

**SEAFARERS REHABILITATION AND COMPENSATION (SPECIFIED DISEASES  
AND EMPLOYMENT) INSTRUMENT 2021**

**EXPLANATORY STATEMENT**

Issued by authority of the Acting Minister for Industrial Relations  
under paragraph 10(1)(b) of the *Seafarers Rehabilitation and Compensation Act 1988*

**PURPOSE AND OPERATION OF THE INSTRUMENT**

The *Seafarers Rehabilitation and Compensation Act 1992* (the Act) provides workers' compensation and rehabilitation arrangements for approximately 5,000 seafarers in the Australian maritime industry. Pursuant to the Act, the employers of such seafarers are responsible for determining liability and paying compensation entitlements in accordance with the Act.

Subject to the Act, liability to provide rehabilitation and make certain compensation payments arises in respect of an 'injury' suffered by an employee. The term 'injury' is relevantly defined to include a 'disease' suffered by an employee (section 3), subject to particular exclusions specified in section 3 and subsection 10(7) of the Act.

For a 'disease' to be suffered by an employee for the purposes of the definition in section 3 of the Act, the requirements of subsection 10(1), (2), (3) or (8), or the definition of disease prescribed by section 3 of the Act, must be satisfied.

This explanatory statement concerns the operation of subsection 10(1) and the legislative instrument made under paragraph (b) of that subsection.

**Purpose and effect of subsection 10(1) of the Act**

The purpose of subsection 10(1) of the Act is to permit the Minister to specify, in a legislative instrument, the circumstances in which employment in the maritime industry is deemed to have contributed, to a material degree, to the contraction of a disease suffered by an employee.

Consistent with this purpose, the Minister has previously specified what are commonly referred to as 'occupational diseases'. An occupational disease is a disease associated with a particular kind of employment because the employment involves a particular risk.

Subsection 10(1) of the Act provides:

- (1) If:
- (a) an employee has suffered, or is suffering, from a disease, or the death of an employee results from a disease; and
  - (b) the disease is of a kind specified by the Minister, by legislative instrument, as a disease related to employment of a kind specified in the instrument; and
  - (c) the employee was, at any time before symptoms of the disease first became apparent, engaged in employment of that kind in the maritime industry

the employment in which the employee was so engaged is taken, for the purposes of this Act, to have contributed in a material degree to the contraction of the disease, unless the contrary is established.

Subsection 10(1) of the Act is intended to be broadly applied and is not limited to the contraction of a contagious or infectious disease. The term ‘disease’ used in subsection 10(1) of the Act has its ordinary meaning. However, ‘aggravation’ (which is defined in section 3 to include acceleration or recurrence) of a disease is not covered by subsection 10(1) of the Act.

The effect of subsection 10(1) of the Act is to reverse the onus of proof in relation to a claim for compensation once it is established that:

- an employee suffered or suffers from a disease of a specified kind; and
- the employee engaged in employment of a specified kind at any time before symptoms of the disease first became apparent.

Once these facts are established, a claimant is not required to further establish that, on the balance of probabilities, the employee’s employment contributed to the contraction of the disease.

Instead, the relevant employer may determine that the employee has suffered, or is suffering, from a ‘disease’ for the purposes of the definition in section 3 of the Act. The relevant employer is required to make such a determination unless it establishes that, on the balance of probabilities, the employee’s employment did not contribute, to a material degree, to the contraction of the disease.

## **Seafarers Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2021**

The *Seafarers Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2021* (the Instrument) was made by the Minister pursuant to paragraph 10(1)(b) of the Act to specify the diseases, employment and circumstances that enliven the statutory presumption prescribed by subsection 10(1) of the Act.

The Instrument was made in consultation with Dr Tim Driscoll and based on information contained in:

- *Deemed Diseases in Australia* (the 2015 Report);
- *Deemed Diseases approach – information to support the update of the Comcare Scheme’s current deemed diseases legislative instrument* (the 2017 Report); and
- *Information to support the review of specified diseases and employment for the purposes of the Seafarers Rehabilitation and Compensation Act 1992* (the 2021 Report).

### Relevant guidance material

It is intended that only occupational diseases associated with particular kinds of employment should be specified in the Instrument. Schedule 1 of the Instrument should therefore be construed consistently with that intent.

Given that information contained in the above reports was used in developing the Instrument, it is expected that relevant authorities will consult those reports when applying Schedule 1 to the Instrument.

It is also expected that relevant employers will have regard to those reports when investigating whether the contrary is established for the purposes of subsection 10(1) of the Act.

For example, an employer may consider the information relevant to a claimed disease, particularly that contained in the 2017 Report, concerning any minimum exposure and minimum latency period (that is, the time between first exposure to the relevant employment-related risk and the clinical onset of the disease) for that disease.

#### Employment involving work or a work activity

Most items in Schedule 1 to the Instrument require employment involving work with a specified person, thing or agent. Two items in Schedule 1 (Item 42 and Item 43) require work and contact with a specified agent. One item in Schedule 1 (Item 46) requires employment involving a work activity that involves prolonged or recurrent external friction or pressure.

To satisfy the requirements of an item that specifies:

- ‘*Employment ... involving work with: [a specified person, thing or agent]*’, work with the specified person, thing or agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that person, thing or agent in the course of that employment; and
- ‘*Employment ... involving work and contact with: [a specified agent]*’, work and contact with that agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with, and had contact with, that agent in the course of that employment; and
- ‘*Employment ... involving a work activity [that involves prolonged or recurrent external friction or pressure]*’, that work activity must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have performed that work activity in the course of that employment.

#### Minimum period of employment

Both the 2017 Report and the 2021 Report contain information concerning minimum exposure, including minimum exposure periods. The rationale for proposing a minimum exposure period for a particular disease is described as follows (2017 Report, p 19):

*In the absence of definitive information on required cumulative exposure and the likely absence of useful workplace exposure data to establish the cumulative exposure of an individual worker, the appropriate approach appears to be to recommend a minimum exposure time. This assumes that typical workers with exposure to a particular hazardous substance have similar levels of exposure, which means that if they are exposed for a similar length of time they will have a similar cumulative exposure and thus a similar risk of developing the disease related to the exposure. This is the rationale for proposing a minimum exposure period rather than proposing a minimum cumulative exposure. [...]*

Most of the items in Schedule 1 to the Instrument specify a minimum period of employment. These are based on the minimum exposure periods contained in the 2017 Report.

To satisfy the requirements of an item that specifies a minimum employment period:

- the employee must have engaged in one or more periods of employment of a kind specified for that item; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than the minimum employment period for that item.

Any period of employment in respect of which an employer would not be liable to pay compensation under the Act should not be counted by that employer.

The employee need not have worked with the person, thing or agent, or undertaken the activity, specified for a particular item, every working day. However, each disease specified in an item in Schedule 1 is associated with a particular kind of employment, and the minimum exposure period for that disease (and therefore the minimum employment period specified for that disease) is based on the typical work profile for that kind of employment.

