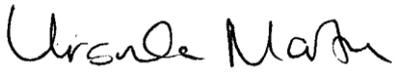


Reference Number: EDQ 035

Version Number: V3

## Guideline for Risk Assessment of New & Expectant Mothers

|  |  |   |
|--|--|---|
| What is this document for?                                 | To enable managers to assess the risks to new and expectant mothers and to do what is reasonably practicable to control those risks.   |   |
| Who needs to know?   | All Staff groups   |   |
| Related PAHNT Documents:                                   | EDH014 - Maternity Paternity & Adoption Leave Policy (incorporating the Administrative Guidelines and the Breastfeeding at Work Guidelines)',<br>EDQ007 – Health and Safety Policy<br>EDQ012 – Risk Management Strategy & Policy             |   |
| Related Legislation/Obligations:                           | Health & Safety Management of Health and Safety at Work Regulations 1999<br>Health and Safety at Work Act 1974<br>Workplace (Health, Safety and Welfare) Regulations 1992<br>HSG 122 New and Expectant Mothers at work A guide for Employers |   |
| Accountable Executive:                                     | Elaine Inglesby-Burke, Chief Nurse   |   |
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| Developed with:  | Health & Safety Advisors, Health & Safety Committees   |   |
| Ratified by:   |   | Ursula Martin, Director of Clinical Governance (on behalf of Health & Safety Committee) |
| Date Ratified:   | 24 August 2016   |   |
| Replaces:  | EDQ035 V2  |   |
| How is this different from the previous document?          | Reformatted, full review   |   |
| What dissemination & training arrangements have been made? | This Guideline will be available via the Document Management System. State what other arrangements have been made  |   |
| Review arrangements:                                       | Review every 3 years or earlier should a change in legislation best practice or other circumstance dictate   |   |
| Safety Arrangements:                                       | Compliance & effectiveness of this guideline will be via accident, incident & complaints monitoring, in addition to compliance audits. Staff experiencing difficulties with implementing this policy should contact their line manager.      |   |

Priority Level:

2

Impact Level:

Cross Speciality

Keywords:

Pregnancy, Risk assessment, New & Expectant Mother

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## 1. What is this Guideline for?

- 1.1 The law requires employers to assess the risks to their employees (Management of Health and Safety at Work Regulations 1999) including new and expectant mothers and to do what is reasonably practicable to control those risks
- 1.2 Pregnancy is not considered an illness and the health and safety implications of pregnancy can be adequately addressed by normal health and safety procedures. Any hazards in the environment that may pose a health & safety risk to new and expectant mothers should be identified.

## 2. Why do I need to know?

- 2.1 The aim of this guidance is to ensure all employees who become pregnant undergo a risk assessment as early in their pregnancy as possible and that all reasonable and practical measures are taken to avoid or reduce hazards to new and expectant mothers.

## 3. What is the guidance?

### 3.1 Risk Assessment

The Risk Assessment sheet can be found in Appendix 1 of this Document. In determining what risks there are the following factors must be taken into account:

### 3.2 Physical risks:

Movements and Postures, Manual handling, Shocks and vibrations, Noise, Radiation (ionising and non-ionising)

### 3.3 Biological agents:

Infectious diseases

### 3.4 Chemical agents, including:

Toxic chemicals, Mercury, Antimitotic (cytotoxic) drugs, Pesticides, Carbon monoxide, Lead.

### 3.5 Working Conditions:

- 3.5.1 Facilities (including rest rooms), Mental and physical fatigue and working hours, Stress (including postnatal depression), Passive smoking, Temperature, Working with visual display units (VDUs), Working alone, Work at heights, Travelling, Violence, personal protective equipment, Nutrition
- 3.5.2 It must be taken into account that there could be different risks depending on whether workers are pregnant, have recently given birth, or are breastfeeding.
- 3.5.3 Pregnancy is not a static condition and the nature and degree of risk will change as the pregnancy develops. The physiological changes must be taken into account when assessing the risks.
- 3.5.4 If there is a significant risk at work to the health or safety of a new or expectant mother, which goes beyond the level of risk to be expected outside the workplace then the following steps must be taken to remove her from the risk:

**Action 1** - temporarily adjust her working conditions and /or hours of work: or if it is not reasonable to do so, or would not avoid the risk:

**Action 2** - offer her suitable alternative work (at the same rate of pay, terms and conditions) if available; or if that is not feasible, you must:

**Action 3** - suspend her from work on full pay for as long as necessary to protect her health and safety, and that of her child.

