External Document

REPRODUCTIVE HAZARDS AND WORK GUIDELINES

PURPOSE

These guidelines support the *Health and Safety Policy* and *Health and Safety Management Standards* at the University.

The aim of these guidelines are to provide information on the types of reproductive hazards that may be present within workplaces at Curtin University.

These guidelines apply to all staff and students at Curtin University sites.

DEFINITIONS

Immunisation	The process of inducing immunity to an infectious agent by giving a vaccine
Reproductive Hazards	Reproductive hazards are substances or agents that may affect the reproductive health of women or men or the ability of couples to have healthy children.
Vaccination	The administration of a vaccine. If vaccination is successful, it results in immunity.

1. REPRODUCTIVE HAZARDS AT CURTIN UNIVERSITY

Curtin University is committed to providing a safe work and study environment for staff and students. This extends to those who are planning pregnancy, who are pregnant and/or those who are breastfeeding.

There are a range of work, teaching and research environments at the University where the hazards present may affect the reproductive health of staff or students and/or their foetus if exposed. It is essential that these hazards are identified and suitably controlled and that staff and students are informed of the risks involved in work or study within these facilities. Curtin University expects that managers will work with their staff to provide reasonable accommodations in these circumstances. For specific advice in relation to accommodations, please refer to the Injury Management team.

1.1. HAZARD TYPES FOR CONSIDERATION

Where staff or students identify that they are planning to become pregnant, are currently pregnant or breastfeeding and they are working with any of the hazards identified within this document, a workplace risk assessment is required. The risk assessment should include tasks involving hazard exposures to ensure that the staff member/student is aware of any hazards in their area.

1.1.1. MATERNAL STRESS

There are many factors that increase maternal stress, ranging from environmental factors (e.g. extreme environments such as those that are excessively hot or cold, pressurised or those with high levels of humidity), pre-existing parental medical conditions (e.g. diabetes), drug use (e.g. illicit, legalised and prescribed) and exposure to the occupational hazards described below. There is evidence to suggest

that these factors affect the developing foetus and can lead to physical growth issues, higher than normal mortality rates and psychiatric disorders later in life. Refer listed references below.

Where these environmental conditions and occupational hazards are present in Curtin workplaces, managers and supervisors are required to eliminate and/or control these as far as is practicable. Staff and students are also reminded to discuss their work and any pre-existing medical conditions with their medical practitioner and where appropriate with their manager/supervisor.

1.1.2. HAZARDOUS SUBSTANCES, DANGEROUS GOODS AND HAZARDOUS MATERIALS

There are a range of chemicals that present a risk to those preparing to become pregnant, those who are pregnant or breastfeeding and to the development of a foetus especially within the first trimester. Exposure may occur through inhalation, skin absorption or ingestion.

The specific Safety Data Sheet and label for each chemical used is to be reviewed to determine if reproductive hazards are present and whether current control measures are adequate to protect the staff member/student and foetus. In a shared laboratory environment the same attention must be paid to neighbouring experiments and processes. Any additional controls identified by the staff member/student, their medical practitioner and their manager/supervisor are to be included in the area risk assessment and relevant safe work/operating procedure. Any engineering controls specified such as exhaust ventilation and fume cupboards are required to be used at all times, likewise Personal Protective Equipment (PPE) and clothing identified by the risk assessment must be inspected as fit-for-purpose and worn at all times when handling the hazardous chemicals.

Please refer to the Chemical Management Plan, the safety data sheet and the Occupational Safety and Health Regulations 1996 part 5 for more information on the specific health risks associated with any hazardous material to be used.

1.1.3. EXCESSIVE NOISE

Where staff/students are asked to work in noisy environments, noise exposure monitoring is required in line with Australian Standard 1269 and the Occupational Safety and Health Regulations 1996. Pregnant women must be made aware that noise levels in excess of the exposure standard have been found to directly affect the auditory development of the foetus. Refer references below.

Administrative controls can be put in place such as; scheduling of work, job rotation, access limitation and the use of engineering controls such as elimination of noisy environments, maintenance or replacement of noisy equipment, reducing noise emissions, isolating or enclosing noisy equipment and acoustic treatment of workplaces. These controls may assist in reducing noise exposure of staff/students and unborn foetuses. In some instances exclusion of the mother from the workplace during the pregnancy may be the most appropriate option.

1.1.4. ANIMALS, BIOLOGIAL MATERIALS AND COMMUNICABLE DISEASES

Where staff or students are working directly with live animals, animal body parts may be exposed to zoonosis in the course of their work or study, additional precautions such as vaccination with resulting proof of immunisation may be required.

Where staff or students are working directly with biological materials or communicable diseases - such as Toxoplasma gondii, Listeria monocytogenes, cytomegalovirus, parvovirus B19, rubella virus, human immunodeficiency virus (HIV), Coxiella burnetii and hepatitis B, C, and E viruses and some funghi - , then medical opinion, additional precautions and in some instances vaccination with resulting proof of immunisation may be required before commencing work or study. Refer to Australian Standard 2243.3 and the Australian Immunisation Handbook for more information.

It is expected that fume cupboards or biological safety cabinets will be used along with laboratory coats and gloves.

