



New and Expectant Mothers Policy and Guidance

INTRODUCTION

Pregnancy should not be equated with ill health. It should be regarded as part of everyday life and its health and safety implications can be adequately addressed by normal health and safety management procedures. Many women work while they are pregnant, and many return to work while they are still breastfeeding. Some hazards in the workplace may affect the health and safety of new and expectant mothers and of their children.

TORBAY COUNCILS DUTIES

The law at present requires assessment of risks to all employees, including new and expectant mothers, and to do what is reasonably practicable to control those risks. Exposure limits for hazardous substances and other agents are set at levels which should not put a pregnant or breastfeeding worker, or her child, at risk. In some cases, there are lower exposure levels for pregnant workers, or for women of childbearing capacity, than for other workers.

The Management of Health and Safety at Work Regulations 1999 (SI No 3242) specifically require taking particular account of risks to new and expectant mothers when assessing risks in your work activity. If you cannot avoid a risk by other means, you will need to make changes to working conditions or hours, offer suitable alternative work, or, if that is not possible, give the worker paid leave for as long as necessary to protect her health or safety or that of her child. The Regulations state that the risk assessment has to be done when the Council has been notified in writing that a worker is pregnant. They also provide for the Council to request in writing a certificate from a registered medical practitioner, or a registered midwife, confirming the pregnancy.

This guidance sets out the known risks to new and expectant mothers and gives advice on what is needed to comply with the law. The notes to **Appendix 2** sets out some of the features of pregnancy which may be taken into account in considering arrangements for pregnant and breastfeeding workers.

The phrase 'new or expectant mother' means a worker who is pregnant, who has given birth within the previous six months, or who is breastfeeding. 'Given birth' is defined in the new Regulations as 'delivered a living child or, after 24 weeks of pregnancy, a stillborn child'.

WHAT NEEDS TO BE DONE?

General risk assessment

As part of their general workplace risk assessments, managers need to ensure that they have assessed the workplace risks that are likely to cause harm to new and expectant mothers or their unborn child. The checklist at **Appendix 1** will help you to identify problem areas. All

employees of childbearing capacity must be informed of the risks and what is being done to reduce and control the risks.

Individual risk assessment

When the Council has been notified in writing (or it has become obvious) that an employee is a new or expectant mother, managers must ensure that an individual risk assessment is carried out and recorded. This will involve a discussion with the employee concerned. The checklist at **Appendix 2** will help you to identify problem areas.

When the hazards likely to affect employees have been identified, they must be assessed and control measures implemented. Checks then need to be made to ensure that the control measures are in place and working. Advice on the risk assessment process is contained in the risk assessment section of the health and safety manual. An electronic version of the manual can be found on the health and safety intranet site. The employee being assessed must be informed of the control measure being taken. Where the control measures to be implemented affect other employees, they must be consulted and kept informed.

If there is still a significant work-related risk to the safety or health of a new or expectant mother, which goes beyond the level of risk to be expected outside the workplace, then you must take the following steps to remove her from the risk.

- Step 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
- Step 2:* offer her suitable alternative work if any is available; or if that is not feasible, you must
- Step 3:* suspend her from work (give her paid leave) for as long as necessary to protect her safety or health or that of her child.

These actions are only necessary where as the result of a risk assessment there is genuine concern. If there is any doubt, managers should seek professional advice from Human Resources or the Health and Safety team on what the risks are and whether they arise from work before offering alternative employment or paid leave.

REVIEWING RISK ASSESSMENTS

Managers will need to keep risk assessments for new or expectant mothers under review. Although any hazards are likely to remain constant, the possibility of damage to the foetus as a result of a hazard will vary at different stages of pregnancy. There are different risks to consider for workers who are breastfeeding.

Managers need to ensure that workers who are breastfeeding are not exposed to risks that could damage health or safety for as long as they continue to breastfeed. The new Regulations do not put a time limit on breastfeeding. While many women may stop after the first six weeks, the Department of Health recommends exclusive breastfeeding for the first four to six months. After that time, breastfeeding can be continued with advantage, together with the safe introduction of solid food. It is for women themselves to decide for how long they wish to breastfeed, depending on individual circumstances. Although there is no legal requirement to do so, managers should consider providing a safe and healthy environment for workers who are breastfeeding to express and store milk. The Workplace (Health, Safety and

Welfare) Regulations 1992 require suitable facilities to be provided for workers who are pregnant or breastfeeding to rest.

