

**Pregnant Persons, New & Breastfeeding Parent Hazard Guidance and Risk Assessment Policy Arrangements**

**HSA-10143**

Swansea University

Corporate Responsibility

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Amendment Record

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1. Scope

These policy arrangements outline a range of hazards for consideration during the risk assessment process for pregnant people, new parents or breastfeeding individuals. They define roles and responsibilities and describe the risk assessment process to minimise risks and meet legislative requirements.

2. Introduction

Working conditions can affect the health, safety and welfare of pregnant and breastfeeding individuals and their child. Sometimes, the relationship between the different factors involved determines the type of risk, rather than one factor on its own.

Since pregnancy is a dynamic state involving continuous changes and developments, the same working conditions may raise different health and safety issues for different individuals at different stages of pregnancy, and again on returning to work after childbirth or whilst breastfeeding. Some of these issues are predictable and apply generally. Others will depend on individual circumstances and personal medical history.

As the first trimester of pregnancy is the most vulnerable period in terms of causing permanent damage to the unborn child, it is essential that appropriate protective measures are implemented as soon as possible.

This may include offering a temporary variation in duties, working/ study hours or working/ study conditions. These policy arrangements provide information on the specific hazards associated with work/ study that may be relevant to a new parent, pregnant or breastfeeding individual and the actions required to assess and mitigate the risks involved. The guidance notes provide a hazard checklist that should be used to identify relevant and specific hazards for an individual and will support the production of a risk assessment.

It is important to remember that pregnancy is a part of everyday life and should not be regarded as ill health. It is possible to address the majority of health and safety issues relating to pregnant and breastfeeding individuals by good health and safety management. The University is committed to assessing any risks to health and safety and possible adverse effects on pregnant or breastfeeding individuals and their children, including the unborn, and taking appropriate action.

3. Definitions

**Pregnant person/ individual** – someone expecting a baby/ the state of carrying a developing foetus in the body.

**New parent** - someone who has recently given birth within the previous six months.

**Breastfeeding individual** – anyone currently breastfeeding their child.

4. Risk Assessment process

Some hazards have the potential to increase the risk to pregnant or breastfeeding individuals and therefore when a line manager / supervisor has been informed that an individual is pregnant, the relevant work/ study activities must be re-assessed and modification or alterations made. The risk assessment must take account of any medical advice from a GP or Midwife about the health of the pregnant/ breastfeeding individual. The timeframes for risk assessment reviews are outlined below; however it is important that the pregnant person or new parent flags any changes or information to their line manager which may determine if the risk assessment should be reviewed sooner.

A specific risk assessment for pregnant people and breastfeeding individuals must be completed using the template provided in appendix 3. It should be completed taking into account the hazard guidance – section 6 and focus on the full role that the individual carries out on a day to day basis, together with any other hazards they are likely to encounter in their working/ study environment.

If a significant risk cannot be removed or reduced as a result of implementing additional control measures, the assessment will need to consider:

* Making a temporary adjustment to the working conditions or hours
* Offering suitable, alternative work/tasks (perhaps with the co-operation of other team members)
* Suspend the pregnant person (on paid leave) for as long as the risk continues and they remain within the definition of ‘new parent or pregnant person’

If the pregnant person works at night the GP may issue a certificate exempting them from night work. This is only likely to occur if there are health issues or complications with the pregnancy that are likely to be adversely affected from night work. If a certificate is issued, consideration must be given to:

* Allocating suitable alternative daytime work, or if this is not possible
* the pregnant person may need to be suspended (on paid leave) for as long as the night work risks continue

## **4.1 Timeframes for risk assessment**

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| **Review**  | **Frequency/ timescales** |
| **Initial risk assessment** | must be undertaken as soon as the individual notifies their line manager/ supervisor that they are pregnant. |
| **1st review** | during the second trimester (3-6 months) or earlier, if required. |
| **2nd review** | during the third trimester (6-9months) or earlier, if required. |
| **3rd review** | completed prior to the individual returning to work. |
| **4th review** | completed when the individual has returned to work. |

In determining what risks may be present, factors that are considered, include:

**4.2** Physical risks:

Manual handling, movements and postures, shocks and vibrations, noise, radiation (ionising and non-ionising).

**4.3 Biological agents:** Work involving biological samples that may be contaminated with viruses and or bacteria. Bacteria or viruses that have been shown to be particularly hazardous to pregnant individuals.

**4.4 Chemical agents**:

Toxic chemicals, mercury, chemicals of known percutaneous absorption, antimitotic (cytotoxic) drugs, pesticides, carbon monoxide, lead.

## **4.5 Working Conditions**:

Working at height, extremes of cold and heat, travel, lone working, welfare facilities, mental and physical fatigue, stress, violence, passive smoking, PPE, strong or nauseating smells, nutrition.

## **4.6 Record and review**

The risk assessment should be completed with the individual it pertains to and the line manager/ supervisor completing it must be aware of relevant hazards that may exist for the individual. It should be documented and a copy made available to the pregnant / breastfeeding individual and communicated to relevant parties.

