

Statement of Principles concerning ATRIAL FIBRILLATION AND ATRIAL FLUTTER (Reasonable Hypothesis)

(No. 1 of 2023)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

Dated 23 December 2022

The Common Seal of the Repatriation Medical Authority was affixed to this instrument at the direction of:

Professor Terence Campbell AM Chairperson

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1 Name

This is the Statement of Principles concerning atrial fibrillation and atrial flutter (Reasonable Hypothesis) (No. 1 of 2023).

2 Commencement

This instrument commences on 23 January 2023.

3 Authority

This instrument is made under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

4 Repeal

The Statement of Principles concerning atrial fibrillation and atrial flutter No. 49 of 2014 (Federal Register of Legislation No. F2014L00481) made under subsection 196B(2) of the VEA is repealed.

5 Application

This instrument applies to a claim to which section 120A of the VEA or section 338 of the *Military Rehabilitation and Compensation Act 2004* applies.

6 Definitions

The terms defined in the Schedule 1 - Dictionary have the meaning given when used in this instrument.

7 Kind of injury, disease or death to which this Statement of Principles relates

(1) This Statement of Principles is about atrial fibrillation and atrial flutter and death from atrial fibrillation and atrial flutter.

Meaning of atrial fibrillation and atrial flutter

- (2) For the purposes of this Statement of Principles:
 - (a) atrial fibrillation means a disorder of cardiac rhythm, in which there is disorganised, rapid, and irregular atrial electrical activation, resulting in loss of organised atrial mechanical contraction and an irregular, usually rapid ventricular rate.
 - (b) atrial flutter:
 - (i) means a disorder of cardiac rhythm in which there is rapid and regular atrial electrical activation caused by a re-entry circuit within the right atrium, resulting in a regular, rapid atrial rate; and

- (ii) a characteristic electrocardiographic appearance of a uniform and regular continuous sawtooth wave-form.
 - Note 1: Atrial fibrillation and atrial flutter can be paroxysmal, persistent or permanent disorders, with variable electrocardiographic and clinical features. Ventricular rates in atrial flutter are typically 150 beats per minute.
 - Note 2: Symptoms of atrial fibrillation or atrial flutter typically include palpitations, fatigue, lightheadedness, and mild shortness of breath. Less common problems include significant dyspnoea, angina, hypotension, anxiety and syncope.

Note 3: Atrial fibrillation and atrial flutter can occur alone or in combination.

- (3) While atrial fibrillation and atrial flutter attract ICD-10-AM code I48, in applying this Statement of Principles the meaning of atrial fibrillation and atrial flutter is that given in subsection (2).
- (4) For subsection (3), a reference to an ICD-10-AM code is a reference to the code assigned to a particular kind of injury or disease in *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification* (ICD-10-AM), Tenth Edition, effective date of 1 July 2017, copyrighted by the Independent Hospital Pricing Authority, ISBN 978-1-76007-296-4.

Death from atrial fibrillation and atrial flutter

(5) For the purposes of this Statement of Principles, atrial fibrillation and atrial flutter, in relation to a person, includes death from a terminal event or condition that was contributed to by the person's atrial fibrillation and atrial flutter.

Note: *terminal event* is defined in the Schedule 1 – Dictionary.

8 Basis for determining the factors

The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that atrial fibrillation and atrial flutter and death from atrial fibrillation and atrial flutter can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces under the VEA, or members under the MRCA.

Note: MRCA, relevant service and VEA are defined in the Schedule 1 – Dictionary.

9 Factors that must exist

At least one of the following factors must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting atrial fibrillation and atrial flutter or death from atrial fibrillation and atrial flutter with the circumstances of a person's relevant service:

(1) having valvular heart disease at the time of the clinical onset of atrial fibrillation or atrial flutter;

Note: valvular heart disease is defined in the schedule 1 Dictionary.