Where employees continue to breastfeed for many months after birth, you will want to review the risks regularly. Where risks are identified, managers will need to continue to avoid exposure to the risk. The main concern is exposure to lead, which can enter breast milk. Where managers are controlling risks in line with regulations, it is unlikely that employees who continue breastfeeding will be exposed to risks which give rise to the need for them to be offered alternative work or given paid leave. If you have any doubts, you may wish to call on professional advice from occupational health specialists (Human Resources).

NIGHT WORK


Managers need to give special consideration to new and expectant mothers who work at night. The new Regulations require that if an employee who is a new or expectant mother works at night, and has a medical certificate stating that night work could affect her health or safety, the employer must either:

- Step 1:* offer her suitable alternative daytime work if any is available; or if that is not reasonable
- Step 2:* suspend her from work (give her paid leave) for as long as is necessary to protect her health or safety.

Managers are required to take these steps only if the risk arises from work.

NB experts are not at present aware of any risks to pregnant or breastfeeding workers or their children from working at night. If an employee states that she cannot work nights, and if there is a question as to whether the cause arises from her work, you may wish to seek advice from occupational health specialists (Human Resources).

Appendix 1

	NEW AND EXPECTANT MOTHERS GENERAL RISK ASSESSMENT CHECKLIST			
FACTORS TO CONSIDER	YES	NO	N/A	COMMENTS
1. Does the work involve night work or shift work?				
2. Does the work involve any physical shocks or vibration?				
3. Does the work involve manual handling?				
4. Does the work involve exposure to ionising radiation?				
5. Does the work involve exposure to non-ionising electromagnetic radiation? (i.e. radio frequency radiation)				
6. Does the work involve temperature extremes? (hot, cold etc).				
7. Does the work involve standing for prolonged periods?				
8. Does the work involve working at height?				
9. Does the work involve working in confined spaces?				
10. Does the work involve the use of PPE that may become restrictive during pregnancy?				
11. Are all workstation fully adjustable for comfort?				
12. Are additional items available to make the workstation comfortable? (footrests, wrist-rests, document holders etc)				
13. Does the work involve excessive physical exertion or applied pressure?				
14. Does the work involve excessive mental exertion or pressure?				
15. Does the work involve working in specialist atmospheres or breathing compressed gasses? (hyperbaric chambers, diving etc)				
16. Does the work involve possible exposure to biological hazards? (Rubella, Hepatitis, HIV, MRSA, Chicken-pox, TB etc)				
17. Does the employees work involve a possible exposure to chemical agents? (hazardous substances. Particularly those with risk phrases R40, R45, R46, R47, R61, R63, R64)				
18. Does the work involve a possible exposure to mercury or mercury derivatives?				
19. Does the work involve possible exposure to Antimitotic (cytotoxic) drugs?				
20. Does the work or environment involve possible exposure to Carbon Monoxide?				
21. Does the work involve possible exposure to lead?				
22. Have you made all female employees of child-bearing capacity aware of the potential risks to them (or their unborn child) from the work of your department?				
23. Have you made all female employees of child-bearing capacity aware of what you are doing, or intend to do, to make sure that they are not exposed to risks that could cause them harm?				
24. Have you informed employee representatives of the hazards associated with your work and the control measure for preventing exposure to risks likely to affect new or expectant mothers?				

Consider	Comments
<p>25. What hazards to new or expectant mothers are there in your workplace?</p>	
<p>26. How are employees likely to be injured? (i.e. Inhalation, Ingestion, Injection, Skin contact etc)</p>	
<p>27. What are the most suitable control measures to use? (in the light of current knowledge and suitable for the circumstances)</p>	
<p>28. How will you ensure that the control measures you have identified are implemented?</p>	
<p>29. How will you ensure that the control measures you have implemented are working?</p>	

Workplace

Manager / Responsible person

Date

Assessor

The information from this checklist should be entered onto the Torbay Council risk assessment form where you can determine the level of risk, prioritise and make an action plan to implement the control measures.

Notes on filling in the new and expectant mothers general risk assessment checklist

1. Does the work involve night work or shift work?

The Management of Health and Safety at Work Regulations require that if an employee who is a new or expectant mother works at night, and has a medical certificate stating that night work could affect her health or safety, the employer must either:

- Step 1:* offer her suitable alternative daytime work if any is available; or if that is not reasonable
- Step 2:* suspend her from work (give her paid leave) for as long as is necessary to protect her health or safety.

Managers are required to take these steps only if the risk arises from work.

NB experts are not at present aware of any risks to pregnant or breastfeeding workers or their children from working at night *per se*. If an employee states that she cannot work nights, and if there is a question as to whether the cause arises from her work, you may wish to seek advice from occupational health specialists (Human Resources).

