

# Deemed diseases in Australia

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# RECOMMENDED AUSTRALIAN-SPECIFIC LIST OF DEEMED DISEASES

Disease	Exposure or occupation
<b>Infectious disease</b>	
Anthrax	Relevant occupations involving work with animals or animal carcasses (such as animal handler, pelt handler, abattoir worker, meat inspector).
Avian Influenza	Relevant occupations involving work with birds (such as poultry slaughterer, poultry farm worker, pet shop worker, veterinarian, veterinary nurse) or frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Brucellosis	Relevant occupations involving work with animals or animal carcasses (such as veterinarian, farmer or farm worker, abattoir worker, laboratory worker).
COVID-19	Frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Hepatitis A	Relevant occupations involving contact with human waste (such as child care workers, carers of intellectually disabled persons, workers in rural or remote indigenous communities, and sewage workers and plumbers).
Hepatitis B and C	Relevant occupations involving contact with human bodily secretions (such as health care worker, embalmer, person who handles body substances, clinical laboratory staff, worker in long-term correctional facilities, police, member of the armed forces, emergency services worker).
HIV/AIDS	Health care workers and laboratory workers who become HIV positive after a needlestick injury.
Influenza A (H1N1)	Frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Leptospirosis	Relevant occupations involving work with animals or animal carcasses (such as farmer or farm worker, abattoir worker, forestry worker, hunter, veterinarian, livestock transport operator) or work with animal or human waste (such as plumber).
Middle East Respiratory Syndrome	Frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Orf	Relevant occupations involving work with sheep or sheep carcasses (such as sheep farmer or farm worker, goat farmer or farm worker, abattoir worker, meat inspector).

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Psittacosis	Relevant occupations involving work with birds (such as poultry slaughterer, poultry farm worker, pet shop worker, veterinarian, veterinary nurse).
Q-fever	Relevant occupations involving contact with animals or animal parts in a rural setting (such as abattoir workers, stock workers, stock transporters, shearers, hide processors, farmers and veterinarians).
Tuberculosis	Relevant occupations involving contact with persons or animals in situations where tuberculosis prevalence is likely to be significantly higher than the general community (such as health worker, clinical laboratory worker, funeral parlour staff, farmer, veterinarian), or person with silicosis.

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Disease	Exposure or occupation
<b>Malignancy</b>	
Salivary gland	Ionizing radiation
Nasopharynx	Formaldehyde, wood dust
Oesophagus	Ionizing radiation
Stomach	Ionizing radiation
Colon and rectum	Ionizing radiation
Liver	HBV or HCV exposure related to occupation, vinyl chloride monomer
Bile duct	1,2-Dichloropropane
Nasal cavity and para-nasal sinuses	Ionizing radiation, leather dust, nickel, wood dust
Larynx	Acid mist - strong inorganic, asbestos*
Lung	Arsenic, asbestos, beryllium, bis(chloromethyl)ether, cadmium, chromium VI, diesel engine exhaust, ETS, Ionizing radiation, nickel, PAHs**, Radon-222 and its decay products, Silica dust (crystalline), Soot (chimney sweeping), welding fumes
Bone	Ionizing radiation
Skin (melanoma)	Solar radiation, polychlorinated biphenyls
Skin (non-melanoma)	ionizing radiation, polycyclic aromatic hydrocarbons#, solar radiation
Mesothelioma	Asbestos
Breast (female)	Ionizing radiation
Ovary	Asbestos
Kidney	Ionizing radiation, trichloroethylene
Bladder	2-naphthylamine, benzidine, cyclophosphamide, ionizing radiation, ortho-toluidine, polycyclic aromatic hydrocarbons^
Eye (melanoma)	Ultraviolet light from welding
Brain	Ionizing radiation
Thyroid	Ionizing radiation
Leukaemia <sup>+</sup>	Benzene, butadiene, Cyclophosphamide, formaldehyde, HCV exposure related to occupation, ionizing radiation
Non-Hodgkin's Lymphoma	Ionizing radiation, lindane, pentachlorophenol

\*:Covers all forms of asbestos, including actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite).

Includes mineral substances that contain asbestos.