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- (2) having ischaemic heart disease at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (3) having non-infectious myocarditis at the time of the clinical onset of atrial fibrillation or atrial flutter;
 - Note 1: Non-infectious myocarditis can be acute or chronic.
 - Note 2: Non-infectious myocarditis can be of autoimmune, infiltrative or immunological origin. Examples of causes of non-infectious myocarditis include immune checkpoint inhibitor therapy and giant cell myocarditis.
- (4) having viral myocarditis at the time of the clinical onset of atrial fibrillation or atrial flutter;
 - Note 1: Viral myocarditis can be acute or chronic.
 - Note 2: Examples of viral causes of myocarditis include severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and dengue virus.
- (5) having a non-viral infection of the myocardium at the time of the clinical onset of atrial fibrillation or atrial flutter;
 - Note: Examples of causes of non-viral infection of the myocardium include *Borrelia burgdorferi* and leptospirosis.
- (6) having pericarditis at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (7) having cardiomyopathy at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (8) having heart failure at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (9) having hypertension before the clinical onset of atrial fibrillation or atrial flutter;
- (10) having pulmonary thromboembolism within the 30 days before the clinical onset of atrial fibrillation or atrial flutter;
- (11) having a thyroid condition from the specified list of thyroid conditions at the time of the clinical onset of atrial fibrillation or atrial flutter;
 - Note: specified list of thyroid conditions is defined in the Schedule 1 Dictionary.
- (12) consuming an average of at least 100 grams of alcohol per week for a continuous period of at least the 5 years before the clinical onset of atrial fibrillation or atrial flutter;
 - Note: Alcohol consumption is calculated utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink.
- (13) binge drinking within the 2 days before the clinical onset of atrial fibrillation or atrial flutter:

Note: *binge drinking* is defined in the Schedule 1 – Dictionary.

- (14) having a thoracic surgical procedure or an invasive cardiac procedure within the 1 year before the clinical onset of atrial fibrillation or atrial flutter;
 - Note 1: Examples of thoracic surgical procedures include vascular, mediastinal, pulmonary and chest wall surgery.

Note 2: Examples of invasive cardiac procedures include:

- (a) coronary artery bypass grafting;
- (b) heart transplant;
- (c) open heart surgery; and
- (d) transcatheter aortic valve implantation.
- (15) having a non-cardiothoracic surgical procedure involving general or regional anaesthesia, within the 30 days before the clinical onset of atrial fibrillation or atrial flutter;

Note: Examples of non-cardiothoracic surgical procedures include emergency or elective orthopaedic and abdominal surgery and neurosurgery.

- (16) having chronic obstructive pulmonary disease at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (17) having asthma of sufficient severity to require maintenance therapy at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (18) undertaking strenuous physical activity greater than 6 METs, for an average of at least 20 hours per week for a continuous period of at least the 5 years before the clinical onset of atrial fibrillation or atrial flutter;

Note: *MET* is defined in the Schedule 1 – Dictionary.

(19) inability to undertake any physical activity greater than 3 METs for at least the 1 year before the clinical onset of atrial fibrillation and atrial flutter:

Note: *MET* is defined in the Schedule 1 - Dictionary.

- (20) having sick sinus syndrome at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (21) having a benign or malignant neoplasm involving the cardiac atrium at the time of the clinical onset of atrial fibrillation or atrial flutter;

Note: A neoplasm involving the cardiac atrium can be primary or metastatic. An example of a primary neoplasm involving the heart is cardiac lymphoma.

(22) having a non-neoplastic lesion involving the cardiac atrium at the time of the clinical onset of atrial fibrillation or atrial flutter;

Note: Examples of non-neoplastic lesions which can involve the cardiac atrium include cardiac tamponade and coronary artery aneurysm.