2. Does the work involve any physical shocks or vibration?

Regular exposure to shocks, low frequency vibration (i.e. driving or riding in off-road vehicles) or excessive movement, may increase the risk of a miscarriage. Long-term exposure to vibration does not cause foetal abnormalities but often occurs with heavy physical work, so there may be an increased risk of premature birth or low birth weight. Pregnant workers and those who have recently given birth are advised to avoid work likely to involve uncomfortable whole body vibration, especially at low frequencies, or where the abdomen is exposed to shocks or jolts. Breastfeeding workers are at no greater risk than other workers.

3. Does the work involve manual handling?

Pregnant workers are especially at risk from manual handling injury – for example hormonal changes can affect the ligaments, increasing susceptibility to injury; and postural problems may increase as the pregnancy progresses. There can also be risks for those who have recently given birth, for example after a caesarean section there is likely to be a temporary limitation on lifting and handling capability. There is no evidence to suggest that breastfeeding mothers are at greater risk from manual handling injury than any other workers.

The changes that should be made will depend on the risks identified in the assessment and the circumstances of the work. For example it may be possible to alter the nature of the task so that risks from manual handling are reduced for all workers including new or expectant mothers. Or it may be necessary to address the specific needs of the worker and reduce the amount of physical work, or provide aids for her in future to reduce the risks she faces.

4. Does the work involve exposure to ionising radiation?

Significant exposure to ionising radiation can be harmful to the foetus and this is recognised by placing limits on the external radiation dose to the abdomen of the expectant mother for the declared term of her pregnancy. If a nursing mother works with radioactive liquids or dusts, these can cause exposure of the child, particularly through contamination of the mother's skin. Also, there may be a risk to the foetus from significant amounts of radioactive contamination breathed in or ingested by the mother and transferred across the placenta.

Work procedures should be designed to keep exposure of the pregnant employee as low as reasonably practicable and certainly below the statutory dose limit for pregnancy. 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 such contamination is high. The working conditions should be such as to make it unlikely that a pregnant woman might receive high accidental exposures to radioactive contamination.

5. Does the work involve exposure to non-ionising electromagnetic radiation?

Optical radiation: Pregnant or breastfeeding mothers are at no greater risk than other workers.

Electromagnetic fields and waves (eg radio-frequency radiation): Exposure to electric and magnetic fields within current recommendations is not known to cause harm to the foetus or the mother. However, extreme over-exposure to radio-frequency radiation could cause harm by raising body temperature.

Exposure to electric and magnetic fields should not exceed the restrictions on human exposure published by the National Radiological Protection Board

In the light of the scientific evidence pregnant women do not need to stop work with VDUs (DSE). However, to avoid problems caused by stress and anxiety, women who are pregnant or planning children and worried about working with VDUs should be given the opportunity to discuss their concerns with someone adequately informed of current authoritative scientific information and advice.

6. Does the work involve temperature extremes?

When 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. Breastfeeding may be impaired by heat dehydration. No specific problems are known to arise from working in extreme cold, although clearly for other health and safety reasons, warm clothing should be provided.

7. Does the work involve standing for prolonged periods?

Fatigue from standing and other physical work has long been associated with miscarriage, premature birth and low birth weight.

8. Does the work involve work at height?

Pregnant workers may experience problems in working at heights (i.e. access by ladders, platforms etc)

9. Does the work involve working in confined spaces?

Access and restricted oxygen supplies, carbon monoxide etc should be taken into account.

10. Does the work involve the use of Personal Protective Equipment?

PPE can restrict movements that may already be impaired by pregnancy. Pregnant employees are also susceptible to becoming overheated and dehydrated.

11. Are all workstations fully adjustable for comfort?

Working in tightly fitting workspaces or with workstations that do not adjust sufficiently to take account of increased abdominal size, particularly during the later stages of pregnancy can be problematic. This may lead to strain or sprain injuries. Dexterity, agility, co-ordination, speed of movement, reach and balance may also be impaired, and an increased risk of accidents may need to be considered.

12. Are additional items available to make the workstation comfortable?

The changes of individual physical characteristics may mean that additional equipment may need to be provided as a result of a review of the DSE risk assessment.

13. Does the work involve excessive physical exertion or applied pressure?

Excessive physical pressure may cause stress and can give rise to anxiety and raised blood pressure.

14. Does the work involve excessive mental exertion or pressure?

Excessive mental pressure may cause stress and can give rise to anxiety and raised blood pressure.