\*\* :Includes exposure from coal gasification, coal tar pitch and coke production

#: Includes topical exposure from coal tar distillation, coal tar pitch, mineral oils (untreated or mildly treated), shale oils, soot (chimney sweeping)

^: Exposure during aluminium production

+: Excluding chronic lymphatic leukaemia

Disease	Exposure or occupation
<b>Mental or neuropsychiatric diseases</b>	
Post-traumatic stress disorder	Occupations involved as first responders (such as police officers, ambulance officers including paramedics, fire fighters).
<b>Diseases of the nervous system</b>	
Peripheral neuropathy	Metals such as lead, mercury and arsenic; organic solvents such as n-hexane, carbon disulphide and trichloroethylene; pesticides such as organophosphates; acrylamide.
Noise induced hearing loss	Exposure to persistent or intermittent noise above 85db(a)
<b>Respiratory diseases</b>	
Occupational asthma <sup>&amp;</sup>	Sensitising agents or irritants - arthropods or mites, biological enzymes, bioaerosols, derived from fish/shellfish, derived from animals, flour, sensitising foods, flowers, latex, wood dusts, soldering, reactive dyes, anhydrides, acrylates, epoxy, ethylene oxide, aldehydes, pesticides, amines, ammonia, industrial cleaning agents, acids, isocyanates, other reactive chemicals, sensitising metals, sensitising drugs.*
Coal workers' pneumoconiosis	Coal
Asbestosis	Asbestos
Silicosis	Silica
Other pneumoconiosis	Exposures known to occasionally cause pneumoconiosis, such as beryllium, tin, iron oxide, barium, aluminium, cobalt, tungsten <sup>2</sup>
Byssinosis	Cotton, flax, hemp, sisal dust
Extrinsic allergic alveolitis	Damp material of biological origin, such as mouldy hay, straw, grain and feathers
Obliterative bronchiolitis	Relevant occupations involving exposure to food flavourings thought to be associated obliterative bronchiolitis (such as some manufacturing workers involved in food production).

Disease	Exposure or occupation
<b>Hepatic diseases</b>	
Non-infectious hepatitis	Agents known to cause hepatitis (particularly organic solvents) <sup>+</sup>
Chronic active hepatitis	Persons with known HBV or HCV related to occupation
Hepatic cirrhosis	Persons with known HBV or HCV related to occupation

\*: The large number of occupational agents that have been shown to cause these diseases means that it is impractical to list every relevant agent

&: This includes immunologically-mediated occupational asthma and new cases of occupational asthma arising as result of workplace exposure to irritants. It excludes pre-existing asthma worsened due to exposure to workplace irritants.

+: See the entry under "Acute poisoning / toxicity" for a detailed list of specific exposures.

Disease	Exposure or occupation
<b>Skin diseases</b>	
Contact dermatitis (irritant and allergic)	Sensitising agents or irritants - Irritant contact dermatitis in an occupational setting is most commonly reported as due to alcohols, cutting fluids, degreasers, disinfectants, petroleum products, soaps and cleaners, solvents and wet work. Allergic contact dermatitis in an occupational setting is most frequently reported as being due to chromates, cobalt, cosmetics and fragrances, epoxy resin, latex, nickel, plants, preservatives, resins and acrylics.*
Occupational vitiligo	Para-tertiary-butylphenol; para-tertiary-butylcatechol; para-amyphenol; hydroquinone or the monobenzyl or monobutyl ether of hydroquinone.
<b>Musculoskeletal diseases</b>	
Raynaud's disease	Vibration from powered tools and equipment
Bursitis (at the elbow or knee)	Prolonged external friction or pressure or repetitive motion at or about the elbow or the knee
Osteonecrosis	Relevant occupations involving working at significantly increased or decreased air pressure (such as professional divers, caisson divers, hyperbaric exposure chamber attendants).

Disease	Exposure or occupation
<b>Acute poisoning / toxicity (includes acute damage to the heart, lungs, liver, kidney, nervous system and blood)</b>	Acrylonitrile; alcohols; antimony; arsenic; benzene; beryllium; cadmium; carbon disulphide; chromium; copper; fluorine; alcohol, glycols or ketones; hexane; lead; manganese; mercury; mineral acids; nitroglycerine (or other nitric acid esters); osmium; oxides of nitrogen; ozone; pesticides (organophosphate and organochlorine compounds, herbicides and related compounds; pharmaceutical agents; phosgene; phosphorus; selenium; styrene; thallium; tin; toluene; vanadium; xylene; zinc; chemical asphyxiants (carbon monoxide, hydrogen cyanide, hydrogen sulphide, methylene chloride); irritants (benzoquinone and other corneal irritants); toxic halogen derivatives of aliphatic or aromatic hydrocarbons; toxic nitro- and amino-derivatives of benzene (and other less common, specific substances not included here)*

\*: The large number of occupational agents that have been shown to cause these diseases means that it is impractical to list every relevant agent

# GUIDANCE MATERIAL

## Infectious diseases

<b>Anthrax</b>	
Description	Very rare infective illness that usually causes open sores on the skin (although involvement of the lung is commonly fatal) and typically arises from contact with the hide of rural animals.
Exposure	Bacillus anthracis
High risk occupation or industry	Animal handlers, abattoir workers and people working with animal hides.
Latency period	Weeks to months.
Main external non-occupational risk factors	Non-occupational exposure very rare.