- 3.5.5 These actions are only necessary where, as a result of risk assessment, there is genuine concern. Any alternative work offered must also be subject to a risk assessment.

## 4. What do I need to do?

### 4.1 The member of Staff

She must inform her manager in writing that she is pregnant. This will allow her manager to carry out the risk assessment

### 4.2 Ward/Departmental and Team Managers

The managers must assess the risks and identify hazards that could pose a health or safety risk to new and expectant mothers and take appropriate action implementing control measures to remove or reduce the risk. They must ask the member of staff to help with the risk assessment. This is to take account of any medical advice she has received.

- 4.3 **Health & Safety Advisors** will give advice and assist where necessary in the process and carry out audits to ensure they are carried out.

### 4.4 Occupational Health Department

The Occupational Health Department must be informed if a risk has been identified for appropriate medical advice, support and monitoring and any further recommendations regarding fitness and suitability for work.

### 4.5 Human Resource Department

Human resource department must be informed if a risk has been identified for any further advice and support.

## 5. Abbreviations & Definitions of terms used

### Definitions:

**New or expectant Mother** - a worker who is pregnant, who has given birth within the previous six months or who is breastfeeding

**“Given birth”**- delivered a living child or, after 24 weeks of pregnancy, a still-born child.

### Abbreviations:

|       |   |
|-------|---|
| BA    | Biological Agent                          |
| CO    | Carbon Monoxide                           |
| COSHH | Control of Substances Hazardous to Health |
| EEC   | European Economic Community               |

|     |  |
|-----|--|
| HIV | Human Immunodeficiency Virus                 |
| HSG | Health & Safety Guidance                     |
| mSv | millisievert (measure of ionising radiation) |
| PhB | blood lead levels                            |
| PPE | Personal Protective Equipment                |
| VDU | Visual Display Unit                          |

## **6. References and Bibliography**

### **6.1 Supporting References**

N/A

### **6.2 Bibliography**

- Her Majesty's Parliament (1999) Statutory Instruments 1999 No 3242 Health & Safety Management of Health and Safety at Work Regulations 1999
- Health and Safety at Work Act 1974
- Workplace (Health, Safety and Welfare) Regulations 1992
- HSG 122 New and Expectant Mothers at work A guide for Employers

## **7. Appendices**

## Appendix 1 – Equality Impact Assessment

### Equality Impact Assessment for Risk assessment Guidance for New & Expectant Mothers EDQ035 V3

| For each of the Protected Characteristics & equality & diversity streams listed answer the questions below using Y to indicate yes and N to indicate no:  | Age  | Disability                          | Ethnicity / Race | Gender | Gender Reassignment | Marriage & Civil Partnership | Pregnancy & Maternity  | Religion/belief | Sexual orientation | Human Rights          | Carers | Please explain your justification  |
|---|--|-------------------------------------|------------------|--------|---------------------|------------------------------|--|-----------------|--------------------|-----------------------|--------|--|
| Example   | N  | Y                                   | N                | N      | N                   | N                            | N  | N               | N                  | N                     | N      | A variety of methods will be made available to minimise barriers to communication such as provision of easy read formats, advocacy services, translation into other languages and braille as required. |
| 1. Does the practice covered have the potential to affect individuals or communities differently or disproportionately, either positively or negatively (including discrimination)?             | N  | N                                   | N                | N      | N                   | N                            | N  | N               | N                  | N                     | N      |  |
| 2. Is there potential for, or evidence that, the proposed practice will promote equality of opportunity for all and promote good relations with different groups?                               | N  | N                                   | N                | N      | N                   | N                            | N  | N               | N                  | N                     | N      |  |
| 3. Is there public concern (including media, academic, voluntary or sector specific interest) in the document about actual, perceived or potential discrimination about a particular community? | N  | N                                   | N                | N      | N                   | N                            | N  | N               | N                  | N                     | N      |  |
| <b>Your Name: Stephanie Mills</b>   | <b>Your Designation: Head of Health &amp; Safety</b> |                                     |                  |        |                     |                              | <b>Signed: S Mills</b>   |                 |                    | <b>Date: 10/08/16</b> |        |  |
| <b>To be completed by the relevant Equality Champion following satisfactory completion &amp; discussion of answers above with author</b>  |  |                                     |                  |        |                     |                              |  |                 |                    |                       |        |  |
| <b>Equality Champion:<br/>Kimberley Salmon-Jamieson</b>   |  | <b>Directorate:<br/>Chief Nurse</b> |                  |        |                     |                              | <b>Signed:</b>  |                 |                    | <b>Date: 18/08/16</b> |        |  |

