

Physical and shift work in pregnancy

Occupational aspects
of management

Evidence-based guidance for
healthcare professionals



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This leaflet summarises the findings of a review of the research evidence on the occupational aspects of the management of pregnant women at work who are exposed to certain hazards. The hazards considered are manual handling, prolonged standing, long working hours, shift work and night shifts.¹

Women at work

Pregnancy is not an illness and the majority of women remain well throughout their pregnancy. However there are a number of known associations with adverse outcomes of pregnancy for example young maternal age, lower education level, low and high body mass index, smoking and low socio-economic status. Whilst many risk factors cannot be avoided, hazards at work can potentially be modified.

Research shows that most women who work are healthier during their pregnancy compared to those who do not work. Some studies also show that women who are employed have a lower risk of preterm delivery than those who are not. However, while at work a pregnant woman may be exposed to certain hazards which may cause harm to her or the fetus resulting in adverse outcomes.

Workplace hazards

Some exposures are known to be hazardous in pregnancy and there are already regulations in place to advise upon acceptable levels of exposure, for example the Control of Lead at Work Regulations 2002. Other hazards such as biological or chemical hazards need to be assessed on an individual basis. The Health and Safety Executive (HSE) provides guidance on these hazards: *A guide for new and expectant mothers who work*² and *New and expectant mothers at work: a guide for health professionals*.³

Key points and recommendations of the review

The synthesis of evidence from this review has taken into account the uncertainties of the evidence base and the fact that many pregnant women undertake physical work such as prolonged standing and lifting in their everyday lives. There is also a possibility that restriction from physical activities could actually cause harm, although we have no direct evidence of this at present.

The recommendations balance causing undue alarm about common daily activities for pregnant women against protecting them from physical activities that might carry a serious risk of harm. The risks that we identified are uncertain and mainly small, and no consistent indication of very high risks was found. Therefore, the advice to employers and pregnant women is to try to reduce exposure where possible in the late stages of pregnancy, particularly if the woman is concerned about possible adverse effects. However, mandatory restriction of any of the activities cannot be recommended if a woman wishes to continue her normal working pattern.

1 General

Recommendation	Grade
■ Managers should perform a risk assessment of a woman's work when she informs her manager that she is pregnant.	GPP

2 Manual Handling

Recommendation	Grade
■ When performing the risk assessment, the manager should assess the amount of physical effort associated with the job and assess the duration for which such tasks are being performed.	GPP

- Pregnant women should be informed that evidence suggests:
 - at most, heavy physical work and lifting carry no more than a moderate risk of low birth weight/intrauterine growth restriction (IUGR)/small for gestational age (SGA) **B***
 - there is limited and inconsistent evidence of risk for preterm birth and pre-eclampsia. **B**

*It is not possible to determine from the literature at what stage in pregnancy the adjustments to work should be applied.
- Employers should reduce very heavy physical activities and lifting for pregnant workers where possible, particularly in late pregnancy. However, if a pregnant worker who has been informed of the possible risk wishes to continue then there are insufficient grounds to impose restrictions against her will. **B*†**

*It is not possible to determine from the literature at what stage in pregnancy the adjustments to work should be applied.
 † It is not possible to determine from the literature the level of heavy work or lifting at which adjustments should be introduced.

3 Prolonged standing

Recommendation

Grade

- Pregnant women should be informed about the generally consistent evidence suggesting that:
 - prolonged standing (more than three hours) carries no more than a small risk of preterm birth and low birth weight/IUGR/SGA **A***
 - limited evidence suggests no effect on pre-eclampsia. **A**
- Employers should reduce standing for longer than three hours for pregnant workers where possible, particularly in late pregnancy. However, if a pregnant worker who has been informed of the possible risk wishes to continue, then there are insufficient grounds to impose restrictions against her will. **A***

*It is not possible to determine from the literature at what stage in pregnancy the adjustments to work should be applied.

4 Working hours

Recommendation

Grade

- Pregnant women should be informed about the generally consistent evidence suggesting that long working hours carry no more than a small to moderate risk of preterm birth, and low birth weight/SGA. **A**
- There is limited and inconsistent evidence for pre-eclampsia. **A**
- Employers should reduce long working hours for pregnant workers particularly in late pregnancy. Where possible, hours should be limited to about 40 per week. However, if a pregnant worker who has been informed of the possible risk wishes to continue then there are insufficient grounds to impose restrictions against her will. **A***

*It is not possible to determine from the literature at what stage in pregnancy the adjustments to work should be applied.

5 Shift work

There is insufficient evidence of a risk to pregnant women to make recommendations to restrict shift work, including rotating shifts or night/evening work.

Grades of recommendation

A	At least one high-quality meta-analysis, systematic review or RCT directly applicable to the target population or a body of high-quality evidence demonstrating overall consistency of results.
B	A body of evidence, including good quality studies directly applicable to the target population, and demonstrating overall consistency of results.
C	A body of evidence, including reasonable-quality studies directly applicable to the target population, and demonstrating overall consistency of results.
D	Evidence from non-analytical studies or expert opinion.
GPP	Good practice point.

References

- 1 NHS Plus, Royal College of Physicians, Faculty of Occupational Medicine. *Physical and shift work in pregnancy: occupational aspects of management. A national guideline*. London: RCP, 2009. www.nhsplus.nhs.uk
- 2 The Health and Safety Executive. *A guide for new and expectant mothers who work*. London: HSE, 2003. www.hse.gov.uk
- 3 The Health and Safety Executive. *New and expectant mothers at work – a guide for health professionals*. London: HSE, 2003. www.hse.gov.uk

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