<b>Avian Influenza A</b>	
Description	Viral illness most commonly producing respiratory symptoms but other symptoms can occur.
Exposure	Avian Influenza A.
High risk occupation or industry	Relevant occupations involving work with birds (such as poultry slaughterer, poultry farm worker, pet shop worker, veterinarian, veterinary nurse) or frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Latency period	One to ten days.
Main external non-occupational risk factors	Uncommon in the general community but would be more common if the virus is circulating in the community.



<b>Brucellosis</b>	
Description	Generalised infective illness that usually arises from contact with reproductive tract tissues of infected cattle.
Exposure	Brucella sp.
High risk occupation or industry	Veterinarians, farmers, abattoir workers and feral pig hunters.
Latency period	One to two weeks.
Main external non-occupational risk factors	Non-occupational exposure uncommon.

<b>COVID-19</b>	
Description	Viral illness most commonly producing respiratory symptoms but other symptoms can occur.
Exposure	SARS-CoV-2.
High risk occupation or industry	Frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Latency period	Typically five days but ranges from one to 14 days.
Main external non-occupational risk factors	Common in the general community when the virus is circulating in the community.

<b>Hepatitis A</b>	
Description	Viral infection that affects the liver and is spread between people from hand to mouth.
Exposure	Hepatitis A virus
High risk occupation or industry	People whose job brings them in contact with persons who may have Hepatitis A, such as health-care workers in high-risk areas, child care workers, carers of intellectually disabled persons, workers in rural or remote indigenous communities, sewage workers and plumbers.
Latency period	One to three weeks.
Main external non-occupational risk factors	Not common in the general Australian community.

<b>Hepatitis B and C</b>	
Description	Viral infection that affects the liver and is spread between people through contact with body fluids.
Exposure	Hepatitis B and C virus
High risk occupation or industry	People whose job brings them in contact with body fluids in situations where there is a considerable risk of the worker having a break in their skin through which the infection could enter, such as health care workers, persons who handle body substances, embalmers, clinical laboratory staff, workers in long-term correctional facilities, police, members of the armed forces, emergency services workers and tattooists
Latency period	One to three weeks.
Main external non-occupational risk factors	A considerable minority of Australian persons are carriers and potentially infectious.

<b>HIV/AIDS</b>	
Description	Immune deficiency illness due to infection with the HIV. There may be no symptoms for much of the time the person is HIV positive.
High risk occupation or industry	Health care workers and laboratory workers handling bodily fluids. Only known occupational transmission in these occupations is through needlestick injury.
Latency period	Two weeks to six weeks.
Main external non-occupational risk factors	Sexual transmission.

<b>Influenza A (H1N1)</b>	
Description	Viral illness most commonly producing respiratory symptoms but other symptoms can occur.
Exposure	Influenza A (H1N1).
High risk occupation or industry	Frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Latency period	Typically two days but ranges from one to seven days.
Main external non-occupational risk factors	Uncommon in the general community but would be more common if the virus is circulating in the community.

<b>Leptospirosis</b>	
Description	Generalised infective illness that usually arises from contact with urine of infected small animals (particularly rats), typically in a rural setting.
Exposure	Leptospira sp.
High risk occupation or industry	Farmers (especially dairy farmers), abattoir workers, forestry workers, hunters, veterinarians, plumbers and sewer worker.
Latency period	One to two weeks.
Main external non-occupational risk factors	Non-occupational exposure uncommon.

<b>Middle East Respiratory Syndrome</b>	
Description	Viral illness most commonly producing respiratory symptoms but other symptoms can occur.
Exposure	MERS-CoV.
High risk occupation or industry	Frontline healthcare occupations with direct patient contact (such as nurse, doctor, physiotherapist).
Latency period	Typically five days but ranges from two to 14 days.
Main external non-occupational risk factors	Uncommon in the general community but would be more common if the virus is circulating in the community.

<b>Orf</b>	
Description	Rare infective illness that usually causes pustules on the skin and typically arises from contact with infected sheep.
Exposure	Parapox virus
High risk occupation or industry	Sheep farmers.
Latency period	Weeks to months.
Main external non-occupational risk factors	Non-occupational exposure very rare.

<b>Psittacosis</b>	
Description	Bacterial illness characterized by an infection of the lung which results in respiratory symptoms.
Exposure	Chlamydia psittaci.
High risk occupation or industry	Relevant occupations involving work with birds (such as poultry slaughterer, poultry farm worker, pet shop worker, veterinarian, veterinary nurse).
Latency period	Typically five to 14 days.
Main external non-occupational risk factors	Uncommon condition in the general community.

<b>Q-fever</b>	
Description	Generalised infective illness that usually arises from contact with infected animals or animal parts, usually in a rural setting.
Exposure	Coxiella burnetii
High risk occupation or industry	Abattoir workers, stock workers, stock transporters, shearers, hide processors, farmers and veterinarians.
Latency period	One to two weeks.
Main external non-occupational risk factors	Non-occupational exposure uncommon.

