



University of  
St Andrews

## New and expectant mothers guidance

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# Guidance on Health and Safety Aspects for New and Expectant Mothers

## The Management of Health and Safety at Work 1999

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## Introduction

The law at present requires employers, such as the University, to assess the risks to all employees that arise from their work, and to do what is reasonably practicable to avoid or control those risks. The Management of Health and Safety at Work 1999 explicitly requires that special attention is given to identifying and controlling risks that may affect women who are pregnant, who have given birth in the previous six months or who are breastfeeding. The objective is to avoid adverse effects being suffered either by the woman herself, by the foetus or by the new-born child.

This guidance includes details of some of the major known hazards to new and expectant mothers and indicates sources of additional information on measures that can be adopted to minimise the risks.

To comply with the requirements of the above Regulations the University must ensure that the following measures are implemented with respect to the groups concerned:

a) that assessments of risk to health and safety at work made under the MHSW Regulations shall include, in certain circumstances, an assessment of risk by reason of her condition, to the health and safety of a new or expectant mother from any process or working conditions, or physical, biological or chemical agents;

b) that steps are taken, in accordance with those prescribed in Regulation 3 of the MHSW Regulations, to ensure that women in the above groups are not exposed to risks which would endanger their health and safety;

c) in the case of an individual employee, whose circumstances are such that compliance with relevant statutory requirements would not avoid risk to health and safety, the University shall, if it is reasonable to do so, and would avoid such risks, alter her working conditions or hours of work;

d) a new or expectant mother who works at night and who produces a certificate from a registered medical practitioner or a registered midwife which shows that she should not work at night for reasons of health and safety, must be suspended from work, on paid leave, for as long as necessary.

## Action to be taken by Expectant Mothers, New Mothers, or Mothers who are Breast-Feeding

Mothers in the above group should inform their Head of School/Unit/Residence of their condition. Expectant mothers should also inform [Human Resources](#) of their condition.

## Action to be taken by Human Resources and Heads

On being informed by a member of staff that she is a new or expectant mother, [Human Resources](#) will send her a copy of the Maternity, Paternity and Adoptive Leave Scheme and a Maternity Leave Application Form.

The Head, on being informed that a member of staff is an expectant mother, new mother, or breast-feeding mother, will ensure that: (i) an appropriate risk assessment is carried out; (ii) a record is kept of the results, and (iii) where necessary, measures implemented to reduce risk.

## Physical Hazards:

### Manual Handling of Loads

Pregnant women are especially at risk when performing manual handling tasks. This is due both to postural difficulties and to hormonal changes that may increase the susceptibility of the body to injury. There can also be an increased risk to those who have recently given birth, particularly after a caesarean section.

There is no evidence that breastfeeding mothers are at greater risk than other workers when performing manual handling tasks.

If possible, manual handling should be avoided by pregnant women. If this is not possible the character and extent of the tasks should be controlled so that the risk of injury is minimised. In cases where heavy or repetitive manual handling is an integral part of the individual's job, they may need to be temporarily re-deployed during the pregnancy and for a period of time after they have given birth. [Human Resources](#) should be consulted in such cases. The University Guidance Notes for Manual Handling Operations provide guidance on safe manual handling and in the assessment of manual handling tasks. Copies are available from [Environmental, Health & Safety Services](#).

### Work with Display Screen Equipment (DSEs)

There has been considerable public concern about reports of higher levels of miscarriage and birth defects among some groups of display screen equipment users. The current view of the National Radiological Protection Board and the Health and Safety Executive is that the levels of ionising and non-ionising electromagnetic radiation, which are likely to be generated by display screen equipment, are well below those set out in international recommendations and do not pose a significant risk to health.

No special protective measures are therefore needed to protect pregnant women or any other workers who are using display screen equipment.

Further advice on the use of display screen equipment is given in the University Guidance Notes for Safe Use of Display Screen Equipment. Copies of this are available from [Environmental, Health & Safety Services](#).

### Ionising Radiation

When their pregnancy is confirmed, staff working with ionising radiation should inform their School Radiation Protection Supervisor, who must make arrangements to minimise their exposure to radiation. A pregnant woman should not perform duties that would require her to be designated a classified person. These duties would include dispensing from high activity stock solutions and iodination of protein where there is a risk of an intake of radioactive material.

Further advice is available from [Environmental, Health & Safety Services](#).

### Non-ionising Radiation

This term includes optical radiation (including ultraviolet and infra-red sources and lasers) and electromagnetic fields and waves (e.g. radiofrequency (RF) radiation, microwaves).

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.

Further advice is available from [Environmental, Health & Safety Services](#).