It follows that if an employee's employment did not involve the work or work activity that was typical for the specified kind of employment, the employment-related risk may have been insufficient even if the employee engaged in the specified kind of employment for the minimum employment period.

In such a case, the relevant employer may still determine that the employee has suffered, or is suffering, from a 'disease' for the purposes of section 3 of the Act unless the employer establishes that, on the balance of probabilities, the employee's employment did not contribute, to a material degree, to the contraction of the disease.

The Instrument repeals and replaces the *Seafarers Rehabilitation and Compensation Act 1992 – Notice of Declarations and Specifications (25/05/1993)*.

## CONSULTATION

The Attorney-General's Department consulted directly with Dr Tim Driscoll to make the Instrument. Dr Driscoll is an independent consultant in epidemiology, occupational health and public health, a specialist in occupational medicine and public health medicine, and a Fellow of the Australasian Faculties of Occupational and Environmental Medicine and Public Health Medicine.

Dr Driscoll was also commissioned by Safe Work Australia to review scientific evidence on the causal link between diseases and occupational exposures for use by Australian workers' compensation jurisdictions in relation to deemed diseases. Dr Driscoll reported the outcome of this review in the 2015 Report. This report was peer reviewed by Professor Malcolm Sim, a physician and epidemiologist, and director of the Monash Centre for Occupational and Environmental Health at Monash University.

The Instrument is informed, in particular, by the information contained in chapter 5 (evidence used to develop a list of deemed diseases), chapter 6 (a recommended Australian-specific list of deemed diseases) and chapter 7 (recommended guidance material) of the 2015 Report. This report is free to view and download from the Safe Work Australia website: [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au).

In 2017, Dr Driscoll was commissioned by the then Department of Employment, to provide the supplementary 2017 Report to support the development of the *Safety, Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2017*. Information contained in that report, particularly chapter 6 (duration of exposure and latency), was used to develop the Instrument. This report is free to view and download from the Attorney-General's Department website: <https://www.ag.gov.au>.

In 2021, the Attorney-General's Department commissioned a further supplementary report from Dr Driscoll to support the development of the Instrument with specific regard to the requirements of workers employed under the Seacare scheme. The Instrument was made in accordance with the recommendations contained in the 2021 Report, which is free to view and download from the Attorney-General's Department website: <https://www.ag.gov.au>.

The Attorney-General's Department also consulted with Comcare, employers and employee representative groups.

The instrument will self-repeal 5 years after its commencement to facilitate the consideration of a change in approach to the deemed diseases criterion under the Act.

## **REGULATION IMPACT STATEMENT**

The Office of Best Practice Regulation was consulted regarding this instrument and indicated that a Regulation Impact Statement is not required (OBPR ID: 24218).

This instrument is a legislative instrument for the purposes of the *Legislation Act 2003*.

This instrument will commence the day after it is registered on the Federal Register of Legislation.

## **STATEMENT OF COMPATIBILITY WITH HUMAN RIGHTS**

*Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011*

### **Seafarers Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2021**

This legislative instrument is compatible with the human rights and freedoms recognised or declared by the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

#### **Overview of the legislative instrument**

The *Seafarers Rehabilitation and Compensation Act 1992* (the Act) provides workers' compensation and rehabilitation arrangements for approximately 5,000 seafarers in the Australian maritime industry. Pursuant to the Act, the employers of such seafarers are responsible for determining liability and paying compensation entitlements in accordance with the Act.

Subject to the Act, liability to provide rehabilitation and make certain compensation payments arises in respect of an 'injury' suffered by an employee. The term 'injury' is relevantly defined to include a 'disease' suffered by an employee (section 3), subject to particular exclusions specified in section 3 and subsection 10(7) of the Act.

The Act contains a number of deeming provisions in accordance with which a disease (in the ordinary sense) will be taken to have been contributed to, to a material degree, by the employee's employment, unless the contrary is established. Subsection 10(1) is one of these deeming provisions.

#### **Purpose and effect of subsection 10(1) of the Act**

The purpose of subsection 10(1) is to permit the Minister to specify, in a legislative instrument, the circumstances in which employment is deemed to have contributed, to a material degree, to the contraction of a disease suffered by an employee.

Consistent with this purpose, the Minister has previously specified what are commonly referred to as occupational diseases. An occupational disease is a disease associated with a particular kind of employment because the employment involves a particular risk.

The effect of subsection 10(1) is to reverse the onus of proof in relation to a claim for compensation once it is established that:

- an employee suffered or suffers from a disease of a specified kind; and
- the employee engaged in employment of a specified kind at any time before symptoms of the disease first became apparent.

Once these facts are established, a claimant is not required to further establish that, on the balance of probabilities, the employee's employment contributed to the contraction of the disease.

Instead, the relevant employer may determine that the employee has suffered, or is suffering, from a 'disease' as defined in section 3 of the Act. The relevant employer is required to make such a determination unless it establishes that, on the balance of probabilities, the employee's employment did not contribute, to a material degree, to the contraction of the disease.

### *Seafarers Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2021*

Three reports by Dr Tim Driscoll formed the basis of the content of this legislative instrument. Dr Driscoll is an independent consultant in epidemiology, occupational health and public health, a specialist in occupational medicine and public health medicine, and a Fellow of the Australasian Faculties of Occupational and Environmental Medicine and Public Health Medicine.

The first report was commissioned by Safe Work Australia and was peer reviewed by Professor Malcom Sim, a physician and epidemiologist, and director of the Monash Centre for Occupational and Environmental Health at Monash University. The second report was commissioned by the then Department of Employment to support the making of the Safety, Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2017. The third report was commissioned by the Attorney-General's Department to support the drafting of this instrument with particular regard to requirements of workers employed under the Seacare scheme.

The Attorney-General's Department also consulted directly with Dr Driscoll on a number of occasions.

### **Human rights implications**

Article 9 of the *International Covenant on Economic, Social and Cultural Rights* provides for the right of everyone to social security, including social insurance. General Comment 19 by the Committee on Economic, Social and Cultural Rights elaborates on Article 9, stating that the 'States parties should ... ensure the protection of workers who are injured in the course of employment or other productive work'.<sup>1</sup>

This legislative instrument will assist an employee covered by the Act (or his or her dependants) in relation to a claim made in respect of a disease of a kind specified in the instrument, where the employee was engaged in employment of a kind specified in the instrument before symptoms of the disease first became apparent. It does this by enlivening subsection 10(1) of the Act, which effectively reverses the onus of proof in relation to the claimed disease. This reduces the evidentiary burden on the claimant for the purposes of establishing an entitlement to workers' compensation and other benefits under the Act.

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<sup>1</sup> Committee on Economic, Social and Cultural Rights, *General Comment 19: The Right to Social Security (art. 9)*, U.N. Doc E/C.12/GC/19 (2008), [17].

If an employee does not satisfy the requirements of an item of this legislative instrument (for example, by not meeting the minimum employment period specified for that item), it remains open for the employee (or his or her dependants) to otherwise establish, on the balance of probabilities, that the disease was contributed to, to a material degree, by the employee's employment.

