

Health monitoring

Guide for vinyl chloride



Contents

Introduction	3
Vinyl chloride	4
1. Health monitoring for vinyl chloride under the WHS Regulations	4
2. Monitoring exposure to vinyl chloride.....	5
Workplace exposure standard	6
Removal from work.....	6
Return to work	6
3. Final medical examination	6
4. Route of occupational exposure	7
5. Target organ/effect	7
6. Acute effects	8
7. Chronic effects	8
8. Carcinogenicity.....	9
9. GHS classification	9
Source documents.....	9
Health monitoring report – Vinyl chloride.....	13
Section 1 – A copy of this section to be provided to the PCBU	13
Section 2 – This section to be retained by the registered medical practitioner	16

Introduction

This guide is intended to be read by a registered medical practitioner with experience in health monitoring who is engaged by person conducting a business or undertaking (PCBU) to carry out or supervise health monitoring. It provides practical guidance to registered medical practitioners about requirements under the work health and safety (WHS) laws for health monitoring.

This guide applies to all workplaces covered by the WHS Regulations where health monitoring is required.

How to use this guide

This guide includes references to the legal requirements under the WHS Act and WHS Regulations. These are included for convenience only and should not be relied on in place of the full text of the WHS Act or WHS Regulations.

The words 'must', 'requires' or 'mandatory' indicate a legal requirement exists that must be complied with. The word 'should' is used in this guide to indicate a recommended course of action, while 'may' is used to indicate an optional course of action.

This guide provides information for those registered medical practitioners engaged by a PCBU to carry out or supervise health monitoring for workers. This guidance should be read in conjunction with the following:

- *Health monitoring guide for registered medical practitioners*
- *Health monitoring guides for hazardous chemicals*
- *Health monitoring guide for workers*
- *Health monitoring guide for persons conducting business or undertakings (PCBUs).*

Health monitoring under the WHS Regulations

In certain circumstances, the model WHS Regulations place duties on a PCBU to provide health monitoring to workers. These requirements arise if the worker is carrying out work with hazardous chemicals including lead and asbestos. In addition, the work being carried out must be the kind of work specified in the WHS Regulations. A PCBU has the duty to determine if health monitoring is required.

The WHS Regulations prescribe that health monitoring is carried out by or supervised by a registered medical practitioner with experience in health monitoring.

Vinyl chloride

Vinyl chloride (CAS 75-01-4) is a colourless gas that burns easily. It does not occur naturally and must be produced industrially for its commercial uses.

Vinyl chloride is also produced as a combustion product in tobacco smoke.

Synonyms: vinyl chloride monomer (VCM), chloroethylene, chloroethene, monochloroethylene.

Work activities that may represent a high risk exposure

Under the Work Health and Safety (WHS) Regulations, vinyl chloride is listed as a restricted carcinogen and must not be used without authorisation from a relevant WHS regulator.

Vinyl chloride is used primarily to make polyvinyl chloride (PVC); a polymerisation process where vinyl chloride monomer is consumed. PVC in turn is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Exposure to vinyl chloride may occur in manufacturing facilities where PVC is being produced. Workers will not be exposed to vinyl chloride as result of handling or working with PVC products. Monitoring is generally only required in PVC manufacturing facilities where there is exposure to vinyl chloride (monomer).

Examples of work activities involving vinyl chloride that require special attention when assessing exposure include production of polyvinyl chloride (PVC), including the cleaning of any equipment used in the production process.

Special attention should be given to acute exposures that may occur in the above vinyl chloride processes.

The level of potential exposure in vinyl chloride monomer/polyvinyl chloride (VCM/PVC) plants is generally low due to comprehensive control measures. However, workers should be made aware of the additional risk of developing HCC when they have hepatitis B virus (HBV) or hepatitis C virus (HCV) or when their alcohol consumption is too high.

Sources of non-occupational exposure

Vinyl chloride is not found naturally though it has been found in landfill, gas and groundwater as a degradation product of chlorinated hydrocarbons deposited as solvent wastes in landfills.

