

## **Statement of Principles**

## concerning

## **ISCHAEMIC HEART DISEASE** (Balance of Probabilities)

## (No. 28 of 2025)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(3) of the *Veterans' Entitlements Act 1986*.

Dated 18 February 2025.

Professor Terence Campbell AM Chairperson by and on behalf of The Repatriation Medical Authority

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#### 1 Name

This is the Statement of Principles concerning *ischaemic heart disease* (Balance of Probabilities) (No. 28 of 2025).

### 2 Commencement

This instrument commences on 25 March 2025.

### 3 Authority

This instrument is made under subsection 196B(3) of the Veterans' Entitlements Act 1986.

### 4 Repeal

The Statement of Principles concerning ischaemic heart disease No. 2 of 2016 (Federal Register of Legislation No. F2016L00003) made under subsections 196B(3) and (8) of the VEA is repealed.

### 5 Application

This instrument applies to a claim to which section 120B of the VEA or section 339 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 ischaemic heart disease and death from ischaemic heart disease.

### Meaning of ischaemic heart disease

- (2) For the purposes of this Statement of Principles, ischaemic heart disease:
  - (a) means a cardiac disease in which inadequate coronary blood supply to part of the heart leads to infarction or periodic ischaemia;
  - (b) includes:
    - myocardial infarction (ST elevation myocardial infarction (STEMI), and non-ST elevation myocardial infarction NSTEMI));
    - (ii) angina pectoris (including unstable angina and Prinzmetal angina);

- (iii) ischaemic cardiomyopathy; and
- (iv) acute coronary syndrome (including STEMI, NSTEMI, and unstable angina); and
- (c) excludes:
  - (i) coronary artery disease without ischaemia;
  - (ii) myocardial infarction due to generalised hypoxia, vascular shock, or cardiac arrest;

Note: The inadequate coronary blood supply can be associated with coronary thrombosis, atherosclerosis, coronary vasospasm, or coronary vascular disease.

- (3) While ischaemic heart disease attracts ICD-10-AM codes I20, I21, I22, I23, I24 and I25, in applying this Statement of Principles the meaning of ischaemic heart disease 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 ischaemic heart disease

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

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

#### 8 Basis for determining the factors

On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that ischaemic heart disease and death from ischaemic heart disease can be related to relevant service rendered by veterans 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 exist before it can be said that, on the balance of probabilities, ischaemic heart disease or death from ischaemic heart disease is connected with the circumstances of a person's relevant service:

- (1) having hypertension before clinical onset or clinical worsening;
- (2) having diabetes mellitus before clinical onset or clinical worsening;

(3) being obese for at least the 5 years before clinical onset or clinical worsening;

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

- (4) having persistently abnormal blood lipid levels before clinical onset or clinical worsening, as indicated by any of the following:
  - (a) a serum high density lipoprotein cholesterol level less than 1.0 mmol/L;
  - (b) a serum low density lipoprotein cholesterol level greater than 4.0 mmol/L;
  - (c) a total serum cholesterol level greater than 5.5 mmol/L;
  - (d) the regular administration of drug therapy to normalise previously elevated blood lipid levels.
- (5) where smoking has not ceased before clinical onset or clinical worsening:
  - (a) smoking an average of at least 1 cigarette per day, or the equivalent thereof in other tobacco products, for at least the 1 year before clinical onset or clinical worsening; or
  - (b) smoking at least one half of one pack-year before clinical onset or clinical worsening;

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

- (6) where smoking has ceased before clinical onset or clinical worsening:
  - having smoked at least one half of one pack-year but less than 5 pack-years, before clinical onset or clinical worsening, and the clinical onset or clinical worsening has occurred within 5 years of smoking cessation; or
  - (b) having smoked at least 5 pack-years but less than 20 pack-years, before clinical onset or clinical worsening, and the clinical onset or clinical worsening occurred within 20 years of smoking cessation; or
  - (c) having smoked at least 20 pack-years before clinical onset or clinical worsening;