**Conclusion**

The legislative instrument is compatible with human rights as it does not raise any human rights issues.

**Senator the Hon Michaelia Cash**

Acting Minister for Industrial Relations

## **NOTES ON SECTIONS**

### **Section 1 – Name**

Section 1 provides that the name of the instrument is the *Seafarers Rehabilitation and Compensation (Specified Diseases and Employment) Instrument 2021*.

### **Section 2 – Commencement**

Section 2 provides that the instrument commences on the day after it is registered on the Federal Register of Legislation.

### **Section 3 – Authority**

Section 3 provides that the instrument is made under paragraph 10(1)(b) of the *Seafarers Rehabilitation and Compensation Act 1992*.

### **Section 4 – Definitions**

Section 4 provides the definitions of the terms included in the instrument.

### **Section 5 – Application**

Section 5 provides that the instrument applies in relation to a disease that an employee suffers on or after the day the instrument commences.

### **Section 6 – Schedules**

Section 6 provides that each instrument that is specified in a Schedule to the instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to the instrument has effect according to its terms.

### **Section 7 – Specification**

Section 7 provides that, for the purposes of paragraph 10(1)(b) of the Act, a disease of a kind specified in column 1 of an item of the table in Schedule 1 is a disease related to employment of a kind specified in column 2 of that item.

### **Section 8 – Repeal**

Section 8 provides that the instrument is repealed the day after the end of the period of 5 years beginning on the day this instrument commences.

### **Schedule 1 – Specification**

For the purposes of paragraph 10(1)(b) of the SRC Act, a disease of a kind specified in an item in Schedule 1 to the Instrument is a disease related to employment of a kind specified in that item.

#### *Infectious diseases*

As provided in the 2017 Report and 2021 Report, no minimum employment period is specified for infectious diseases in Schedule 1 (that is, Items 1 to 10).

### **Item 1 – Anthrax**

Anthrax is a 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 (2015 Report, p 49). The risk of contracting anthrax arises from exposure to *Bacillus anthracis* (p 49).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: animals, animal carcasses or animal parts.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to *Bacillus anthracis* other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: animal handler, pelt handler, abattoir worker or meat inspector.

### **Item 2 – Brucellosis**

Brucellosis is a generalised infective illness that usually arises from contact with reproductive tract tissues of infected cattle (2015 Report, p 46). The risk of contracting brucellosis arises from exposure to *Brucella sp.* (p 46).

During consultation in relation to the Instrument, Dr Driscoll clarified that the appropriate wording for this item is employment involving work with animals, animal carcasses, animal parts or animal waste.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: animals, animal carcasses, animal parts or animal waste.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to *Brucella sp.* other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: veterinarian, farmer, farm worker, abattoir worker or laboratory worker.

### **Item 3 – Hepatitis A**

Hepatitis A is a viral infection that affects the liver and is spread between people from hand to mouth (2015 Report, p 47). The risk of contracting hepatitis A arises from exposure to hepatitis A virus (p 47).

For the purposes of this item, the employment-related risk arises from work with the following specified thing: human waste (including whilst wearing protective clothing or using protective equipment).

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to the hepatitis A virus other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: child care worker, carer of intellectually disabled persons, rural community worker, remote community worker, sewage worker or plumber.

#### **Item 4 – Hepatitis B or Hepatitis C**

Hepatitis B and hepatitis C are viral infections that affect the liver and are spread between people through contact with body fluids (2015 Report, p 47). The risk of contracting hepatitis B and hepatitis C arises from exposure to the hepatitis B virus and the hepatitis C virus, respectively (p 47).

For the purposes of this item, the employment-related risk arises from work with the following specified thing: human body fluids (including whilst wearing protective clothing or using protective equipment).

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to the hepatitis B virus or the hepatitis C virus other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: healthcare worker, embalmer, clinical laboratory staff, long-term correctional facility worker, police, member of the Defence Force, emergency services worker or tattooist.

#### **Item 5 – Human Immunodeficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS)**

HIV/AIDS is an immunodeficiency illness due to infection with the human immunodeficiency virus, and there may be no symptoms for much of the time the person is HIV positive (2015 Report, p 48).

During consultation in relation to the Instrument, Dr Driscoll clarified that the relevant employment-related risk of contracting HIV/AIDS is limited to the transmission of the human immunodeficiency virus to a healthcare worker or a laboratory worker, in a healthcare services setting, through either a needlestick injury or a sharps injury.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things in the following specified settings: needles in a healthcare services setting or sharps in a healthcare services setting.

This item requires employment involving work with a specified thing in a specified setting. To satisfy the requirements of this item, work with the specified thing in the specified setting must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in that setting in the course of that employment.

Exposure to the human immunodeficiency virus other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### **Item 6 – Leptospirosis**

Leptospirosis is a generalised infective illness that usually arises from contact with urine of infected animals, typically in a rural setting (2015 Report, p 48, as clarified by Dr Driscoll during consultation). The risk of contracting leptospirosis arises from exposure to *Leptospira sp.* (p 48).

During consultation in relation to the Instrument, Dr Driscoll clarified that the appropriate wording for this item is employment involving work with animals, animal carcasses, animal parts or animal waste.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: animals, animal carcasses, animal parts or animal waste.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to *Leptospira sp.* other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: farmer, farm worker, abattoir worker, forestry worker, hunter, veterinarian, livestock transport operator or plumber.

### **Item 7 – Orf**

Orf is a rare infective illness that usually causes pustules on the skin and typically arises from contact with infected sheep (2015 Report, p 49). The risk of contracting orf arises from exposure to the parapox virus (p 49).

During consultation in relation to the Instrument, Dr Driscoll clarified that the relevant employment-related risk arises from work with goats and goat carcasses in addition to sheep and sheep carcasses.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: goats, goat carcasses, sheep or sheep carcasses.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to the parapox virus other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: sheep farmer, sheep farm worker, goat farmer, goat farm worker, abattoir worker or meat inspector.

### **Item 8 – Q-fever**

Q-fever is a generalised infective illness that usually arises from contact with infected animals or animal parts, usually in a rural setting (2015 Report, p 48). The risk of contracting Q-fever arises from exposure to *Coxiella burnetii* (p 48).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: animals, animal carcasses or animal parts.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item, work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment.

Exposure to *Coxiella burnetii* other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: abattoir worker, stock worker, stock transporter, shearer, hide processor, farmer or veterinarian.

### **Item 9 – Tuberculosis**

Tuberculosis is an infection that usually affects the lungs and can be spread between persons or from animals to persons (2015 Report, p 49). The risk of contracting tuberculosis arises from exposure to *Mycobacterium tuberculosis* (p 49).