\*Please scan or insert electronic signature

## Appendix 2

## Risk Assessment Guidance Notes

The following (**Ref: HSG 122 New and Expectant Mothers at work A guide for Employers**) is a guide to managers to ensure that should a member of staff become pregnant, they can provide the appropriate control measures. Each person should, however, be individually assessed on the occasion of becoming pregnant

### 1. Generic hazards

| List of generic hazards and situations   | Risk  | Risk Control/Avoidance Measures  |
|--|---|--|
| <b>Mental and physical fatigue and working hours</b>                             | Long working hours, shift work and night work can have a significant effect on the health of new, expectant and breastfeeding mothers. Both mental and physical fatigue increase during pregnancy and in the postnatal period due to the various physiological and other changes taking place   | If necessary, managers should adjust working hours temporarily, as well as other working conditions, including the timing and frequency of rest breaks, and to change shift patterns and duration to reduce risk<br><br>If night work is detrimental to the individual's health, alternative day work should be considered   |
| <b>Postural problems connected with the activity of new or expectant mothers</b> | Fatigue from standing and other physical work has been associated with miscarriage, premature birth and low birth weight<br><br>It is hazardous working in tightly fitting workspaces or workstations which do not adjust sufficiently to take account of increased abdominal size, particularly during the later stages of pregnancy. This may lead to sprain or strain injuries | Ensure that the hours, volume and pacing of work are not excessive. Employees themselves should have some control over how work is organised<br><br>Ensure that seating is available where appropriate<br>Fatigue can be avoided or reduced by taking longer and more frequent breaks during the work session<br><br>Adjusting workstations or work procedures may be beneficial |
| <b>Work at heights</b>   | It is hazardous for pregnant workers working at heights, e.g. ladders, platforms  | Managers must ensure that pregnant workers are not exposed to work at heights  |
| <b>Working alone</b>   | Pregnant women are more exposed to risk than others when working alone, particularly if they fall or require urgent medical attention   | Depending on their medical condition, access to communications with others and levels of (remote) supervision involved, may need to be revised to ensure that help and   |

|                               |  |   |
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|                               |  | support is available when required, and that emergency procedures take into account the needs of new and expectant mothers  |
| <b>Occupational stress</b>    | <p>New and expectant mothers can be particularly affected by occupational stresses e.g. through hormonal changes, financial, emotional or job insecurity</p> <p>If a new or expectant woman is exposed to the risk of violence at work, this may be harmful</p> <p>Women who have recently suffered loss through stillbirth, miscarriage, adoption or neonatal death will be especially vulnerable to stress, as will women who have experienced serious illness or trauma associated with pregnancy or childbirth</p> | When completing a risk assessment, managers should take into account known stress factors and the particular medical and psychosocial factors affecting the individual woman  |
| <b>Standing activities</b>    | <p>Physiological changes during pregnancy promote peripheral congestion while standing i.e. increased blood and systolic volume and dilation of blood vessels resulting in dizziness and faintness</p> <p>Continuous standing (and/or walking) for long periods during the working day also contributes to an increased risk of premature childbirth</p>   | <p>Ensure that seating is available where appropriate</p> <p>Constant sitting or standing are both inadvisable. It is better to alternate between the two. If this is not possible, provision should be made for breaks</p> |
| <b>Sitting activities</b>     | <p>Pregnancy-specific changes in coagulation and mechanical compression of the pelvic veins by the uterus pose a relatively high risk of thrombosis or embolism for pregnant women. When sitting still, the venous filling in the legs increases which may cause aching and oedema. The increase in abdominal circumference can lead to muscular pain in the lumbar spine. This may be intensified by remaining in a specific position for an excessively long period of time</p>                                      | Constant sitting is inadvisable. Provision should be made for regular breaks  |
| <b>Lack of rest and other</b> | Rest is important for new and expectant mothers  | There may be a need for suitable facilities for the woman   |

