Instrument No.140 of 1996

# REVOKED

## **Revocation and Determination**

of

# Statement of Principles

## **ISCHAEMIC HEART DISEASE**

### ICD 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.77 of 1996; and
  - (b) determines 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. Ischaemic heart disease is considered to be present when there is evidence of at least one of the following:

- (i) myocardial infarction (old or new); or
- (ii) angina; or
- (iii) arrhythmia with ECG evidence of myocardial ischaemia; or
- (iv) myocardial ischaemia (for example ischaemic cardiomyopathy); or
- (v) coronary occlusion,

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

Note: coronary artery disease is the usual underlying disorder for ischaemic heart disease and this is a disease process of the coronary arterial system characterised by the formation of intimal fatty streaks, followed by inflammation and the formation of fibrous plaques.

#### **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, the factors set out in at least one of the paragraphs 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) smoking at least five cigarettes per day or the equivalent thereof, in other tobacco products, for at least three years before the clinical onset of ischaemic heart disease and, where smoking has ceased, the clinical onset has occurred within 15 years of cessation; or
  - (f) immersion in an atmosphere with a visible tobacco smoke haze in an enclosed space for at least 20 hours per week, for a period or periods of time totalling at least five years, (or for at least 5,200 hours, the equivalent total time of exposure) provided such period

or the last period of which, if now ended, did not end more than 15 years before the clinical onset of ischaemic heart disease; or

- (g) an inability to undertake moderate or vigorous physical activity for at least the five years immediately before the clinical onset of ischaemic heart disease; or
- (h) suffering from hyperhomocystinaemia before the clinical onset of ischaemic heart disease; or
- (j) suffering from chronic renal disease before the clinical onset of ischaemic heart disease; or
- (k) suffering from hypothyroidism before the clinical onset of ischaemic heart disease; or
- (m) the presence of hypertension which developed before the clinical worsening of ischaemic heart disease; or
- (n) suffering from diabetes mellitus which developed before the clinical worsening of ischaemic heart disease; or
- (o) being obese for a period of at least two years within the 15 years immediately before the clinical worsening of ischaemic heart disease; or
- (p) suffering from dyslipidaemia which developed before the clinical worsening of ischaemic heart disease; or
- smoking at least five cigarettes per day or the equivalent thereof, in other tobacco products, for at least three years before the clinical worsening of ischaemic heart disease and, where smoking has ceased, the clinical worsening has occurred within 15 years of that cessation; or
- (r) immersion in an atmosphere with a visible tobacco smoke haze in an enclosed space for at least 20 hours per week, for a period or periods of time totalling at least five years, (or for at least 5,200 hours, the equivalent total time of exposure) provided such period or the last period of which, if now ended, did not end more than 15 years before the clinical worsening of ischaemic heart disease; or
- (s) an inability to undertake moderate or vigorous physical activity for at least the five years immediately before the clinical worsening of ischaemic heart disease; or

- (t) suffering from chronic renal disease before the clinical worsening of ischaemic heart disease; or
- (u) suffering from hypothyroidism before the clinical worsening of ischaemic heart disease; or
- (v) suffering from acute stress immediately before the clinical worsening of ischaemic heart disease; or
- (w) inability to obtain appropriate clinical management for ischaemic heart disease.

#### Factors that apply only to material contribution or aggravation

6. Paragraphs 5(m) to 5(w) 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.

#### **Other definitions**

7. For the purposes of this Statement of Principles:

**"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, attracting ICD code 278.0.

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, attracting ICD code 585;

"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,

attracting ICD code 250;

**"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.

"hyperhomocystinaemia" means a condition that arises from impaired methionine metabolism, attracting ICD code 270.4, probably due to a heterozygous deficiency of the enzyme cystathionine  $\beta$ -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  $\mu$ mol per litre (< 24.0 vs. > = 24.0) has been found to be more than 92 % sensitive and 100 % specific.

#### "hypertension" means:

- (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) where treatment for hypertension is being administered,

attracting an ICD code in the range 401 to 405;

**"hypothyroidism"** means a disease state characterised by a reduction in circulating thyroid hormones, attracting the ICD code 243 or 244;

**"ICD 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;

**"moderate or vigorous physical activity"** means physical activity greater than 3 METs, where a "MET" is a unit of measurement of the level of physical exertion equalling 3.5 ml of oxygen per kg of body weight per minute;

#### "relevant service" means:

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

**"suffering from acute stress"** means the following (derived from DSM-IV):

- (a) the person experienced, witnessed, or was confronted with an event that involved actual or threatened death or serious injury, or a threat to the person's, or other people's, physical integrity; and
- (b) the person's response to that event involved intense fear, helplessness or horror.

#### Application

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