During consultation in relation to the Instrument, Dr Driscoll clarified that the relevant risk factor is not contact with persons or animals where the prevalence of tuberculosis is likely to be significantly higher than in the general community. Instead, the relevant risk factor is work with (rather than merely contact with) persons dead or alive in a healthcare services or mortuary setting, or work with (rather than merely contact with) animals dead or alive in a veterinarian or farming setting.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things or persons in the following specified settings: animals in a farming or veterinarian setting, animal carcasses in a farming or veterinarian setting, human corpses in a healthcare services or mortuary setting, or persons (individuals) in a healthcare services setting.

This item requires employment involving work with a specified thing or person in a specified setting. To satisfy the requirements of this item, work with the specified thing or person in the specified setting must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing or person in that setting in the course of that employment.

Exposure to *Mycobacterium tuberculosis* other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: healthcare worker, clinical laboratory worker, funeral parlour staff, farmer or veterinarian.

### **Item 10 – Malaria**

Malaria is a generalised infective illness characterised by fevers and chills and is spread to humans through the bite of Anopheles mosquitoes. The risk of contracting malaria arises from exposure to the Plasmodium parasite.

For the purposes of this item, the employment related risk arises from work in a region where malaria is endemic.

Exposure to Plasmodium species other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### *Malignant diseases*

For the purposes of Items 11 to 31 in Schedule 1, only primary malignancies of specific parts of the body or specific bodily systems are specified. No metastases from primary malignancies elsewhere in the body are included in the Instrument.

### **Item 11 – Primary malignant disease of the salivary gland**

The relevant risk of developing primary malignant disease of the salivary gland (salivary gland cancer) arises from exposure to ionising radiation (2015 Report, p 50).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

### **Item 12 – Primary malignant disease of the nasopharynx**

The relevant risk of developing primary malignant disease of the nasopharynx (nasopharyngeal cancer) arises from:

- respiratory exposure to formaldehyde (2015 Report, p 50) – for the purposes of this item, this is a specified agent and an employment-related risk arises from work with this agent; or
- respiratory exposure to wood dust (p 50) – for the purposes of this item, wood is a specified thing and an employment-related risk arises from work with wood.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to formaldehyde or wood dust other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to formaldehyde required for this item may arise include employment in one of the following occupations: embalmer, forensic mortuary worker, hospital mortuary worker or pathology laboratory worker.

Examples of where the kind of employment involving respiratory exposure to wood dust required for this item may arise include employment in one of the following occupations: pulp mill worker, paper mill worker, sawmill worker, wood veneer plant worker, plywood plant worker, woodchip operations worker, joiner, wooden furniture maker, carpenter, roofer, floorer, maintenance worker, tree-lopper or chainsaw operator.

### **Item 13 – Primary malignant disease of the oesophagus**

The relevant risk of developing primary malignant disease of the oesophagus (oesophageal cancer) arises from exposure to ionising radiation (2015 Report, p 51).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

#### **Item 14 – Primary malignant disease of the stomach**

The relevant risk of developing primary malignant disease of the stomach (stomach cancer) arises from exposure to ionising radiation (2015 Report, p 51).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

#### **Item 15 – Primary malignant disease of the colon or rectum**

The relevant risk of developing primary malignant disease of the colon or rectum (colo-rectal cancer) is exposure to ionising radiation (2015 Report, p 52).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

#### **Item 16 – Primary malignant disease of the liver**

The relevant risk of developing primary malignant disease of the liver (liver cancer) arises from exposure to vinyl chloride monomer (2015 Report, p 52). For the purposes of this item, this is the specified agent and the employment-related risk arises from work with this agent.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to vinyl chloride monomer other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

#### **Item 17 – Primary malignant disease of the nasal cavity or para-nasal sinuses**

The relevant risk of developing primary malignant disease of the nasal cavity or para-nasal sinuses (cancer of the nasal cavity or para-nasal sinuses) arises from:

- exposure to ionising radiation (2015 Report, p 53) – for the purposes of this item, an employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation; or
- respiratory exposure to nickel (p 53) – for the purposes of this item, this is a specified agent and an employment-related risk arises from work with this agent; or
- respiratory exposure to leather dust or wood dust (p 53) – for the purposes of this item, leather and wood are specified things and an employment-related risk arises from work with leather or wood.

This item requires employment involving work with a specified thing or agent. To satisfy the requirements of this item:

- work with the specified thing or agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing or agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar

radiation or cosmic radiation). Respiratory exposure to nickel, leather dust or wood dust other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to wood dust required for this item may arise include employment in one of the following occupations: pulp mill worker, paper mill worker, sawmill worker, wood veneer plant worker, plywood plant worker, woodchip operations worker, joiner, wooden furniture maker, carpenter, roofer, floorer, maintenance worker, tree-lopper, or chainsaw operator.

### **Item 18 – Primary malignant disease of the larynx**

The relevant risk of developing primary malignant disease of the larynx (laryngeal cancer) arises from:

- respiratory exposure to asbestos (all forms) (2015 Report, pp 39, 54) – for the purposes of this item, asbestos is a specified agent and asbestos-containing material is a specified thing, and an employment-related risk arises from work with this agent or thing;
- respiratory exposure to acid mist (strong inorganic) (p 54) – for the purposes of this item, this is a specified agent and an employment-related risk arises from work with this agent.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of this item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to asbestos or acid mist (strong inorganic) other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to asbestos required for this item may arise include employment in one of the following occupations: miner, truck driver or dock worker (prior to 31 December 2003, being the date on which the use of asbestos was banned in Australia), or carpenter, boilermaker, plumber or demolition worker (at any time).

### **Item 19 – Primary malignant disease of the lung caused by asbestos**

The relevant risk of developing primary malignant disease of the lung (carcinoma of the lung) arises from respiratory exposure to asbestos (all forms) (2015 Report, pp 39, 56). For the purposes of this item, asbestos is a specified agent and asbestos-containing material is a specified thing, and an employment-related risk arises from work with this agent or thing.

Only primary malignant disease of the lung caused by asbestos is specified for this item.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of this item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and

- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to asbestos other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to asbestos required for this item may arise include employment in one of the following occupations: miner, truck driver or dock worker (prior to 31 December 2003, being the date on which the use of asbestos was banned in Australia), or carpenter, boilermaker, plumber or demolition worker (at any time).

### **Item 20 – Primary malignant disease of the bone**

The relevant risk of developing primary malignant disease of the bone (bone cancer) arises from exposure to ionising radiation (2015 Report, p 56).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

### **Item 21 – Primary malignant disease of the mesothelium**

The relevant risk of developing primary malignant disease of the mesothelium (malignant mesothelioma) arises from respiratory exposure to asbestos (all forms) (2015 Report, pp 39, 58). For the purposes of this item, asbestos is a specified agent and asbestos-containing material is a specified thing, and an employment-related risk arises from work with this agent or thing.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of this item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and

- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than three months.

Respiratory exposure to asbestos other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to asbestos required for this item may arise include employment in one of the following occupations: miner, truck driver or dock worker (prior to 31 December 2003, being the date on which the use of asbestos was banned in Australia), or carpenter, boilermaker, plumber or demolition worker (at any time).