<b>Tuberculosis</b>	
Description	Infection that usually affects the lungs and can be spread between persons or from animals to persons.
Exposure	Mycobacterium tuberculosis
High risk occupation or industry	Health workers, farmers and veterinarians, clinical laboratory workers and funeral parlour staff.
Latency period	Weeks to months.
Main external non-occupational risk factors	Unusual infection in Australian-born persons unless they come from very low socio-economic circumstances or have very poor health.

## Malignancies

<b>Salivary gland cancer</b>	
Description	Malignant disease of the salivary glands.
Exposure	Ionizing radiation.
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking and alcohol.

<b>Nasopharyngeal cancer</b>	
Description	Malignant disease of the nasopharynx
Exposure	Formaldehyde, wood dust
High risk occupation or industry	Formaldehyde exposure is most likely in embalmers, forensic/hospital mortuary workers, pathology laboratory workers, formaldehyde resin manufacturers, users and packers.  Wood dust exposure is most likely in workers involved in wood processing (workers in pulp and paper mills, sawmills, veneer and plywood plants, woodchip operations), people who use wood (joineries, furniture manufacturing, other timber product manufacturing, carpentry, roofing, flooring, maintenance work) and people who otherwise work with wood (tree-loppers and chainsaw operators)
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking and alcohol.

<b>Oesophageal cancer</b>	
Description	Malignant disease of the oesophagus.
Exposure	Ionizing radiation.
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking and alcohol.

<b>Stomach cancer</b>	
Description	Malignant disease of the stomach
Exposure	Ionizing radiation
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes)
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking.

<b>Colo-rectal cancer</b>	
Description	Malignant disease of the colon or rectum
Exposure	Ionizing radiation
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes)
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Diet.

<b>Liver cancer</b>	
Description	Primary malignant disease of the liver (it excludes metastases to the liver from primary cancers elsewhere in the body.)
Exposure	HBV or HCV exposure related to occupation, vinyl chloride monomer
High risk occupation or industry	<p>People whose job brings them in contact with body fluids in situations where there is a considerable risk of the worker having a break in their skin through which the infection could enter, such as health care workers, persons who handle body substances, embalmers, clinical laboratory staff, workers in long-term correctional facilities, police, members of the armed forces, emergency services workers and tattooists.</p> <p>Exposure to vinyl chloride monomer occurs through manufacturing of polyvinyl chloride and especially cleaning of autoclaves.</p>
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Alcohol (cirrhosis).

<b>Cholangiocarcinoma</b>	
Description	Malignant disease of the gall bladder and biliary tree.
Exposure	1,2-Dichloropropane.
High risk occupation or industry	Occupations involved in printing.
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	All not common; primary hepatobiliary disease such as primary sclerosing cholangitis is the most common of these.

<b>Cancer of the nasal cavity and para-nasal sinuses</b>	
Description	Malignant disease of the nasal cavity and para-nasal sinuses
Exposure	Ionizing radiation, leather dust, nickel, wood dust
High risk occupation or industry	<p>Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).</p> <p>Leather dust: workers involved in manufacture of footwear and in the leather-tanning and -processing industry.</p> <p>Nickel: Workers involved with commercial and industrial machinery and equipment repair and maintenance, motor vehicle parts manufacturing, and architectural and structural metals manufacturing</p> <p>Wood dust exposure is most likely in workers involved in wood processing (workers in pulp and paper mills, sawmills, veneer and plywood plants, woodchip operations), people who use wood (joineries, furniture manufacturing, other timber product manufacturing, carpentry, roofing, flooring, maintenance work) and people who otherwise work with wood (tree-loppers and chainsaw operators)</p>
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	-



<b>Laryngeal cancer</b>	
Description	Malignant disease of the larynx.
Exposure	Acid mist - strong inorganic, asbestos.
High risk occupation or industry	<p>Acid mist exposure – there is a potential for high exposure in workers involved in the manufacturing, use and transport of sulfuric acid and isopropanol and metal pickling; moderate exposure in soap and detergent production, and the manufacture of nitric acid and ethanol; low exposure in lead-acid battery manufacturing and phosphate fertilizer production</p> <p>Asbestos exposure can occur through mining (no longer in Australia), transport (truck drivers, dock workers – no longer in Australia except for transport of material contaminated with asbestos), manufacturing (no longer in Australia), contact with asbestos products through construction, maintenance or demolition (carpenters, boilermakers, plumbers, demolition workers).</p>
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking.