1.1.5. IONISING RADIATION AND MAGNETIC FIELDS

At Curtin, no pregnant staff member may work with radioactive materials or radiation equipment, and no breastfeeding staff member may work with radioactive materials, unless authorised by the University Radiation Safety Officer.

There is insufficient knowledge to establish guidance regarding large magnetic fields or alternating fields, such as those found in MRI machines, but the duration of exposure should always be kept to a minimum to avoid body temperature elevation. It is advised that pregnant staff may work in an area with large magnetic fields or alternating fields after a risk assessment has been conducted and approved. The University Radiation Safety Officer can advise on such matters.

Depending on the work, there may be a number of controls in place such as lead aprons, protective barriers, laboratory coats and gloves, fume cupboards, biological safety cabinets and exposure monitoring. All controls would be approved through the radiation project application process and must be documented in the risk assessment and safe work procedure as required. Additional controls can be implemented following consultation with the manager/supervisor, the staff member/students medical practitioner and the University Radiation Safety Officer.

1.1.6. PHYSICAL HAZARDS AND ERGONOMIC ISSUES

Physical and ergonomic hazards are present in every workplace and should be adequately controlled within area risk assessments and safe work/operating procedures. Examples of these physical hazards include manual tasks, plant and equipment, driving long distances, fieldwork and travel. Ergonomic issues such as rotating shift work, extended work hours and working alone or in isolation may also present additional risks to those who are pregnant and to their foetus. Managers/supervisors, need to be aware that hormonal changes during pregnancy can lead staff/students to become excessively tired and/or not as alert to the physical and ergonomic hazards within the workplace, leading to workplace injuries.

Staff/students are encouraged to consult with their manager/supervisor to modify or reduce their duties if required to ensure that they can perform their roles safely. For more information on controlling specific physical and ergonomic hazards in the workplace, please refer to the relevant legislation, Codes of Practice and Australian Standards listed within the Health and Safety Legal Obligations Register and Injury Management for ergonomic assessments.

2. RESPONSIBILITIES

2.1. HEAD OF AREA

It is the responsibility of the Head of Area to:

a) Ensure that a risk assessment of each area under their control has been completed, to determine the reproductive hazards present and to ensure that suitable controls are in place prior to any work commencing in the space
b) Ensure that all technical and academic staff are aware of any reproductive hazards present in their areas that cannot be suitably controlled that would preclude staff or students working in the area if they are planning to become pregnant, are pregnant or breastfeeding
c) Ensure that all hazards present within the space are listed on the area specific Risk Register
d) Ensure that this area specific Risk Register is available for review by staff and students as requested
e) Approve updated risk assessments/safe work/operating procedures and/or alternative facilities and/or duties for the staff member/student where necessary
f) Where necessary, make the final decision in relation to granting staff or student access into a space to work or study where there are identified reproductive hazards.

2.2. MANAGER/SUPERVISOR

Managers and supervisors are responsible for:

a) Ensuring that staff or students are aware of the risks of exposure to the reproductive hazards within the area they are required to work
b) Assisting the staff member or student to identify and implement additional or alternative work practices that do not disadvantage them, that allow them to continue their work
c) Update the area risk assessment and any safe work/operating procedures where necessary for the specific staff member/student's needs
d) Provide this updated risk assessment to the Head of Area for approval prior to the staff member/student commencing/re-commencing work in the area.

2.3. STAFF MEMBER/STUDENT

Individual staff members/students are responsible for:

a) Advising their Manager/Supervisor of their status as soon as possible
b) Reviewing the area risk assessment and safe work/operating procedures with their manager/supervisor to determine whether all suitable controls are in place for them to commence/re-commence their work
c) Discuss the work environment, duties and the area risk assessment with their physician to determine any additional vaccinations required and/or their continued suitability to work within the facility.

3. RECORD KEEPING

All records should be stored according to the Records and Information Management Procedures and the health surveillance requirements within the Occupational Safety and Health Regulations 1996.

EXEMPTIONS

Nil

RELEVANT DOCUMENTS/LINKS

Asbestos management plan
Blood handling guidelines
Chemical management plan
Driver safety guidelines
Emergency management plan
Fieldwork policy
Fieldwork manual
Guide to pregnancy and work
Health and Safety Legal Obligations Register
Health and safety policy
Health and safety management standards
Health and safety risk assessment guidelines
Immunisation and vaccination guidelines
Manual tasks for pregnant workers
Noise control fact sheet - Working Quiet
People and Culture
Personal protective equipment (PPE) guidelines
Plant risk assessment guidelines
Records and information management procedures
School of Science diving manual
Working alone or in isolation guidelines
Workplace exposure standards for airborne contaminants

Bran, etal. (2012) The relationship of maternal gestational drug and alcohol intake, psychosocial Dipietro, Janet, A. (2012) Maternal stress in pregnancy: Considerations for fetal development.

Pierson L, L. (1996) Hazards of noise exposure on foetal hearing.

Williams etal. (2010) Health effects of prenatal radiation exposure.

World Health Organisation – Female reproductive health and the environment

World Health Organisation – Introduction to reproductive health and the environment

World Health Organisation – Male reproductive health and the environment

World Health Organisation – Occupational risks and children's health

World Health Organisation – Preventing reproductive health problems

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REVISION HISTORY		
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1	17/04/2019	New Guideline