### Shocks, Vibrations or Movement

Pregnant women, or those who have recently given birth, should avoid work likely to involve uncomfortable whole body vibration, especially at low frequencies, or where the abdomen is exposed to shocks or jolts, (e.g. riding in or driving off-road vehicles).

Breastfeeding women are at no greater risk than other workers.

### Noise

There is no specific risk from exposure to high noise levels, although prolonged exposure may cause stress leading to raised blood pressure and tiredness. Compliance with the current requirements of the Noise at Work Regulations 2005 are sufficient to meet the needs of new or expectant mothers.

Advice on these Regulations is available from [Environmental, Health & Safety Services](#).

### Extremes of Heat or Cold

When pregnant, women have a lower tolerance to heat and may be more liable to faint or suffer heat stress. However, temperatures within the range encountered in normal office work are not likely to represent a significant hazard.

Where conditions in the workplace involve extremes of temperature e.g. certain catering areas, steps should be taken to minimise the risk to pregnant women.

Access to refreshments and rest periods may help to alleviate some problems that may arise.

## Work in Hyperbaric Atmospheres and Underwater Diving

Pregnant women should not work in environments that are pressurised above normal atmospheric pressure nor should they undertake underwater diving. Women who are breastfeeding may undertake these activities unless advised otherwise by their doctor.

Facilities - Pregnant women and new mothers are prone to fatigue and raised blood pressure. It is, therefore, important that the work schedule is arranged to allow adequate rest breaks, in suitable rest areas, for pregnant women and new mothers.

Breastfeeding mothers must have suitable facilities which allow the mother to feed the baby in an area which is protected from other hazards e.g. chemical hazards. This area should be away from the main work environment.

## Chemical Hazards

Work with chemical substances that are classed as hazardous to health is covered by the Control of Substances Hazardous to Health Regulations 2002. General advice on control measures can be found in the COSHH Approved Code of Practice (HSE Books Reference Number L5) and from the [Environmental Health and Safety Services](#).

### Inhalation, Ingestion and Absorption of Chemical Agents

Hazardous substances can enter the body by inhalation, ingestion or absorption through the skin where they may cause adverse effects. Chemicals which are absorbed through the skin are labelled "Sk" in the HSE book EH40/2005 (see URL: <http://www.hse.gov.uk/pubns/priced/eh40.pdf>). This book lists all the Workplace Exposure Limits (WEL) for known hazardous substances with respect to inhalation. Details are available from [Environmental Health and Safety Services](#) on request.

The container label and material safety data sheet (MSDS) should be consulted for information on substances not listed in EH40.

During pregnancy particular care should be taken to reduce exposure to any hazardous substance by using engineering control measures (fume cupboards, enclosed processes, etc) where possible, and personal protective equipment (gloves, lab coats, faceshields, etc) as an additional precaution.

### Carcinogens, Teratogens and Mutagens

Some substances may be labelled with standard risk phrases which indicate that a particular hazard is associated with the material. Materials which should carry such labelling are listed in the approved list for supply issued under the Chemicals (Hazard Information and Packaging) Regulations.

Currently there are about 200 such substances. The standard risk phrases may be found on the container label or on the material safety data sheet for the substances. The wording that corresponds to these phrases is as follows:

R40: Possible risk of irreversible effects;

H350 or R45: May cause cancer;

H340 or R46: May cause heritable genetic damage;

H360 or R60: May impair fertility;

H360 / H361 or R61: May cause harm to the unborn child;

H36-/H361 or R62: Possible risk of impaired fertility;

H360/H361 or R63: Possible harm to the unborn child;

H362 or R64: May cause harm to breastfed babies;

H350 / H351 or R49: May cause cancer by inhalation;

These materials are particularly hazardous to those trying to conceive a child or to new or expectant mothers. Exposure to them should be avoided by these groups of workers.

## Inhalation Anaesthetics

Over the past decade there has been concern about the possibility of genetic and physiological effects resulting from long term exposure to some inhalation anaesthetics. Both halothane and nitrous oxide have been allocated.

WEL of 10ppm (halothane) and 100ppm (nitrous oxide). Where properly maintained and operated gas scavenging systems are in use there is usually no difficulty in keeping concentrations below these levels.

## Antimitotic (cytotoxic) Drugs

These drugs are used in cancer chemotherapy and have the ability to arrest the multiplication of living cells. They achieve this by interfering with the essential functions of the cell, especially those involving cell division and can, in the long term, cause damage to the sperm and egg cells. Some can cause cancer. Occupational exposure is usually by inhalation or absorption through the skin.

These substances are exempt from the normal labelling requirements because they are drugs.

Those who are trying to conceive a child, are pregnant, or breastfeeding, should avoid exposure to such materials.