(23) having a malignant neoplasm, excluding non-melanotic malignant neoplasm of the skin, at the time of the clinical onset of atrial fibrillation or atrial flutter:

- (24) undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, before the clinical onset of atrial fibrillation or atrial flutter;
- (25) having diabetes mellitus for at least the 5 years before the clinical onset of atrial fibrillation or atrial flutter;
- (26) experiencing penetrating trauma to the heart within the 1 year before the clinical onset of atrial fibrillation or atrial flutter;
- (27) experiencing a blunt chest injury within the 7 days before the clinical onset of atrial fibrillation or atrial flutter;

Note: *blunt chest injury* is defined in the Schedule 1 – Dictionary.

(28) having a spinal cord injury before the clinical onset of atrial fibrillation or atrial flutter;

Note: *spinal cord injury* is defined in the Schedule 1 – Dictionary.

(29) having sepsis, or an injury or illness requiring admission to an intensive care unit or mechanical ventilation within the 30 days before the clinical onset of atrial fibrillation or atrial flutter:

Note: *sepsis* is defined in the Schedule 1 – Dictionary.

- (30) having infiltration of the myocardium due to:
 - (a) amyloidosis;
 - (b) haemochromatosis; or
 - (c) sarcoidosis;

at the time of the clinical onset of atrial fibrillation or atrial flutter;

(31) having an autoimmune or inflammatory disease from the specified list of autoimmune or inflammatory diseases at the time of the clinical onset of atrial fibrillation or atrial flutter;

Note: *specified list of autoimmune or inflammatory diseases* is defined in the Schedule 1 - Dictionary.

(32) being overweight or obese for at least the 5 years before the clinical onset of atrial fibrillation or atrial flutter;

Note: being overweight or obese is defined in the Schedule 1 - Dictionary.

- (33) having obstructive sleep apnoea at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (34) having smoked tobacco products in an amount of at least 5 pack-years before the clinical onset of atrial fibrillation or atrial flutter; and if smoking has ceased before the clinical onset of atrial fibrillation or atrial flutter, then that onset occurred within 5 years of cessation;

Note: one pack-year is defined in the Schedule 1 - Dictionary.

- (35) having gastro-oesophageal reflux disease at the time of the clinical onset of atrial fibrillation or atrial flutter;
- (36) having chronic renal failure at the time of the clinical onset of atrial fibrillation or atrial flutter;

Note: *chronic renal failure* is defined in the Schedule 1 - Dictionary.

(37) having systemic chemotherapy for a malignant disease at the time of the clinical onset of atrial fibrillation or atrial flutter;

Note: Examples of systemic chemotherapy for malignant disease include:

- (a) anthracyclines including doxorubicin;
- (b) HER2 inhibitors including trastuzumab; and
- (c) tyrosine kinase inhibitors including ibrutinib.
- (38) having glucocorticoid therapy as specified before the clinical onset of atrial fibrillation or atrial flutter, and if the glucocorticoid therapy as specified has ceased or decreased before the clinical onset of atrial fibrillation or atrial flutter, then that onset occurred within 30 days of cessation of therapy;

Note: glucocorticoid therapy as specified is defined in the Schedule 1 - Dictionary.

(39) taking a non-topical, non-steroidal, anti-inflammatory drug, excluding low-dose aspirin, for a continuous period at least 30 days within the 60 days before the clinical onset of atrial fibrillation or atrial flutter;

Note: *low-dose aspirin* is defined in the Schedule 1 – Dictionary.

(40) taking a drug from the specified list of drugs, within the 7 days before the clinical onset of atrial fibrillation or atrial flutter;

Note: *specified list of drugs* is defined in the Schedule 1 - Dictionary.

- (41) taking a bisphosphonate for a continuous period at least 30 days within the 60 days before the clinical onset of atrial fibrillation or atrial flutter;
- (42) inhaling ambient, chronically polluted air as specified for at least 1 year, within the 2 years before the clinical onset of atrial fibrillation or atrial flutter;

Note: ambient, chronically polluted air as specified is defined in the Schedule 1 – Dictionary.

(43) inhaling ambient, highly polluted air as specified for at least the 30 days before the clinical onset of atrial fibrillation or atrial flutter;

Note: ambient, highly polluted air as specified is defined in the Schedule 1 – Dictionary.