<b>Carcinoma of the lung</b>	
Description	Malignant disease of the respiratory tree and gas exchange areas of the lung.
Exposure	Arsenic, asbestos, beryllium, bis(chloromethyl) ether, cadmium, chromium VI, diesel engine exhaust, ETS, Ionizing radiation, nickel, PAHs, Radon-222 and its decay products, silica dust (crystalline), soot (chimney sweeping), welding fume.
High risk occupation or industry	<p><b>Arsenic:</b> workers exposed through mining, manufacturing (treated timbers, non-ferrous metal production and processing, iron and steel milling), or use of products containing arsenic (carpenters, oil and gas extraction, water and sewage).</p> <p><b>Asbestos:</b> Asbestos exposure can occur through mining (no longer in Australia), transport (truck drivers, dock workers— no longer in Australia except for transport of material contaminated with asbestos), manufacturing (no longer in Australia), contact with asbestos products through construction, maintenance or demolition (carpenters, boilermakers, plumbers, demolition workers).</p> <p><b>Beryllium:</b> Uncommon exposure. Workers most at risk of exposure are construction trades workers, welders, electricians, and dental technologists.</p> <p><b>Bis(chloromethyl)ether:</b> Exposure is uncommon but can occur during chemical manufacturing.</p>

	<p>Cadmium: Exposure can occur to welders, automotive service technicians and saw-filers.</p> <p>Chromium VI: Exposure can occur to welders, machinists, automotive service technicians and workers in saw mills treating timbers.</p> <p>Diesel engine exhaust: Exposure can occur to workers operating equipment with diesel engines or working near where diesel equipment operates— truck and bus drivers, heavy equipment operators, forklift operators, non-metal miners, car mechanics.</p> <p>ETS: Hospitality workers, outdoor workers. Ionizing radiation: Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings— health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).</p> <p>Nickel: Workers involved with commercial and industrial machinery and equipment repair and maintenance, motor vehicle parts manufacturing, and architectural and structural metals manufacturing.</p> <p>PAHs: There are a wide range of potential exposure circumstances. Exposures mainly occur through cooking (chefs and cooks); use of fuels (mechanics); and in heavy industry (coal tar production and distillation, coal gasification, coke production); and in a range of other work circumstances (paving and roofing using coal tar, creosote wood preservation, aluminium production, carbon electrode manufacture, mining, metal working, calcium carbide production, petroleum industries, chemical production and transportation, electrical industries and chimney sweeping).</p> <p>Radon-222 and its decay products: Rare in Australia. Exposure can occur to workers involved in underground mining or other underground work.</p> <p>Silica dust (crystalline): Exposure can occur to workers involved in construction, especially excavators; mining; brick, concrete or stone cutting; abrasive blasting; foundry casting.</p> <p>Soot (chimney sweeping): Chimney sweeps.</p> <p>Welding fume: Exposure occurs when welding (or when in close proximity to welding).</p>
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking.

<b>Bone cancer</b>	
Description	Malignant disease of the bone.
Exposure	Ionizing radiation.
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	-

<b>Skin cancer (melanoma)</b>	
Description	Malignant disease of the melanin-producing cells in the skin.
Exposure	Solar radiation, polychlorinated biphenyls (PCBs).
High risk occupation or industry	Solar radiation: Outdoor workers are at most at risk. PCBs: Uncommon exposure. Exposure can occur to workers coming into contact with electrical fittings (industrial electricians, electrical power line and cable workers, electrical mechanics, and electricians); workers involved in disposal of such material (waste storage, incineration and contaminated site remediation); welders and general maintenance workers; fire-fighters.
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Non-occupational sun exposure.

<b>Skin cancer (non-melanoma)</b>	
Description	Malignant disease of the cells making up the skin.
Exposure	Solar radiation.
High risk occupation or industry	Solar radiation: Outdoor workers are at most at risk.
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Non-occupational sun exposure.

<b>Malignant mesothelioma</b>	
Description	Malignant disease of the inside lining of the chest wall (pleura), pericardium and abdomen (peritoneum).
Exposure	Asbestos.
High risk occupation or industry	Asbestos: Asbestos exposure can occur through mining (no longer in Australia), transport (truck drivers, dock workers – no longer in Australia except for transport of material contaminated with asbestos), manufacturing (no longer in Australia), contact with asbestos products through construction, maintenance or demolition (carpenters, boilermakers, plumbers, demolition workers).
Latency period	Minimum five years; commonly at least 20 to 25 years.
Main external non-occupational risk factors	-

<b>Breast cancer</b>	
Description	Malignant disease of the breast.
Exposure	Ionizing radiation.
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Alcohol, female hormones.

<b>Ovarian cancer</b>	
Description	Malignant disease of the ovary.
Exposure	Asbestos.
High risk occupation or industry	Asbestos: Asbestos exposure can occur through mining (no longer in Australia), transport (truck drivers, dock workers – no longer in Australia except for transport of material contaminated with asbestos), manufacturing (no longer in Australia), contact with asbestos products through construction, maintenance or demolition (carpenters, boilermakers, plumbers, demolition workers).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	-

<b>Renal cancer (cancer of the kidney)</b>	
Description	Malignant disease of the kidney.
Exposure	Ionizing radiation, trichloroethylene.
High risk occupation or industry	<p>Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).</p> <p>Trichloroethylene: Exposure occurs particularly to workers involved in degreasing - metal product manufacturing, electroplating, metal spraying, metal fabrication.</p>
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking.