Further guidance on this subject is available in HSE Guidance at URL: <http://www.hse.gov.uk/healthservices/safe-use-cytotoxic-drugs.htm>

## Carbon Monoxide

Pregnant women should avoid working in an atmosphere where there is a high concentration of carbon monoxide (CO). Carbon monoxide readily crosses the placenta and may result in adverse effects on the foetus. High levels may be found in vehicle repair workshops, or other areas, where internal combustion engines are run without adequate extract ventilation.

There is no indication that breastfed babies suffer adverse effects as a result of their mother's exposure to carbon monoxide.

Further guidance is available in HSE Guidance Carbon monoxide – see URL: <http://www.hse.gov.uk/mothers/faqs.htm#q19> .

## Lead and Lead Derivatives

High exposure to lead is associated with increased frequency of spontaneous abortion, stillbirths and infertility. Lead can also enter breast milk and may adversely affect the nervous system of young children. For these reasons the Control of Lead at Work Regulations set a lower permissible blood lead level for women of reproductive age than for men.

When pregnancy is confirmed significant exposures to lead should be avoided.

## Mercury and Mercury Derivatives

There is evidence that organic mercury compounds may have adverse effects on the foetus. No such clear evidence exists for mercury or inorganic mercury compounds, although it would be advisable to avoid exposure to these materials also.

HSE Guidance Note EH17: Mercury - Health and safety precautions gives guidance on the risks of working with mercury and how to control them.

## Biological Hazards

Work with biological agents is covered by the Control of Substances Hazardous to Health Regulations 2002 and general advice on control measures can be found in the COSHH Approved Code of Practice (HSE Books Reference Number L5). Further advice is available from [Environmental, Health and Safety Services](#).

Work with Biological Agents - Hazardous biological agents are classified by the Health and Safety Executive's (HSE) Advisory Committee on Dangerous Pathogens (ACDP) into one of four hazard categories. These classifications are set out in an HSE publication entitled "Categorisation of biological agents according to hazard and categories of containment". Many biological agents within hazard categories 2, 3 and 4 can affect the foetus if the mother is infected during pregnancy or pose a significant risk to a new born child.

Exposure to biological agents may occur in a laboratory setting where there is a deliberate intention to work with the agent or through other work where exposure to the agent is foreseeable but is incidental to the principal task.

Normally the precautions taken in biological laboratories are such as to minimise the risk of accidental exposure of any staff to the agents handled. In many cases such "good laboratory practice" will be sufficient to adequately control the risks to new or expectant mothers. However, where there are particular risks associated with some biological agents additional precautions may be appropriate. This may include ceasing work with such agents for the duration of the pregnancy and for a period after the birth.

When working with animals there may be a risk of zoonotic infection if the animals are infected with agents that may be transmitted to humans. One of the best known examples of this is enzootic abortion in sheep. This is caused by the organism *Chlamydia psittaci* and may cause abortion and illness in pregnant women. Pregnant women should therefore be excluded for working with pregnant ewes.

Other examples of agents where there may be a risk during pregnancy include rubella (German Measles), toxoplasma and cytomegalovirus. Agents such as Hepatitis B, HIV, Herpes, tuberculosis, syphilis, chickenpox and typhoid may pose a risk to the child either through infection of the mother during pregnancy or through infection of the child after birth as a result of breastfeeding or other close physical contact. Note that these are not comprehensive lists.

Pregnant women can be at their most vulnerable from potentially infectious agents during the early weeks of pregnancy. For this reason, women who are intending to become pregnant and who work with the agents indicated above, or with others posing similar hazards, should seek medical advice from the University [Occupational Health Service](#) on the advisability of continued exposure to these agents.

Further advice on the hazards outlined in this booklet is available from:

- [Environmental, Health and Safety Services](#) Ext. 2750
- University [Occupational Health Service](#) Ext. 2752

## Communicable Diseases

The COSHH Regulations, in line with other health & safety legislation, was not designed to cover hazards of everyday life - such as the common cold - and a risk assessment would not be expected to cover such generally communicable illnesses. However in circumstances where the expectant mother's role gives rise to increased exposures beyond that which would normally be experienced in the community, the risks will need to be assessed and, where possible, controls introduced to reduce the level of risk to the levels experienced in the community at large. Examples of such exposures would include the habitual contact with ill people in such a way that a communicable disease can be contracted, e.g. in a carer role; or tasks involving an increased likelihood of close contact with contagious sufferers during a local outbreak, epidemic or pandemic.

## Useful References

Health and Safety Executive Publications

New and Expectant Mothers at Work - A Guide for Employers (URL: <http://www.hse.gov.uk/pubns/indg373.pdf> )

Management of Health and Safety at Work 1999

HSE Website – URL: <http://www.hse.gov.uk/mothers/>



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