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

- (7) where exposure to second-hand tobacco smoke has not ceased, being exposed to second-hand tobacco smoke exhaled by others in an enclosed space for at least 1,000 hours before clinical onset or clinical worsening;
- (8) where exposure to second-hand tobacco smoke has ceased:
  - (a) being exposed to second-hand tobacco smoke exhaled by others in an enclosed space for at least 1,000 hours but less than 5,000 hours before clinical onset or clinical worsening, and the clinical

onset or clinical worsening has occurred within 5 years of the last exposure to second-hand tobacco smoke; or

- (b) being exposed to second-hand tobacco smoke exhaled by others in an enclosed space for at least 5,000 hours before clinical onset or clinical worsening;
- (9) an inability to undertake any physical activity greater than 3 METs for at least the 5 years before clinical onset or clinical worsening;

- (10) having chronic kidney disease before clinical onset or clinical worsening as indicated by one of the following:
  - (a) a glomerular filtration rate of less than 45 mL/min/1.73 m<sup>2</sup> for at least 3 months;
  - (b) albuminuria with an albumin to creatinine ratio of at least 3 milligrams/millimole for at least 3 months;
  - (c) kidney damage, as evidenced by renal biopsy, imaging studies, urinary sediment abnormalities or other markers of abnormal renal function;
  - (d) having had a kidney transplant;
- (11) having Hashimoto thyroiditis for at least 2 years within the 10 years before clinical onset or clinical worsening;
- (12) having radiotherapy for cancer, where the heart was in the field of radiation, before clinical onset or clinical worsening;
- (13) undergoing a procedure involving catheterisation of the affected coronary artery within the 30 days before clinical onset or clinical worsening of myocardial infarction or unstable angina;
- (14) having infective endocarditis at the time of the clinical onset of myocardial infarction;
- (15) having syphilis involving the coronary arteries at the time of clinical onset or clinical worsening;
- (16) having one of the following vasculitides at the time of clinical onset or clinical worsening:
  - (a) antineutrophilic cytoplasmic antibody (ANCA) associated vasculitis;
  - (b) Behcet disease;
  - (c) eosinophilic granulomatosis with polyangiitis (Churg-Strauss syndrome);
  - (d) giant cell (temporal) arteritis;
  - (e) granulomatosis with polyangiitis (Wegener granulomatosis);

Note: MET (metabolic equivalent) is a unit of measure of the level of physical capability of the cardiorespiratory system. For example, 1 MET = cardiorespiratory effort associated with a person sitting, 3-4 METs = cardiorespiratory effort associated with a person walking at average walking pace (5 km/h) or light gardening.

- (f) IgA vasculitis (Henoch-Schönlein purpura);
- (g) microscopic polyangiitis;
- (h) mucocutaneous lymph node syndrome (Kawasaki disease);
- (i) non-specific autoimmune vasculitis;
- (j) polyarteritis nodosa;
- (k) Takayasu arteritis;
- (17) having one of the following systemic inflammatory rheumatological diseases at the time of clinical onset or clinical worsening:
  - (a) dermatomyositis;
  - (b) polymyositis;
  - (c) psoriasis;
  - (d) psoriatic arthritis;
  - (e) rheumatoid arthritis;
  - (f) Sjögren syndrome;
  - (g) systemic lupus erythematosus;
  - (h) systemic sclerosis;
- (18) having a hypercoagulable state that results in thrombosis of a coronary artery at the time of clinical onset or clinical worsening;

- (19) having one of following clinically significant disorders of mental health for at least the 5 years before clinical onset or clinical worsening;
  - (a) adjustment disorder;
  - (b) agoraphobia;
  - (c) anxiety disorder;
  - (d) depressive disorder;
  - (e) panic disorder;
  - (f) posttraumatic stress disorder;
  - (g) schizophrenia; or
  - (h) social anxiety disorder.

Note: *clinically significant disorder of mental health* is defined in the Schedule 1 – Dictionary.

- (20) taking combined estrogen-progestogen contraception within the 4 weeks before clinical onset or clinical worsening of myocardial infarction or unstable angina;
- (21) taking any of the following medications, within the 24 hours before clinical onset or clinical worsening:
  - (a) alemtuzumab;
  - (b) aromatase inhibitors;
  - (c) bevacizumab;

Note: Some examples of hypercoagulable state include acquired antithrombin III deficiency, disseminated intravascular coagulation, secondary thrombocytosis and acute myeloid leukaemia.