1. Responsibilities

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| All staff | Individuals are responsible for notifying their line manager of their pregnancy and following maternity leave must also state their intention to return to work. Individuals must follow University procedures and control measures implemented as a result of the pregnancy and new parent risk assessment undertaken with their line manager. Written confirmation of pregnancy, from the pregnant individual, is mandatory and must be provided within the 1st trimester of pregnancy or as early as feasibly possible so that a risk assessment can be completed.  |
| Postgraduates | Individuals are responsible for notifying their project supervisor and/ or student information/ experience officer of their pregnancy and following maternity leave must also state their intention to return to the University. Individuals must follow University procedures and controls measures implemented as part of the pregnancy/ new parent risk assessment.  |
| Undergraduate students  | Individuals whose study involves the use of/ work with the following:* hazardous substances e.g. chemicals, biological hazards, GMOs
* ionising radiation
* EMF
* noisy environments
* diving
* strenuous exercise or lifting/ handling and carrying heavy objects

or anything they are advised by their GP/ Midwife that has the potential to be harmful to them or their unborn child should inform their academic mentor/ project supervisor and / or student information/ experience officer of the pregnancy as soon as possible. Following maternity leave, students should information their College/ School when they are ready to return and plan with their academic mentor an appropriate timetable for their reintegration into the programme of study.  |
| Line Manager / Academic Mentor/ Supervisor/ Project Supervisor  | Line managers/ supervisors must assess risks and identify hazards that could pose a health and safety risk to the pregnant/ breastfeeding individual. Appropriate action must be taken to implement suitable and robust control measures in order to remove or reduce risks as low as reasonably practicable. If the health of the pregnant person/ new parent changes significantly or new potential risks are identified, the risk assessment must be reviewed and updated. A referral must be made to Occupational Health for any individual who has a pregnancy/ post-natal related health issue. |
| Scientific Safety Team  | Provide specialist advice, as required, to identify and control specific risks that may be hazardous to pregnant people or new parents, or breastfeeding individuals. |
| College H&S Lead/ H&S Advisor  | Assist line managers/ supervisors in identifying any measures required to control risks that may be hazardous to pregnant people, new parents or breastfeeding individuals as requested.  |
| Occupational Health | Provide advice/ act upon referrals made to Occupational Health for any individual who has a pregnancy/ post-natal health related issue.  |
| HR | Provide assistance and support to both staff/ postgraduates and line managers/ supervisors in cases where significant risk to a pregnant person or new parent may require a substantial change in duties or removal of the pregnant person/ new parent from their normal work.  |

