team at +61 3 9905 2464 or email us at <u>psych-shine@monash.edu</u>.



















The project was approved by Monash Health and Monash University Human Research Ethics Committees.