|   |   |   |
|---|---|---|
| <b>welfare facilities</b>   |   | concerned to have access to somewhere where she can sit or lie down comfortably in privacy at appropriate intervals   |
| <b>Risk of infection or kidney disease as a result of inadequate hygiene facilities</b> | Pregnant women – because of pressure on the bladder and other changes associated with pregnancy, pregnant women often have to go to the toilet more frequently and more urgently than others<br>Breastfeeding women – may also need to do so because of increased fluid intake to promote breast milk production  | Managers should ensure that there is easy access to toilets and associated hygiene facilities, taking into account the fact that expectant and nursing mothers may need to break from their work more frequently than normal. Managers should seek further guidance if necessary. |
| <b>Hazards as a result of inappropriate nutrition</b>                                   | Pregnant women may need more frequent meal breaks and more frequent access to drinking water or other light refreshments and may only be able to tolerate food 'little and often'. Their eating patterns may change, especially in the early stages of pregnancy in response to morning sickness and also in the later stages due to discomfort or other problems | New and expectant mothers' particular needs may be established in consultation with the individual concerned. These needs may change as pregnancy progresses  |
| <b>Hazard due to unsuitable or absent facilities</b>                                    | Access to appropriate facilities for expressing and safely storing breast milk for breastfeeding mothers, or to enable infants to be breastfed at or near the workplace, may facilitate breastfeeding by working women  | Protective measures could include access to a private room, use of secure, clean refrigerators for storing expressed breast milk and time off without loss of pay or benefits to express milk or breastfeed   |

## 2. PHYSICAL AGENTS – where these are regarded as agents causing foetal lesions and/or likely to disrupt placental attachment

| List of agents/working conditions    | Risk  | Risk control measures  |
|--------------------------------------|---|--|
| <b>Shocks, vibration or movement</b> | Regular exposure to shocks, i.e. sudden severe blow to the body or low frequency vibrations (floor buffers), or excessive movement may increase the risk of miscarriage. Long-term exposure to the risk may increase the risk of premature birth or low birth weight. Breastfeeding workers are at no greater risk than other workers | Work shall be organised in such a way that pregnant workers and those who have recently given birth are not exposed to work entailing risk arising from unpleasant vibrations of the entire body, particularly at low frequencies, microtraumas, shaking, shocks or where jolts or blows are delivered to the lower body |

|                                  |   |   |
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| <p><b>Noise</b></p>              | <p>Prolonged exposure to loud noise may lead to increased blood pressure and tiredness.</p> <p>Experimental evidence suggests that prolonged exposure of the unborn child to loud noise during pregnancy may have an effect on later hearing and that low frequencies have a greater potential for causing harm.</p> <p>There are no particular problems for women who have recently given birth or who are breastfeeding.</p>  | <p>Situations giving rise to loud noise are rare within the Trust. However, if noise is thought to be causing a problem then national provisions applying Council Directive 86/188/EEC must be respected. The employer must ensure that workers who are pregnant, who have recently given birth or who are breastfeeding are not exposed to noise levels exceeding national exposure limit values based on Directive 86/188/EEC. Basic noise measurements can be taken by the Estates Dept but in exceptional circumstances specialist advice may be needed.</p> <p>It should be recognised that use of personal protective equipment by the mother will not protect the unborn child from the physical hazard</p>  |
| <p><b>Ionising radiation</b></p> | <ul style="list-style-type: none"> <li>○</li> <li>○ Exposure to ionising radiation involves risks to the unborn child; there are therefore particular provisions to limit the exposure of the expectant mother and the unborn child.</li> </ul> <p>If a nursing mother works with radioactive liquids or dusts, the child may be exposed, particularly through contamination of the mother's skin</p> <p>Also, there may be a risk from radioactive contamination breathed in or ingested by the mother and transferred to the milk or via the placenta to the unborn child</p> | <ul style="list-style-type: none"> <li>○</li> <li>○ As soon as a woman informs her manager of her pregnancy, the protection of the child to be born must be comparable with that provided for members of the public. The conditions for the pregnant woman in the context of her employment are therefore such that the equivalent dose to the unborn child will be as low as reasonably achievable and that it will be unlikely that this dose will exceed 1 mSv during at least the remainder of the pregnancy</li> </ul> <p>The effective dose received by any worker may not exceed 20 mSv per year. In addition, the dose for the abdomen of a woman of reproductive capacity must be less than 13 mSv in any consecutive three months</p> <p>The employer must inform female workers exposed to ionising radiation of the need to declare the pregnancy as soon as possible, having regard to the risks of exposure for the unborn child and of contamination of the breastfed child in the event of bodily radioactive contamination</p> <p>Work procedures should be designed to prevent pregnant</p> |