Note: Examples of causes of viral lower respiratory tract infections include severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and influenza virus.

(44) Having a viral lower respiratory tract infection within the 30 days before the clinical onset of atrial fibrillation or atrial flutter;

- Note; Examples of causes of viral lower respiratory tract infections include severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and influenza virus.
- (45) having valvular heart disease at the time of the clinical worsening of atrial fibrillation or atrial flutter;
 - Note: valvular heart disease is defined in the schedule 1 Dictionary.
- (46) having ischaemic heart disease at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (47) having non-infectious myocarditis at the time of the clinical worsening of atrial fibrillation or atrial flutter;
 - Note 1: Non-infectious myocarditis can be acute or chronic.
 - Note 2: Non-infectious myocarditis can be of autoimmune, infiltrative or immunological origin. Examples of causes of non-infectious myocarditis include immune checkpoint inhibitor therapy and giant cell myocarditis.
- (48) having viral myocarditis at the time of the clinical worsening of atrial fibrillation or atrial flutter;
 - Note 1: Viral myocarditis can be acute or chronic.
 - Note 2: Examples of viral causes of myocarditis include severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and dengue virus.
- (49) having a non-viral infection of the myocardium at the time of the clinical worsening of atrial fibrillation or atrial flutter;
 - Note: Examples of causes of non-viral infection of the myocardium include *Borrelia burgdorferi* and leptospirosis.
- (50) having pericarditis at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (51) having cardiomyopathy at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (52) having heart failure at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (53) having hypertension before the clinical worsening of atrial fibrillation or atrial flutter;
- (54) having pulmonary thromboembolism within the 30 days before the clinical worsening of atrial fibrillation or atrial flutter;
- (55) having a thyroid condition from the specified list of thyroid conditions at the time of the clinical worsening of atrial fibrillation or atrial flutter;
 - Note: *specified list of thyroid conditions* is defined in the Schedule 1 Dictionary.
- (56) consuming an average of at least 100 grams of alcohol per week for a continuous period of at least the 5 years before the clinical worsening of atrial fibrillation or atrial flutter:

Note: Alcohol consumption is calculated utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink.

(57) binge drinking within the 2 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: binge drinking is defined in the Schedule 1 – Dictionary.

(58) having a thoracic surgical procedure or an invasive cardiac procedure within the 1 year before the clinical worsening of atrial fibrillation or atrial flutter;

Note 1: Examples of thoracic surgical procedures include vascular, mediastinal, pulmonary and chest wall surgery.

Note 2: Examples of invasive cardiac procedures include:

- (a) coronary artery bypass grafting;
- (b) heart transplant;
- (c) open heart surgery; and
- (d) transcatheter aortic valve implantation.
- (59) having a non-cardiothoracic surgical procedure involving general or regional anaesthesia, within the 30 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: Examples of non-cardiothoracic surgical procedures include emergency or elective orthopaedic and abdominal surgery and neurosurgery.

- (60) having chronic obstructive pulmonary disease at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (61) having asthma of sufficient severity to require maintenance therapy at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (62) undertaking strenuous physical activity greater than 6 METs, for an average of at least 20 hours per week for a continuous period of at least the 5 years before the clinical worsening of atrial fibrillation or atrial flutter;

Note: *MET* is defined in the Schedule 1 – Dictionary.

(63) inability to undertake any physical activity greater than 3 METs for at least the 1 year before the clinical worsening of atrial fibrillation and atrial flutter;

Note: *MET* is defined in the Schedule 1 - Dictionary.

- (64) having sick sinus syndrome at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (65) having a benign or malignant neoplasm involving the cardiac atrium at the time of the clinical worsening of atrial fibrillation or atrial flutter;

Note: A neoplasm involving the cardiac atrium can be primary or metastatic. An example of a primary neoplasm involving the heart is cardiac lymphoma.

