

Revocation and Determination

of

Statement of Principles
concerning

ISCHAEMIC HEART DISEASE

ICD-9-CM CODES: 410, 411, 412, 413, 414.0, 414.10, 414.8

Veterans' Entitlements Act 1986

1. The Repatriation Medical Authority under subsection **196B(2)** of the *Veterans' Entitlements Act 1986* (the Act):
 - (a) revokes Instrument No.80 of 1998; and
 - (b) determines in its place the following Statement of Principles.

Kind of injury, disease or death

2. (a) This Statement of Principles is about **ischaemic heart disease** and **death from ischaemic heart disease**.
- (b) For the purposes of this Statement of Principles, **“ischaemic heart disease”** means a cardiac disability, acute or chronic, arising from an imbalance between the supply and myocardial demand for oxygen which results from coronary atheroma or coronary vasospasm. Ischaemic heart disease may be evidenced by:
 - (i) myocardial infarction (old or new); or
 - (ii) angina; or
 - (iii) arrhythmia with ECG evidence of myocardial ischaemia; or
 - (iv) cardiac failure,

attracting ICD-9-CM code 410, 411, 412, 413, 414.0, 414.10 or 414.8.

Basis for determining the factors

3. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **ischaemic heart disease and death from ischaemic heart disease** can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces.

Factors that must be related to service

4. Subject to clause 6, at least one of the factors set out in clause 5 must be related to any relevant service rendered by the person.

Factors

5. The factors that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting **ischaemic heart disease** or **death from ischaemic heart disease** with the circumstances of a person's relevant service are:
 - (a) the presence of hypertension before the clinical onset of ischaemic heart disease; or
 - (b) suffering from diabetes mellitus before the clinical onset of ischaemic heart disease; or
 - (c) being obese for a period of at least two years within the 15 years immediately before the clinical onset of ischaemic heart disease; or
 - (d) the presence of dyslipidaemia before the clinical onset of ischaemic heart disease; or
 - (e) where smoking has ceased prior to the clinical onset of ischaemic heart disease,
 - (i) smoking at least one pack year but less than five pack years of cigarettes or the equivalent thereof, in other tobacco products, and the clinical onset of ischaemic heart disease has occurred within five years of cessation; or
 - (ii) smoking at least five pack years but less than 20 pack years of cigarettes or the equivalent thereof, in other tobacco products, and the clinical onset of ischaemic heart disease has occurred within 15 years of cessation; or
 - (iii) smoking at least 20 pack years of cigarettes or the equivalent thereof, in other tobacco products, and the

clinical onset of ischaemic heart disease has occurred within 20 years of cessation; or

- (f) where smoking has not ceased prior to the clinical onset of ischaemic heart disease,
 - (i) smoking at least five cigarettes per day or the equivalent thereof, in other tobacco products, for a period of at least one year immediately before the clinical onset of ischaemic heart disease; or
 - (ii) smoking at least one pack year of cigarettes or the equivalent thereof, in other tobacco products, before the clinical onset of ischaemic heart disease; or
- (g) immersion in an atmosphere with a visible tobacco smoke haze in an enclosed space for at least 1000 hours before the clinical onset of ischaemic heart disease, provided the last exposure to that atmosphere, did not end more than five years before the clinical onset of ischaemic heart disease; or
- (h) an inability to undertake more than a mildly strenuous level of physical activity for at least the five years immediately before the clinical onset of ischaemic heart disease; or
- (j) suffering from hyperhomocystinaemia before the clinical onset of ischaemic heart disease; or
- (k) suffering from chronic renal disease before the clinical onset of ischaemic heart disease; or
- (m) suffering from hypothyroidism before the clinical onset of ischaemic heart disease; or
- (n) occupational exposure to, and handling of, products containing nitroglycerine or nitroglycol:
 - (i) each day for at least 20 days within a consecutive period of 30 days; and
 - (ii) in activities where the active components could be absorbed via cutaneous or respiratory routes; and
 - (iii) where the last exposure occurred not more than two weeks before the clinical onset of ischaemic heart disease; or

- (o) for myocardial infarction or arrhythmia with ECG evidence of myocardial ischaemia only, suffering from panic disorder or phobic anxiety with panic attack at the time of the clinical onset of ischaemic heart disease; or
- (p) experiencing a severe stressor immediately before the clinical onset of ischaemic heart disease; or
- (q) undergoing a course of therapeutic radiation involving the mediastinum or the chest wall region overlying the heart before the clinical onset of ischaemic heart disease; or
- (r) the presence of hypertension which developed before the clinical worsening of ischaemic heart disease; or
- (s) suffering from diabetes mellitus which developed before the clinical worsening of ischaemic heart disease; or
- (t) being obese for a period of at least two years within the 15 years immediately before the clinical worsening of ischaemic heart disease; or
- (u) suffering from dyslipidaemia which developed before the clinical worsening of ischaemic heart disease; or
- (v) where smoking has ceased prior to the clinical worsening of ischaemic heart disease,
 - (i) smoking at least one pack year but less than five pack years of cigarettes or the equivalent thereof, in other tobacco products, and the clinical worsening of ischaemic heart disease has occurred within five years of cessation; or
 - (ii) smoking at least five pack years but less than 20 pack years of cigarettes or the equivalent thereof, in other tobacco products, and the clinical worsening of ischaemic heart disease has occurred within 15 years of cessation; or
 - (iii) smoking at least 20 pack years of cigarettes or the equivalent thereof, in other tobacco products, and the clinical worsening of ischaemic heart disease has occurred within 20 years of cessation; or
- (w) where smoking has not ceased prior to the clinical worsening of ischaemic heart disease,

