

Advising women with a healthy, uncomplicated, singleton pregnancy on: long working hours and the risk of miscarriage and preterm delivery

This advice sheet is based on the findings from a systematic literature review and associated evidence based guideline on the risk of working long hours on five specific pregnancy outcomes: miscarriage, preterm delivery, small for gestational age, low birthweight, preeclampsia/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 work long hours.
- > 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).
- > Long working hours are defined as more than 40 hours per week.
- Added risks from long working hours
- > It is uncertain whether or not working long hours in pregnancy puts women at increased risk of either preterm delivery or miscarriage. It is possible that working long hours has no effect on either risk, but the balance of evidence suggests a slight increase in risk for both preterm delivery and miscarriage.

- > If risks are increased, then there is good evidence that any increase is likely to be small.
- > A best estimate of 'small' is that for women who work long hours, there could be:
 - + 1.2 extra cases of preterm delivery for every 100 deliveries,
 - + 2.0 extra cases of miscarriage, for every 100 pregnancies.

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

Available evidence does not indicate an increase in risk in relation to small for gestational age, and 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, working hours may need to be reduced.

> This guideline has been funded by the Royal College of Physicians and *NHS Health at Work* – the network of occupational health teams dedicated to ensuring that the NHS has a healthy, motivated workforce that is able to provide the best possible patient care.

What this means

- > Because the risks of preterm delivery and miscarriage are likely to be small, if present at all, we do not recommend a mandatory reduction in working hours to below 40 hours per week.
- > If a woman experiences psychological distress about the risk of either preterm delivery or miscarriage that is not allayed by the explanation of risks above, she should be advised to discuss this with her employer and consider reducing her hours.
- > 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

Working hours and risk of preterm delivery

- > 6.7 women in 100 have a preterm delivery [dark purple]
- > Among pregnant women working long hours, an extra 1.2 women may suffer preterm delivery because of working long hours [light purple].



Background risk
Extra cases

Working long hours and miscarriage

- > Approximately 12 women in 100 with a recognised pregnancy have a miscarriage.
- > Among pregnant women working long hours, an extra 2.0 women may suffer a miscarriage because of working long hours [light purple].