(66) having a non-neoplastic lesion involving the cardiac atrium at the time of the clinical worsening of atrial fibrillation or atrial flutter;

- Note: Examples of non-neoplastic lesions which can involve the cardiac atrium include cardiac tamponade and coronary artery aneurysm.
- (67) having a malignant neoplasm, excluding non-melanotic malignant neoplasm of the skin, at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (68) undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, before the clinical worsening of atrial fibrillation or atrial flutter;
- (69) having diabetes mellitus for at least the 5 years before the clinical worsening of atrial fibrillation or atrial flutter;
- (70) experiencing penetrating trauma to the heart within the 1 year before the clinical worsening of atrial fibrillation or atrial flutter;
- (71) experiencing a blunt chest injury within the 7 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: *blunt chest injury* is defined in the Schedule 1 – Dictionary.

(72) having a spinal cord injury before the clinical worsening of atrial fibrillation or atrial flutter;

Note: *spinal cord injury* is defined in the Schedule 1 – Dictionary.

(73) having sepsis, or an injury or illness requiring admission to an intensive care unit or mechanical ventilation within the 30 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: *sepsis* is defined in the Schedule 1 – Dictionary.

- (74) having infiltration of the myocardium due to:
 - (a) amyloidosis;
 - (b) haemochromatosis; or
 - (c) sarcoidosis;

at the time of the clinical worsening of atrial fibrillation or atrial flutter;

(75) having an autoimmune or inflammatory disease from the specified list of autoimmune or inflammatory diseases at the time of the clinical worsening of atrial fibrillation or atrial flutter;

Note: *specified list of autoimmune or inflammatory diseases* is defined in the Schedule 1 - Dictionary.

(76) being overweight or obese for at least the 5 years before the clinical worsening of atrial fibrillation or atrial flutter;

Note: being overweight or obese is defined in the Schedule 1 - Dictionary.

(77) having obstructive sleep apnoea at the time of the clinical worsening of atrial fibrillation or atrial flutter;

(78) having smoked tobacco products in an amount of at least 5 pack-years before the clinical worsening of atrial fibrillation or atrial flutter; and if smoking has ceased before the clinical worsening of atrial fibrillation or atrial flutter, then that worsening occurred within 5 years of cessation;

Note: *one pack-year* is defined in the Schedule 1 - Dictionary.

- (79) having gastro-oesophageal reflux disease at the time of the clinical worsening of atrial fibrillation or atrial flutter;
- (80) having chronic renal failure at the time of the clinical worsening of atrial fibrillation or atrial flutter;

Note: *chronic renal failure* is defined in the Schedule 1 - Dictionary.

(81) having systemic chemotherapy for a malignant disease at the time of the clinical worsening of atrial fibrillation or atrial flutter;

Note: Examples of systemic chemotherapy for malignant disease include:

- (a) anthracyclines including doxorubicin;
- (b) HER2 inhibitors including trastuzumab; and
- (c) tyrosine kinase inhibitors including ibrutinib.
- (82) having glucocorticoid therapy as specified before the clinical worsening of atrial fibrillation or atrial flutter, and if the glucocorticoid therapy as specified has ceased or decreased before the clinical worsening of atrial fibrillation or atrial flutter, then that worsening occurred within 30 days of cessation of therapy;

Note: glucocorticoid therapy as specified is defined in the Schedule 1 - Dictionary.

(83) taking a non-topical, non-steroidal, anti-inflammatory drug, excluding low-dose aspirin, for a continuous period at least 30 days within the 60 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: *low-dose aspirin* is defined in the Schedule 1 – Dictionary.

(84) taking a drug from the specified list of drugs within the 7 days before the clinical worsening of atrial fibrillation or atrial flutter.

Note: specified list of drugs is defined in the Schedule 1 - Dictionary.

