



Advising women with a healthy, uncomplicated, singleton pregnancy on: **heavy lifting and the risk of miscarriage, preterm delivery and small for gestational age**

This advice sheet is based on the findings from a systematic literature review and associated evidence based guideline on the risk of heavy lifting on five specific pregnancy outcomes: miscarriage, preterm delivery, small for gestational age, low birthweight, pre-eclampsia/gestational hypertension.

This advice does not cover any other potential adverse outcomes of pregnancy and these would need to be considered separately.

Background risk and definitions

- > On average, 6.7% of pregnant women (1 in 15) have a preterm delivery (birth of a baby before the 37th week of pregnancy), whether or not they undertake heavy lifting at work.
- > Around 12% (1 in 8) of all recognised pregnancies in the UK end in miscarriage (loss of a recognised pregnancy before the 24th week of gestation).
- > 10% (1 in 10) of deliveries are small for gestational age (when this is defined in the standard way as birthweight below the 10th centile on the expected distribution of birthweights by duration of gestation).
- > Heavy lifting: the Health and Safety Executive does not give specific guidance for pregnant women, but a 'typical' load in research studies that provided such detail was about 10-12 kg (a load that is not uncommonly lifted in the home by pregnant women with toddlers).

Added risks from heavy lifting

- > It is uncertain whether or not heavy lifting at work while pregnant puts women at increased risk of miscarriage, preterm delivery, or small for gestational age. It is possible that heavy lifting has no effect on these outcomes, but the balance of evidence suggests a very small increase in risk for all three outcomes.
- > If risks are increased, then there is good evidence that any increase in risk relating to these outcomes is likely to be very small.
- > A best estimate of risk is that there could be:
 - + 0.2 extra cases of miscarriage per 100 pregnancies amongst women undertaking heavy lifting at work;
 - + 0.1 extra cases of preterm delivery per 100 pregnancies amongst women undertaking heavy lifting at work; and
 - + 0.8 extra cases of small for gestational age for every 100 deliveries among women undertaking heavy lifting at work.

It may be easier to visualise these as in the pictures overleaf rather than in numbers.

- > There is not enough evidence to draw firm conclusions about the risk of pre-eclampsia and gestational hypertension, although such evidence as exists suggests that risks are probably no more than small.

Other considerations

Keeping active is generally thought to be healthy for pregnant women. This should be taken into account when considering whether, and by how much, heavy lifting at work may need to be reduced. >>>

What this means

- > Because the risks of miscarriage, preterm delivery and small for gestational age are likely to be very small, if present at all, we do not recommend a mandatory reduction in heavy lifting at work.
- > If a pregnant woman experiences psychological distress about the risk of miscarriage, preterm delivery or small for gestational age that is not allayed by the explanation of risks

above, she should be advised to discuss this with her employer and consider reducing heavy lifting at work.

- > In women encountering difficulties at work as the pregnancy progresses, working arrangements and associated symptoms should be reviewed with the employer or line manager and those involved in the employee's obstetric care. ■



Background risk ●
Extra cases ●

Heavy lifting and the risks of preterm delivery

- > 6.7 women in 100 have a preterm delivery [dark purple].
- > Among pregnant women undertaking heavy lifting at work, an extra 0.1 women may suffer a preterm delivery because of heavy lifting [light purple].



Background risk ●
Extra cases ●

Heavy lifting and the risks of small for gestational age

- > 10 deliveries in 100 will be small for gestational age [dark purple].
- > Among pregnant women undertaking heavy lifting at work, an extra 0.8 deliveries may be small for gestational age [light purple].



Background risk ●
Extra cases ●

Heavy lifting and the risk of miscarriage

- > Approximately 12 women in 100 with a recognised pregnancy have a miscarriage [dark purple].
- > Among pregnant women who undertake heavy lifting at work, an extra 0.2 women may suffer a miscarriage because of heavy lifting at work [light purple].