|   |   |   |
|---|---|---|
|   |   | <p>women from being exposed to ionising radiation</p> <p>Special attention should be paid to the possibility of nursing mothers receiving radioactive contamination and they should not be employed in work where the risk of contamination is high</p>   |
| <b>Non-ionising electromagnetic radiation</b> | <p>The possibility cannot be excluded that electromagnetic or magnetic fields, including those associated with short-wave therapy, may involve an increased risk for the unborn child. Within the Trust, this will include the Magnetic Resonance equipment</p>   | <p>It is advised to minimise exposure by means of health and safety measures. For Magnetic Resonance equipment, the Medical Devices Agency recommends giving staff the option of whether or not to enter the inner controlled area during the first three months of their pregnancy and advises that pregnant staff do not remain in the scan room whilst scanning is underway</p>  |
| <b>Extremes of cold or heat</b>               | <p>Pregnant women tolerate heat less well and may more readily faint or be more liable to heat stress. The risk is likely to be reduced after birth but it is not certain how quickly an improvement comes about. Exposure to heat may lead to adverse pregnancy outcomes.</p> <p>Breastfeeding may be impaired by heat dehydration.</p> <p>Working in extreme cold may be a hazard for pregnant women and their unborn child. Warm clothing should be provided.</p> <p>The risks are increased particularly in the event of sudden changes in temperature.</p> | <p>Pregnant workers should not be exposed to prolonged excessive heat or cold at work.</p> <p>Given the nature of the work within the Trust, extremes of heat and cold are not normally experienced except in very unusual weather conditions. If particular departments are adversely affected during very unusual weather conditions, managers should consider alternative working arrangements e.g. provide more frequent breaks away from the work area</p> |

**3. BIOLOGICAL AGENTS** – The Control of Substances Hazardous to Health Regulations (2002) defines a biological agent (BA) as a micro-organism, cell culture or human endoparasite which may cause infection, allergy, toxicity or otherwise create a hazard to human health, including any BA that has been genetically modified. The Regulations assign BAs to specific groups on the basis of the hazard to human health as follows:

Group 1 - unlikely to cause human disease

- Group 2 – can cause human disease and may be a hazard to employees; it is unlikely to spread to the community, and there is usually effective prophylaxis or treatment available
- Group 3 – can cause severe human disease and may be a serious hazard to employees; it may spread to the community, but there is usually effective prophylaxis or treatment available
- Group 4 – causes severe human disease and is a serious hazard to employees; it is likely to spread to the community and there is usually no effective prophylaxis or treatment available

Assignment of a biological agent to a particular hazard group has the effect of determining the containment measures that must be applied (eg group 2 BA must be handled at Containment Level 2). These containment measures are prescribed within the COSHH regulations

| List of agents/working conditions  | Risk  | Risk control measures  |
|--|---|--|
| <b>Biological agents in hazard groups 2, 3, 4</b>  | Biological agents within these three risk groups can affect the unborn child if the mother is infected during pregnancy. These may be transmitted across the placenta while the child is in the womb or during or after birth eg if the child is breast-fed. Examples of agents that might affect the child in this way are Hepatitis B and C, HIV, Herpes, syphilis, chickenpox and typhoid. For most workers the risk of infection is no higher than from living in the community but in certain occupations e.g. biomedical science, nursing, medicine, exposure is more likely. | <p>A risk assessment must be performed to take account of the nature of the biological agent, how the infection may be spread, how likely contact is and the control measures in place. These include notification of the hazard, the level of containment for working, protective equipment in use, hygiene measures in place and surveillance measures. The use of available vaccines is to be recommended, with due regard for contra-indications especially in the early stages of pregnancy.</p> <p>If there is a known or suspected risk of exposure to a highly infectious agent, then it is appropriate for the pregnant worker to avoid exposure altogether.</p> <p>The Trust must ensure immunity testing (Hep B, chickenpox, toxoplasmosis, parvovirus, rubella) for risk occupations, and job transfer or temporary leave during epidemics, if seronegative.</p> |
| <b>Biological agents known to cause abortion of the foetus, or physical and neurological damage. These agents are included in hazard</b> | Rubella (German Measles) and toxoplasmosis can harm the unborn child, as can some other biological agents e.g. cytomegalovirus  | <p>As above.</p> <p>Exposure to these biological agents should be avoided except if the pregnant woman is protected by her state of immunity.</p>  |