The level of residual vinyl chloride in PVC has been regulated since the late 1970s in many countries. Since then, release of vinyl chloride monomer from the thermal degradation of PVC is either not detectable or is at very low levels. Vinyl chloride is also present in cigarette smoke.

1. Health monitoring for vinyl chloride under the WHS Regulations

Collection of demographic, medical and occupational history

Physical examination

Records of personal exposure

Annual liver function tests (AST, ALT, GGT, ALP, and bilirubin)

In this guide, 'vinyl chloride' is also used to refer to vinyl chloride monomer.

Health monitoring before starting work in a vinyl chloride process

Health monitoring for vinyl chloride may be required before the worker starts work so that changes to the worker's health can be detected.

Initial discussions about a health monitoring program should include:

- possible health effects from exposure to vinyl chloride
- how to recognise and report symptoms, and
- what is involved in the health monitoring program, for example the frequency of testing and the tests that may be needed.

There are many non-work factors associated with hepatocarcinoma (a key cancer caused by vinyl chloride), including excessive alcohol consumption and viral hepatitis that the registered medical practitioner needs to be aware of. The following details about the worker's medical history should be collected by the registered medical practitioner:

- presence of symptoms
- smoking history
- alcohol consumption
- viral hepatitis – hepatitis B or C
- haemochromatosis, and
- other liver disease.

The registered medical practitioner may consider testing for viral markers for hepatitis B and hepatitis C after pre-test counselling.

If workers are suffering from active hepatitis, the registered medical practitioner should discuss with the treating gastroenterologist possible exemption from working in duties that may expose them to vinyl chloride.

A physical examination should be carried out only if work and medical history indicates this is necessary, for example if the symptoms of vinyl chloride exposure are present.

Vinyl chloride is a respiratory irritant and it is important to investigate respiratory symptoms. However, spirometry may not be required at this stage.

During exposure to a vinyl chloride process

2. Monitoring exposure to vinyl chloride

Where workers are exposed, suspected of being exposed or are concerned about exposure to vinyl chloride, the person conducting the business or undertaking (PCBU) has a duty to arrange a health monitoring appointment with a registered medical practitioner. For example, an appointment should be arranged following spills or loss of containment of vinyl chloride resulting in excessive exposure to workers or when workers develop symptoms of vinyl chloride exposure.

There are a number of test methods that can be used to indirectly assess symptoms of vinyl chloride exposure. One of these is:

- liver function tests including:
 - aspartate transaminase (AST)
 - alanine transaminase (ALT)
 - gamma glutamyl transpeptidase (GGT)
 - alkaline phosphatase (ALP), and
 - bilirubin.

Examination of full blood counts including mean cell volume (MCV) and platelets may also provide an indication of effects associated with excessive vinyl chloride exposure.

NOTE: There is no specific biological marker for angiosarcoma of the liver (ASL) and hepatocellular carcinoma (HCC) caused by vinyl chloride exposure. Biological testing results will need to be interpreted in consideration of symptoms and exposure profile.

Laboratory tests should be repeated annually where required.

There are studies that indicate urinary thiodiglycolic acid, a metabolite of vinyl chloride, may be used as an indicator of vinyl chloride exposure¹. However, at this stage, a biological exposure standard has not been established.

Workplace exposure standard

The workplace exposure standard for vinyl chloride (monomer) is:

- eight hour time weighted average (TWA) of 5 ppm (13 mg/m³).

A physical examination and biological testing may be indicated if the results of air monitoring indicate frequent or potentially high exposure (half of the TWA or above).

Removal from work

Where a medical examination or test indicates the worker is displaying symptoms of exposure to vinyl chloride the registered medical practitioner should consider recommending the worker be removed from vinyl chloride-related work.

When removal from vinyl chloride-related work is indicated the registered medical practitioner must provide the PCBU with the following recommendations:

- the worker should be removed from work with vinyl chloride, and
- the PCBU should review control measures and carry out recommended remedial action.

The worker must be informed of the results of health monitoring.

Return to work

Should a worker be removed from vinyl chloride-related work, they must not return until the registered medical practitioner has:

- assessed them as medically fit, and
- made a recommendation to the PCBU that the worker can return to remediated vinyl chloride-related work.