15. Does the work involve working in specialist atmospheres or breathing compressed gasses?

Compressed air: People who work in compressed air are at risk of developing the bends. This is due to free bubbles of gas in the circulation. It is not clear whether pregnant women are more at risk of the bends but potentially such gas bubbles could seriously harm the foetus. For those who have recently given birth there is a small increase in the risk of the bends. There is no physiological reason why a breastfeeding mother should not work in compressed air (although there would be obvious practical difficulties). Pregnant workers should not work in compressed air.

Diving: Pregnant workers are advised not to dive *at all* during pregnancy due to the possible effects of exposure to hyperbaric environment on the foetus. There is no evidence to suggest that breastfeeding and diving are incompatible. Pregnancy is viewed as a medical reason not to dive. The diving regulations include the provision that if a diver knows of any medical reason why they should not dive, they should disclose it to the dive supervisor and/or refrain from diving. The diving regulations also require all divers to undertake an annual medical examination. In the HSE guidance leaflet on the medical examination of divers, doctors are advised that pregnant workers should not dive.

16. Does the work involve possible exposure to biological hazards?

(Rubella, Hepatitis, HIV, MRSA, Chicken-pox, TB etc)

Many biological agents can affect the unborn child if the mother is infected during pregnancy. These may be transmitted through the placenta while the child is in the womb, or during or after birth, for example through breastfeeding or through close physical contact between mother and child. Examples of agents where the child might be infected in one of these ways are hepatitis B, HIV (the AIDS virus), herpes, TB, syphilis, chickenpox and typhoid. For most workers, the risk of infection is not higher at work than from living in the community; but in certain occupations, exposure to infections is more likely, for example laboratory workers, health care, people looking after animals and dealing with animal products.

Rubella (German measles) and toxoplasma can harm the foetus, as can some other biological agents, for example cytomegalovirus (an infection common in the community) and chlamydia in sheep. The risks of infection are generally no higher for workers than others, except in those exposed occupations like those listed above.

The risk assessment must take account first of the nature of the biological agent, how infection is spread, how likely contact is, and what control measures there are. These may include physical containment, hygiene measures, use of available vaccines if exposure justifies this. If there is a known high risk of exposure to a highly infectious agent, then it will be appropriate for the pregnant worker to avoid exposure altogether.

17. Does the employees work involve possible exposure to chemical agents?

There are about 200 substances labelled with these risk phrases:

R40: possible risk of irreversible effects

R45: may cause cancer

R46: may cause heritable genetic damage

R47: may cause birth defects (recently replaced with R61, R63, R64)

R61: may cause harm to the unborn child

R63: possible risk of harm to the unborn child

R64: may cause harm to breastfed babies

The actual risk to health of these substances can only be determined following a risk assessment of a particular substance at the place of work - ie although the substances listed may have the potential to endanger health or safety, there may be no risk in practice, for example if exposure is below a level which might cause harm.

With the exception of lead (see below) and asbestos these substances all fall within the scope of COSHH. For work with hazardous substances, which include chemicals that 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 have regard for women who are pregnant, or who have recently given birth

18. Does the work involve possible exposure to mercury or mercury derivatives?

Organic mercury compounds could have adverse effects on the foetus. Animal studies and human observations have demonstrated that exposure to these forms of mercury during pregnancy can slow the growth of the unborn baby, disrupt the nervous system, and cause the mother to be poisoned. There is no clear evidence of adverse effects on developing foetus from studies of humans exposed to mercury and inorganic mercury compounds. There is no indication that mothers are more likely to suffer greater adverse effects from mercury and its compounds after the birth of the baby. Potential for health effects in children from exposure of mother to mercury and mercury compounds is uncertain. Given the fact that it is uncertain, managers should act cautiously.

19. Does the work involve possible exposure to Antimytotic (cytotoxic) drugs?

In the long term these drugs cause damage to genetic information in sperm and eggs. Some can cause cancer. Absorption is by inhalation or through the skin. There is no known threshold limit and exposure must be reduced to as low a level as is reasonably practicable. Assessment of the risk should look particularly at preparation of the drug for use (pharmacists, nurses), administration of the drug, and disposal of waste (chemical and

human). Those who are trying to conceive a child or are pregnant or breastfeeding should be fully informed of the reproductive hazard.

20. Does the work or environment involve possible exposure to carbon monoxide?

Carbon monoxide readily crosses the placenta and can result in the foetus being starved of oxygen. Data on the effects of exposure to carbon monoxide on pregnant women are limited but there is evidence of adverse effects on the foetus. Both the level and duration of maternal exposure are important factors in the effect on the foetus.