**groups 2, 3 and 4****4. CHEMICAL AGENTS** – Chemical agents may enter the human body through inhalation, ingestion, percutaneous penetration, absorption through the skin

| List of agents/working conditions                               | Risk   | Risk control measures  |
|---|--|--|
| <b>Substances labelled R40, R45, R46, R49, R61, R63 and R64</b> | <p>There are about 200 substances labelled with these risk phrases:</p> <p>R40: possible risk of irreversible effects<br/> R45: may cause cancer<br/> R46: may cause heritable genetic damage<br/> R49: may cause cancer by inhalation<br/> R61: may cause harm to the unborn child<br/> R63: possible risk of harm to the unborn child<br/> R64: may cause harm to breastfed babies</p> <p>The actual risk to health from these substances can only be determined following a risk assessment of a particular substance at the place of work – i.e. although the substances listed may have the potential to endanger health or safety, there may be no risk in practice, e.g. if exposure is below a level which might cause harm.</p> | <p>These substances all fall within the scope of COSHH. For work with hazardous substances, which include chemicals which may cause heritable genetic damage, employers are required to assess the health risks to workers arising from such work, and, where appropriate, prevent or control the risks. In carrying out assessments employers should make specific reference to women who are pregnant, or who have recently given birth.</p> <p>Prevention of exposure must be the first priority. If this is not possible, control measures should include good work planning and the use of Personal Protective Equipment (PPE)</p> <p>Substitution of harmful agents should be made, if possible.</p> |
| <b>Mercury and mercury derivatives</b>                          | <p>Exposure to organic mercury compounds can slow the growth of the unborn baby, disrupt the nervous system and cause the mother to be poisoned.</p> <p>Organic mercury is transferred from blood to milk which could pose a risk to offspring if a woman is highly exposed before and during pregnancy.</p>   | As above.  |
| <b>Antimitotic (cytotoxic) drugs</b>                            | <p>In the long term these drugs can cause damage to genetic information in sperm and eggs. Some can cause cancer.</p> <p>Absorption is by inhalation and through the skin.</p>   | <p>As above.</p> <p>Exposure must be avoided or reduced.</p>   |

|   |  |   |
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|   | <p>Assessment of the risk should look at the preparation of the drug for use (pharmacists, nurses), administration of the drug and disposal of waste (chemical and human)</p>  | <p>Those trying to conceive a child should be fully informed of the reproductive hazard.</p> <p>Exposure should be minimised by the use of PPE, equipment and good working practices. A pregnant worker preparing antineoplastic drug solutions should be transferred to another job</p>  |
| <p><b>Chemical agents of known and dangerous percutaneous absorption (ie that may be absorbed through the skin). This includes some pesticides.</b></p> | <p>Risks will depend on the way a substance is used as well as its hazardous properties. Absorption can result from localised contamination, eg a splash on the skin, or from exposure to high atmospheric concentrations of vapour.</p>   | <p>As above.</p>  |
| <p><b>Carbon monoxide</b></p>   | <p>Risks arise when engines or appliances are operated in enclosed areas.</p> <p>Pregnant women may have heightened susceptibility to the effects of exposure to carbon monoxide.</p> <p>Carbon monoxide can cross the placenta and result in the unborn child being starved of oxygen.</p> <p>There is no indication that breastfed babies suffer adverse effects from their mother's exposure to carbon monoxide, nor that the mother is significantly more sensitive to carbon monoxide after giving birth.</p> | <p>Eliminate the hazard by changing processes or equipment.</p> <p>Carry out a COSHH assessment.</p> <p>Chronic exposure of female workers should be avoided as even occasional exposure to CO could potentially be harmful.</p> <p>Pregnant workers should be informed about the dangers of exposure to carbon monoxide during smoking.</p>                                      |
| <p><b>Lead and lead derivatives – in so far as these agents are capable of being absorbed by the human organism</b></p>                                 | <p>Historically, exposure of pregnant women to lead is associated with miscarriages, but there is no indication that this is still relevant at current accepted standards for exposure. There are strong indications that exposure to lead, both intra-uterine and post-partum, leads to developmental problems, especially of the nervous system and the blood-forming organs.</p>  | <p>Women of reproductive capacity must be subject to a lower blood-lead suspension level than other workers to protect the individual in the eventuality of becoming pregnant.</p> <p>On confirmation of pregnancy, women who are subject to medical surveillance under the lead Directive will normally be suspended from the work which exposes them significantly to lead.</p> |