1. Hazard guidance

| **HAZARDS** | **INFORMATION & FURTHER REFERENCE** | **SUGGESTED CONTROLS** |
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| **PHYSICAL AGENTS**  |
| **Manual handling – handling of loads, particularly of dorsolumbar nature**  | During the last 3 months of pregnancy there is an increased risk of musculoskeletal symptoms when heavy or repeated lifting is undertaken, due to hormonal changes affecting the ligaments that support the joints. As pregnancy progresses it may become difficult to achieve and maintain good postures, which further reduces manual handling capability. A shift of the centre of gravity can increase the risk of back pain for pregnant people. Attention should also be given to those who may handle loads during the three months following a return to work and consideration should be given to a temporary limitation on lifting and handling following recent birth or a Caesarean section. Those breastfeeding may experience dis-comfort due to increased breast size and sensitivity. | The manual handling risk assessment for the relevant activity should be reviewed and the following elements considered: * aids that could reduce the risk associated with the work
* reduce the amount of manual handling required to be undertaken
* reassess the handling operations (positioning of the load and feet, frequency of lifting etc) to consider what improvements might be made
* provide training to recognise ways in which the work may be altered to help with changes in posture and physical capability, including the timing and frequency of rest periods
* consider job-sharing or alternative work where the risk cannot be reduced by a change to the working conditions
* take account of any advice from the GP/ Midwife
* ensure the individual has some control over how the work is organised
 |
| **Movements and postures other physical burdens connected with the activity of the worker** | Standing:Continuous standing during the working day may lead to dizziness, faintness, and fatigue. It may also cause sore feet, swelling of the legs, varicose veins, general muscular fatigue, low back pain, stiffness in the neck and shoulders. It can contribute to an increased risk of premature childbirth and miscarriage.Sitting: Prolonged periods of sitting down increase pregnancy specific risks of thrombosis or embolism. In the later stages of pregnancy, individuals are more likely to experience backache, which can be intensified by remaining in a specific position for a long period of time. Backache, thrombosis or varicose veins through sitting for a long time. Postural problems/discomfort in later stages of pregnancy, due to increased girth. Hormonal changes can affect ligaments, increasing susceptibility to injury through using the mouse/keyboard.Restricted space: Difficulties in working in tightly fitting workspaces or workstations during the later stages of pregnancy can lead to strain or sprain injury. Individuals may have reduced dexterity, agility, coordination, speed of movement, reach and balance and may be at an increased risk of having an accident.Balance can be impaired as pregnancy progresses and may be a problem if working in an area that is prone to wet/ slippery floors e.g. catering. | Ensure that hours, volume and pacing of work are not excessive and that where possible, individuals have control over how their work is organised. If necessary changes to the type of work being undertaken should be made. Ensure seating is available, where appropriate and pregnant individuals are encouraged to take longer or more frequent rest breaks to avoid or reduce fatigue.Review workstations at key stages of pregnancy to ensure that the layout and setup is suitable and provide DSE aids as necessary. Ensure ergonomic seating is used to provide support to the back and legs. Encourage and facilitate regular breaks from sitting to be taken.Consider areas of work that require mobility and movement in more restricted spaces, which may become more difficult as the pregnancy progresses and how this work may be altered or reduced.Consider areas where this may be an increased risk and how this work may be altered/ reduced. Provide/ identify access to rest areas where breaks can be taken. |
| **Shocks and Vibration**  | Whole Body VibrationRegular exposure to shocks, low-frequency vibration such as driving, some floor buffers, riding on off-road vehicles or excessive movement may increase the risk of miscarriage. Hand Arm VibrationWhilst hand arm vibration is recognised as increasing the risk of carpal tunnel, the risk of developing carpal tunnel is increased during pregnancy.Breastfeeding individuals are at no higher risk than other individuals. | Extra care is required to ensure that the exposure to whole body vibration is kept to a minimum, particularly at low frequencies or where the abdomen is exposed to shocks/jolts. This may include restricting time/use. Symptoms of back pain should be monitored.Consider ways to reduce exposure to hand-arm vibration as low as possible (by using different equipment, maintenance, reducing time in use) or consider removal of tasks from job role. |
| **Noise**  | Prolonged exposure to loud noise may lead to increased blood pressure and tiredness in individuals. There is some evidence to suggest that prolonged exposure of the unborn child to loud noise during pregnancy may have an effect on hearing and that low frequencies have a greater potential for causing harm.Those working in an environment where noise levels are distracting or intrusive are at risk of increased stress levels. | Assess the nature, degree and duration of exposure of pregnant people to loud noise. Implement adjustments to working conditions where any risk is identified to reduce/ avoid exposure. Provide rest breaks, as required, in a quiet area away from the noise.Note: Protecting the pregnant person using PPE will not protect the unborn child. Consider the frequency of breaks provided and areas where breaks can be taken that are quiet and away from the work area. |