<b>Bladder cancer</b>	
Description	Malignant disease of urothelial tissue lining the urinary tract.
Exposure	2-naphthylamine, benzidine, cyclophosphamide, ionizing radiation, ortho-toluidine, PAHs.
High risk occupation or industry	<p>2-naphthylamine, benzidine and ortho-toluidine: Workers involved in the production of azo dyes (this no longer occurs in Australia).</p> <p>Cyclophosphamide: Oncology nurses and pharmacists involved in preparing or administering cyclophosphamide for use with patients.</p> <p>Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).</p> <p>PAHs: There are a wide range of potential exposure circumstances. Exposures mainly occur through cooking (chefs and cooks); use of fuels (mechanics); and in heavy industry (coal tar production and distillation, coal gasification, coke production); and in a range of other work circumstances (paving and roofing using coal tar, creosote wood preservation, aluminium production, carbon electrode manufacture, mining, metal working, calcium carbide production, petroleum industries, chemical production and transportation, electrical industries and chimney sweeping).</p>
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	Smoking.

<b>Ocular melanoma</b>	
Description	Malignant disease of the eye.
Exposure	Ultraviolet light from welding.
High risk occupation or industry	Occupations involved in welding.
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	History of dysplastic nevus syndrome; a family history of melanoma; the presence of fair skin and light-coloured eyes.

<b>Brain cancer</b>	
Description	Malignant disease of the brain.
Exposure	Ionizing radiation.
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	-

<b>Thyroid cancer</b>	
Description	Malignant disease of the thyroid.
Exposure	Ionizing radiation.
High risk occupation or industry	Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).
Latency period	Minimum five years; commonly at least 15 to 20 years.
Main external non-occupational risk factors	-

<b>Leukaemia</b>	
Description	Malignant disease of a subset of white blood cells.
Exposure	Benzene, butadiene, cyclophosphamide, formaldehyde, HCV exposure related to occupation, ionizing radiation.
High risk occupation or industry	<p>Benzene: Exposure is primarily through exposure to fuels (automotive service technicians and mechanics, delivery and courier drivers, taxi, and firefighters) and through manufacturing or use of products with small amounts of benzene (steel workers, printers, rubber workers, shoe makers)</p> <p>Butadiene: Exposure is primarily to machine operators in the rubber and plastic processing industry.</p> <p>Cyclophosphamide: Oncology nurses and pharmacists involved in preparing or administering cyclophosphamide for use with patients.</p> <p>Formaldehyde: Formaldehyde exposure is most likely in embalmers, forensic/hospital mortuary workers, pathology laboratory workers, formaldehyde resin manufacturers, users and packers.</p> <p>HCV: People whose job brings them in contact with body fluids in situations where there is a considerable risk of the worker having a break in their skin through which the infection could enter, such as health care workers, persons who handle body substances, embalmers, clinical laboratory staff, workers in long-term correctional facilities, police, members of the armed forces, emergency services workers and tattooists.</p> <p>Ionizing radiation: Ionizing radiation would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings - health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).</p>
Latency period	Minimum one year; commonly at least 10 to 15 years.
Main external non-occupational risk factors	Smoking.



<b>Non-Hodgkins Lymphoma</b>	
Description	Malignant disease of a subset of white blood cells.
Exposure	Ionizing radiation, lindane, pentachlorophenol.
High risk occupation or industry	<p>Ionizing radiation: exposure would be expected to be very well controlled in Australia but is relevant for anyone whose occupation potentially exposes them to x-rays on a regular basis, which can occur in a range of settings—health (radiographers, radiologists, radiotherapists, dentists), manufacturing and industry (various specific jobs), security (customs officers), nuclear industry (work with isotopes).</p> <p>Lindane: Exposure should no longer occur in Australia but it may still be relevant for some pesticide workers.</p> <p>Pentachlorophenol: Exposure should be uncommon in Australia but may occur through contact with treated timber (e.g. sawmill workers, timber products manufacturing worker).</p>
Latency period	Minimum one year; commonly at least 10 to 15 years.
Main external non-occupational risk factors	Smoking.

### **Mental or neuropsychiatric diseases**

<b>Post-traumatic stress disorder</b>	
Description	Psychological distress following exposure to highly stressful circumstances. Clear diagnostic criteria are provided by the Fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) <sup>68</sup> and in the International Classification of Diseases <sup>69</sup> .
Exposure	Highly stressful circumstances during emergency response work.
High risk occupation or industry	Occupations involved in emergency response (such as police officers, ambulance officers including paramedics, fire fighters).
Latency period	Weeks to months.
Main external non-occupational risk factors	Various non-occupational highly stressful exposures.