|   |   |  |
|---|---|--|
|   | <p>Lead is transferred from blood to milk. This may pose a risk to offspring if a woman is highly exposed before and during pregnancy.</p> <p><b>Indications of safe levels</b><br/>Exposure to lead cannot be measured in terms of airborne exposure levels, because of the different uptake routes. Biological monitoring e.g. tests for zinc protoporphyrin and levels of amino laevulinic acid in blood or urine, are the best exposure indicators.</p> <p><b>Risk assessment</b><br/>A risk of exposure of pregnant and breastfeeding women to lead is specifically prohibited under Article 6 of the Directive if the exposure might jeopardise safety or health. The risk assessment should be based upon both the individual's and the work group's historical record of blood lead levels or similar parameters, not on ambient air monitoring. Where these are within the range of unexposed people, it could be concluded that the health is not in jeopardy. However, PbB levels and other biological indicators of exposure may change over time without apparent relation to (airborne) exposure. There is therefore a possibility that a change in the monitoring indicator might occur without an increase in exposure. This could be interpreted as indicating that health had been jeopardised.</p> | <p>Because the elimination of lead from the body is a very slow process, fertile women should be informed of this. The employer must ensure that exposure to lead is reduced and that women have the option of a placement elsewhere until this has been done.</p> <p>In view of this, banning pregnant and breastfeeding women from all lead-containing areas may be the only acceptable option. This is particularly advisable if there is exposure to organic lead compounds.</p> |
| <p><b>Chemical agents and industrial processes in Annex 1 to Directive 90/394/EEC</b></p> | <p>These processes may give rise to carcinogenic risk. If there are carcinogens, these should be clearly stated</p>   | <p>Carry out COSHH assessments on individual substances</p> <p>Avoid exposure. If risks cannot be assessed and controlled, appropriate steps should be taken to inform and train employees</p>   |

## 6. WORKING CONDITIONS

| List of agents/working conditions      | Risk   | Risk control measures   |
|--|--|---|
| <p><b>Manual handling of loads</b></p> | <p>Manual handling of heavy loads is considered to pose a risk to pregnancy, such as risk of foetal injury and premature birth. The risk depends on strain i.e. the weight of the load, how you lift and how often it occurs during work time</p> <p>As the pregnancy progresses, a pregnant worker is at greater risk from manual handling injury. This is due to hormonal relaxation of the ligaments and the postural problems of advancing pregnancy</p> <p>There can also be risks for those who have recently given birth, e.g. after a Caesarean section there is likely to be temporary limitation on lifting and handling capability</p> <p>Breastfeeding mothers may experience dis-comfort due to increased breast size and sensitivity</p> | <p>The changes an employer should make will depend on the risks identified in the assessment and the tasks involved. It may be possible to alter the nature of the task so that risks from manual handling are reduced for all workers, including new and expectant mothers. The specific needs of the individual should be addressed and, if necessary, the amount of physical work they are involved in reduced</p> <p>Where there is a risk particularly of back injury to workers, Directive 90/269/EEC requires employers to:</p> <ul style="list-style-type: none"> <li>○ avoid the need for hazardous manual handling</li> <li>○ assess the risks from those operations that cannot be avoided; and</li> </ul> <p>take steps to reduce these risks to the lowest level</p> |
| <p><b>Movements and postures</b></p>   | <p>The nature and extent of any risks of injury or ill health resulting from movements or posture during and after pregnancy will depend on a number of factors, including:</p> <ul style="list-style-type: none"> <li>○ the nature, duration and frequency of tasks/movements</li> <li>○ the pace, intensity and variety of work</li> <li>○ patterns of working time and rest breaks</li> <li>○ ergonomic factors and the general working environment</li> <li>○ the suitability and adaptability of any work equipment involved.</li> </ul> <p>Hormonal changes in new and expectant mothers can affect the ligaments, increasing susceptibility to injury. Resulting injury may not be apparent until some time after the birth.</p>                | <p>The employer must ensure that workers who are pregnant, have recently given birth or are breastfeeding are not exposed to:</p> <ul style="list-style-type: none"> <li>○ manual handling involving risk of injury</li> <li>○ awkward movements and postures, especially in confined spaces</li> <li>○ work at heights</li> <li>○ where appropriate, work equipment and lifting gear should be introduced or adapted, storage arrangements altered, or workstations or job content redesigned</li> </ul> <p>To help maintain healthy circulation avoidance of the following is advisable:</p> <ul style="list-style-type: none"> <li>○ long periods spent handling loads</li> </ul>  |