### **Item 22 – Primary malignant disease of the breast**

The relevant risk of developing primary malignant disease of the breast (breast cancer) arises from exposure to ionising radiation (2015 Report, p 58).

During consultation in relation to the Instrument, Dr Driscoll clarified that the relevant risk is not limited to females. Accordingly, this item is not limited to female breast cancer.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

### **Item 23 – Primary malignant disease of the ovary**

The relevant risk of developing primary malignant disease of the ovary (ovarian cancer) arises from respiratory exposure to asbestos (all forms) (2015 Report, pp 39, 59). For the purposes of this item, asbestos is a specified agent and asbestos-containing material is a specified thing, and an employment-related risk arises from work with this agent or thing.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of this item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to asbestos other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to asbestos required for this item may arise include employment in one of the following occupations: miner, truck driver or dock worker (prior to 31 December 2003, being the date on which the use of asbestos was banned in Australia), or carpenter, boilermaker, plumber or demolition worker (at any time).

#### **Items 24 – Primary malignant disease of the kidney**

The relevant risk of developing primary malignant disease of the kidney (renal cancer or cancer of the kidney) arises from:

- exposure to ionising radiation (2015 Report, p 59) – for the purposes of this item, an employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation; or
- exposure to trichloroethylene (p 59) – for the purposes of this item, this is a specified agent and an employment-related risk arises from work with this agent.

This item requires employment involving work with a specified thing or agent. To satisfy the requirements of this item:

- work with the specified thing or agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing or agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation). Exposure to trichloroethylene other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

#### **Items 25 – Primary malignant disease of urothelial tissue lining the urinary tract**

The relevant risk of developing primary malignant disease of urothelial tissue lining the urinary tract (bladder cancer) arises from:

- exposure to ionising radiation (2015 Report, p 60) – for the purposes of this item, an employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation; or

- exposure to 2-naphthylamine, benzidine, cyclophosphamide or ortho-toluidine (p 60) – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- exposure to polycyclic aromatic hydrocarbons during aluminium production (p 60) – for the purposes of this item, polycyclic aromatic hydrocarbons is a specified agent and aluminium production is a specified process, and an employment-related risk arises from work with this agent during this process.

This item requires employment involving work with a specified thing or agent, or work with a specified agent during a specified process. To satisfy the requirements of this item:

- work with the specified thing or agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing or agent in the course of that employment; or
- in the case of polycyclic aromatic hydrocarbons: work with the specified agent during the specified process must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent during that process in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation). Exposure to 2-naphthylamine, benzidine, cyclophosphamide, ortho-toluidine or polycyclic aromatic hydrocarbons other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving exposure to cyclophosphamide required for this item may arise include employment in one of the following occupations: oncology nurse or pharmacist.

During consultation in relation to the Instrument, Dr Driscoll clarified that the examples of high risk occupations or industries for exposure to polycyclic aromatic hydrocarbons exposure ('PAHs') for this item (*see* 2015 Report, p 60) should have been limited to exposure during aluminium production.

### **Item 26 – Primary malignant disease of the brain**

The relevant risk of developing primary malignant disease of the brain (brain cancer) arises from exposure to ionising radiation (2015 Report, p 61).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and

- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

### **Item 27 – Primary malignant disease of the thyroid**

The relevant risk of developing primary malignant disease of the thyroid (thyroid cancer) arises from exposure to ionising radiation (2015 Report, p 61).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation).

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

### **Items 28 – Primary leukaemia (excluding chronic lymphatic leukaemia)**

Leukaemia is a malignant disease of a subset of white blood cells (2015 Report, p 62).

The relevant risk of developing primary leukaemia, excluding chronic lymphatic leukaemia, arises from:

- exposure to ionising radiation (2015 Report, p 62) – for the purposes of this item, an employment-related risk arises from work with one or more of the following specified things: equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation; or

- exposure to benzene, butadiene, cyclophosphamide or formaldehyde (p 62) – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents.

This item requires employment involving work with a specified thing or agent. To satisfy the requirements of this item:

- work with the specified thing or agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing or agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 2 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation). Exposure to benzene, butadiene, cyclophosphamide or formaldehyde other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

Examples of where the kind of employment involving exposure to cyclophosphamide required for this item may arise include employment in one of the following occupations: oncology nurse or pharmacist.

Examples of where the kind of employment involving exposure to formaldehyde required for this item may arise include employment in one of the following occupations: embalmer, forensic mortuary worker, hospital mortuary worker or pathology laboratory worker.

### **Item 29 – Primary non-Hodgkins lymphoma**

Non-Hodgkins lymphoma is a malignant disease of a subset of white blood cells (2015 Report, p 63). The relevant risk of developing primary non-Hodgkins lymphoma arises from exposure to ionising radiation (p 63), pentachlorophenol or lindane (2021 Report).

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things:

- equipment that produces ionising radiation, or substances (whether natural or artificial, or in the form of a solid, liquid, gas or vapour) that emit ionising radiation; or
- pentachlorophenol; or
- lindane.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and

- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 2 years.

Exposure to ionising radiation other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item (for example, employment involving exposure to solar radiation or cosmic radiation). Exposure to pentachlorophenol or lindane other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations, which involve possible exposure to x-rays on a regular basis: radiographer, radiologist, radiotherapist, dentist or customs officer.

Examples of where the kind of employment involving exposure (usually dermal) to pentachlorophenol required for this item may arise include employment in one of the following occupations: pentachlorophenol manufacture, workers involved in treating or handling wood products (such as sawmill workers), workers involved in spraying pentachlorophenol (such as agricultural workers), workers involved in treating materials (such as textile workers).

Examples of where the kind of employment involving exposure (usually respiratory or dermal) to lindane required for this item may arise include employment in one of the following occupations: lindane manufacture, workers involved in treating wood products with lindane (such as pesticide workers) and workers involved in applying lindane (such as agricultural workers).

### **Item 30 – Cholangiocarcinoma**

Cholangiocarcinoma is a malignant disease of the bile ducts. The relevant risk of developing cholangiocarcinoma arises from exposure to 1,2-Dichloropropane.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: 1,2-Dichloropropane.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to 1,2-Dichloropropane other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving exposure (usually respiratory or dermal) to 1,2-Dichloropropane required for this item may arise include employment in one of the following occupations: printing.

### **Item 31 – Ocular melanoma**

Ocular melanoma is a malignant disease of the eye. The relevant risk of developing ocular melanoma arises from exposure to ultraviolet light from welding.

For the purposes of this item, the employment-related risk arises from work with one or more of the following specified things: welding

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Exposure to ultraviolet light other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: any occupation in which welding occurs, such as welder, plumber and metal worker.

#### *Diseases of the nervous system*

#### **Item 32 – Parkinson’s disease**

Parkinson’s disease is a neurodegenerative disease of the central nervous system associated with tremor, stiff limbs and difficulty moving (2015 Report, p 63).