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. Pregnant women may have heightened susceptibility to the effects of exposure to carbon monoxide.

21. Does the work or environment involve possible exposure to lead?

Occupational exposure to lead in the early 1900s, when exposure was poorly controlled, was associated with high frequencies of spontaneous abortion, stillbirth and infertility. More recent studies draw attention to an association between low-level lead exposure before the baby is born from environmental sources and mild decreases in intellectual performance in childhood.

The effects on breastfed babies of their mothers' lead exposure have not been studied. However, lead can enter breast milk. Since it is thought that the nervous system of young children is particularly sensitive to the toxic effects of lead, the exposure of breastfeeding mothers to lead should be viewed with concern and managers should act cautiously.

22. Have you made all female employees of child-bearing capacity aware of the potential risks to them (or their unborn child) from the work of your department?

This is a legal requirement.

23. Have you made all female employees of child-bearing capacity aware of what you are doing, or intend to do, to make sure that they are not exposed to risks that could cause them harm?

This is a legal requirement

24. Have you informed employee representatives of the hazards associated with your work and the control measure for preventing exposure to risks likely to affect new or expectant mothers?

This is a legal requirement

Other items to consider

25. What hazards to new and expectant mothers are there in your workplace?

List the hazards, then, when you have completed the checklist, risk assess each one on the risk assessment form.

26. How are employees likely to be injured?

You need to think about how the new or expectant mother, or the unborn child, can be injured i.e. (Inhalation, Ingestion, Injection, Skin contact, Proximity, Other etc)

27. What are the most suitable control measures to use?


You need to consider the most suitable control measure to use in the circumstances. This has to be considered “in the light of current knowledge” and the information from question 26.

28. How will you ensure that the control measures that you have identified are implemented?

You need to consider how the control measures identified in question 27 are going to be implemented in your workplace including consultation with employees and their representatives.

29. How will you ensure that the control measures that you have implemented are working?

You need to consider how the implementation of the control measures is working such as through inspections or monitoring, health surveillance etc

	NEW AND EXPECTANT MOTHERS INDIVIDUAL RISK ASSESSMENT CHECKLIST			
FACTORS TO CONSIDER	YES	NO	N/A	COMMENTS
1. Does the employee breast-feed, or intend to breast-feed?				
2. Is the employee involved in night work or shift work?				
3. Does the employee have a medical certificate stating that night work or shift work could affect her health or safety?				
4. Does the employees work involve any physical shocks or vibration?				
5. Does the employees work involve manual handling?				
6. Does the employees work involve exposure to ionising radiation?				
7. Does the employees work involve exposure to non-ionising electromagnetic radiation? (i.e. radio frequency radiation)				
8. Does the employees work involve temperature extremes? (hot, cold etc).				
9. Does the employees work involve standing for prolonged periods?				
10. Does the employees work involve working at height?				
11. Does the employees work involve gaining access to confined spaces?				
12. Does the work involve the use of Personal Protective Equipment?				
13. Is the employees workstation fully adjustable for comfort?				
14. Does the employees work involve excessive physical exertion or applied pressure?				
15. Does the employees work involve excessive mental exertion or pressure?				
16. Does the employees work involve work in specialist atmospheres or breathing compressed gasses? (hyperbaric, diving etc)				
17. Does the employees work involve possible exposure to biological hazards? (Rubella, Hepatitis, HIV, Chicken-pox, TB etc)				
18. Does the employees work involve a possible exposure to chemical agents?				
19. Does the employees work involve a possible exposure to mercury or mercury derivatives?				
20. Does the employees work involve possible exposure to Antimitotic (cytotoxic) drugs?				
21. Does the employees work or environment involve possible exposure to Carbon Monoxide?				
22. Does the employees work involve possible exposure to lead?				
23. Does the employees suffer from medical conditions that are like to effect her ability to carry out her usual work?				
24. Have you made the employee aware of the potential risks to them (or their unborn child) from arising out of the work of your department?				
25. Have you made the employee aware of what you are going to do, or intend to do, to make sure that they are not exposed to risks that could cause them (or their unborn child) harm?				

Consider	Comments
26. What hazards to the employee are there in your workplace?	
27. How is the employee likely to be injured? (i.e. Inhalation, Ingestion, Injection, Skin contact etc)	
28. What are the most suitable control measures to use? (in the light of current knowledge and suitable for the circumstances)	
29. Will the control measures identified affect other workers?	
30. How will you ensure that the control measures you have identified are implemented?	
31. How will you ensure that the control measures you have implemented are working?	

