

Health and Safety Guidelines: HSG 10.4



Health Surveillance

1. Purpose

This document provides guidance on how to prevent or detect adverse health effects resulting from use of hazardous substances or from other exposures in the workplace through undertaking Health Surveillance.

2. Scope

This document applies to all Faculties, Divisions and organisational units of the University of Newcastle and its controlled entities.

3. Definitions

In the context of the Health and Safety Management System Framework:

- (a) **Airborne Contaminant** means a hazardous substance in the form of a fume, mist, gas, vapour or dust, and includes micro-organisms.
- (b) **Hazardous Substance** means a substance that:
 - (i) is included on the [GHS Hazardous Chemical Information List](#) published by the National Occupational Health and Safety Commission [NOHSC:10005(1994)], which can be found on the [Safe Work Australia website](#); or
 - (ii) has been classified as a hazardous substance by the manufacturer or importer in accordance with the [Approved Criteria for Classifying Hazard Substances](#) published by the National Occupational Health and Safety Commission [NOHSC:1008(1994)].
- (c) **Health Surveillance** means a periodic medical assessment of a Worker's health to ensure that the Worker is not being harmed by the use of hazardous substances or other workplace exposures.
- (d) **Executive Committee** means the Vice-Chancellor, the Deputy Vice-Chancellors, the Pro Vice-Chancellors, the Chief Operating Officer and the Chief Financial Officer.
- (e) **Leader/Supervisor** means any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.

- (f) **Regulatory requirements** means the legal obligations imposed upon the University, its officers and employees, and other Workers under:
 - (i) the [Work Health and Safety Act 2011 \(NSW\)](#); and
 - (ii) the [Work Health and Safety Regulation 2011 \(NSW\)](#).
- (g) **Worker** includes an employee, conjoint, student on work experience, contractor, sub-contractor, and volunteer.
- (h) **Workplace Exposure Monitoring** means monitoring the potential level of exposure to a hazardous substance or other workplace exposure, and includes sampling and analysis to determine the risk to Workers.
- (i) **Biological Monitoring** means the measurement and evaluation of a hazardous substance in the body.
- (j) **Health Effects Monitoring** means the assessment of early adverse health effects through measurement of biological function e.g. administration of a medical test such as lung function in exposed workers.
- (k) **HHAQ:** Refers to the [Health and Hazard Assessment Questionnaire](#) document.

4. Responsibilities

4.1 Executive Committee

The Executive Committee should ensure that the University is complying with Regulatory requirements in relation to Workplace Exposure Monitoring and Health Surveillance.

4.2 Leaders and Supervisors

Leaders and Supervisors should:

- (a) Carry out risk assessments to determine the Health Surveillance needs for the Workers working within their areas of responsibility;
- (b) Ensure that the [Health and Hazard Assessment Questionnaire \(HHAQ\)](#) is completed for each Worker recruited into an area which has been identified as having potential workplace exposures which will require the person to be included in a health surveillance program e.g. noise, radiation, dust, fumes, chemicals;
- (c) Ensure periodic Health Surveillance is carried out where a need has been identified, and that Workers' consent is obtained prior to the Health Surveillance;
- (d) Ensure that personal results from health surveillance are treated with strict confidentiality;

- (e) Ensure an explanation of health surveillance results is provided to each employee; and
- (f) Take action to improve exposure controls where indicated by Health Surveillance results.

4.3 Health and Safety Team

The Health and Safety Team should:

- (a) Assist Faculties and Divisions to determine Health Surveillance needs;
- (b) Assist with identifying competent providers to carry out Health Surveillance when required;
- (c) Assist with interpretation of surveillance outcomes to Workers when necessary;
- (d) Provide input to identifying means of improving exposure controls where indicated; and
- (e) Provide education and training where required to assist Leaders, Supervisors and Workers to understand their responsibilities with respect to Health Surveillance.

4.4 Workers

Workers should:

- (a) Complete Part C of the HHAQ during the recruitment process when required;
- (b) Attend Health Surveillance examinations when advised;
- (c) Follow up with their family medical practitioner where advised for further explanation and/or treatment.

5. Guidelines

5.1 Identification of potential workplace exposures

The following actions can be taken to determine the Health Surveillance needs for a work location:

- (a) Review the Regulatory requirements and relevant Codes of Practice governing workplace storage and handling of hazardous substances, and exposure to airborne contaminants, fumes, heat, chemicals and noise to determine Health Surveillance requirements;

- (b) Identify whether there are hazardous substances or other exposures in the workplace which could result in an identifiable disease occurring in an exposed Worker;
- (c) Assess the risk of hazardous workplace exposures, which can be quantified when necessary by arranging Workplace Exposure Monitoring; and
- (d) Ensure that a completed HHAQ is submitted to the University Health Service for a Worker being recruited into an area which has been identified as having potential workplace exposures so that an assessment can be made regarding future Health Surveillance.

5.2 Implementing periodic Health Surveillance

- (a) Prior to conducting Health Surveillance in an area, Workers should be informed and the reason for the Health Surveillance explained.
- (b) Workers will be asked to sign a release of information form. It should be explained to Workers that personal health information will not be disclosed to the University unless the results of the Health Surveillance identifies exposure results in the workplace that will need to be addressed.
- (c) Health Surveillance will be carried out under the guidance of the UON Medical Director with input from the Health and Safety Team when necessary.
- (d) The content of a Health Surveillance examination will be determined by the nature of the workplace exposure. The following items may be included:
 - (i) An employment history to determine work related activities and non-work related activities that may be relevant, i.e. smoking habits;
 - (ii) Chest X-rays;
 - (iii) Lung function tests;
 - (iv) Blood analysis;
 - (v) Urinalysis;
 - (vi) Hearing tests;
 - (vii) Radiation exposure evaluation.
- (e) The UON Medical Director will review Health Surveillance results and provide follow up with the Worker.