| **Ionising radiation** | Significant exposure to ionising radiation can harm the foetus (either through external exposure or by breathing in/ ingesting radioactive material) and there are specific limits on the levels pregnant individuals may be exposed to. Within the University, the risk of significant exposure to radiation is low and in many cases, its unlikely there will be any requirement to alter their work activities. However, certain X-ray equipment and higher risk radioactive sealed sources may present a risk and, as such it is generally advised that, where possible, pregnant people do not undertake these activities. If necessary, additional control measures may be identified to allow pregnant persons to continue work. The internal hazards posed by unsealed radioactive materials is dependent on the quantities and radionuclides used and in certain circumstances it may be desirable to limit the handling of these materials. It should be noted that the foetus will preferentially absorb the important body building elements of phosphorous and calcium and any intake by the pregnant person of radioactive isotopes of these elements will lead to significantly higher doses in the foetus than they receive. Anyone breastfeeding who works with unsealed radioactive sources could cause exposure to the child, particularly through contamination of the parent’s skin. Nursing parents should not work where the risk of contamination is likely.Further is available at <http://www.hse.gov.uk/pubns/indg334.pdf> | For any ionising-radiation activities, the risk assessment required by the Ionising Radiations Regulations 2017 should indicate what exposures pregnant or breastfeeding employees are likely to receive when carrying out particular activities. These assessments will identify areas/activities where the foetus could receive a dose greater than 1 mSv during the declared period of pregnancy.For exposure to external radiation, this dose restriction is broadly equivalent to a dose to the surface of the abdomen of a pregnant person of about 2 mSv.The radiation risk assessments outline the control measures required which also include controls for pregnant people or breastfeeding parents. |
| **Optical radiation/ lasers** | Pregnant individuals or breast-feeding parents are at no greater risk than other workers when working with optical radiation. |  |
| **Electro-magnetic frequencies (EMF)** | Although there have been some reports of adverse effects on the foetus resulting from exposure of the pregnant individual to low frequency magnetic fields. Overall the evidence of an association between such effects and exposure to low frequency fields is considered to be very weak although the foetus’ developing nervous system could be potentially susceptible to induced time varying electric fields.Appendix 2 contains a non-exhaustive list of sources of EMFs, which may pose specific risks to pregnant people. These should be considered in addition to the information on sources of EMF, which may exceed the ELVs and/or the indirect-effect ALs. Further information on whether a specific risk assessment is required for anyone who is pregnant can be located on p26 of the [Non-binding guide to good practice](https://publications.europa.eu/en/publication-detail/-/publication/c6440d35-8775-11e5-b8b7-01aa75ed71a1). The table lists many common work activities, equipment and workplaces, and provides an indication of whether assessments are likely to be required. The entries in this table are based on whether a situation is likely to give rise to field strengths in excess of the reference levels in Council Recommendation 1999/519/EC, and if so, whether those fields are likely to be highly localised or not.Article 3 limits maximum exposures by setting exposure limit values (ELVs) for sensory and health effects. These are defined in Annexes II (non-thermal effects) and III (thermal effects) of the [EMF Directiv](https://publications.europa.eu/en/publication-detail/-/publication/c6440d35-8775-11e5-b8b7-01aa75ed71a1)e – page 202 Further information:**Non-binding guide to good practice for implementing Directive 2013/35/EU Electromagnetic Fields**<https://publications.europa.eu/en/publication-detail/-/publication/c6440d35-8775-11e5-b8b7-01aa75ed71a1>**Electromagnetic fields at work - A guide to the Control of Electromagnetic Fields at Work Regulations 2016**<http://www.hse.gov.uk/pubns/priced/hsg281.pdf> | Research has suggested that limiting induced electric field strengths to around 20 mV/m should provide adequate protection to the developing nervous system *in utero*. Calculations determined this could be achieved by compliance with the reference levels for low frequency fields specified in Council Recommendation 1999/519/EC. There is evidence that raised maternal body temperature adversely affects pregnancy outcome, with the central nervous system apparently particularly susceptible, as such limits to average whole body exposure is limited to 0.1 W/kg in pregnant people. A pragmatic approach would be to limit exposures of pregnant workers using the reference levels contained in Council Recommendation 1999/519/EC. This should provide adequate protection at both low and high frequenciesMRI scanners For Magnetic Resonance equipment, the Medical Devices Agency recommends giving pregnant people the option of whether or not to enter the inner controlled area during the first three months of their pregnancy and advises that pregnant people do not remain in the scan room whilst scanning is underway |
| **Work in hyperbaric atmosphere, e.g. pressurized enclosures and underwater diving.** | Due to the possible harmful effects that exposure to increased pressure may have on a foetus, a commercial diver who is pregnant or suspects they might be pregnant should not dive or work in compressed air. | Pregnant individuals must not dive or work in compressed air. In line with the requirements of the Diving at Work Regulations 1997 and Compressed Air Regulations 1996 divers are required to disclose any known medical reason why they should not dive and refrain from the activity.Individuals returning to work following maternity leave must be subject to a Medical Examination to assess fitness to work prior to returning to work in hyperbaric atmospheres. |
| **Work in confined spaces** | Work within a hypoxic environment (reduced oxygen) is of particular risk for pregnant people and can be harmful to the foetus. As this is a foreseeable risk, the need for any pregnant person to work within such a space should be reviewed and consideration given to the hazards present, space constraints and access, egress as outlined within the specific hazards outlined in this document.  | Work within hypoxic environments should be avoided during pregnancy.It is advisable that pregnant people do not work within a confined space, particularly as their pregnancy progresses and their dexterity, agility and size changes. |