- (85) taking a bisphosphonate: for a continuous period at least 30 days within the 60 days before the clinical worsening of atrial fibrillation or atrial flutter
- (86) inhaling ambient, chronically polluted air as specified for at least 1 year, within the 2 years before the clinical worsening of atrial fibrillation or atrial flutter;

Note: ambient, chronically polluted air as specified is defined in the Schedule 1 – Dictionary.

(87) inhaling ambient, highly polluted air as specified for at least the 30 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: ambient, highly polluted air as specified is defined in the Schedule 1 – Dictionary.

(88) having a viral lower respiratory tract infection within the 30 days before the clinical worsening of atrial fibrillation or atrial flutter;

Note: Examples of causes of viral lower respiratory tract infections include severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and influenza virus.

(89) inability to obtain appropriate clinical management for atrial fibrillation and atrial flutter.

10 Relationship to service

- (1) The existence in a person of any factor referred to in section 9, must be related to the relevant service rendered by the person.
- (2) The factors set out in subsections 9(45) to 9(89) apply only to material contribution to, or aggravation of, atrial fibrillation and atrial flutter where the person's atrial fibrillation and atrial flutter was suffered or contracted before or during (but did not arise out of) the person's relevant service.

11 Factors referring to an injury or disease covered by another Statement of Principles

In this Statement of Principles:

- (1) if a factor referred to in section 9 applies in relation to a person; and
- (2) that factor refers to an injury or disease in respect of which a Statement of Principles has been determined under subsection 196B(2) of the VEA;

then the factors in that Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Schedule 1 - Dictionary

Note: See Section 6

1 Definitions

In this instrument:

ambient, chronically polluted air as specified means air with average annual concentrations of particulate matter with an aerodynamic diameter of < 2.5 µm (PM2.5) exceeding 25 µg/m³.

ambient, highly polluted air as specified means air with 24 hour average concentrations of:

- (a) particulate matter with an aerodynamic diameter of $< 2.5 \mu m$ (PM2.5)
- (b) exceeding $50 \mu g/m^3$; or
- (c) particulate matter with an aerodynamic diameter of $< 10 \mu m$ (PM10) exceeding 75 $\mu g/m^3$.

atrial fibrillation and atrial flutter—see subsection 7(2).

being overweight or obese means:

- (a) having a Body Mass Index (BMI) of 25 or greater; or
- (b) for males, having a waist circumference exceeding 94 centimetres; or
- (c) for females, having a waist circumference exceeding 80 centimetres.

Note: **BMI is also defined in the Schedule 1 - Dictionary.**

binge drinking means consumption of large amounts of alcohol in a short space of time resulting in acute alcohol intoxication.

Note: Acute alcohol intoxication typically occurs when there is consumption of:

- (a) 4 or more standard alcoholic drinks by an adult female within a 2 hour time period; or
- (b) 5 or more standard alcoholic drinks by an adult male within a 2 hour time period; or
- (c) sufficient alcohol as would result in a blood alcohol concentration greater than 0.1 gram of alcohol per 100 millilitres of blood.

blunt chest injury means a non-penetrating blow to the chest.

Note: Examples of causes of blunt chest injury include a motor vehicle accident, a direct blow to the chest wall by airbag deployment, impact in contact sports, a fall from heights, a crush injury and being struck by a projectile.

BMI means W/H^2 where:

- (a) W is the person's weight in kilograms; and
- (b) H is the person's height in metres.

chronic renal failure means:

- (a) having a glomerular filtration rate of less than 15 mL/min/1.73 m² for a period of at least 3 months; or
- (b) a need for renal replacement therapy (dialysis or transplantation) for treatment of complications of decreased glomerular filtration rate which would otherwise increase the risk of morbidity and mortality; or
- (c) undergoing chronic dialysis.

equivalent glucocorticoid therapy means a glucocorticoid in the following table, at the doses specified in the table, or a therapeutically equivalent dose of another glucocorticoid:

Glucocorticoid	Minimum cumulative dose (milligram)	Minimum average rate (milligram/day)
betamethasone	45	1.5
cortisone	1,875	62.5
dexamethasone	55	1.8
methylprednisolone	300	10
paramethasone	150	5
prednisolone	375	12.5
prednisone	375	12.5
triamcinolone	300	10

glucocorticoid therapy as specified means taking:

- (a) hydrocortisone, orally or by injection:
 - (i) to a cumulative dose of at least 1,500 milligrams; and
 - (ii) at a minimum dose rate averaging 50 milligrams per day; or
- (b) equivalent glucocorticoid therapy, orally or by injection.