Employee

Workplace

Manager / Responsible person

DateAssessor

The information from this checklist should be entered onto the Torbay Council risk assessment form where you can determine the level of risk, prioritise and make an action plan to implement the control measures.

Notes on filling in the new and expectant mothers general risk assessment checklist

1. Does the employee breast-feed, or intend to breast-feed?

You need to know this because the mother's milk can be affected which in turn can affect the child. You also need to make sure that you are kept informed of any changes in circumstances

2. Is the employee involved in night work or shift work?

See notes to question 3

3. Does the employee have a medical certificate stating that night work or shift work could affect her health or safety?

The Management of Health and Safety at Work Regulations require that if an employee who is a new or expectant mother works at night, and has a medical certificate stating that night work could affect her health or safety, the employer must either:

Step 1: offer her suitable alternative daytime work if any is available; or if that is not reasonable

Step 2: suspend her from work (give her paid leave) for as long as is necessary to protect her health or safety.

Managers are required to take these steps only if the risk arises from work.

NB experts are not at present aware of any risks to pregnant or breastfeeding workers or their children from working at night. If an employee states that she cannot work nights, and if there is a question as to whether the cause arises from her work, you may wish to seek advice from occupational health specialists (Human Resources).

4. Does the employees work involve any physical shocks or vibration?

Regular exposure to shocks, low frequency vibration (i.e. driving or riding in off-road vehicles) or excessive movement, may increase the risk of a miscarriage. Long-term exposure to vibration does not cause foetal abnormalities but often occurs with heavy physical work, so there may be an increased risk of premature birth or low birth weight. Pregnant workers and those who have recently given birth are advised to avoid work likely to involve uncomfortable whole body vibration, especially at low frequencies, or where the abdomen is exposed to shocks or jolts. Breastfeeding workers are at no greater risk than other workers.

5. Does the employees work involve manual handling?

Pregnant workers are especially at risk from manual handling injury – for example hormonal changes can affect the ligaments, increasing susceptibility to injury; and postural problems may increase as the pregnancy progresses. There can also be risks for those who have recently given birth, for example after a caesarean section there is likely to be a temporary limitation on lifting and handling capability. There is no evidence to suggest that breastfeeding mothers are at greater risk from manual handling injury than any other workers.

The changes that should be made will depend on the risks identified in the assessment and the circumstances of the work. For example it may be possible to alter the nature of the task so that risks from manual handling are reduced for all workers including new or expectant

mothers. Or it may be necessary to address the specific needs of the worker and reduce the amount of physical work, or provide aids for her in future to reduce the risks she faces.

6. Does the employees work involve exposure to ionising radiation?

Significant exposure to ionising radiation can be harmful to the foetus and this is recognised by placing limits on the external radiation dose to the abdomen of the expectant mother for the declared term of her pregnancy. If a nursing mother works with radioactive liquids or dusts, these can cause exposure of the child, particularly through contamination of the mother's skin. Also, there may be a risk to the foetus from significant amounts of radioactive contamination breathed in or ingested by the mother and transferred across the placenta.

Work procedures should be designed to keep exposure of the pregnant employee as low as reasonably practicable and certainly below the statutory dose limit for pregnancy. 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 such contamination is high. The working conditions should be such as to make it unlikely that a pregnant woman might receive high accidental exposures to radioactive contamination.

7. Does the employees work involve exposure to non-ionising electromagnetic radiation?

Optical radiation: Pregnant or breastfeeding mothers are at no greater risk than other workers.

Electromagnetic fields and waves (eg radio-frequency radiation): Exposure to electric and magnetic fields within current recommendations is not known to cause harm to the foetus or the mother. However, extreme over-exposure to radio-frequency radiation could cause harm by raising body temperature.

Exposure to electric and magnetic fields should not exceed the restrictions on human exposure published by the National Radiological Protection Board

In the light of the scientific evidence pregnant women do not need to stop work with VDUs (DSE). However, to avoid problems caused by stress and anxiety, women who are pregnant or planning children and worried about working with VDUs should be given the opportunity to discuss their concerns with someone adequately informed of current authoritative scientific information and advice.

8. Does the employees work involve temperature extremes?

Pregnant women may 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. Breastfeeding may be impaired by heat dehydration. No specific problems are known to arise from working in extreme cold, although clearly for other health and safety reasons, warm clothing should be provided.