| **HAZARDS** | **INFORMATION & FURTHER REFERENCE** | **SUGGESTED CONTROLS** |
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| **BIOLOGICAL AGENTS**  |
| **Biological Agents and Genetically Modified Microorganisms** | A wide range of biological agents can cause infections which may or may not pose a risk to the unborn child. Pregnancy risk assessments should consider exposure to biological hazards arising from work activities e.g. from working with cultures or samples, zoonosis (infections transferred from animals) or working in close contact with patients. General infections caught at work from work-colleagues and students e.g. colds do not need to be considered. Risk assessments for laboratory work with known human pathogens or samples that may have biological hazards should already be in place and consider risk to pregnant people or those breastfeeding. The risks from Genetically Modified Microorganisms are largely similar to those of the unmodified organisms and the same precautions followed.  | It is not possible to provide a definitive list of all biological agents that may pose a risk to unborn or new babies. Some of the more common agents are listed in appendix 1 together with transmission routes and suggested control measures. Additional information can be found in <http://www.hse.gov.uk/pubns/priced/infection-mothers.pdf> |
| **CHEMICAL AGENTS** |
| **Chemicals** | Some chemicals are well known as being able to cause damage to the unborn child, or to new babies via breast-feeding. These substances are labelled with the following hazard statements: * H340: May cause genetic defects
* H341: Suspected of causing genetic defects
* H350/ H350i: May cause cancer
* H351: Suspected of causing cancer
* H360/ H360D/ H360FD/ H360fD/ H360Df: May damage fertility or the unborn child
* H361/ H361D/ H361fD: Suspected of damaging fertility or the unborn child
* H361d: Suspected of damaging the unborn child
* H362: May cause harm to breast-fed children

Further information should be gathered from the SDS for these substances relating to potential systemic effects:* **H370**– Causes damage to organs
* **H371**– May cause damage to organs
* **H372**– Causes damage to organs through prolonged or repeated exposure
* **H373**– May cause damage to organs through prolonged or repeated exposure
 | These materials are particularly hazardous to those trying to conceive a child or to breastfeeding & pregnant people and exposure\* to them should be avoided by these groups of workers. Embryotoxins have the greatest impact during the first trimester of pregnancy e.g. organic solvents *Examples include dimethylsulphoxide and formamide – both have embryotoxic and teratogenic action. Other solvents, however, are less dangerous. Growth retardation and abortions, but not malformations, were shown in animals exposed to chloroform, carbon tetrachloride, trichloroethylene, perchloroethylene, benzene, xylene, cyclohexanone, and propylene glycol. SDS should be reviewed for all chemicals used by pregnant individuals or new parents.*\*Users should note that correctly managed work with a chemical should entail very little exposure to hazardous chemical substances. However, to reduce the risk as low as reasonably possible, pregnant individuals may request not work with these substances. Use of these chemicals in the laboratory where a new parent, breastfeeding parent or pregnant person works may continue, with appropriate care to prevent exposure. The new parent/ pregnant person should consult with their GP/ Midwife and inform them of the activities and chemicals used in the laboratory and provide the line manager with any feedback on the advice provided by the GP/Midwife. |
| **Mercury and mercury derivatives**  | There is little evidence on the effects of exposure to mercury during pregnancy. Effects on the unborn child are more likely to occur at levels that harm the pregnant person. There is no indication that new parents are more likely to suffer greater adverse effects from mercury and its compounds after the birth of the baby.  | Users should note that correctly managed work with a chemical should entail very little exposure to hazardous chemical substances. However, to reduce the risk as low as reasonably possible, pregnant individuals may request not work with these substances. Use of these chemicals in the laboratory where a new parent, breastfeeding parent or pregnant person works may continue, with appropriate care to prevent exposure.  |
| **Chemical agents of known and dangerous percutaneous absorption** | 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. | Control measures in place should be sufficient to protect those working with these substances, however if there is concern, additional controls e.g. not working in an area where a substance is being used. |
| **Pesticides** | Certain pesticides [e.g. chlordecone (kepone)] can become concentrated in the milk of a breastfeeding individual.  | It is advisable that breastfeeding individuals be restricted from all duties involving the use of pesticides. |
| **Cytotoxic Drugs** | These drugs are used in chemotherapy and have the ability to arrest the multiplication of living cells. They can cause damage to the sperm and egg cells and in some cases cause cancer. Assessors should note that drugs intended for medical (or veterinary) use are not labelled in the same way as chemicals used for research. | Pregnant and breastfeeding individuals should avoid exposure to such materials.Further guidance on this subject is available in:[Safe use and handling of Cytotoxic drugs](https://www.hse.ie/eng/staff/safetywellbeing/healthsafetyand%20wellbeing/hse%20guideline%20on%20the%20safe%20handling%20and%20use%20of%20cytotox%20drugs%20%20aug%202016.pdf)  |
| **Lead and lead derivatives** | Lead in the pregnant person’s blood can pass into the blood of the baby they are carrying and could affect its development during pregnancy and impairment of the child after birth. Because of this it is important to keep the amount of lead in the mothers blood (from work exposure) as low as possible. Lead can be passed through to infants when breastfeeding.  | Where pregnant / breastfeeding individuals have been identified by risk assessment as being exposed to significant levels of lead (e.g. carrying out work which may produce lead dust, fume or vapour, or working with lead derivatives that can be absorbed through the skin), the doctor should automatically certify restriction of these work activities.Where work with lead does not meet the threshold of significant level, exposure should still be reduced as low as possible through good hygiene and work practices. The decision on when an individual can return to work involving the potential for significant exposure to lead should only be authorised by the doctor. This should be a matter of the doctor’s judgement, taking account of: (a) the individual’s degree and duration of exposure to lead; (b) recent blood-lead or urinary lead levels; (c) the results of any other biochemical tests; (d) the prevailing conditions in the place of work; and (e) for a person who returns to work after giving birth, whether or not they are still breastfeeding the child. |
| **Carbon Monoxide** | The most common exposure to carbon monoxide is when it is produced during fuel combustion in an enclosed area. Occasionally the gas is used in research laboratories. Pregnant people may have heightened susceptibility to the effects of exposure to carbon monoxide and the gas readily crosses the placenta and can result in the unborn child being starved of oxygen. There is no indication that breastfed babies suffer adverse effects from their birth parent’s exposure. | The best preventative measure is to eliminate the hazard by changing processes or equipment. If this is not possible control by combination of technical measures, and good working practices.  |