The relevant risk of developing Parkinson’s disease arises from exposure to manganese (2015 Report, p 63). For the purposes of this item, this is the specified agent and the employment-related risk arises from work with this agent.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than one year.

Exposure to manganese other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: welder or metal worker.

#### **Item 33 – Peripheral neuropathy**

Peripheral neuropathy is a group of diseases characterised by temporary or permanent damage to nerves outside the central nervous system (2015 Report, p 64).

The relevant risk of developing peripheral neuropathy arises from exposure to acrylamide, arsenic, carbon disulphide, lead, mercury, n-hexane, organophosphates or trichloroethylene (2015 Report, p 64). For the purposes of this item, these are the specified agents and the employment-related risk arises from work with one or more of these agents.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than one year.

Exposure to acrylamide, arsenic, carbon disulphide, lead, mercury, n-hexane, organophosphates or trichloroethylene other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### Respiratory diseases

#### **Item 34 – Occupational asthma**

Occupational asthma is a 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 (2015 Report, p 65). This includes immunologically-mediated occupational asthma and new cases of occupational asthma arising as result of workplace exposure to irritants, and excludes pre-existing asthma worsened due to exposure to workplace irritants (p 40).

Dr Driscoll subsequently advised that comprehensive information on specific exposures resulting in occupational asthma, relevant to Australian workplaces, is contained in a published paper by Crewe et al., 2016 (Crewe J, Carey R, Glass D, Peters S, Abramson MJ, Benke G, Reid A, Driscoll T, Fritschi L, A comprehensive list of asthmagens to inform health interventions in the Australian workplace, Aust N Z J Public Health. 2016 Apr;40(2):170-3. doi: 10.1111/1753-6405.12479).

The relevant risk of developing occupational asthma arises from respiratory exposure to:

- one of the following arthropods: acarain, barn mite, caddisfly, cricket, *Ephestia kuehniella* (Mediterranean flour moth), fowl mite, fruit fly, grain mite, flour mite, lesser mealworm, locust, sheep blowfly or silkworm – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following acids: dodecanedioic acid, glacial acetic acid, hydrochloric acid, peroxyacetic acid, sulphuric acid or sulphur dioxide – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following acrylates: acrylic acid, cyanoacrylates, methyl methacrylate, polymethyl methacrylate or trimethylolpropane triacrylate/2-hydroxypropyl acrylate – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or

- one of the following aldehydes: formaldehyde, glutaraldehyde, paraformaldehyde or urea formaldehyde – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following amines: aminoethyl ethanolamine, diethanolamine, dimethylethanolamine, ethanolamines, ethylenediamine, monoethanolamine, surfactant-specific amines, triethanolamine, triethylenetetramine, trimethylhexane-1 or 6-diamine/isophorondiamine mixture – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following ammonias: anhydrous ammonia, ammonium hydroxide, ammonia solution 10% or ammonia solution 29% – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following bio-aerosols: *Alternaria*, *Chrysonilia sitophila*, *Neurospora*, *Penicillium* or cutting oils – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following biological enzymes: *Bacillus subtilis* enzymes, bromelain, egg lysozyme, esperase, flaviastase, fungal amylase, fungal amyloglucosidase, fungal hemicellulose, pancreatin, papain, pepsin or trypsin – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- epoxy or epoxy adhesive – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- ethylene oxide – for the purposes of this item, this is a specified agent and an employment-related risk arises from work with this agent; or
- one of the following flours: buckwheat flour, rye flour, soya flour or wheat flour – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following flowers: baby's breath, freesia, *Limonium tataricum* or sunflower – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following foods: Brazil ginseng, castor bean, chamomile, cinnamon, *Dioscorea batatas* (Chinese yam), egg protein, fenugreek, garlic dust, green beans, guar, hops, paprika, pectin, rose hips, soybean lecithin, tea, thiamine (vitamin B) or thyme – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following industrial cleaning and sterilising agents: alkyl dimethyl benzyl ammonium chloride, benzyl-C10-16-alkyldimethyl, chlorides, benzyl-C12-16-alkyldimethyl, chlorides, benzyl-C12-18-alkyldimethyl, chlorides, benzyl-C16-18-alkyldimethyl, chlorides, benzyldimethylstearyl ammonium chloride, cetalkonium chloride, chlorhexidine, chlorine, dialkyl methyl benzyl ammonium chloride, dicumyl-peroxide, dodecyl dimethyl ammonium chloride, dimethyl ethyl benzyl ammonium chloride, dodecyl-dimethylbenzylammonium, fluorine, n-alkyl dimethyl benzyl ammonium chloride, persulphate salts, sodium hypochlorite or sodium metabisulfite – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or

- one of the following isocyanates: diisocyanates, hexamethylene diisocyanate prepolymers, isocyanates or toluene diisocyanate prepolymers – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- latex or natural rubber – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following medications: ampicillin, amprolium, cimetidine, codeine, colistin, hydralazine, ipecacuanha, hydrocodone, isonicotinic acid hydrazide, methyl dopa, morphine, opiate compounds, oxycodone, papaverine, penicillamine, penicillins, phenylglycine acid chloride, psyllium, salbutamol intermediate, spiramycin, tetracycline, thebaine, tylosin tartrate or vancomycin – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following metals: aluminium, aluminium chloride, aluminium oxide, aluminium compounds, ammonium dichromate, ammonium hexachloroplatinate (IV), chromium, chromium (metal), chromium (hexavalent), chromium (non-hexavalent), cobalt, cobalt compounds, nickel, nickel compounds, platinum, rhodium, soluble halogenated platinum compounds, titanium oxide/dioxide, tributyl tin oxide, tungsten carbide, tungsten carbide/cobalt, vanadium, welding fumes - gas metal arc welding on uncoated mild steel, welding fumes - stainless steel, stainless steel or zinc oxide – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following other reactive chemicals: chlorofluorocarbon refrigerants heated, fluoride, furfuryl alcohol mixed with a catalyst, isolyzer, polyethylene terephthalate/polybutylene terephthal, polyfunctional aziridine, polypropylene heated, polyvinyl chloride heated, polyvinyl chloride non-heated, polyvinyl chloride thermally degraded, radiographic fixative, resin containing furfuryl alcohol, styrene or triglycidyl isocyanurate – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following pesticides: 3-amino-5-mercapto-1,2,4-triazole, acephate, chloramine T, chlorothalonil (bravo, echo), diazinon, dimethoate, fenthion, malathion, nemacur, piperazine, piperazine citrate, piperazine hydrochloride, pyrethrins, pyrifos, saflufenuron or tetramethrin – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following plants and sensitising agents or irritants derived from plants: almond dust, *Arabidopsis thaliana*, *Chlorella* algae, gum arabic, henna, kapok, linseed oilcake, *Pinellia ternata*, quillaja bark, rice dust, tall oil crude, tall oil - rosin, tobacco leaf, tragacanth, turpentine, *Vicia sativa* (vetch) or weeping fig – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following reactive dyes: Cibachrome Brilliant Scarlet 32, Drimarene Brilliant Blue K-BL, Drimarene Brilliant Yellow K-3GL, Lanazol Yellow 4G, Levafix Brilliant Yellow E36, Methyl Blue, Rifacion Orange HE 2G, Rifafix Yellow 3 RN, Rifazol Black GR or Rifazol Brilliant Orange 3R – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or