This assessment should take into consideration the clinical condition of the worker, the resolution of symptoms, the worker's biological monitoring results and remediation of the circumstances that led to the symptoms if possible.

At termination of work in a vinyl chloride process

3. Final medical examination

A final medical examination should be carried out and may include tests used by the registered medical practitioner to assess symptoms of exposure including:

- liver function tests including AST, ALT, GGT, ALP and bilirubin, and
- full blood count including MCV and platelets.

¹ Deutsche Forschungsgemeinschaft (DFG). 2010. [Addendum to Vinyl Chloride \[BAT Value Documentation, 2010\]](#)

A physical examination should be carried out if work and medical history indicates this is necessary, for example through the presence of symptoms as organised by the registered medical practitioner supervising the health monitoring program.

Workers with other health conditions or continuing symptoms due to vinyl chloride exposure (including liver, neurological or skin complaints) should be advised to seek continuing medical examinations.

A health monitoring report from the registered medical practitioner should be provided to the PCBU as soon as practicable after the completion of the monitoring program, and at regular intervals for longer term or ongoing health monitoring processes. The report must include:

- the name and date of birth of the worker
- the name and registration number of the registered medical practitioner
- the name and address of the PCBU who commissioned the health monitoring
- the date of the health monitoring
- any test results that indicate whether or not the worker has been exposed to a hazardous chemical
- any advice that test results indicate that the worker may have contracted an injury, illness or disease as a result of carrying out the work that triggered the requirement for health monitoring
- any recommendation that the PCBU or undertaking take remedial measures, including whether the worker can continue to carry out the type of work that triggered the requirement for health monitoring, and
- whether medical counselling is required for the worker in relation to the work that triggered the requirement for health monitoring.

Potential health effects following exposure to vinyl chloride

4. Route of occupational exposure

The primary route of vinyl chloride exposure is inhalation.

Accidental ingestion may be possible when eating or smoking with contaminated hands.

5. Target organ/effect

The target organs and potential effects of vinyl chloride exposure include:

Table 1 Target organs and potential effects of vinyl chloride exposure

Target organ	Effect
Liver	<ul style="list-style-type: none"> • Fibrosis • Angiosarcoma
Central nervous system	<ul style="list-style-type: none"> • Dizziness • Ataxia • Visual disturbance • Coma • Death
Skin and mucous membranes	<ul style="list-style-type: none"> • Scleroderma • Irritation
Circulatory system	<ul style="list-style-type: none"> • Raynaud's syndrome

Target organ	Effect
Bone	<ul style="list-style-type: none"> Resorption particularly of the fingertips—acro-osteolysis
Respiratory system	<ul style="list-style-type: none"> Irritation
Eyes	<ul style="list-style-type: none"> Irritation

6. Acute effects

CNS

The CNS is the primary target of vinyl chloride acute toxicity. Vinyl chloride is thought to depress the CNS via a solvent effect on lipids and protein components of neural membranes that interrupt signal transmission. There may be a latent period of hours to days between exposure and symptom onset.

Symptoms include:

- euphoria
- dizziness
- ataxia
- fatigue
- drowsiness
- headache, and
- loss of consciousness.

With inhalational exposure, symptoms increase in severity over a range of 8000 to 20,000 ppm in air. Exposure to higher concentrations can cause death.

Sub-lethal CNS effects resolve quickly when the victim is removed from further exposure.

Respiratory system

Vinyl chloride gas inhalation may cause mild respiratory tract irritation, wheezing and chemical bronchitis. These effects are transient and resolve quickly following removal from exposure.

Cardiovascular system

Vinyl chloride may lower the myocardial threshold to the dysrhythmogenic effects of catecholamines.

Dermal and ocular

Exposure to escaping compressed gas or liquid can cause frostbite injury with redness, blistering, and scaling of the skin and corneal and conjunctival irritation or burns.