| **HAZARDS/ CONSIDERATIONS** | **INFORMATION & FURTHER REFERENCE** | **SUGGESTED CONTROLS** |
| --- | --- | --- |
| **WORKING CONDITIONS** |
| **Working at Height** | It is hazardous for anyone who is pregnant to work at heights. Balance and coordination may be affected from mid pregnancy onwards and could result in a higher risk of falling.  | Review working at height risk assessments and consider additional controls that may be required. Review the requirement for working at height as the pregnancy progresses. |
| **Extremes of cold or heat**  | Pregnant people tolerate heat less well and may be liable to heat stress and/or faint easily. The risk is likely to be reduced after birth but it is not certain how quickly. Exposure to heat may lead to adverse pregnancy outcomes.Breast-feeding may be impaired by heat dehydration. Work in extreme cold – risks should be managed as per risk assessment and reviewed as the pregnancy progresses.  | Prolonged exposure to heat should be avoided. Review time spent in areas where there is a risk of exposure to prolonged heat at work. Consider additional rest breaks and/ or reduced working time spent in these areas plus unrestricted access to drinking water.Prolonged exposure to extreme cold should be avoided. Review the work and amount of time spent in extreme cold as the pregnancy progresses and ensure that risks are managed as identified in the risk assessment.  |
| **Travel**  | Fatigue and dizziness are common during pregnancy. As pregnancy progresses it may become more difficult to drive or travel for work purposes.Air travel / travel abroad - flying is not harmful to the pregnant person or unborn child, however any health issues or pregnancy complications should be discussed with the midwife or doctor before flying. Further advice is available from NHS Direct:<https://www.nhs.uk/common-health-questions/pregnancy/is-it-safe-to-fly-while-pregnant/> | Driving for long work journeys should be avoided and journeys should be planned to include regular rest breaks and access to snacks and refreshments. Drivers should consider the siting of the seatbelt - with the diagonal strap positioned between the breasts, over the breastbone, resting on the shoulder, not the neck. The lap belt should be placed on the thighs, fitting beneath the abdomen and over the pelvis, not the bump. The belt should be worn as tightly as possible. Driving for work should be reviewed throughout the pregnancy and where necessary minimised.Consideration to reducing travel for work should be given as the pregnancy progresses with alternatives considered including temporary adjustment of tasks/ duties and homeworking.For travel abroad please also refer to the [International Travel Policy.](https://www.swansea.ac.uk/media/INTERNATIONAL%20TRAVEL%20POLICY%20%20signed%2012.docx) Individuals should ensure they have sought advice from their GP/ Midwife for travel. The University insurers will not insure travel abroad within 1 month of the expected date of confinement.  |
| **Lone working** | Pregnant individuals are more at risk than others when working alone, particularly if they fall or require urgent medical attention. | Refer to the Lone Working Guidance SGD-01010 and risk assessment for the lone working activity. Review in relation to the individual new parent/ pregnant person, taking into consideration any specific information such as pre-existing health conditions and pregnancy related factors.Individuals should download the university campus safety app ‘Safezone’ onto their mobile phone and ensure they are ‘checked in’ so that Security are aware they are on campus. Any emergency situation may also be flagged via Safezone. |
| **Welfare Facilities (including rest rooms)** | **Hygiene facilities:** due to pressure on the bladder and other changes associated with pregnancy, individuals may need to go to the toilet more frequently and more urgently. Individuals who do not have easy access to toilets (and associated hygiene facilities) at work, (due to distance, work patterns etc) may be increased risk of infection or kidney disease. **Rest facilities**: rest is important for new parents and pregnant people. Tiredness increases during and after pregnancy and may be exacerbated by work-related factors. The need for rest is both physical and mental.**Breastfeeding individuals** require somewhere suitable, private and hygienic to express and store breastmilk. Toilets are not suitable for this.  | Ensure easy access to toilets and associated hygiene facilities and take into account the potential need for expectant and nursing mothers to break from their work more frequently than normal. Ensure access to appropriate facilities (secure, clean) that are suitably located (e.g. near toilets), where it is possible for the breastfeeding parent/ pregnant individual to lie down and provides facilities for expressing and safely storing (in a cool place i.e. fridge) breast milk, or to enable infants to be breastfed at or near the workplace.  |
| **Mental and physical fatigue** | Long working hours, shift or night work and workload pressure can have a significant effect on the mental and physical fatigue of pregnant individuals and new parents. Reduced dexterity and balance and increased tiredness may increase errors, adding to stress or potential high blood pressure. Early morning shifts may be problematic for someone suffering from morning sickness. | Consider adjusting work hours temporarily and look at timings and frequency of rest breaks, shift patterns and duration to reduce the risk of mental and physical fatigue.If a medical certificate from a GP/ Midwife is provided stating that working night shifts will affect the health of individuals who are pregnant or have recently given birth alternative day work, where possible, or suspension on full pay must be considered.  |
| **Stress** | Hormonal, physiological and psychological changes during pregnancy can make pregnant people vulnerable to increased stress. Reduced dexterity and increased tiredness may increase errors, adding to stress. Some studies have shown that stress may increase the incidence of miscarriage and impair the ability to breastfeed. Individuals who have suffered loss through stillbirth, miscarriage adoption or neonatal death will be especially vulnerable to stress, as will those who have experienced serious illness or trauma associated with childbirth.  | The risk assessment should identify potential organisational stress factors. Consider adjustments to working conditions, tasks and working hours. Refer to University Policy Statement on Occupational Stress for further guidancehttp://www.swansea.ac.uk/personnel/policies-and-procedures/healthandwellbeing/occupationalstress/  |
| **Violence** | The risk of physical or verbal violence at work has the potential for harmful effects on a new parents/ pregnant individual.  | Where the risk of violence has been identified, the risk assessment should consider additional control measures that might be necessary to protect the pregnant individual. This may include working in pairs, working at a different location, changes to role (e.g. not carrying cash). If the risk of violence cannot be significantly, reduced pregnant individuals should be offered suitable alternative work.  |
| **Passive smoking**  | Pregnant individuals exposed to passive smoke are more prone to premature birth and their baby is more at risk of low birthweight and cot death. | The general policy of the University is that there must be no smoking inside any University operated buildings or vehicles. Any person smoking must do so at least 5m away from a building. |
| **Personal Protective Equipment (PPE)** | Pregnancy and breastfeeding involves physiological changes which may make existing personal protective equipment not only uncomfortable but also unsafe for use e.g. where equipment does not fit properly.RPE may need to be reviewed and a face fit test undertaken to check that the fit is suitable due to changes in the face shape (potential weight gain/ weight loss).  | Consider changes in risk as the pregnancy progresses and the requirement for alternative PPE for the duration of the pregnancy e.g. maternity lab coats.  |
| **Strong/ nauseating smells** | Strong or nauseating smells mays exacerbate morning sickness, particularly during early pregnancy. | Consider if exposure to the smell can be avoided. Are there adequate controls in place such as ventilation? Allow regular breaks to be taken away from the source of the smell. |
|  **Nutrition** | During pregnancy, more frequent meal breaks, access to drinking water or other light refreshments may be required. 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  | Discuss needs in consultation with the individual concerned. These needs may change as pregnancy progresses. |