- one of the following sensitising agents or irritants derived from animals: bat guano, bovine serum albumin, casein, cat antigens, chicken antigens, cow antigens, frog antigens, guinea pig antigens, lactoserum, mice antigens, pig antigens, rabbit antigens or rat antigens – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following sensitising agents or irritants derived from fish or shellfish: *Anisakis simplex* (herring worm) antigens, clam antigens, crab antigens, cuttlefish antigens, fishmeal, nacre dust, octopus antigens, prawn antigens, red soft coral antigens, salmon antigens, shrimp meal or trout antigens – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- one of the following soldering fluxes: colophony soldering flux, alkyl aryl polyether soldering flux or zinc soldering flux – for the purposes of this item, these are specified agents and an employment-related risk arises from work with one or more of these agents; or
- wood dust from one of the following: *Triplochiton scleroxylon* (African maple), *Acacia melanoxylon* (blackwood), *Sequoia sempervirens* (California redwood), *Juglans olanchana* (Central American walnut), *Thuja occidentalis* (eastern white cedar), *Shorea sp.* (mahogany), *Quercus robur* (oak) or *Thuja lpicata* (western red cedar) – for the purposes of this item, these are the specified things and an employment-related risk arises from work with the wood of one of these things.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 4 weeks.

Respiratory exposure to a specified agent or wood dust from a specified tree other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### **Item 35 – Coal workers’ pneumoconiosis**

Coal workers’ pneumoconiosis is a fibrotic lung disease (2015 Report, p 65).

The relevant risk of developing coal workers’ pneumoconiosis arises from respiratory exposure to coal (2015 Report, p 65). For the purposes of this item, this is the specified agent and the employment-related risk arises from work with this agent.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to coal other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

An example of where the kind of employment required for this item may arise is employment in the occupation of coal miner.

### **Item 36 – Asbestosis**

Asbestosis is a fibrotic lung disease caused by respiratory exposure to asbestos (all forms) (2015 Report, pp 27, 39, 65). For the purposes of this item, asbestos is a specified agent and asbestos-containing material is a specified thing, and an employment-related risk arises from work with this agent or thing.

This item requires employment involving work with a specified agent or thing. To satisfy the requirements of this item:

- work with the specified agent or thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent or thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to asbestos other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment involving respiratory exposure to asbestos required for this item may arise include employment in one of the following occupations: miner, truck driver or dock worker (prior to 31 December 2003, being the date on which the use of asbestos was banned in Australia), or carpenter, boilermaker, plumber or demolition worker (at any time).

### **Item 37 – Silicosis**

Silicosis is a fibrotic lung disease caused by respiratory exposure to silica (including all materials containing crystalline silica) (2015 Report, pp 27, 65). For the purposes of this item, material containing crystalline silica is a specified thing, and silica is a specified agent, and the employment-related risk arises from work with this thing or agent.

This item requires employment involving work with a specified thing or agent. To satisfy the requirements of this item:

- work with the specified thing or agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing or agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to silica other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: excavator, miner, brick cutter, concrete cutter, stone cutter, abrasive blaster or foundry casting worker.

### **Item 38 – Other pneumoconiosis**

The relevant risk of developing other pneumoconiosis (fibrotic lung disease) arises from respiratory exposure to beryllium, tin, iron oxide, barium, aluminium, cobalt or tungsten (2015 Report, pp 40, 65). For the purposes of this item, these are the specified agents and the employment-related risk arises from work with one or more of these agents.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 5 years.

Respiratory exposure to a specified agent other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### **Item 39 – Byssinosis**

Byssinosis is an asthma-like condition (reversible narrowing of the small and medium airways in the lung which causes shortness of breath) (2015 Report, p 66).

The relevant risk of developing byssinosis arises from respiratory exposure to cotton dust, flax dust, hemp dust or sisal dust (2015 Report, p 66). For the purposes of this item, unprocessed cotton, unprocessed flax, unprocessed hemp and unprocessed sisal are specified agents and an employment-related risk arises from work with one of these agents.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 4 weeks.

Respiratory exposure to cotton dust, flax dust, hemp dust or sisal dust other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### **Item 40 – Extrinsic allergic alveolitis**

Extrinsic allergic alveolitis is a disease of the alveoli (the gas-exchange spaces in the lung) causing shortness of breath (2015 Report, p 66).

The relevant risk of developing extrinsic allergic alveolitis arises from respiratory exposure to mouldy feathers, mouldy grain, mouldy hay or mouldy straw (2015 Report, p 66). For the purposes of this item, feathers, grain, hay and straw are the specified things and the employment-related risk arises from work with one of these things.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 4 weeks.

Respiratory exposure to mouldy feathers, mouldy grain, mouldy hay or mouldy straw other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### Hepatic disease

#### **Item 41 – Non-infectious hepatitis**

Non-infectious hepatitis is an acute inflammation of the liver due to non-infectious agents (2015 Report, p 66).

The relevant risk of developing non-infectious hepatitis arises from exposure to acrylonitrile, alcohols, amino-derivatives of benzene, antimony, aromatic hydrocarbons, arsenic, benzene, benzoquinone, beryllium, cadmium, carbon disulphide, carbon monoxide, chromium, copper, fluorine, glycols, hexane, hydrogen cyanide, hydrogen sulphide, ketones, lead, manganese, mercury, methylene chloride, mineral acids, nitric acid esters, organochlorine compounds, organophosphate, osmium, oxides of nitrogen, ozone, phosgene, phosphorus, selenium, styrene, thallium, tin, toluene, toxic halogen derivatives of aliphatic, toxic nitro-derivatives of benzene, vanadium or zinc (2015 Report, pp 40, 70). For the purposes of this item, these are the specified agents and the employment-related risk arises from work with one or more of these agents.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item, work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment.

Exposure to a specified agent other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### Skin diseases

#### **Item 42 – Irritant contact dermatitis**

Dermatitis is an inflammatory disease of the skin (2015 Report, p 68).

The relevant risk of developing irritant contact dermatitis arises from contact with alcohols, cutting fluids, cleaners, degreasers, disinfectants, liquids (frequent contact), liquids (prolonged contact), petroleum products, soaps or solvents (2015 Report, p 68). For the purposes of this item, these are the

specified agents and the employment-related risk arises from work and contact with one or more of these agents.

This item requires employment involving work and contact with a specified agent. To satisfy the requirements of this item:

- work and contact with the specified agent (and in the case of liquids, the contact must be frequent or prolonged) must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with, and had contact with, that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 4 weeks.