7. Chronic effects

Chronic exposure to levels around 100-1000 ppm has been associated with a range of symptoms collectively termed 'vinyl chloride disease', including Raynaud's syndrome, scleroderma and acro-osteolysis—bone resorption of the terminal phalanges of the fingers.

Liver and spleen fibrosis, portal hypertension and cirrhosis can occur.

Other effects of chronic exposure include sensory-motor polyneuropathy; pyramidal, extrapyramidal, and cerebellar abnormalities and immunopathological phenomena like purpura and thrombocytopenia.

8. Carcinogenicity

Vinyl chloride has been classified as a Category 1A carcinogen according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) as it has been shown to cause cancer in humans.

Vinyl chloride has been found to cause DNA and chromosomal damage.

A large number of epidemiological studies and case reports have substantiated the causal association between inhalation of vinyl chloride and haemangiosarcoma of the liver. Some studies have also reported a statistically significant increase in mortality due to brain cancer, lung cancer, cancer of the lymphatic and haematopoietic system and non-malignant disease.

There are many non-work factors associated with HCC including excessive alcohol consumption and viral hepatitis. Studies have suggested exposure to vinyl chloride and excessive alcohol consumption had a synergistic effect on the development of HCC.

9. GHS classification

The following GHS health hazard classification for vinyl chloride has been taken from Safe Work Australia's Hazardous Chemicals Information System.

Hazard category

Carcinogenicity – category 1A

Germ cell mutagenicity – category 2 (suspected of causing genetic defects)

Specific target organ toxicity (repeated exposure) – category 1
(causes damage to organs through prolonged or repeated exposure)

Source documents

Agency for Toxic Substances and Disease Registry (1990) *Case Studies in Environmental Medicine 2: Vinyl Chloride Toxicity*, Agency for Toxic Substances and Disease Registry, United States Department of Health and Human Services, Public Health Service, Atlanta.

Agency for Toxic Substances and Disease Registry, [Medical Management Guidelines for Vinyl Chloride](#).

Agency for Toxic Substances and Disease Registry, [Toxicological Profile for Vinyl Chloride](#).

American Conference of Governmental Industrial Hygienists (ACGIH) (2011) *Documentation of the Threshold Limit Values for Chemical Substances*, 7th Ed, Cincinnati.

[Chemical analysis branch handbook, 9th Edition, Workplace and biological monitoring exposure analysis](#), WorkCover NSW (PDF 3.39MB).

European Centre for Ecotoxicology and Toxicology of Chemicals (1988) *Technical Report 31: The Mutagenicity and Carcinogenicity of Vinyl Chloride—A Historical Review and Assessment*, European Centre for Ecotoxicology and Toxicology of Chemicals, Brussels.

International Program for Chemical Safety, [Environmental Health Criteria 215 Vinyl Chloride](#).

Lauwerys, R.R. and Hoet, P. (2001) *Industrial Chemical Exposure Guidelines for Biological Monitoring*, 3rd Ed, Lewis Publishers, Boca Raton.

Mastrangelo, G., Fedeli U., Fadda, E., Valentini, F., Agnesi, R., Magarotto, G., Marchi, T., Buda, A., Pinzani, M. and Martines, D. (2004) Increased Risk of Hepatocellular Carcinoma

and Liver Cirrhosis in Vinyl Chloride Workers: Synergistic Effect of Occupational Exposure with Alcohol Intake. *Environ. Health Pers.* 112(11): 1188-1192.

National Industrial Chemicals Notification and Assessment Scheme; Human Health Tier II Assessment for [Ethene, chloro-](#).

Safe Work Australia (2013); [Workplace Exposure Standards for Airborne Contaminants](#) (PDF 873KB).

Safe Work Australia; [Hazardous Chemicals Information System](#).



Health monitoring report

Vinyl chloride

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

Health monitoring report – Vinyl chloride

This health monitoring report is a confidential health record and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with the consent of the worker.

There are two sections. Complete both sections and all questions as applicable.

Section 1 A copy of this section should be forwarded to the person conducting the business or undertaking (PCBU) who has engaged your services.

Section 2 may contain confidential health information. Information that is required to be given to the PCBU should be summarised in Section 1.