9. Does the employees work involve standing for prolonged periods?

Fatigue from standing and other physical work has long been associated with miscarriage, premature birth and low birth weight. Varicose veins and circulatory problems may result from standing for prolonged periods

10. Does the employees work involve work at height?

Pregnant workers may experience problems in working at heights (i.e. access by ladders, platforms etc)

11. Does the employees work involve working in confined spaces?

Access and restricted oxygen supplies, carbon monoxide etc should be taken into account.

12. Does the employees work involve the use of Personal Protective Equipment?

PPE can restrict movements that may already be impaired by pregnancy. Pregnant employees are also susceptible to becoming overheated and dehydrated.

13. Is the employees workstation fully adjustable for comfort?

Working in tightly fitting workspaces or with workstations that do not adjust sufficiently to take account of increased abdominal size, particularly during the later stages of pregnancy can be problematic. This may lead to strain or sprain injuries. Dexterity, agility, co-ordination, speed of movement, reach and balance may also be impaired, and an increased risk of accidents may need to be considered.

14. Does the employees work involve excessive physical exertion or applied pressure?

Excessive physical pressure may cause stress and can give rise to anxiety and raised blood pressure.

15. Does the employees work involve excessive mental exertion or pressure?

Excessive mental pressure may cause stress and can give rise to anxiety and raised blood pressure.

16. Does the employees work involve work in specialist atmospheres or breathing compressed gasses?

Compressed air: People who work in compressed air are at risk of developing the bends. This is due to free bubbles of gas in the circulation. It is not clear whether pregnant women are more at risk of the bends but potentially such gas bubbles could seriously harm the foetus. For those who have recently given birth there is a small increase in the risk of the bends. There is no physiological reason why a breastfeeding mother should not work in compressed air (although there would be obvious practical difficulties). Pregnant workers should not work in compressed air.

Diving: Pregnant workers are advised not to dive *at all* during pregnancy due to the possible effects of exposure to hyperbaric environment on the foetus. There is no evidence to suggest that breastfeeding and diving are incompatible. Pregnancy is viewed as a medical reason not to dive. The diving regulations include the provision that if a diver knows of any medical reason why they should not dive, they should disclose it to the dive supervisor and/or refrain from diving. The diving regulations also require all divers to undertake an annual medical examination. In the HSE guidance leaflet on the medical examination of divers, doctors are advised that pregnant workers should not dive.

17. Does the employees work involve possible exposure to biological hazards?

Many biological agents can affect the unborn child if the mother is infected during pregnancy. These may be transmitted through the placenta while the child is in the womb, or during or after birth, for example through breastfeeding or through close physical contact between mother and child. Examples of agents where the child might be infected in one of

these ways are hepatitis B, HIV (the AIDS virus), herpes, TB, syphilis, chickenpox and typhoid. For most workers, the risk of infection is not higher at work than from living in the community; but in certain occupations, exposure to infections is more likely, for example laboratory workers, health care, people looking after animals and dealing with animal products.

Rubella (German measles) and toxoplasma can harm the foetus, as can some other biological agents, for example cytomegalovirus (an infection common in the community) and chlamydia in sheep. The risks of infection are generally no higher for workers than others, except in those exposed occupations like those listed above.

The risk assessment must take account first of the nature of the biological agent, how infection is spread, how likely contact is, and what control measures there are. These may include physical containment, hygiene measures, use of available vaccines if exposure justifies this. If there is a known high risk of exposure to a highly infectious agent, then it will be appropriate for the pregnant worker to avoid exposure altogether.

18. Does the employees work involve possible exposure to chemical agents?

There are about 200 substances labelled with these risk phrases:

R40: possible risk of irreversible effects

R45: may cause cancer

R46: may cause heritable genetic damage

R47: may cause birth defects

R61: may cause harm to the unborn child

R63: possible risk of harm to the unborn child

R64: may cause harm to breastfed babies

The actual risk to health of these substances can only be determined following a risk assessment of a particular substance at the place of work - ie although the substances listed may have the potential to endanger health or safety, there may be no risk in practice, for example if exposure is below a level which might cause harm.

With the exception of lead (see below) and asbestos these substances all fall within the scope of COSHH. For work with hazardous substances, which include chemicals that 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 have regard for women who are pregnant, or who have recently given birth

19. Does the employees work involve possible exposure to mercury or mercury derivatives?

Organic mercury compounds could have adverse effects on the foetus. Animal studies and human observations have demonstrated that exposure to these forms of mercury during pregnancy can slow the growth of the unborn baby, disrupt the nervous system, and cause the mother to be poisoned. There is no clear evidence of adverse effects on developing foetus from studies of humans exposed to mercury and inorganic mercury compounds. There is no indication that mothers are more likely to suffer greater adverse effects from mercury and its compounds after the birth of the baby. Potential for health effects in children from exposure of mother to mercury and mercury compounds is uncertain. Given the fact that it is uncertain, managers should act cautiously.