Contact with alcohols, cutting fluids, cleaners, degreasers, disinfectants, liquids, petroleum products, soaps or solvents other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: agricultural worker, beautician, chemical worker, cleaner, cook, caterer, electronics worker, hairdresser, healthcare worker, machine operator, mechanic, metalworker or vehicle assembler.

### **Item 43 – Allergic contact dermatitis**

Dermatitis is an inflammatory disease of the skin (2015 Report, p 68).

The relevant risk of developing allergic contact dermatitis arises from contact with acrylics, chromates, cobalt, cosmetics, epoxy resin, fragrances, latex, nickel, plants, preservatives or resins (2015 Report, p 68).

Dr Driscoll subsequently provided a more specific list of the agents known to cause allergic contact dermatitis in an occupational setting. The revised list is based on a 2013 article by Hannam and Nixon (Hannam S, Nixon R, *How to treat occupational contact dermatitis*, Australian Doctor 2013; April:25-33) and a 2005 article by Nixon, Frowen and Moyle (Nixon R, Frowen K, Moyle M, *Occupational dermatoses*, Aust Fam Physician 2005; 34(5):327-333).

The revised list includes: 2,5-diaminotoluene sulfate, 4-phenylenediamine base, ammonium persulfate, cobalt chloride, cocamide diethanolamide, coconut diethanolamide, colophonium/colophony/rosin, diazolidinyl urea, epoxy resin, formaldehyde, fragrance mix I (amylcinnamaldehyde, cinnamic alcohol, cinnamic aldehyde, eugenol, geraniol, hydroxycitronellal, isoeugenol and oakmoss absolute), fragrance mix II (citral, citronellol, coumarin, farnesol, hexyl cinnamic aldehyde and hydroxyisohexyl 3-cyclohexene carboxaldehyde), glyceryl monothioglycolate, hydroxyethyl methacrylate, mercaptobenzothiazole, methyl chlorisothiazolinone, mixture of methylchlorisothiazolinone and methylisothiazolinone, nickel sulfate, potassium dichromate, quaternium 15, thiuram mix (tetramethylthiuramdisulfide, tetramethylthiuram monosulfide and tetraethylthiuram disulfide). For the purposes of this item, these are the specified agents and the employment-related risk arises from work and contact with one or more of these agents.

In the case of fragrance mix I, fragrance mix II and thiuram mix, the mix and the individual chemical components are each specified agents for the purposes of this item.

This item requires employment involving work and contact with a specified agent. To satisfy the requirements of this item:

- work and contact with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with, and had contact with, that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 4 weeks.

Contact with a specified agent other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

Examples of where the kind of employment required for this item may arise include employment in one of the following occupations: agricultural worker, beautician, chemical worker, cleaner, cook, caterer, electronics worker, hairdresser, healthcare worker, machine operator, mechanic, metalworker or vehicle assembler.

#### **Item 44 – Occupational vitiligo**

Vitiligo is 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 (2015 Report, p 68).

The relevant risk of developing occupational vitiligo arises from exposure to hydroquinone, monobenzyl ether of hydroquinone, monobutyl ether of hydroquinone, para-amyphenol, para-tertiary-butylcatechol or para-tertiary-butylphenol (2015 Report, p 68). For the purposes of this item, these are the specified agents and the employment-related risk arises from work with one or more of these agents.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item:

- work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 4 weeks.

Exposure to hydroquinone, monobenzyl ether of hydroquinone, monobutyl ether of hydroquinone, para-amyphenol, para-tertiary-butylcatechol or para-tertiary-butylphenol other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

#### *Musculoskeletal diseases*

#### **Item 45 – Raynaud’s disease**

Raynaud’s disease is characterised by intermittent spasm of the arteries of the hands or feet, causing pain due to decreased blood flow to the affected area (2015 Report, p 69).

The relevant risk of developing Raynaud’s disease arises from exposure to vibration from powered equipment or vibration from powered tools (2015 Report, p 41). For the purposes of this item,

powered equipment that produces vibration and powered tools that produce vibration are the specified things and the employment-related risk arises from work with one or more of these things.

This item requires employment involving work with a specified thing. To satisfy the requirements of this item:

- work with the specified thing must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that thing in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 12 weeks.

Exposure to vibration other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

#### **Item 46 – Bursitis at the elbow or knee**

Bursitis (inflammation of the relevant bursa) causes pain, tenderness and sometimes swelling just above or below the knee or behind the elbow, worse with movement (2015 Report, p 69).

The relevant risk of developing bursitis at the elbow arises from prolonged or recurrent external friction or pressure at or about the elbow, and the relevant risk of developing bursitis at the knee arises from prolonged or recurrent external friction or pressure at or about the knee (2015 Report, p 69, as clarified by Dr Driscoll during consultation).

For the purposes of this item, the employment-related risk arises from a specified work activity that:

- in the case of bursitis at the elbow: involves prolonged or recurrent external friction or pressure at or about the elbow; or
- in the case of bursitis at the knee: involves prolonged or recurrent external friction or pressure at or about the knee.

This item requires employment involving a specified work activity. To satisfy the requirements of this item:

- the specified work activity must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have undertaken that activity in the course of that employment; and
- the period, or the sum total of periods (whether consecutive or not), of such employment, must have been no less than 6 months.

Prolonged or recurrent external friction or pressure at or about the elbow or knee occurring other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

## Acute diseases

### **Item 47– Acute poisoning or toxicity affecting the heart, lungs, liver, kidney, nervous system or blood**

The relevant risk of developing acute poisoning or toxicity affecting the heart, lungs, liver, kidney, nervous system or blood includes exposure to acrylonitrile, alcohols, amino-derivatives of benzene, antimony, aromatic hydrocarbons, arsenic, benzene, benzoquinone, beryllium, cadmium, carbon disulphide, carbon monoxide, chromium, copper, fluorine, glycols, hexane, hydrogen cyanide, hydrogen sulphide, ketones, lead, manganese, mercury, methylene chloride, mineral acids, nitric acid esters, organochlorine compounds, organophosphate, osmium, oxides of nitrogen, ozone, phosgene, phosphorus, selenium, styrene, thallium, tin, toluene, toxic halogen derivatives of aliphatic, toxic nitro-derivatives of benzene, vanadium or zinc (2015 Report, p 70). For the purposes of this item, these are the specified agents and the employment-related risk arises from work with one or more of these agents.

This item requires employment involving work with a specified agent. To satisfy the requirements of this item, work with the specified agent must have been an ordinary incident of the kind of employment in which the employee was engaged, and the employee must have worked with that agent in the course of that employment.

Exposure to a specified agent other than in the circumstances described in the preceding paragraph will not satisfy the requirements of this item.

### **Schedule 2 – Occupational asthma**

An agent or thing specified in column 2 of an item of the table in Schedule 2 is a specified agent or thing for the purposes of Item 34 (Occupational asthma) of the table in Schedule 1.

### **Schedule 3 – Repeals**

Schedule 3 to the instrument repeals the *Seafarers Rehabilitation and Compensation Act 1992 – Notice of Declarations and Specifications (25/05/1993)*.