Section 1 – A copy of this section to be provided to the PCBU

Person conducting a business or undertaking

Company/organisation name: Click here to enter text.

Site address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.

Site Tel: Click here to enter text.

Site Fax: Click here to enter text.

Contact Name: Click here to enter text.

Other businesses or undertakings engaging the worker (include a separate section for each PCBU)

N/A

Company/organisation name: Click here to enter text.

Site address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.

Site Tel: Click here to enter text.

Site Fax: Click here to enter text.

Contact Name: Click here to enter text.

Worker details (tick all relevant boxes)

Surname: Click here to enter text.

Given names: Click here to enter text.

Date of birth: Click here to enter a date.

Sex: Male Female

Address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.

Current job: Click here to enter text.

Tel (H): Click here to enter text.

Mob: Click here to enter text.

Date started employment: Click here to enter a date.

Employment in vinyl chloride risk work (tick all relevant boxes) (information provided by the PCBU)

New to vinyl chloride work

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

- New worker but not new to vinyl chloride work
- Current worker continuing in vinyl chloride work

Worked with vinyl chloride since: [Click here to enter a date.](#)

Risk assessment completed: Yes No

Work environment assessment (tick all relevant boxes)
(information provided by the PCBU)

Date of assessment: [Click here to enter a date.](#)

Vinyl chloride industry/use

- Polyvinyl chloride production
- Other (specify): [Click here to enter text.](#)

Other chemicals the worker may be exposed to: [Click here to enter text.](#)

Controls

Wear gloves	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Respirator use	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Respirator type	Click here to enter text.	
Local exhaust ventilation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Overalls/work clothing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Laundering by employer	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Wash basins and showers (with hot and cold water)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other please specify		

Health monitoring results

Comments about health monitoring results (for example any early indications or diagnosis of injury, illness or disease): [Click here to enter text.](#)

Recommendations (by registered medical practitioner) (tick all relevant boxes)

Further/additional health monitoring for worker

- This is the final health monitoring report
- Repeat health assessment in [Click here to enter text.](#) month(s) / [Click here to enter text.](#) week(s)
- Counselling required
- Medical examination by registered medical practitioner. On [Click here to enter a date.](#)
- Referred to Medical Specialist (respiratory/dermatology/other). On [Click here to enter a date.](#)

Recommendations to PCBU

- The worker is suitable for work with vinyl chloride

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

- Review workplace controls
- The worker should be removed from work with vinyl chloride. On [Click here to enter a date.](#)
- The worker is fit to resume work. On [Click here to enter a date.](#)
- Biological monitoring results indicate unacceptably high exposure levels

Specialist's name: [Click here to enter text.](#)

Additional comments or recommendations: [Click here to enter text.](#)

Registered medical practitioner (responsible for supervising health monitoring)

Name: [Click here to enter text.](#)

Signature:

Date: [Click here to enter a date.](#)

Tel: [Click here to enter text.](#)

Fax: [Click here to enter text.](#)

Registration Number: [Click here to enter text.](#)

Medical Practice: [Click here to enter text.](#)

Address: [Click here to enter text.](#)

Suburb: [Click here to enter text.](#)

Postcode: [Click here to enter text.](#)

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

Section 2 – This section to be retained by the registered medical practitioner

Person conducting a business or undertaking

Company/organisation name: Click here to enter text.

Site address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.

Site Tel: Click here to enter text.

Site Fax: Click here to enter text.

Contact Name: Click here to enter text.

Other businesses or undertakings engaging the worker

N/A

Company/organisation name: Click here to enter text.

Site address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.

Site Tel: Click here to enter text.

Site Fax: Click here to enter text.

Contact Name: Click here to enter text.

Worker details (tick all relevant boxes)

Surname: Click here to enter text.

Given names: Click here to enter text.

Date of birth: Click here to enter a date.

Sex: Male Female Pregnant/breastfeeding

Address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.

Current job: Click here to enter text.

Tel (H): Click here to enter text.

Mob: Click here to enter text.

Date started employment: Click here to enter a date.

