RMIT Classification: Trusted

HAZARD	TYPE OF HEALTH MONITORING			
	BASELINE	DURING EXPOSURE OR POST INCIDENT	AT TERMINATION OF WORK/STUDY	REQUIREMENT
SCHEDULED HAZARDOUS SUBSTANCES				
Acrylonitrile	• Collection of demographic data • Work/exposure history • Medical history • Physical examination - emphasis on central nervous system (CNS), respiratory system and skin, only if work and medical history indicates this is necessary.	Medical examination.	Final medication examination – emphasis on CNS, respiratory system and skin.	Occupational Health and Safety Regulations (Vic)
Arsenic (inorganic)	• Collection of demographic data • Work/exposure history • Medical history • Physical examination - emphasis on peripheral nervous system and skin • Investigation – a baseline level of arsenic in urine will be determined.	Monitoring exposure to inorganic arsenic through urinary inorganic arsenic testing.	• Final medication examination – include skin and neurological checks. • Continuing medical surveillance – people with skin or neurological signs due to arsenic should be advised to seek continuing medical surveillance.	Occupational Health and Safety Regulations (Vic)
Benzene	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – only if indicated by work/exposure and medical history • Investigation – blood sample for haematological profile to test the worker's baseline.	• Biological exposure – a spot urine test at the end of the shift to determine levels of *S-Phenylmercapturic* acid (S-PMA) relative to creatinine. • If spot urine testing demonstrates exposure to benzene is consistent with occupational exposure, a blood sample should be taken and compared to the haematological profile with the person's baseline haematological profile determined at the beginning of the health monitoring process • Confounding factors – as tobacco smoke contains benzene, inhalation of tobacco smoke will cause elevated background values of S-PMA	• Final medication examination – A blood sample should be taken and results compared with the person's baseline haematological profile. • Those with haematological abnormalities should be advised to seek continuing medical monitoring	Occupational Health and Safety Regulations (Vic)
Cadmium	• Collection of demographic data • Work/exposure history • Medical history – administration of a standardised respiratory questionnaire • Physical examination – emphasis on respiratory system • Investigation – i. Standardised respiratory function tests ii. A spot urine for cadmium with the results corrected for creatinine iii. A urine ß2-microglobulin test will be conducted and the results will be corrected for creatinine.	• Monitoring exposure to cadmium – Work/study-related exposure to cadmium can be assessed by monitoring urine. Two methods can be used: i. measurement of cadmium in urine as µg/g of creatinine ii. assessment of ß2-microglobulin as µg/g of creatinine. • A spot urine for cadmium and urine ß2-microglobulin will be conducted annually and compared against the person's baseline levels measured at the start of the health monitoring process.	Final medical examination – A final medical examination will be conducted and those with a history of raised ß2-microglobulin should be advised to seek continuing medical monitoring.	Occupational Health and Safety Regulations (Vic)
Chromium (inorganic)	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – emphasis on respiratory system and skin	• Workplace skin care program • Respiratory symptoms – any symptoms should be reported to a medical practitioner • Monitoring exposure to chromium - The registered medical practitioner may also choose to monitor a person's exposure to chromium via urinary chromium level	Final medical examination - The final medical examination will include urinary chromium testing and a physical examination by a medical practitioner.	Occupational Health and Safety Regulations (Vic)
Creosote	• Collection of demographic data • Work/exposure history • Medical history	• Photosensitivity – if a person develops photosensitivity, they should see a medical practitioner. • Physical examination – annual physical examination with emphasis on neurological system and skin. Evidence of skin sensitisation should be recorded.	• Final medical examination - A final medical examination will be conducted and will include a physical examination with emphasis on the neurological system and skin, noting abnormal lesions and evidence of skin sensitisation.	Occupational Health and Safety Regulations (Vic)

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HAZARD	TYPE OF HEALTH MONITORING			
	BASELINE	DURING EXPOSURE OR POST INCIDENT	AT TERMINATION OF WORK/STUDY	REQUIREMENT
	• Physical examination – emphasis on neurological system and a thorough examination of skin.	• Data for inclusion in health records - Records of photosensitivity which a person has had, indicating specific processes involved should be included in the person's health monitoring report.	• Continuing medical monitoring - Those with a history of skin disease due to contact with creosote should be advised to seek continuing medical monitoring.	