5.3 Managing Health Surveillance results

- (a) A Worker will be confidentially advised of the results of any Health Surveillance examination by the UON Medical Director. If necessary, the Worker will be directed to a medical provider for follow up and/or treatment.
- (b) The UON Medical Director may counsel the Worker with regard to complying with standard operating procedures and the use of personal protective equipment if this is considered to be relevant.
- (c) Where an employee has been found unfit for further exposure to a hazardous substance or other workplace exposure, the Executive member of the Faculty or Division will implement one of the following recommendations in consultation with the employee, the UON Medical Director and the Health and Safety Team:
 - (i) Relocate the Worker to suitable alternative work; or
 - (ii) Implement exposure controls.
- (d) The UON Medical Director will provide a report to the relevant Faculty, School or Division with recommendations if the Health Surveillance results indicate exposure to hazardous substances or other workplace exposures may be present. The Executive member of the Faculty or Division should then ensure a reassessment of the workplace is carried out and appropriate controls are put in place to minimise any further risk of exposure as soon as practicable.

5.4 Document Management

- (a) The results of Workers' Health Surveillance will be retained by the University in accordance with regulatory standards i.e. 30 years plus employment years;
- (b) Access to Workers' records is limited to authorised personnel only as determined by the Associate Director, Health and Safety or the UON Medical Director;
- (c) All the personal information relating to Health Surveillance is treated as Medical-in Confidence and will be kept strictly confidential which includes the following documents:
 - (i) HHAQ form;
 - (ii) Pre-placement Health Assessment outcomes;
 - (iii) Health Surveillance reports;

- (iv) Correspondence between the Medical Director, other medical practitioners and the Health and Safety Team.

6. References

[UON HSG 4.1 H&S Risk Management](#)

[UON HSG 4.2 Workplace Exposure Monitoring](#)

[UON HSG 5.1 Pre-placement Assessment against Inherent Requirements](#)

7. Attachments

1. Hazardous Substances Requiring Mandatory Health Surveillance
2. Health Surveillance Assessment Form

Attachment 1.

Hazardous Substances Requiring Mandatory Health Surveillance	
Hazardous Substance	Type of health monitoring
Acrylonitrile	Demographic, medical and occupational history Records of personal exposure Physical examination
Arsenic (inorganic)	Demographic, medical and occupational history Records of personal exposure Physical examination with emphasis on the peripheral nervous system and skin Urinary inorganic arsenic
Benzene	Demographic, medical and occupational history Records of personal exposure Physical examination Baseline blood sample for haematological profile
Beryllium	Demographic, medical and occupational history Records of personal exposure Physical examination Lung function tests Chest X ray
Cadmium	Demographic, medical and occupational history Records of personal exposure Physical examination with emphasis on the respiratory system Standard respiratory questionnaire to be completed Standardised respiratory function tests including e.g. FEV ₁ , FVC and FEV ₁ /FVC Urinary cadmium and β_2 -microglobulin Health advice, including counselling on the effect of smoking on cadmium exposure
Chromium (inorganic)	Demographic, medical and occupational history Physical examination with emphasis on the respiratory system and skin Weekly skin inspection of hands and forearms by a competent person
Creosote	Demographic, medical and occupational history Health advice, including recognition of photosensitivity and skin changes Physical examination with emphasis on the neurological system and skin, noting any abnormal lesions and evidence of skin sensitisation Records of personal exposure, including photosensitivity
Crystalline silica	Demographic, medical and occupational history Records of personal exposure Standardised respiratory questionnaire to be completed Standardised respiratory function test, for example, FEV ₁ , FVC and FEV ₁ /FVC Chest X-ray full size PA view

Hazardous Substance	Type of health monitoring
Isocyanates	Demographic, medical and occupational history Completion of a standardised respiratory questionnaire Physical examination of the respiratory system and skin Standardised respiratory function tests, for example, FEV1, FVC and FEV1/FVC
Mercury (inorganic)	Demographic, medical and occupational history Physical examination with emphasis on dermatological, gastrointestinal, neurological and renal systems Urinary inorganic mercury
4,4'-Methylene bis (2-chloroaniline) (MOCA)	Demographic, medical and occupational history Physical examination Urinary total MOCA Dipstick analysis of urine for haematuria Urine cytology
Organophosphate pesticides	Demographic, medical and occupational history including pattern of use Physical examination Baseline estimation of red cell and plasma cholinesterase activity levels by the Ellman or equivalent method Estimation of red cell and plasma cholinesterase activity towards the end of the working day on which organophosphate pesticides have been used
Pentachlorophenol (PCP)	Demographic, medical and occupational history Records of personal exposure Physical examination with emphasis on the skin, noting any abnormal lesions or effects of irritancy Urinary total pentachlorophenol Dipstick urinalysis for haematuria and proteinuria
Polycyclic aromatic hydrocarbons (PAH)	Demographic, medical and occupational history Physical examination Records of personal exposure, including photosensitivity Health advice, including recognition of photosensitivity and skin changes
Thallium	Demographic, medical and occupational history Physical examination Urinary thallium
Vinyl chloride	Demographic, medical and occupational history Physical examination Records of personal exposure
Lead (inorganic)	Demographic, medical and occupational history, Physical examination Biological monitoring

Attachment 2.

HEALTH SURVEILLANCE ASSESSMENT REQUIREMENTS						
Potential Health Risk	Are Employees at Risk (Yes/No)	Tests Required	At Pre-placement (Yes/No)	Routine Frequency (Monthly/Yearly)	Following Incident (Yes/No)	Exit Employment (Yes/No)