20. Does the employees work involve possible exposure to Antimytotic (cytotoxic) drugs?

In the long term these drugs cause damage to genetic information in sperm and eggs. Some can cause cancer. Absorption is by inhalation or through the skin. There is no known threshold limit and exposure must be reduced to as low a level as is reasonably practicable. Assessment of the risk should look particularly at preparation of the drug for use (pharmacists, nurses), administration of the drug, and disposal of waste (chemical and human). Those who are trying to conceive a child or are pregnant or breastfeeding should be fully informed of the reproductive hazard.

21. Does the employees work or environment involve possible exposure to carbon monoxide?

Carbon monoxide readily crosses the placenta and can result in the foetus being starved of oxygen. Data on the effects of exposure to carbon monoxide on pregnant women are limited but there is evidence of adverse effects on the foetus. Both the level and duration of maternal exposure are important factors in the effect on the foetus.

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. Pregnant women may have heightened susceptibility to the effects of exposure to carbon monoxide.

22. Does the employees work or environment involve possible exposure to lead?

Occupational exposure to lead in the early 1900s, when exposure was poorly controlled, was associated with high frequencies of spontaneous abortion, stillbirth and infertility. More recent studies draw attention to an association between low-level lead exposure before the baby is born from environmental sources and mild decreases in intellectual performance in childhood.

The effects on breastfed babies of their mothers' lead exposure have not been studied. However, lead can enter breast milk. Since it is thought that the nervous system of young children is particularly sensitive to the toxic effects of lead, the exposure of breastfeeding mothers to lead should be viewed with concern and managers should act cautiously.

23. Does the employee suffer from medical conditions that are like to effect her ability to carry out her usual work?

Aspects of pregnancy

Morning sickness

(see below)

Backache

Varicose veins

Haemorrhoids

Frequent visits to toilet

Increasing size

Tiredness

Balance

Factors in work

Early shift work

Exposure to nauseating smells

Standing/manual handling/posture

Standing/sitting

Working in hot conditions

Difficulty in leaving job/site of work

Use of protective clothing

Work in confined areas

Manual handling

Overtime

Evening work

Problems of working on slippery, wet surfaces

Comfort

Problems of working in tightly fitting workspaces

Dexterity, agility, co-ordination, speed of movement, reach, may be impaired because of increasing size

Cramp- sitting for long periods, wearing high shoes and sitting cross-legged can exacerbate symptoms.

Swollen ankles/feet and varicose veins- periods of standing should be minimised and those affected should rest with their feet raised.

Morning sickness- some women may experience nausea throughout the day.

Backache- can normally be alleviated by a sensible combination of rest and light exercise such as walking. Lifting of heavy or awkward loads should be avoided at all stages of the pregnancy.

Carpal tunnel syndrome- affects the lower wrists and hands. Caused by swelling around the carpal tunnel, where the nerves, blood vessels and tendons pass through a narrow opening at the wrist, giving rise to numbness and tingling in the hands, which can become stiff and swollen. Symptoms are often worse in the morning.

Symphysis pubis dysfunction- causing severe pain at the front and back of the pelvic area. Using the stairs, lifting and walking become difficult.

24. Have you made the employee aware of the potential risks to them (or their unborn child) arising out of the work of your department?

This is a legal requirement.

25. Have you made the employee aware of what you are doing, or intend to do, to make sure that they are not exposed to risks that could cause them (or their unborn child) harm?

This is a legal requirement

Other items to consider

26. What hazards to the employee being assessed are there in your workplace?

List the hazards, then, when you have completed the checklist, risk assess each one on the risk assessment form.

27. How are employees likely to be injured?

You need to think about how the new or expectant mother, or the unborn child, can be injured i.e. (Inhalation, Ingestion, Injection, Skin contact, Proximity, Impact, Other etc)

28. What are the most suitable control measures to use?

You need to consider the most suitable control measure to use in the circumstances. This has to be considered “in the light of current knowledge” and the information from question 27.

29. Will the control measures identified affect other workers?

If the control measures identified affect other workers, they need to be informed.

30. How will you ensure that the control measures that you have identified are implemented?

You need to consider how the control measures identified in question 28 are going to be implemented in your workplace including consultation with employees and their representatives.

31. How will you ensure that the control measures that you have implemented are working?

You need to consider how the implementation of the control measures is working such as through inspections or monitoring, health surveillance etc.