

Guidance Note, GN002

GUIDANCE ON OCCUPATIONAL HEALTH, SAFETY AND WELLBEING ASPECTS OF PREGNANCY

Introduction

The purpose of this document is to highlight some potential significant risks to new and expectant mothers that may arise while conducting their work at the University and how to control these risks as far as is reasonably practicable. In this document special attention is given to identifying and controlling risks that may affect women who are pregnant, who have recently given birth or who are breastfeeding.

Actions Required

Heads of Schools and Professional Services must ensure that activities conducted within their area of control that may pose a significant risk to women of child bearing age are identified and actions taken to minimise the potential for harm from these activities.

When a member of staff has given notice that they are pregnant or breastfeeding, then a specific individual assessment of the work carried out by that person must be conducted to ensure that they, or their child, are not put at risk during and immediately after their pregnancy. The actual tasks that the individual performs must be considered and it is essential that the assessment is conducted with the individual. A pregnancy risk assessment form can be found on the University safety web pages which can be used to document any risks to the woman or her unborn child as a result of their work activities and any additional controls required.

The assessment must be reviewed on a regular basis due to the changing nature of the individuals pregnancy and the impact that this may have on their capabilities to conduct their work. It is likely that as the pregnancy progresses, then they may require further modifications to their work activities.

The following sections gives guidance on some of the major issues that can be of concern to pregnant / breast feeding women and methods to address these risks.

Common Issues

Physical Hazards

Manual Handling

Pregnant women are at particular risk when performing manual handling activities as a result of both postural difficulties and hormonal changes which may increase the susceptibility of the body to injury. This can be especially the case for those who have recently given birth, especially after a caesarean section.

As a result, manual handling should be avoided by pregnant women unless the risks are deemed to be low. If this is not possible, then the character and extent of tasks should be controlled so that the risk of injury is minimized. Where heavy or repetitive manual handling is a fundamental part of the individual's job, then they may need to be re-deployed during their pregnancy and for a period of time following. Human Resources should be contacted for further advice.

Work with Computers

There is no risk from any radiological emissions from computer screens, but pregnant women may experience difficulties achieving a comfortable posture as the pregnancy progresses, especially sitting for long periods. Line managers should take account of this and discuss with the staff member what modifications to their working pattern can be implemented to benefit them.

Ionising Radiation

As soon as pregnancy is confirmed, staff working with ionising radiation should inform their radiation protection supervisor who must make arrangements to minimise their exposure to radiation. Pregnant women should not perform duties that would require their classification as classified radiation workers. Further advice is available from the University Radiation Protection Adviser via the Central Safety Team.

Non-Ionising Radiation

Pregnant or breastfeeding women are at no greater risk from exposure to optical radiation than other workers. Exposure to electric and magnetic fields should be kept within the limits set by the National Radiological Protection Board – please refer to the Central Safety Team.

Shocks and Vibrations

Pregnant women, or those just who have recently given birth, should not be exposed to whole body vibration, especially at low frequencies or where the abdomen is exposed to shocks or jolts, *e.g.* driving or travelling in agricultural or other off-road vehicles.

Noise

Although there is no specific risk to pregnant or breastfeeding women from exposure to high noise levels, prolonged exposure may cause stress, leading to raised blood pressure and tiredness. Compliance with the Noise at Work Regulations 2005 should be considered to meet the needs of new or expectant mothers.

Extremes of Heat / Cold

Generally, pregnant women have a lower tolerance to heat and may be more liable to faint or suffer heat stress, although normal office temperatures are unlikely to prevent a significant risk. To minimise any adverse impact, access to refreshments and rest periods should be available.

Pressurised environments

Pregnant women should not work in environments that are pressurised above normal atmospheric pressure nor should they undertake underwater diving.

Chemical Hazards

Work with chemicals which are hazardous to health are covered by the Control of Substances Hazardous to Health Regulations 2002 (COSHH). Correctly managed work with chemicals with appropriate controls should result in minimal exposure to the chemicals.