Appendix 1 BIOLOGICAL AGENTS – SOURCES, TRANMISSION ROUTES AND CONTROL MEASURES

|  |
| --- |
| ***Brucella spp*** |
| **Sources** | **Contact with infected cattle, swine, goats, sheep and deer** |
| Transmission to the baby | Information not available |
| Examples of occupations at risk | Agricultural workers, vets, laboratory workers with infected tissue/material |
| Control measures | In laboratories, where *Brucella spp* is known or suspected,work should be carried out in containment level 3 conditions. Good occupational hygiene (wearing of gloves and washing hands) and control of aerosols via microbiological safety cabinets should reduce risk.  |
| **Chlamydia psittaci** |
| **Sources** | **Infected birds, e.g. parrots (psittacosis), turkeys, pigeons and ducks (ornithosis), and sheep during lambing** |
| Transmission to the baby | Across the placenta |
| Examples of occupations at risk | Agricultural workers, farmers, pet shop workers, veterinary workers, etc. |
| Control measures | Avoid ewes, new-born lambs, and placentas at lambing time. Avoid clothing and boots that have been in contact with infected animals. |
| **Human cytomegalovirus (CMV).** |
| **Sources** | **Humans - particularly children. Transmission may occur through breast milk, saliva, sexual intercourse and blood.** |
| Transmission to the baby | Across the placenta |
| Examples of occupations at risk | Those in close contact with children, e.g. nursery workers and health care workers, especially in children’s wards. |
| Control measures | Pay scrupulous attention to hygiene, including handwashing. Particular care should be taken when handling nappies, excreta etc. from babies and children.  |
| **Hepatitis A** |
| **Sources** | **Humans, and water or food contaminated by faeces\*.** |
| Transmission to the baby | Most transmission to babies is via mouth contact with faecally-contaminated objects (faecal-oral route). Mother to unborn baby transmission is very unlikely to occur. |
| Examples of occupations at risk | Nursery workers, primary school workers, sewage workers, etc. |
| Control measures | Pay scrupulous attention to hygiene, especially handwashing. A vaccine is available for adults and children but it is not currently licensed for use in babies under 1 year old. |
| **Hepatitis B** |
| **Sources** | **Humans, contaminated needles, blood and body fluids such as genital secretions4 and laboratory specimens etc.\*.**  |
| Transmission to the baby | The virus does not usually cross the placenta. It is thought that the mother passes the infection to her baby during delivery and just after by exposure to her blood. |
| Examples of occupations at risk | Health care workers, dentists, laboratory workers, rescue workers and other people exposed to human blood and body fluids. |
| Control measures | Avoid injuries with sharp objects contaminated with blood and body fluids and directcontact with blood and body fluids. Use protective clothing. Ensure that all employees who might be at occupational risk are immunised and blood tests show them to be immune. |
| **Human immunodeficiency viruses** |
| **Sources** | **Humans, contaminated needles, blood and body fluids, laboratory specimens etc.** |
| Transmission to the baby | Across the placenta, during delivery and by breastfeeding. |
| Examples of occupations at risk | Health care workers, dentists, laboratory workers, rescue workers and other people exposed to human blood and body fluids. |
| Control measures | Avoid injuries with sharp objects contaminated with blood and body fluids and direct contact with blood and body fluids. Use protective clothing.  |
| ***Listeria monocytogenes*.** |
| **Sources** | **Contaminated food (e.g. unpasteurised soft cheese), infected animals, and silage.**  |
| Transmission to the baby | Across the placenta, and during delivery. |
| Examples of occupations at risk | Laboratory workers, food workers, farm workers, abattoir workers. |
| Control measures | Good laboratory practice - make sure staff avoid infection through the mouth. Good hand hygiene is very important. |
| **Human Parvovirus** |
| **Sources** | **via respiratory secretions** |
| Transmission to the baby | Across the placenta |
| Examples of occupations at risk | Health care workers, laboratory workers, teachers and child care workers. |
| Control measures | Basic good hygiene. Additional control measures may be needed where pregnant women are exposed at work to infected people in whom viral excretion may be prolonged because they do not have a fully working immune system or have certain other blood disorders. |
| **Rubella** |
| **Sources** | **Humans by close contact and via respiratory secretions.** |
| Transmission to the baby | Across the placenta. |
| Examples of occupations at risk | Laboratory workers, health care workers, especially in children’s’ wards, nurseries etc. |
| Control measures | Rubella vaccine is given routinely to all children, and adults who have not had the infection.  |
| ***Toxoplasma gondii*** |
| **Sources** | **Hand-to-mouth contact with the faeces of infected cats, contaminated soil, poorly washed garden produce, and by eating undercooked, infected meat.** |
| Transmission to the baby | Across the placenta |
| Examples of occupations at risk | Veterinary workers, cattery workers, farm/meat/abattoir workers, grounds maintenance staff, park keepers. |
| Control measures | Avoid handling infected meat, cat faeces, and sheep at lambing time, or wear gloves and pay scrupulous attention to hygiene, including handwashing. |
| **Varicella-zoster (chickenpox)** |
| **Sources** | **Humans by direct contact, droplet infection or recently soiled materials such as handkerchiefs.**  |
| Transmission to the baby | Across the placenta. |
| Examples of occupations at risk | Health care workers, nursery workers, school teachers. |
| Control measures | Hospital occupational health departments may enquire routinely about chickenpox in staff and test those without a history for antibody to VZV. If women are not immune from past infection, contact with known cases of chickenpox or shingles present in the workplace should be avoided.  |

Appendix 2 ELECTRO MAGNETIC FREQUENCIES

**SOURCES OF EMF THAT MAY POSE A RISK TO EXPECTANT MOTHERS**

**SOURCES OF EMF WHICH MAY EXCEED THE ELVS &/OR THE INDIRECT-EFFECT ALS**

|  |
| --- |
| **Infrastructure (buildings and grounds)**Broadcast and telecoms base stations, inside operator’s designated exclusion zoneRadio frequency or microwave energised lighting equipmentRadio and TV broadcasting systems and devices**Electrical supply**Any electrical circuit or installation (including cables, busbars, switchgear and transformers), where the cables carrying the electrical currents are bundled together so that they are always touching or nearly so, but there are earthing arrangements that mean the cables collectively carry an unbalanced current of >100 A.Any electrical circuit or installation (including cables, busbars, switchgear and transformers), where the cables or busbars carrying the electrical currents are separated, and the rating of the circuit or that part of it is >100 A (equivalent to 23 kW for a single-phase 230 V circuit, 69 kW for a three-phase 230 V circuit, or 1.9 MW for a three-phase 11 kV circuit)**Light industry**Dielectric heating and weldingResistance welding: manual spot and seam weldingInduction heatingInduction solderingMagnetic particle inspection (crack detection)Industrial magnetiser and demagnetisers, eg tape erasersMicrowave heating and dryingRF plasma devices including vacuum deposition and sputtering |

**Further advice**:

[Non-binding guide to good practice for implementing Directive 2013/35/EU Electromagnetic Fields Volume 1: Practical Guide](http://ec.europa.eu/social/BlobServlet?docId=14741&langId=en) provides a table of equipment and workplaces and outlines which of those require a specific risk assessment for ‘workers at particular risk’ (page 24)

Council Directive 92/85/EEC Introduction of measures to encourage improvement for pregnant workers (where the list of hazards to be considered is listed) <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31992L0085>

Appendix 3 PREGNANCY RISK ASSESSMENT

The risk assessment should be completed by the line manager/ academic supervisor for the member of staff/ postgraduate who is pregnant, given birth within the last 6 months or who is breastfeeding.

The risk assessment should be completed together with the member of staff/ postgraduate, using the guidance in the Pregnant Person & New Parent Policy Arrangements.