Crystalline Silica	• Collection of demographic data • Work/exposure history • Medical history - administration of a standardised respiratory questionnaire • Physical examination – emphasis on the respiratory system • Investigation – i. standardised respiratory function tests to be performed ii. chest X-ray, full size PA view.	• Monitoring exposure to crystalline silica - A medical examination should be conducted annually and will include: i. Work/exposure history ii. medical history iii. physical examination iv. lung function investigation consisting of standardised respiratory function tests and, v. if required, a chest X-ray.	Final medical examination - A final medical examination will be conducted and will include: i. medical history ii. physical examination iii. investigation.	Occupational Health and Safety Regulations (Vic)
Isocyanates	• Collection of demographic data • Work/exposure history • Medical history - administration of a standardised respiratory questionnaire • Physical examination – emphasis on the respiratory system and skin • Investigation – i. standardised respiratory function tests to be performed.	Medical examination - A medical examination should be performed at six weeks and then at six monthly intervals during continued exposure. Where monitoring after 12 months shows no adverse health effects the medical practitioner may choose to carry out annual monitoring. The medical examination will include: i. physical examination for work/study-related dermatitis ii. standardised respiratory function tests.	Final medical examination - A final medical examination will be conducted and will include: i. physical examination for work/study-related dermatitis ii. standardised respiratory function tests.	Occupational Health and Safety Regulations (Vic)
Lead (inorganic)	• Baseline health monitoring: i. Before the person starts lead risk work/study ii. One month after the person first starts the lead risk work/study • Collection of demographic data • Work/exposure history • Medical history - The following details about the person's medical history will be collected by the medical practitioner: i. presence of symptoms with an emphasis on reproductive history including current pregnancy or breast feeding, neuropsychologic problems, haematological disorders and renal disorders ii. prior history of non-work/study- related lead exposure e.g. hobbies like shooting (exposure to gun powder) and fishing (exposure to lead sinkers) iii. history of medication or medical treatment including recent chelating agent therapy e.g. EDTA iv. smoking history • Physical examination - A physical examination will be conducted, with an emphasis on the gastrointestinal, haematopoietic, renal, cardiovascular, reproductive and neurological systems • Investigation - The following tests may be conducted to test the person's baseline exposure: i. full blood examination ii. blood lead in whole blood or packed red cells iii. serum creatinine iv. routine urinalysis v. pulmonary function test in cases where respiratory protection is likely to be required	• Monitoring exposure to lead - Biological monitoring must be arranged for each person who carries out lead risk work/study at the following times: 1. For females not of reproductive capacity and males: – six months after the last biological monitoring of the person if the last monitoring shows a blood lead level of less than 30µg/dL (1.45µmol/L); or – three months after the last biological monitoring of the person if the last monitoring – shows a blood lead level of 30µg/dL (1.45µmol/L) or – more but less than 40µg/dL (1.93µmol/L); or – six weeks after the last biological monitoring of the person if the last monitoring shows a blood lead level of 40µg/dL (1.93µmol/L) or more. 2. For females of reproductive capacity: – three months after the last biological monitoring of the person if the last monitoring – shows a blood lead level of less than 10µg/dL (0.48µmol/L); or – six weeks after the last biological monitoring of the person if the last monitoring shows a blood lead level of 10µg/dL (0.48µmol/L) or more • Removal of person from a lead risk - A person must be immediately removed from carrying out lead risk work if: – biological monitoring of the person shows that the person's blood lead level is, or is more than: ○ for females not of reproductive capacity and males—50µg/dL (2.42µmol/L); or		Occupational Health and Safety Regulations (Vic)

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HAZARD	TYPE OF HEALTH MONITORING			
	BASELINE	DURING EXPOSURE OR POST INCIDENT	AT TERMINATION OF WORK/STUDY	REQUIREMENT
	• Counselling - Counselling for lead risk work/study should include the following health and personal hygiene advice: i. Health effects of lead ii. Family planning iii. Pregnancy iv. Personal hygiene v. Eating, drinking and smoking	○ for females of reproductive capacity—20µg/dL (0.97µmol/L); or ○ for females who are pregnant or breastfeeding—15µg/dL (0.72µmol/L); or • following a medical examination of the person, the medical practitioner who supervised the health monitoring recommends that the person must be removed from carrying out the lead risk work/study; or • there is an indication that a risk control measure has failed and as a result, the person's blood lead level is likely to reach the relevant level for the person mentioned above • Return to work/study - The frequency of repeat blood lead level tests after removal from lead risk work/study is at the discretion of the medical practitioner supervising the health monitoring, but should be done at least every three to six weeks until the appropriate fall in blood lead levels has occurred. • The person should be examined periodically to determine whether the person is suitable to return to carrying out lead risk work/study. • A person must not return to lead risk work/study until the person's blood lead level is less than: ○ for females not of reproductive capacity and males—40µg/dL (1.93µmol/L); or ○ for females of reproductive capacity—10µg/dL (0.48µmol/L); AND ○ o they have been assessed as medically fit to return to lead risk work/study by the medical practitioner supervising the health monitoring		