Past employment and exposure details (tick all relevant boxes)

Have you ever worked in any of the following jobs?

If you answered 'yes' to any of the questions, please advise if you experienced any symptoms such as cough or wheeze or asthma when working.

			Comments (all 'yes' answers)
Manufacturing of polyvinyl chloride (PVC)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Other (please specify)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

General health questionnaire (tick all relevant boxes)

			Comments (all 'yes' answers)
Did you suffer any incapacity lasting two weeks or longer in the last two years	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Have you ever had any operations or accidents or been hospitalised for any reason	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Are you currently being treated by a doctor or other health professional for any illness or injury	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Are you currently receiving any medical treatment or taking any medications. Please detail.	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Do you currently smoke	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Do you practice personal hygiene at work, for example nail biting, frequency of hand washing, eating or smoking, clean shaven, shower and change into clean clothes at end of shift	<input type="checkbox"/> No	<input type="checkbox"/> Yes	

Specific health questions (tick all relevant boxes)

Do you have or have you ever had:

Blurred vision or other vision problems	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Itchy eyes, runny and/or congested nose	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Wheezing, bronchitis or asthma now or in the past	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Any other lung or respiratory conditions (emphysema, pneumonia or sinusitis)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Allergies, hay fever, or allergic bronchitis	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Liver disease (including alcohol related or other hepatitis)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Kidney or bladder disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Blood disorders	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Any neurological condition affecting nerves in your feet or hands, your coordination or balance	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Raynaud's disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

Skin disorders or dermatitis, including scleroderma	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Any form of cancer	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Any other significant health conditions	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.

General health assessment (if applicable)

Height: Click here to enter text. cm

Weight: Click here to enter text. kg

BP: Click here to enter text. / Click here to enter text. mmHg

Urinalysis

Blood: Normal Abnormal

Protein: Click here to enter text.

Referred for further testing

Sugar: Click here to enter text.

No Yes

Cardiovascular system			Medical comments (for all yes/abnormal)
Blood pressure	<input type="checkbox"/> Normal	<input type="checkbox"/> Abnormal	Click here to enter text.
Heart rate	<input type="checkbox"/> Normal	<input type="checkbox"/> Abnormal	Click here to enter text.
Heart sounds	<input type="checkbox"/> Normal	<input type="checkbox"/> Abnormal	Click here to enter text.
Murmurs present	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Evidence of cardiac failure/oedema	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Gastrointestinal System			
Any evidence of hepatomegaly	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Click here to enter text.
Respiratory system			
Breathing normal and regular in character	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Click here to enter text.
Auscultation normal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Click here to enter text.
Signs of past/present respiratory disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Nervous system			
Muscular tone, co-ordination	<input type="checkbox"/> Normal	<input type="checkbox"/> Abnormal	Click here to enter text.
Tremor	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Skin			
Eczema, dermatitis or allergy	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Skin cancer or other abnormality	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Evidence of nail biting	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.
Other	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Click here to enter text.