Note: *equivalent glucocorticoid therapy* is also defined in the Schedule 1 – Dictionary.

low-dose aspirin means a daily dose of aspirin of 325 milligrams or less.

MET means a unit of measurement of the level of physical exertion. 1 MET = 3.5 ml of oxygen/kg of body weight per minute, or 1.0 kcal/kg of body weight per hour, or resting metabolic rate.

MRCA means the Military Rehabilitation and Compensation Act 2004.

one pack-year means the amount of tobacco consumed in smoking 20 cigarettes per day for a period of 1 year, or an equivalent amount of tobacco products.

Note 1: An equivalent amount of tobacco products is 7,300 grams of smoking tobacco by weight, either in cigarettes, pipe tobacco or cigars, or a combination of same. For pipe tobacco, cigars or combinations of multiple tobacco types, 1 gram of tobacco is considered to be equal to one cigarette.

Note 2: Pack-years are calculated by dividing the number of cigarettes smoked per day by 20 and multiplying this number by the number of years the person has smoked. For example, smoking 10 cigarettes per day for 10 years is equal to 5 pack-years, and smoking 40 cigarettes per day for 10 years is equal to 20 pack-years.

relevant service means:

- (a) operational service under the VEA;
- (b) peacekeeping service under the VEA;
- (c) hazardous service under the VEA;
- (d) British nuclear test defence service under the VEA;
- (e) warlike service under the MRCA; or
- (f) non-warlike service under the MRCA.

Note: MRCA and VEA are also defined in the Schedule 1 - Dictionary.

sepsis means life-threatening organ dysfunction caused by an overwhelming host response to infection.

specified list of drugs means:

- (a) adenosine;
- (b) dobutamine; or
- (c) milrinone.

specified list of thyroid conditions means:

- (a) hyperthyroidism; including goitre or Graves disease which has resulted in hyperthyroidism;
- (b) hypothyroidism, including Hashimoto thyroiditis which has resulted in hypothyroidism;
- (c) subclinical hyperthyroidism; or
- (d) thyrotoxicosis.

Note: *subclinical hyperthyroidism* is also defined in the Schedule 1 – Dictionary.

spinal cord injury means an injury to the long tracts of the spinal cord resulting in permanent motor or sensory deficits below the level of the lesion.

specified list of autoimmune or inflammatory diseases means:

- (a) ankylosing spondylitis or another autoimmune inflammatory spondyloarthritis;
- (b) atopic dermatitis;
- (c) Behçet's disease;
- (d) coeliac disease;
- (e) giant cell arteritis;
- (f) inflammatory bowel disease;
- (g) polymyalgia rheumatica;
- (h) psoriasis;
- (i) rheumatoid arthritis;
- (j) systemic lupus erythematosus; or
- (k) systemic sclerosis (scleroderma).

subclinical hyperthyroidism means having normal free thyroxine (FT4) and total triiodothyronine (T3) levels in conjunction with a thyrotropin (TSH) level persistently below the normal range in the absence of factors known to suppress TSH.

terminal event means the proximate or ultimate cause of death and includes the following:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest:
- (d) circulatory failure; or
- (e) cessation of brain function.

valvular heart disease means haemodynamically significant stenosis or incompetence of one or more cardiac valves.

Note: An example of a cause of haemodynamically significant valvular heart disease is rheumatic heart disease.

VEA means the Veterans' Entitlements Act 1986.