

Maternal Side Sleeping

Red Nose recommends sleeping on your side from 28 weeks to help prevent stillbirth.

- Research shows that women going to sleep on their side from 28 weeks of pregnancy can halve their risk of late-term stillbirth, compared with going to sleep on their back.
- The reason for this increased risk of stillbirth for babies after 28 weeks of pregnancy is that mothers going to sleep on their back causes a reduction in the blood flow and oxygen to the pregnant uterus, placenta, and baby.
- From 28 weeks of pregnancy, women should settle to sleep on their side for any episode of sleep, including:
 - o going to sleep at night;
 - o returning to sleep after waking up during sleep;
 - o daytime naps.
- It does not matter which side you go to sleep on.
- The going-to-sleep position is the one held longest during the night so women should not be concerned if they wake up on their back but should simply roll back onto their side.

Stillbirth

Stillbirth is the tragic loss of a baby born after 20 weeks gestational age (or weighing greater than 400grams at birth if gestational age is unknown).

Around 1 in every 130 pregnancies in Australia tragically ends in stillbirth – that is six babies each day dying suddenly before they have even had a chance to take their first breath.

The major causes of stillbirth in Australia are congenital abnormality, perinatal conditions and maternal

conditions. Tragically though, around 20% of stillbirths have no explanation, and almost half of unexplained stillbirths occur near full-term¹. This lack of diagnosis or cause can add to grieving parents' distress, as they struggle to understand what went wrong and are left wondering if it will happen again in a subsequent pregnancy.

Maternal Sleep Position

Research over the past decade has demonstrated an association between maternal supine (back) going-to-sleep position and stillbirth after 28 weeks' gestation. Several international studies, both case-control and cross-sectional, have shown that going to sleep in the supine position (on the back) increases the risk of having a stillborn baby compared with going to sleep in a different position. A 2019 meta-analysis of world-wide data showed that women who reported a going-to-sleep supine (back) position had around 2.5 times the chance of having a stillbirth in late pregnancy. Going to sleep on the left or right side appeared equally safe³.

The research suggests that 1 in 10 stillbirths occurring in late pregnancy (after 28 weeks' gestation) could potentially be avoided if women did not go to sleep on their back during this time².

Why Does Sleep Position Affect the Risk of Stillbirth?

Physiological studies inform us about the underlying reasons for the association between supine sleep position and stillbirth. Reduced diameter of the inferior vena cava (a vein that takes blood back to the heart from the body) has been demonstrated by magnetic resonance imaging in supine compared with the left lateral (side) position in late pregnancy⁴. Other studies have shown using Doppler ultrasound, that blood flow in the uterine artery was reduced in the supine position compared with the left side⁵. Adverse effects on the unborn baby of the supine position are suggested by reduced middle cerebral artery Doppler resistance, a fetal response to hypoxia (reduced

oxygen levels)⁶, and reduced fetal oxygen saturation in labour in the supine position^{7,8}. Routine left lateral tilt is used for caesarean sections to reduce the adverse physiological disturbances in both the mother and the baby and a systematic review concludes that right lateral tilt when compared to left lateral tilt is associated with more hypotensive events in the mother⁸. Furthermore, it has been reported that in healthy late pregnancy, when the mother is in the supine position, the fetus spends more time in a quiet state, compared to an active behavioural state⁹.

Public Health Campaigns:

The UK, Australia and New Zealand have recently released public health messages around the avoidance of supine going-to-sleep position to prevent stillbirth. Surveys have shown in late pregnancy, women report that they could modify their going-to-sleep position if that were recommended.¹⁰ Further research will determine whether such public awareness campaigns are effective in supporting side sleeping practices.

Conclusion

Maternal sleep position in late pregnancy is now recognised as an important modifiable risk factor for stillbirth. Red Nose recommends that pregnant women go to sleep on their side from 28 weeks to help reduce their risk of stillbirth.

Where to find further information and resources about stillbirth prevention

Red Nose is proud to partner with the NHMRC Stillbirth Centre for Research Excellence in the National Safer Baby Bundle Initiative

Stillbirth Centre for Research Excellence:
<https://www.stillbirthcre.org.au/safer-baby-bundle/>

Safer baby resources for women and healthcare settings:
<https://saferbaby.org.au>

Safer baby bundle sleep position resources and position statement: <https://www.stillbirthcre.org.au/safer-baby-bundle/improving-awareness-of-maternal-safe-going-to-sleep-position-in-late-pregnancy/>

State/Territory Health Department Safer Baby Information

New South Wales: <http://cec.health.nsw.gov.au/keep-patients-safe/maternity-safety-program/safer-baby-bundle>

Victoria: <https://www.bettersafecare.vic.gov.au/our-work/clinical-improvement-and-innovation/reducing-stillbirth>

Queensland: <https://clinicalexcellence.qld.gov.au/priority-areas/safety-and-quality/safer-baby-bundle>

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