## Neurological diseases

<b>Peripheral neuropathy</b>	
Description	A group of diseases characterised by temporary or permanent damage to nerves outside the central nervous system.
Exposure	Metals such as lead, mercury and arsenic; organic solvents such as n-hexane, carbon disulphide and trichloroethylene; pesticides such as organophosphates; acrylamide.
High risk occupation or industry	Exposures can occur in a wide range of industrial settings, particularly manufacturing.
Latency period	Weeks to years
Main external non-occupational risk factors	Alcohol.

## Noise-induced hearing loss

<b>Noise-induced hearing loss</b>	
Description	A permanent, degenerative disease of the inner ear characterised by loss of auditory acuity, particularly in the high frequency range.
Exposure	Noise above 85dB(A).
High risk occupation or industry	Any occupation which involves sustained exposure to loud noise.
Latency period	Years.
Main external non-occupational risk factors	Non-occupational noise.

## Respiratory diseases

<b>Occupational asthma</b>	
Description	Reversible narrowing of the small and medium airways in the lung which causes shortness of breath as a result of exposure to one or more workplace agents.
Exposure	Sensitising agents or irritants - arthropods or mites, biological enzymes, bioaerosols, derived from fish/shellfish, derived from animals, flour, sensitising foods, flowers, latex, wood dusts, soldering, reactive dyes, anhydrides, acrylates, epoxy, ethylene oxide, aldehydes, pesticides, amines, ammonia, industrial cleaning agents, acids, isocyanates, other reactive chemicals, sensitising metals, sensitising drugs*
High risk occupation or industry	A wide range of occupations, particularly involving manufacturing, construction and agriculture
Latency period	Variable, from days to months.
Main external non-occupational risk factors	Asthma is a common condition in the general community.

\*: The large number of occupational agents that have been shown to cause these diseases means that it is impractical to list every relevant agent.

<b>Pneumoconioses</b>	
Description	Fibrotic lung disease caused by exposure to dusts
Exposure	Coal, asbestos, silica and a range of other dusts.
High risk occupation or industry	Coal: Coal miners.  Asbestos: Exposure can occur through mining, transport (truck drivers, dock workers), manufacturing, construction, maintenance or demolition (carpenters, boilermakers, plumbers, demolition workers).  Silica dust (crystalline): Exposure can occur to workers involved in construction, especially excavators; mining; brick, concrete or stone cutting; abrasive blasting; foundry casting.  Other dusts: Exposure to other dusts can occur in a range of occupations, usually in manufacturing.
Latency period	Years.
Main external non-occupational risk factors	-

<b>Byssinosis</b>	
Description	Asthma-like condition (reversible narrowing of the small and medium airways in the lung which causes shortness of breath).
Exposure	Cotton, hemp, flax or sisal dust.
High risk occupation or industry	Exposure is most likely in manufacturing workers working with these agents.
Latency period	Variable, from days to months.
Main external non-occupational risk factors	Very rare.

<b>Extrinsic allergic alveolitis</b>	
Description	Disease of the alveoli (the gas-exchange spaces in the lung), causing shortness of breath. Initially can be cured but can develop a chronic component.
Exposure	A wide range of occupational exposures.
High risk occupation or industry	A wide range of occupations, particularly involving manufacturing, construction and agriculture.
Latency period	Variable, from days to months.
Main external non-occupational risk factors	A wide range possible but not common.

<b>Obliterative bronchiolitis</b>	
Description	Respiratory disorder causing shortness of breath on exertion and cough.
Exposure	Food flavourings thought to be associated obliterative bronchiolitis.
High risk occupation or industry	Relevant occupations involving exposure to food flavourings thought to be associated obliterative bronchiolitis (such as some manufacturing workers involved in food production).
Latency period	Weeks to months.
Main external non-occupational risk factors	Rare in the general community.

## Hepatic diseases

<b>Non-infectious hepatitis</b>	
Description	Acute inflammation of the liver due to non-infectious agents.
Exposure	Agents known to cause hepatitis (particularly organic solvents).
High risk occupation or industry	A wide range of occupations, particularly involving manufacturing and construction.
Latency period	Variable, from days to months.
Main external non-occupational risk factors	Uncommon.

<b>Chronic active hepatitis</b>	
Description	Prolonged (greater than six months) on-going inflammation of the liver.
Exposure	Persons with known HBV or HCV related to occupation.
High risk occupation or industry	People whose job brings them in contact with body fluids in situations where there is a considerable risk of the worker having a break in their skin through which the infection could enter, such as health care workers, persons who handle body substances, embalmers, clinical laboratory staff, workers in long-term correctional facilities, police, members of the armed forces, emergency services workers and tattooists.
Latency period	Months to years
Main external non-occupational risk factors	A considerable minority of Australian persons are carriers of HBV or HCV and potentially infectious. The main cause of on-going liver disease is alcohol.