- (i) smoking at least five cigarettes per day or the equivalent thereof, in other tobacco products, for a period of at least one year immediately before the clinical worsening of ischaemic heart disease; or
- (ii) smoking at least one pack year of cigarettes or the equivalent thereof, in other tobacco products, before the clinical worsening of ischaemic heart disease; or
- (x) immersion in an atmosphere with a visible tobacco smoke haze in an enclosed space for at least 1000 hours before the clinical worsening of ischaemic heart disease, provided the last exposure to that atmosphere, did not end more than five years before the clinical worsening of ischaemic heart disease; or
- (y) an inability to undertake more than a mildly strenuous level of physical activity for at least the five years immediately before the clinical worsening of ischaemic heart disease; or
- (z) suffering from hyperhomocystinaemia before the clinical worsening of ischaemic heart disease; or
- (za) suffering from chronic renal disease before the clinical worsening of ischaemic heart disease; or
- (zb) suffering from hypothyroidism before the clinical worsening of ischaemic heart disease; or
- (zc) occupational exposure to, and handling of, products containing nitroglycerine or nitroglycol:
 - (i) each day for at least 20 days within a consecutive period of 30 days; and
 - (ii) in activities where the active components could be absorbed via cutaneous or respiratory routes; and
 - (iii) where the last exposure occurred not more than two weeks before the clinical worsening of ischaemic heart disease; or
- (zd) for clinical worsening demonstrated by myocardial infarction or arrhythmia with ECG evidence of myocardial ischaemia only, suffering from panic disorder or phobic anxiety with panic attack at the time of the clinical worsening of ischaemic heart disease; or

- (ze) experiencing a severe stressor immediately before the clinical worsening of ischaemic heart disease; or
- (zf) undergoing a course of therapeutic radiation involving the mediastinum or the chest wall region overlying the heart before the clinical worsening of ischaemic heart disease; or
- (zg) inability to obtain appropriate clinical management for ischaemic heart disease.

Factors that apply only to material contribution or aggravation

6. Paragraphs **5(r) to 5(zg)** 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 not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e), 70(5)(d) or 70(5A)(d) of the Act refers.

Inclusion of Statements of Principles

7. In this Statement of Principles if a relevant factor applies and that factor includes an injury or disease in respect of which there is a Statement of Principles then the factors in that last mentioned Statement of Principles apply in accordance with the terms of that Statement of Principles.

Other definitions

8. For the purposes of this Statement of Principles:

“a course of therapeutic radiation” means one or more fractions (treatment portions) of ionising radiation administered with the aim of achieving palliation or cure with gamma rays, x-rays, alpha particles or beta particles;

“an inability to undertake more than a mildly strenuous level of physical activity” means the presence of an incapacity which prevents any physical activity greater than 3 METS, where a “MET” is 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. (A MET approximates to the energy required to rest quietly in bed. A 70 kg man would use about 3 METS when walking at 4 km per hour.);

“being obese” means having an increase in body weight by way of fat accumulation beyond an arbitrary limit, and due to a cause specified in the Repatriation Medical Authority's Statement about the causes of “being obese” signed by the Chairman of the Authority on 16 August 1996.

The measurement used to define “being obese” is the Body Mass Index (BMI).

The BMI = W/H^2 , where:

W is the person’s weight in kilograms and

H is the person’s height in metres.

“Being obese” is where the BMI is 30 or greater. This definition excludes weight gain not resulting from fat deposition such as gross oedema, peritoneal or pleural effusion, or muscle hypertrophy. “Being obese” develops when energy intake is in excess of expenditure for a sustained period of time.

For a factor to be included as a cause of “being obese” it must have resulted in a significant weight gain, of the order of a 20% increase in baseline weight, and in association with a BMI of 30 or greater;

“chronic renal disease” means renal injury of a sustained nature that is not reversible and leads to destruction of nephron mass and is associated with a demonstrable functional abnormality of the kidney which raises the level of creatinine;

“cigarettes per day or the equivalent thereof, in other tobacco products” means either cigarettes, pipe tobacco or cigars, alone or in any combination where one tailor made cigarette approximates one gram of tobacco; or one gram of cigar, pipe or other smoking tobacco by weight;

“death from 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;

“diabetes mellitus” means an endocrine disease characterised by:

- (a) a fasting venous plasma glucose concentration equal to or greater than 7.8 millimoles per litre on at least two separate occasions; or
- (b) a venous plasma glucose concentration equal to or greater than 11.1 millimoles per litre both within two hours and at two hours after ingestion of 75 grams of glucose;

“DSM-IV” means the fourth edition of the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*;

“dyslipidaemia” generally means evidence of a persistently abnormal lipid profile after the accurate evaluation of serum lipids following a 12 hour overnight fast, and estimated on a minimum of two occasions as a:

- (a) total serum cholesterol level greater than or equal to 5.5 mmol/L; or
- (b) fasting serum triglyceride level greater than or equal to 2.0 mmol/L together with high density lipoprotein cholesterol level less than 0.9 mmol/L;

Note: the source for this definition is: NHF Australia, Guide to Plasma Lipids for Doctors; Current Therapeutics, Vol 33 Supplement 1, 1992.