Skin absorption

Specific chemicals, can be absorbed through the skin and then into the body. These chemicals are identified by 'Sk' in the HSE Guidance Document EH40 and in material safety data sheets provided with the substance. Care should be taken during pregnancy to prevent skin absorption using appropriate engineering control measures and personal protection as an additional precaution (*e.g.* gloves, lab coats, faceshields, etc.).

Carcinogens, Teratogens and Mutagens

There are a number of substances that are labelled with specific risk phrases (or R-phrases) that indicate a specific hazard and this will be identified on the container label or safety data sheet. Some of these are particularly hazardous to women trying to conceive or to expectant / new mothers and exposure to these should be avoided. Some examples of these are:

- R40: Limited evidence of a carcinogenic effect
- R45: May cause cancer
- R46: May cause heritable genetic damage
- R49: May cause cancer by inhalation
- R60: May impair fertility
- R61: May cause harm to the unborn child
- R62: Possible risk of impaired fertility
- R63: Possible risk of harm to the unborn child
- R64: May cause harm to breastfed babies

Note, this list is not exhaustive.

Inhalation anesthetics

There is some concern concerning the genetic and physiological effects on workers and unborn children of long term exposure to anesthetics and Isoflurane has workplace exposure limit as defined in EH40. However, where properly maintained gas scavenging units are in operation, there will unlikely be any exposure near these levels.

Cytotoxic (Antimiotic) Drugs

These are specific cancer chemotherapy drugs which arrest the multiplication of living cells. They interfere with cell division and can cause damage to sperm and egg cells. Women who are trying to conceive, are pregnant or breastfeeding should avoid exposure to these drugs.

Carbon Monoxide

Carbon monoxide has the ability to readily cross the placenta and may result in adverse effects on the foetus and as a result pregnant women should avoid working in an atmosphere that has a high concentration of carbon monoxide. High levels of carbon monoxide may be found in areas where internal combustion engines are run without adequate ventilation.

Lead and Mercury or their Derivatives

High exposure to lead is linked to increase in spontaneous abortions, stillbirths and infertility. As a result, pregnant women should avoid significant exposure to lead. Organic mercury compounds has been shown to have adverse effects on the foetus, although no clear evidence exists for mercury or inorganic mercury compounds. However, a precautionary approach would be to avoid exposure to these substances.

Biological Hazards

Work with biological agents is covered by the Control of Substances Hazardous to Health Regulations 2002 (COSHH).

Hazardous biological agents are classed into one of four categories by the HSE and these classifications can be found in The Approved List of Biological Agents. A number of biological agents listed as category 2, 3 or 4 can affect the foetus if the mother is infected during pregnancy or pose a significant risk to the new born child. Exposure can occur in a laboratory setting where there is deliberate work with the agent or where exposure is foreseeable but is incidental to the work.

The normal precautions taken in biological laboratories to minimise accidental exposure of any staff to biological agents are likely to sufficiently control the risks to expectant or new mothers. However, where there are particular risks associated with specific biological agents, then additional precautions may be required and this may include stopping work with the agents during pregnancy and, where necessary, for a period after the birth.

Examples of agents where there may be an increased risk during pregnancy include rubella, toxoplasma, parvovirus B19 and cytomegalovirus. Agents that may pose a risk to the child through infection of the mother or during breastfeeding include hepatitis B, HIV, herpes, tuberculosis, syphilis, chickenpox and typhoid. Note that these lists are not comprehensive.

Pregnant women are at their most vulnerable from potentially infectious agents during the early weeks of pregnancy and as such, for women who are intending to become pregnant and work with biological agents that are a cause for concern should seek medical advice through their GP or occupational health on the suitability of working with these agents.

Job Factors and Working Conditions

Once notified that a woman is pregnant, the nature of her job needs to be considered to identify whether there are aspects of her work that may place the woman or unborn child at greater risk. These aspects can include length and time of working hours, travel requirements, lone working, risk of violence or stressful situations, etc. The effect of pregnancy on the woman can make these situations more difficult for the woman to manage. The effects of stress and depression also need to be considered.