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

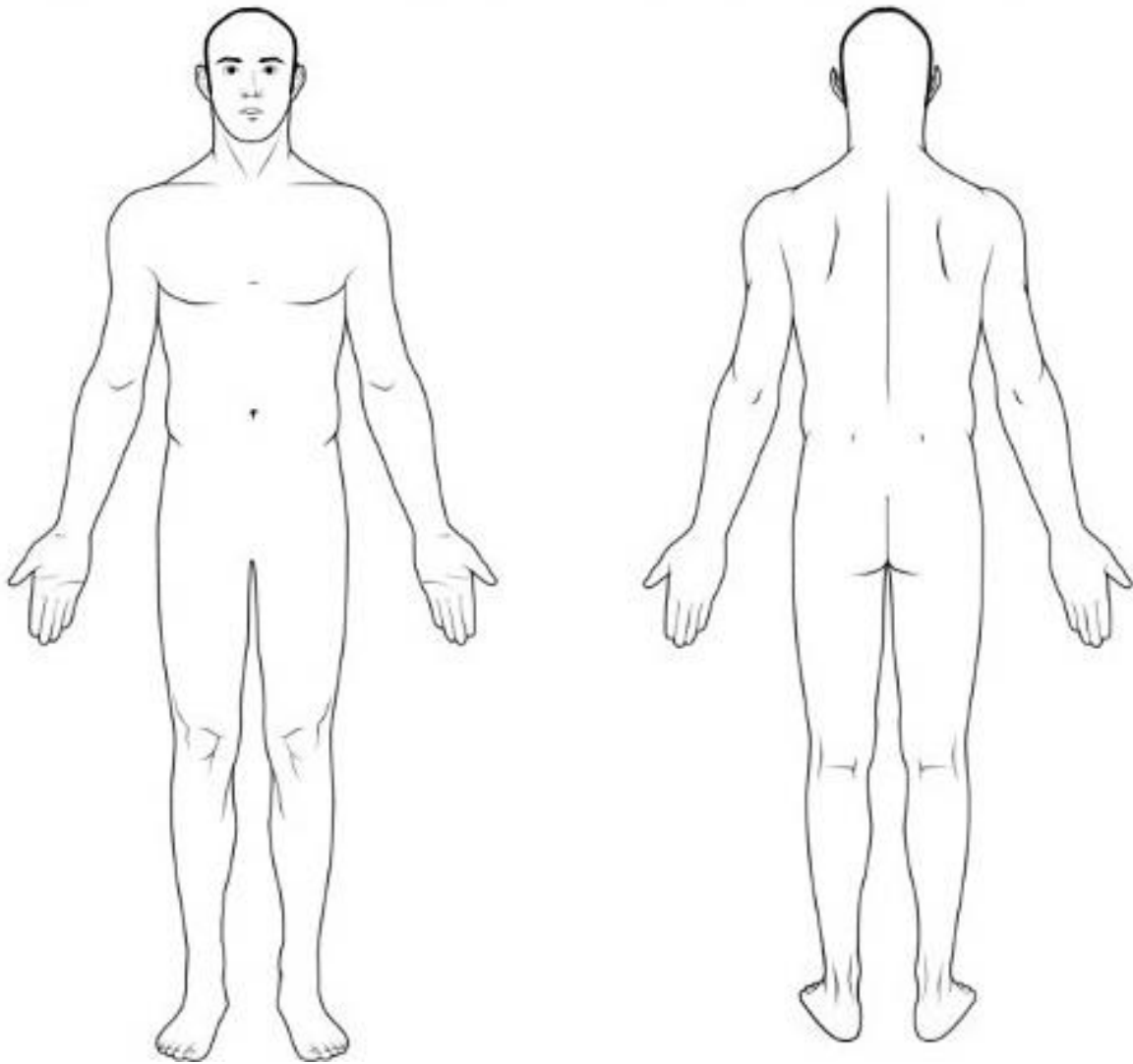


Figure 1 Template of the human body to indicate the location of abnormalities

Eye	Medical comments (for all abnormal)
Evidence of eye irritation <input type="checkbox"/> No <input type="checkbox"/> Yes	Click here to enter text.

Biological monitoring results

Include/attach at least the previous two test results (if available)

Date	Tests performed	Recommended action and/or comment
Click here to enter a date.	Click here to enter text.	Click here to enter text.
Click here to enter a date.	Click here to enter text.	Click here to enter text.
Click here to enter a date.	Click here to enter text.	Click here to enter text.
Click here to enter a date.	Click here to enter text.	Click here to enter text.

This form contains confidential information and must not be disclosed to another person except in accordance with the Work Health and Safety Regulations or with consent of the worker

Other medical history, family medical history, current medication, comments, tests or recommendations (use separate sheet if necessary)

Click here to enter text.

Registered medical practitioner (responsible for supervising health monitoring)

Name: Click here to enter text.

Signature:

Date: Click here to enter a date.

Tel: Click here to enter text.

Fax: Click here to enter text.

Registration Number: Click here to enter text.

Medical Practice: Click here to enter text.

Address: Click here to enter text.

Suburb: Click here to enter text.

Postcode: Click here to enter text.