<b>Hepatic cirrhosis</b>	
Description	Chronic fibrotic disease of the liver where damaged liver cells have been replaced by scar tissue.
Exposure	Persons with known HBV or HCV related to occupation.
High risk occupation or industry	People whose job brings them in contact with body fluids in situations where there is a considerable risk of the worker having a break in their skin through which the infection could enter, such as health care workers, persons who handle body substances, embalmers, clinical laboratory staff, workers in long-term correctional facilities, police, members of the armed forces, emergency services workers and tattooists.
Latency period	Years.
Main external non-occupational risk factors	A considerable minority of Australian persons are carriers of HBV or HCV and potentially infectious. The main cause of cirrhotic liver disease is alcohol.

## Skin diseases

<b>Irritant and allergic contact dermatitis</b>	
Description	Dermatitis is an inflammatory disease of the skin. In an occupational setting it mainly occurs on the hands.
Exposure	A wide range of sensitising agents or irritants. Irritant contact dermatitis in an occupational setting is most commonly reported as due to alcohols, cutting fluids, degreasers, disinfectants, petroleum products, soaps and cleaners, solvents and wet work. Allergic contact dermatitis in an occupational setting is most frequently reported as being due to chromates, cobalt, cosmetics and fragrances, epoxy resin, latex, nickel, plants, preservatives, resins and acrylics.
High risk occupation or industry	Exposure can occur in many occupations, but particularly agricultural workers, beauticians, chemical workers, cleaners, construction workers, cooks and caterers, electronics workers, hairdressers, health care workers, machine operators, mechanics, metalworkers and vehicle assemblers.
Latency period	Variable, from days to months.
Main external non-occupational risk factors	Dermatitis is a common condition in the general community.

<b>Vitiligo</b>	
Description	A disease where the melanin-producing cells in the skin, mucous membranes and/or eye are damaged, with loss of pigment resulting in white patches on the skin or other affected areas.
Exposure	Para-tertiary-butylphenol; para-tertiary-butylcatechol; para-amyphenol; hydroquinone or the monobenzyl or monobutyl ether of hydroquinone.
High risk occupation or industry	Exposure is unusual but most common in manufacturing workers.
Latency period	Variable; weeks to years
Main external non-occupational risk factors	-

## Musculoskeletal diseases

<b>Raynaud's disease</b>	
Description	Intermittent spasm of the arteries of the hands or feet, causing pain due to decreased blood flow to the affected area.
Exposure	Vibration, hammer drills, hand-held portable grinders and jigsaws.
High risk occupation or industry	A wide range of occupations that involve the relevant exposures.
Latency period	Weeks to years.
Main external non-occupational risk factors	Uncommon condition with no other clear external causes.

<b>Bursitis (at the elbow or knee)</b>	
Description	Pain, tenderness and sometimes swelling just above or below the knee or behind the elbow, worse with movement, due to inflammation of the relevant bursa.
Exposure	Prolonged external friction or pressure or repetitive motion at or about the elbow or the knee.
High risk occupation or industry	A wide range of occupations that involve the relevant movements.
Latency period	Weeks to years.
Main external non-occupational risk factors	Occurs occasionally in the general community.



<b>Osteonecrosis</b>	
Description	Death of bone, usually resulting in pain.
Exposure	Work in significantly increased or decreased air pressure.
High risk occupation or industry	Relevant occupations involving working at significantly increased or decreased air pressure (such as professional divers, caisson divers, hyperbaric exposure chamber attendants).
Latency period	Months to years.
Main external non-occupational risk factors	Various

<b>Acute poisoning / toxicity</b>	
Description	Poisoning causing damage to one or more of the heart, lungs, liver, kidney, nervous system and blood).
Exposure	Acrylonitrile; alcohols; antimony; arsenic; benzene; beryllium; cadmium; carbon disulphide; chromium; copper; fluorine; alcohol, glycols or ketones; hexane; lead; manganese; mercury; mineral acids; nitroglycerine (or other nitric acid esters); osmium; oxides of nitrogen; ozone; pesticides (organophosphate and organochlorine compounds), herbicides and related compounds; pharmaceutical agents; phosgene; phosphorus; selenium; styrene; thallium; tin; toluene; vanadium; xylene; zinc; chemical asphyxiants (carbon monoxide, hydrogen cyanide, hydrogen sulphide, methylene chloride); irritants (benzoquinone and other corneal irritants); toxic halogen derivatives of aliphatic or aromatic hydrocarbons; toxic nitro- and amino-derivatives of benzene (and other less common, specific substances not included here).
High risk occupation or industry	A wide range of occupations, particularly in manufacturing.
Latency period	Minutes to hours (typically).
Main external non-occupational risk factors	Instances due to non-occupational exposure are uncommon.