|   |  |  |
|---|--|--|
|   | <p>Attention should also be given to women who may handle loads during the three months following a return to work</p> <p>Postural problems can arise at different stages of pregnancy, and on returning to work. These problems may increase as the pregnancy progresses, especially if the work involves awkward movements or long periods of standing or sitting in one position. These may contribute to the development of varicose veins as well as backache</p> <p>Backache in pregnancy may be associated with prolonged work and poor working posture, as well as excessive movement. A pregnant woman may need more work-space, or may need to adapt the way she works</p> <p>There may also be additional risks if a woman is returning to work after a childbirth with medical complications such as Caesarean birth or deep vein thrombosis</p> | <ul style="list-style-type: none"> <li>○ standing or sitting without regular exercise or movement</li> </ul>   |
| <p><b>Work with Display Screen Equipment (VDUs)</b></p>                             | <p>The levels of electromagnetic radiation which are likely to be generated by DSE are well below those set out in international recommendations for limiting risk to health and the Radiological Protection Board does not consider such levels pose a significant risk to health. The results of numerous scientific studies do not show any link between miscarriages or birth defects and working with VDUs. Research will continue</p> <p>There may also be ergonomic risks from working with VDUs (see Section 1 above)</p>  | <p>Pregnant women do not need to stop working with VDUs. However, to avoid problems caused by anxiety and stress, women should be given the opportunity to discuss their concerns with Occupational Health</p> |
| <p><b>Work equipment and Personal Protective Equipment (including clothing)</b></p> | <p>Work equipment and personal protective equipment is not generally designed for use by pregnant women. Pregnancy and breastfeeding involves physiological changes which may make existing work and protective equipment not only uncomfortable but also unsafe for use e.g. where equipment does not fit properly</p>  | <p>The risk assessment must take into account changes in risks as pregnancy progresses</p> <p>Managers may wish to consider alternative clothing for the duration of the pregnancy</p>                         |

### Appendix 3

#### Pregnancy Risk Assessment

(Also to be used for mothers who have given birth in last 6 months or for nursing mothers)

Name.....Dept .....Job Title.....Date.....

Expected Delivery Date.....

Review Date.....

| Does your work activity involve any of the following: | Yes /No | Details | Control Measures |
|---|---------|---------|------------------|
| Manual handling                                       |         |         |                  |
| Vibration   |         |         |                  |
| Noise   |         |         |                  |
| Radiation   |         |         |                  |
| Work with Biological Agents                           |         |         |                  |
| Work with Chemicals                                   |         |         |                  |

|   |  |  |  |
|---|--|--|--|
| Work in confined areas  |  |  |  |
| Movements and Posture – prolonged sitting, standing, bending, stretching etc. |  |  |  |
| Work Alone  |  |  |  |
| Shift work or night work  |  |  |  |
| Work in extremes of temperature   |  |  |  |
| Extensive Travelling  |  |  |  |
| Working at heights  |  |  |  |
| Work without good access to toilet and rest facilities                        |  |  |  |
| Use of Personal Protective equipment  |  |  |  |
| Work in a particularly violent environment                                    |  |  |  |