- (d) capecitabine;
- (e) docetaxel;
- (f) ephedrine;
- (g) ergotamine;
- (h) fluorouracil;
- (i) paclitaxel;
- (j) phentermine;
- (k) pseudoephedrine;
- the kinase inhibitors, axitinib, cabozantinib, dasatinib, erlotinib, lenvatinib, midostaurin, nilotinib, nintedanib, pazopanib, ponatinib, regorafenib, sorafenib; or
- (m) triptans, including sumatriptan.
- (22) being treated with antipsychotic within the 24 hours before the clinical onset or clinical worsening of myocardial infarction;
- (23) taking a non-topical, non-steroidal, anti-inflammatory drug, excluding aspirin and paracetamol, for a continuous period of at least 7 days before clinical onset or clinical worsening, where the last dose of the drug was taken within the 7 days before clinical onset or clinical worsening;

Note: non-steroidal, anti-inflammatory drug is defined in the Schedule 1 - Dictionary.

- (24) having bilateral orchidectomy (orchiectomy) before clinical onset or clinical worsening;
- (25) taking one of the following anti-androgen medications for at least the 7 days before clinical onset or clinical worsening:
  - (a) abiraterone;
  - (b) androgen receptor blockers, including apalutamide, bicalutamide, darolutamide, enzalutamide, and cyproterone acetate; or
  - (c) gonadotrophin releasing hormone agonists, including goserelin and leuprorelin;
- (26) an inability to sleep for an average of at least 5 hours daily for at least the 1 year before clinical onset or clinical worsening;
- (27) having infection with human immunodeficiency virus for at least the 5 years before the clinical onset or clinical worsening of myocardial infarction;
- (28) having gout at the time of clinical onset or clinical worsening of myocardial infarction;
- (29) undertaking physical activity of 6 METS or more within the 24 hours before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;

- Note: MET (metabolic equivalent) is a unit of measure of the level of physical capability of the cardiorespiratory system. For example, 1 MET = cardiorespiratory effort associated with a person sitting, 3-4 METs = cardiorespiratory effort associated with a person walking at average walking pace (5 km/h) or light gardening.
- (30) experiencing a category 1A stressor within the 24 hours before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;

Note: category 1A stressor is defined in the Schedule 1 - Dictionary.

(31) experiencing a category 1B stressor within the 24 hours before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;

Note: category 1B stressor is defined in the Schedule 1 - Dictionary.

- (32) experiencing an acute severe stressful event that causes a sudden, intense emotional or psychological response within the 12 hours before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;
- (33) experiencing the death of a family member or close friend within the 1 week before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;
- (34) using one of the following illicit drugs within the 24 hours before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease:
  - (a) amphetamines or amphetamine derivatives, including methamphetamine, 3, 4-methylenedioxymethamphetamine (Ecstasy or MDMA);
  - (b) cocaine;
  - (c) marijuana;
  - (d) Khat and synthetic cathinones, including alphapyrrolidinopentiophenone, 4- methylmethcathinone (4-MMC), and 3-methylmethcathinone (3-MMC).
- (35) having an episode of acute cholinergic poisoning from exposure to an organophosphorus ester within the 1 week before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;

Note: *acute cholinergic poisoning* and *organophosphorus ester* are defined in the Schedule 1 - Dictionary.

- (36) being exposed to:
  - (a) an ambient temperature of 38 degrees Celsius or above; or
  - (b) an ambient temperature of zero degrees Celsius or below;

for a period of at least 6 hours within the 1 week before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;

- (37) being envenomated by a snake, scorpion, wasp, bee, hornet, spider, centipede, fish or jellyfish within the 24 hours before the clinical onset of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;
- (38) having an acute hypersensitivity reaction (including anaphylaxis) involving the coronary arteries within the 12 hours before the clinical onset of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;
- (39) having infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) within the 3 months before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) and sudden death from ischaemic heart disease;

Note 1: SARS-CoV-2 is the virus which causes coronavirus disease 2019 (COVID-19).