Mercury (inorganic)	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – emphasis on the dermatological, gastrointestinal, neurological and renal systems • Investigation – spot urine to test to determine workers baseline exposure.	• Monitoring average exposure to inorganic mercury – urinary mercury tests • After acute exposure – blood samples to be taken.	Final physical examination – to determine any neurological or renal dysfunction due to inorganic lead exposure.	Occupational Health and Safety Regulations (Vic)
4,4'-Methylene bis (2-chloroaniline) (MOCA)	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – only if indicated by work/exposure history • Investigation – The following tests will be used to test the person's baseline exposure: i. dipstick urinalysis for haematuria ii. urine cytology may be required depending on the medical history and previous exposure.	• Monitoring exposure to MOCA – The following tests will be conducted twice annually at the time of peak exposure/use: i. urinary total MOCA ii. spot creatinine corrected urine for total MOCA iii. dipstick urinalysis for haematuria. • Dipstick urinalysis results will be compared with the person's baseline dipstick urinalysis. Urine cytology will also be conducted annually	• Final medical examination – A final medical examination will be conducted and will include: i. urine cytology for haematuria ii. dipstick urinalysis iii. a medical review of health monitoring records. • Continuing medical monitoring – The person should be reminded of the need for continuing urine cytology and dipstick urinalysis.	Occupational Health and Safety Regulations (Vic)

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HAZARD	TYPE OF HEALTH MONITORING			
	BASELINE	DURING EXPOSURE OR POST INCIDENT	AT TERMINATION OF WORK/STUDY	REQUIREMENT
Organophosphate Pesticides	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – only if indicated by work/exposure and medical history • Investigation – The following tests will be used to test the person's baseline exposure: i. Estimation of red cell and plasma cholinesterase activity levels by the Ellman method. A venous blood sample is recommended. At least one, and ideally two, pre-exposure tests should be performed at least three days apart and the baseline obtained by averaging these tests. The results of these tests should be within 15 per cent to be regarded as reliable.	Monitoring exposure to organophosphate pesticides – Periodic testing of people during organophosphate pesticides use is desirable. The medical examination will include: i. Work/exposure history ii. medical history iii. physical examination including looking for evidence of dermatitis on the hands and forearms—this may indicate advice is required on work/study practices iv. estimation of red cell and plasma cholinesterase activity levels by the Ellman method. It is preferable the estimation be done in the latter half of the working day when organophosphate pesticides are used. If a 20 per cent depression of cholinesterase activity is seen the person should be re-tested.	Final medical examination.	Occupational Health and Safety Regulations (Vic)
Polycyclic Aromatic hydrocarbons (PAH)	• Work/exposure history • Medical history – The following details about the person's medical history will be collected by the medical practitioner: i. records of personal exposure, including photosensitivity ii. presence of symptoms iii. smoking history. • Physical history – conducted if indicated by work/exposure and medical history.	• Photosensitivity – Where people report photosensitivity, an appointment should be arranged with the medical practitioner and people should receive additional counselling on the potential health effects of PAH on the skin. • Monitoring exposure to PAH – The assessment of work/study-related exposure to PAH is difficult because people are exposed to a mixture of compounds. However, the metabolite of pyrene, 1-hydroxypyrene (1-HP) in urine, is most often used as the biomarker for PAH exposure as pyrene is a very thermodynamically stable compound and therefore most abundant in a PAH mixture.	Final medical examination	Occupational Health and Safety Regulations (Vic)
Pentachlorophenol (PCP)	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – emphasis on the skin, noting abnormal lesions or effects of irritancy • Investigation – The following tests will be used to test the person's baseline exposure: i. A spot urine test for total PCP will be conducted and the result will be corrected for creatinine. Where there is 1 mg or more of total PCP per gram of creatinine, repeat spot urine for total PCP should be performed at the same time of the day ii. A dipstick urinalysis for haematuria and proteinuria will also be conducted.	• Monitoring exposure to PCP – A spot urine for total PCP corrected for creatinine and a dipstick urinalysis for proteinuria and haematuria will be conducted every 180 days and compared with the person's baseline levels. • Tests should be conducted pre-shift towards the end of the working/study week.	Final medical examination – A final medical examination will be conducted with emphasis on the skin, noting abnormal lesions or effects of irritancy.	Occupational Health and Safety Regulations (Vic)
Thallium	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – only if indicated by work/exposure and medical history • Investigation – A spot urine test for thallium will be used to test the person's baseline exposure. The result is corrected for creatinine that is the thallium concentration in micrograms per gram of creatinine.	• Monitoring exposure to thallium – A spot urine test for thallium will be conducted every 90 days and compared with the person's baseline levels. • Where there is 50 µg thallium or more per gram of creatinine: i. a repeat spot urine for thallium should be performed at the same time of the day to confirm results	Final medical examination – A final medical examination will be conducted and will include a spot urine for thallium.	Occupational Health and Safety Regulations (Vic)

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HAZARD	TYPE OF HEALTH MONITORING			
	BASELINE	DURING EXPOSURE OR POST INCIDENT	AT TERMINATION OF WORK/STUDY	REQUIREMENT
	• Where there is 50 µg thallium or more per gram creatinine, a repeat spot urine test should be performed at the same time of the day.	ii. a physical examination should be performed with particular attention to the nervous system and noting hair loss iii. the person conducting a business or undertaking must review control measures and carry out recommended remedial action iv. the person must be informed of the results of the health monitoring.		