If you require support or further assistance in completing the documentation you should contact the relevant member of the [H&S Services Team](http://www.swansea.ac.uk/healthsafety/contactus/) who can provide you with support and assistance.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **Status:**  | Staff [ ]  Postgraduate [ ]  |
| **Staff ID:** |  | **College/ PSU:** |  |
| **Work location:*****(Building/ Floor/ Room number):*** |  | **Dept:** |  |
| **(Estimated) date of confinement:** |  | **Date of Assessment:** |  |
| **Line Manager/ Academic Supervisor:** |  | **College H&S Lead/ PSU H&S Advisor** |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Please tick** |  | **Initial Assessment** | **Assessment Review 1** | **Assessment Review 2** | **Assessment Review 3** | **Assessment Review 4** |
| Is the individual pregnant  |[ ]   |[ ] [ ] [ ] [ ] [ ]
| Have they given birth within previous six months |[ ]   |  |  |  |  |  |
| Are they breastfeeding |[ ]   |  |  |  |  |  |

| **HAZARD** | **RISK** | **Additional control measures / Work adjustments required**  | **Action by & Complete date**  |
| --- | --- | --- | --- |
|  | **YES** | **NO** |  |  |
| **Movement and postures** * Does the role involve standing or sitting for long periods e.g. 2 hrs or more without a break?
* Can equipment and workstations be adjusted to suit the individual’s needs?
* Are there space restrictions, which could be problematic as the pregnancy progresses?
 |[ ] [ ]   |  |
| **Manual handling** Does the role involve:* Heavy or repeated lifting
* Stretching/ reaching
 | * Repetitive twisting
* Lifting and carrying loads
 |[ ] [ ]   |  |
| **Shocks, jolts and vibration** * Is the individual exposed to whole body vibration? e.g. ride on mower
* Does the individual operate vibrating equipment (hand arm vibration)?
* Is there a risk of the individual being jolted or shocks to the body?
 |[ ] [ ]   |  |
| **Noise*** Does the individual work in a hearing protection zone?
* Is the individual regularly subjected to noise in the workplace in excess of 80dB(A) or 135dB(C)?
* Does the individual work in an area that is noisy, but where hearing protection is not required? e.g nuisance or distracting noise.
 |[ ] [ ]   |  |
| **Ionising Radiation** * Does the individual work with ionising radiation?
* Has the radiation risk assessment for the activity been checked to identify control measures for pregnant people/ breastfeeding individuals?
 |[ ] [ ]   |  |
| **Electro-magnetic frequencies (EMF)*** Does the individual work with any sources of EMF that pose a risk to pregnant people or that may exceed the ELVs and/ or the indirect-effect ALs?
* Is a specific risk assessment required for pregnant people?
 |[ ] [ ]   |  |
| **Hyperbaric atmospheres*** Does the role involve working in a hyperbaric environment e.g. diving or work in compressed air?
* Has the individual returned to work following pregnancy?
 |[ ] [ ]   |  |
| **Confined spaces*** Does the role involve work in confined spaces?
* Is there work in hypoxic confined spaces?
 |[ ] [ ]   |  |
| **Biological agents/ Genetically modified organisms*** Does the role involve work with biological agents/ genetically modified organisms including any of those identified in the guidance document & appendix 1
 |[ ] [ ]   |  |
| **Chemicals*** Does the role involve working with/ or within an area where any chemicals that may be hazardous to the unborn child or to new babies via breastfeeding?
 |[ ] [ ]   |  |
| **Mercury/ mercury derivatives*** Does the role involve working with mercury/ mercury derivatives or within an area where they are used?
 |[ ] [ ]   |  |
| **Chemical agents of known and dangerous percutaneous absorption*** Does the role involve working with any chemical agents of known and dangerous percutaneous absorption or within an area where they are being used?
 |[ ] [ ]   |  |
| **Pesticides*** Does the individual undertake any work activity using pesticides?
 |[ ] [ ]   |  |
| **Cytotoxic drugs*** Does the individual undertake any work using or handling cytotoxic drugs?
 |[ ] [ ]   |  |
| **Lead and lead derivatives*** Does the individual undertake any work using or handling lead or lead derivatives?
 |[ ] [ ]   |  |
| **Carbon Monoxide*** Does the individual undertake any work where exposure to carbon monoxide is possible?
 |[ ] [ ]   |  |
| **Working at height*** Does the individual work at height at all e.g. ladders, mobile platforms?
 |[ ] [ ]   |  |
| **Extremes of cold or heat*** Is any work undertaken which may expose the individual to prolonged heat or extreme cold?
 |[ ] [ ]   |  |
| **Travel*** Does the individual drive for work purposes?
* Are the journeys long or does driving make up most of their working day?
* Do they fly or travel abroad for work purposes?
 |[ ] [ ]   |  |
| **Lone working** * Does the individual work alone for periods of time, out of normal office hours or in high risk areas?
 |[ ] [ ]   |  |
| **Welfare Facilities*** Is there easy access toilet facilities?
* Is there access to appropriate rest facilities?
 |[ ] [ ]   |  |
| **Mental and physical fatigue**Does the work undertaken involve: |[ ] [ ]   |  |
| * Long working hours
* Shift work
 | * Night work
* Regular overtime
 |  |  |  |  |
| **Stress*** Does the individual have control over the pace and demands associated with their work e.g. workload, deadlines?
* Are there tasks that are demanding both mentally and physically?
* Is there a requirement to deal with difficult situations, for example, dealing with complaints from clients/ customers?
 |[ ] [ ]   |  |
| **Violence** * Is there a risk of violence associated with the work?
* Has the risk assessment been reviewed to taken into consideration any additional control measures required?
 |[ ] [ ]   |  |
| **Passive smoking** |[ ] [ ]   |  |
| **PPE*** Do risk assessments for work activities specify the requirement to wear PPE?
* Does RPE need to be worn as part of the role?
* Are lab coats worn?
 |[ ] [ ]   |  |
| **Strong/ nauseating smells*** Are there any strong nauseating smells?
 |[ ] [ ]   |  |
| **Nutrition** * Can the individual take regular breaks, access drinking water as required?
 |[ ] [ ]   |  |

**Line Manager/ Academic Supervisor**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Referral to OH required: No [ ]  Yes [ ]

Date referral made: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Pregnant person/ New Parent**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_