- (40) having influenza or a lower respiratory tract infection within the 30 days before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;
- (41) being pregnant within the 6 weeks before the clinical onset or the clinical worsening of acute myocardial infarction or sudden death from ischaemic heart disease;
- (42) having a hypertensive emergency or crisis within the 24 hours before the clinical onset or the clinical worsening of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;

Note: hypertensive emergency or crisis is defined in the Schedule 1 - Dictionary.

- (43) having atrial fibrillation or atrial flutter within the 30 days before the clinical onset of acute coronary syndrome (including myocardial infarction) or sudden death from ischaemic heart disease;
- (44) inability to obtain appropriate clinical management for ischaemic heart disease before clinical worsening.

### 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 clinical worsening aspects of factors set out in section 9 apply only to material contribution to, or aggravation of, ischaemic heart disease where the person's ischaemic heart disease 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
- that factor refers to an injury or disease in respect of which a Statement of Principles has been determined under subsection 196B(3) 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:

*acute cholinergic poisoning* means symptoms and signs due to the inhibition of acetylcholinesterase enzyme activity which occur within the 24 hours following exposure. These symptoms and signs include muscle weakness, acute paralysis, overwhelming bronchial secretions, bradycardia, gastrointestinal distress, miosis, lacrimation and diarrhoea.

#### being obese means:

(a) having a Body Mass Index (BMI) of 30 or greater; or

(b) for males, having a waist circumference exceeding 102 centimetres; or

(c) for females, having a waist circumference exceeding 88 centimetres.

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

*BMI* means  $W/H^2$  and where:

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

category 1A stressor means one of the following severe traumatic events:

- (a) experiencing a life-threatening event;
- (b) being subject to a serious physical attack or assault including rape and sexual molestation;
- (c) being threatened with a weapon, being held captive, being kidnapped, being tortured.

category 1B stressor means one of the following severe traumatic events:

- (a) killing or maiming a person;
- (b) being a witness to a person being killed or critically injured;
- (c) being a witness to atrocities inflicted on another person;
- (d) participating in the clearance of a corpse or a critically injured casualty;
- (e) viewing a corpse or a critically injured casualty as a witness.

Note: *corpse* and *witness* are defined in the Schedule 1 – Dictionary.

*clinically significant disorder of mental health* means a disorder of mental health which is of sufficient severity to warrant ongoing management.

Note: To warrant ongoing management does not require that any actual management was received or given for the condition.

*corpse* means the human remains or body parts of one or more persons who have met a violent or horrific death.

*hypertensive emergency or crisis*, also known as malignant hypertension, means a sudden and severe increase in blood pressure to a diastolic blood

pressure greater than or equal to 110 mm Hg or a systolic blood pressure greater than or equal to 180 mm Hg, or of a sufficient degree to cause acute impairment to one or more organ systems.

*ischaemic heart disease*—see subsection 7(2).

MRCA means the Military Rehabilitation and Compensation Act 2004.

*non-steroidal, anti-inflammatory drug* means any of a large chemically heterogeneous group of drugs that inhibit cyclooxygenase activity, resulting in decreased synthesis of prostaglandin and thromboxane precursors from arachidonic acid. In addition to anti-inflammatory actions, they have analgesic, antipyretic, and platelet inhibitory actions.

*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.

*organophosphorus ester* means an agent used to inhibit acetylcholinesterase, and includes the organophosphate pesticides chlorpyrifos, dichlorvos, EPN (ethyl p-nitrophenyl theonobenzenephosphonate), leptophos, methamidophos, mipafox (diisopropyl phosphorofluoridate), omethoate, parathion, TOCP (tri-ortho-cresyl phosphate), trichlorfon and trichlornat.

#### relevant service means:

- (a) eligible war service (other than operational service) under the VEA;
- (b) defence service (other than hazardous service and British nuclear test defence service) under the VEA; or
- (c) peacetime service under the MRCA.

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

*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.

#### VEA means the Veterans' Entitlements Act 1986.

*witness* means a person who experiences an incident at the time it occurs and can give direct evidence of it. This excludes persons exposed only to public broadcasting or mass media coverage of the incident.