Vinyl Chloride	• Collection of demographic data • Work/exposure history • Medical history – There are many non-work/study factors associated with hepatocellular carcinoma, including excessive alcohol consumption and viral hepatitis that the medical practitioner needs to be aware of. The following details about the person's medical history will be collected by the medical practitioner: i. presence of symptoms ii. smoking history iii. alcohol consumption iv. viral hepatitis – hepatitis B or C v. haemachromatosis vi. other liver disease • Physical examination – A physical examination will be conducted only if work/exposure and medical history indicates this is necessary, for example if the symptoms of vinyl chloride exposure are present. Investigation – In addition to medical history and physical examination, there are several test methods that can be used to assess exposure to vinyl chloride. These are: i. full blood count including mean cell volume and platelets ii. liver function tests including aspartate transaminase (AST), alanine transaminase (ALT), gamma glutamyl transpeptidase (GGT), alkaline phosphatase and bilirubin. • The registered medical practitioner may choose to conduct these tests to assess the person's exposure to vinyl chloride. • The medical practitioner should consider testing for viral markers for hepatitis B and hepatitis C after pre-test counselling.	• Monitoring exposure to vinyl chloride – Medical examinations should occur every two years, with laboratory tests repeated annually where required. • Medical examination – The person conducting a business or undertaking should arrange an appointment with the registered medical practitioner for those who are excessively exposed to vinyl chloride, are suspected of being excessively exposed to vinyl chloride, or have concerns about vinyl chloride exposure.	Final medical examination – A final medical examination will be conducted and may include tests used by the registered medical practitioner to assess exposure including: i. full blood count including mean cell volume and platelets ii. liver function tests including AST, ALT, GGT, alkaline phosphatase and bilirubin.	Occupational Health and Safety Regulations (Vic)
RADIATION				
Sealed and unsealed sources and x-ray	• Collection of demographic data • Work/exposure history.	Personal dosimetry every 3 months.	Final dosimetry.	Radiation Act (Vic)
ASBESTOS				
Asbestos	• Collection of demographic data • Work/exposure history • Medical history • Physical examination – only if indicated by work/exposure and medical history	Monitoring exposure to asbestos.	Final medication examination – emphasis on the respiratory system.	Occupational Health and Safety Regulations (Vic)

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HAZARD	TYPE OF HEALTH MONITORING			
	BASELINE	DURING EXPOSURE OR POST INCIDENT	AT TERMINATION OF WORK/STUDY	REQUIREMENT
	• Investigation – standardised respiratory function tests to determine baseline respiratory function.			
SCUBA DIVING				
Scuba Diving	Certificate of medical fitness before diving activity or before diving training commences.	Comply with conditions of the certificate.		Occupational Health and Safety Regulations (Vic) AS/NZS 2299
BIOHAZARDS				
Working with laboratory animals	• Pre-employment medical questionnaire for all • Health monitoring / lung function tests for persons at risk.	Monitoring for symptoms of allergens.		AS2234.3 2010
Work with risk group 3 and 4 human pathogens	• Initial health examination for all. • Base line serum sample from at risk persons.	Additional serum samples collected periodically depending on the risk of exposure to the laboratory agents handled.		AS2234.3 2010
GENERAL				
Noise	• Collection of demographic data • Work/exposure history • Audiometric Testing – when a need for testing, as described in Part 3.2 of the OHS Regulations (Vic), has been identified it must be provided within three months of the worker commencing work.	• Audiometric Testing – Follow up test need to be carried out at least every two years. Should be carried out well into the work shift so that any temporary hearing loss can be picked up. • More frequent audiometric testing may need to be provided if exposures are equal or greater than 94 Db(A) or as recommended my medical professional. • If the results of 2 or more audiometric tests of a person, during a period not exceeding 2 years, indicate a reduction in hearing levels equal to or greater than 15 decibels at 3000 hertz, 4000 hertz or 6000 hertz, RMIT must provide for the person to undergo an audiological examination as soon as reasonably possible.	Follow up testing to be provided in line with "During Exposure or Post Incident" requirements. No additional testing is required once employment/study has been terminated/completed.	Occupational Health and Safety Regulations (Vic)