“experiencing a severe stressor” means, the person experienced, witnessed or was confronted with, an event or events that involved actual or threat of death or serious injury, or a threat to the person’s or other people’s physical integrity, which event or events might evoke intense fear, helplessness or horror.

In the setting of service in the Defence Forces, or other service where the Veterans’ Entitlements Act applies, events that qualify as severe stressors include:

- (i) threat of serious injury or death; or
- (ii) engagement with the enemy; or
- (iii) witnessing casualties or participation in or observation of casualty clearance, atrocities or abusive violence;

“hyperhomocystinaemia” means a condition that arises from impaired methionine metabolism, probably due to a heterozygous deficiency of the enzyme cystathionine β -synthase;

Note: this condition results in the elevation of homocystine in serum that is not usually high enough to result in excretion of detectable amounts of homocystine in urine. It can be diagnosed by the peak serum level of non-protein-bound homocystine after a standard methionine-loading test. A level of 24.0 µmol per litre (< 24.0 vs. > = 24.0) has been found to be more than 92 % sensitive and 100 % specific.

“hypertension” means elevated baseline blood pressure, evidenced by:

- (a) a usual blood pressure reading where the systolic reading is greater than or equal to 140 mmHg and/ or where the diastolic reading is greater than or equal to 90 mmHg; or
- (b) administration of antihypertensive therapy;

“hypothyroidism” means a disease state characterised by a reduction in circulating thyroid hormones;

“ICD-9-CM code” means a number assigned to a particular kind of injury or disease in the Australian Version of The International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM), effective date of 1 July 1996, copyrighted by the National Coding Centre, Faculty of Health Sciences, University of Sydney, NSW, and having ISBN 0 642 24447 2;

“pack years of cigarettes or the equivalent thereof, in other tobacco products” means a calculation of consumption where one pack year of cigarettes equals twenty tailor made cigarettes (being the “standard” cigarette pack contents) per day for a period of one calendar year, or 7 300 cigarettes. One tailor made cigarette approximates one gram of tobacco or one gram of cigar or pipe tobacco by weight. One pack year of tailor made cigarettes equates to 7 300 cigarettes, or 7.3kg of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

“panic attack” means a condition, as defined in DSM-IV, meeting the following criteria:

the person has experienced a discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reached a peak within 10 minutes:

- (1) palpitations, pounding heart, or accelerated heart rate; or
- (2) sweating; or
- (3) trembling or shaking; or
- (4) sensations of shortness of breath or smothering; or
- (5) feeling of choking; or
- (6) chest pain or discomfort; or

- (7) nausea or abdominal distress; or
- (8) feeling dizzy, unsteady, light headed or faint; or
- (9) derealisation (feelings of unreality) or depersonalisation (being detached from oneself); or
- (10) fear of losing control or going crazy; or
- (11) fear of dying; or
- (12) paresthesias (numbness or tingling sensations); or
- (13) chills or hot flushes;

“panic disorder” means the presence of recurrent, unexpected panic attacks followed by at least one month of persistent concern about having another panic attack, worry about possible implications or consequences of the panic attacks, or a significant behavioural change related to the panic attacks, as clinically defined in the diagnostic criteria for panic disorder in the *Diagnostic and Statistical Manual of the American Psychiatric Association, Fourth Edition (DSM-IV)*, and includes panic disorder without agoraphobia and panic disorder with agoraphobia;

“phobic anxiety” means a psychiatric condition which significantly limits an individual’s normal routine, occupational and social activities by excessive or unreasonable persistent fears brought on by the presence or anticipation of certain situations or objects. The exposure to the stimulus invariably provokes an immediate anxiety response such as a panic attack and is recognized as being excessive or unreasonable by the affected individual. Phobic anxiety includes specific and social phobia as clinically defined in the diagnostic criteria in the *Diagnostic and Statistical Manual of the American Psychiatric Association, Fourth Edition (DSM-IV)*;

“products containing nitroglycerine or nitroglycol” include double and triple base gun propellants and gelatinous explosives;

“relevant service” means:

- (a) operational service; or
- (b) peacekeeping service; or
- (c) hazardous service;

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

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

Application

9. This Instrument applies to all matters to which section 120A of the Act applies.

Dated this *Twenty-seventh* day of *April* 1999

The Common Seal of the)
Repatriation Medical Authority)
was affixed to this instrument)
in the presence of:)

KEN DONALD
CHAIRMAN