Determination

of

Statement of Principles concerning

AORTIC ANEURYSM

ICD-9-CM CODES: 441.1 - 441.9

Veterans' Entitlements Act 1986

1. This Statement of Principles is determined by the Repatriation Medical Authority under subsection 196B(2) of the *Veterans' Entitlements Act* 1986 (the Act).

Kind of injury, disease or death

- 2. (a) This Statement of Principles is about **aortic aneurysm** and **death from aortic aneurysm**.
 - (b) For the purposes of this Statement of Principles, "aortic aneurysm" means a sac formed by the permanent dilatation of the wall of the thoracic or abdominal aorta, attracting an ICD-9-CM code in the range 441.1 to 441.9. This definition excludes dissection of the aorta or false aneurysm of the aorta.

Basis for determining the factors

3. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **aortic aneurysm and death from aortic aneurysm** 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 **aortic aneurysm** or **death from aortic aneurysm** with the circumstances of a person's relevant service are:
 - (a) 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 aortic aneurysm; or
 - (b) suffering from hypertension before the clinical onset of aortic aneurysm; or
 - (c) suffering from dyslipidaemia before the clinical onset of aortic aneurysm; or
 - (d) suffering from Marfan syndrome or Ehlers-Danlos type IV syndrome before the clinical onset of aortic aneurysm; or
 - (e) suffering from cystic medial necrosis before the clinical onset of aortic aneurysm; or
 - (f) suffering from infective aortitis before the clinical onset of aortic aneurysm; or
 - (g) undergoing therapy with BCG vaccine resulting in tuberculous aortitis, and where this therapy has been administered within the five years immediately before the clinical onset of aortic aneurysm; or
 - (h) suffering from tertiary syphilis before the clinical onset of aortic aneurysm; or
 - (j) suffering trauma to the aorta before the clinical onset of aortic aneurysm which has occurred at the site of the trauma; or
 - (k) suffering from rheumatic aortitis before the clinical onset of aortic aneurysm; or
 - (m) suffering from Takayasu's arteritis or giant cell arteritis before the clinical onset of aortic aneurysm; or
 - (n) suffering from coarctation of the aorta before the clinical onset of aortic aneurysm; or

- (o) 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 aortic aneurysm; or
- (p) suffering from hypertension which developed before the clinical worsening of aortic aneurysm; or
- (q) suffering from dyslipidaemia which developed before the clinical worsening of aortic aneurysm; or
- (r) suffering from Marfan syndrome or Ehlers-Danlos type IV syndrome before the clinical worsening of aortic aneurysm; or
- (s) suffering from cystic medial necrosis before the clinical worsening of aortic aneurysm; or
- (t) suffering from infective aortitis before the clinical worsening of aortic aneurysm; or
- (u) undergoing therapy with BCG vaccine resulting in tuberculous aortitis, and where this therapy has been administered within the five years immediately before the clinical worsening of aortic aneurysm; or
- (v) suffering from tertiary syphilis before the clinical worsening of aortic aneurysm; or
- (w) suffering trauma to the aorta before the clinical worsening of aortic aneurysm which has occurred at the site of the trauma; or
- (x) suffering from rheumatic aortitis before the clinical worsening of aortic aneurysm; or
- (y) suffering from Takayasu's arteritis or giant cell arteritis before the clinical worsening of aortic aneurysm; or
- (z) suffering from coarctation of the aorta before the clinical worsening of aortic aneurysm; or
- (za) inability to obtain appropriate clinical management for aortic aneurysm.

Factors that apply only to material contribution or aggravation

6. Paragraphs 5(o) to 5(za) apply only to material contribution to, or aggravation of, aortic aneurysm where the person's aortic aneurysm 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:

"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;

"coarctation of the aorta" means a localised malformation characterised by deformity of the aortic media, causing narrowing of the lumen of the aorta;

"cystic medial necrosis" means changes in the medial layer of the aorta, consisting of degeneration and necrosis of elastic and muscle fibres, mucoid infiltration, and cyst formation;

"death from aortic aneurysm" in relation to a person includes death from a terminal event or condition that was contributed to by the person's aortic aneurysm;

"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.

"Ehlers-Danlos type IV syndrome" means a disorder of connective tissue involving defects in the structure, synthesis or secretion of one type of procollagen and has prominent vascular manifestations;

"giant cell arteritis" means chronic inflammatory disease of the large and medium sized-systemic arteries, and which includes temporal or cranial arteritis;

"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;

"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;

"infective aortitis" means the infection of the aortic wall by bacteria or fungi, and resultant inflammation within the aortic wall;

"Marfan syndrome" means a disorder of connective tissue characterised by long, thin extremities associated with other skeletal changes, reduced vision as a result of dislocation of the lenses and aortic aneurysms that typically begin at the base of the aorta;

"relevant service" means:

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

"rheumatic aortitis" means inflammation of the aorta associated with any one of the following diseases, rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis, Reiter's syndrome, Behcet's syndrome, relapsing polychondritis and inflammatory bowel disorders;

"Takayasu's arteritis" means an inflammatory disease of the aorta and its major arteries often resulting in occlusion and involves a panarteritis;

"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;

"tertiary syphilis" means the last stage of syphilis which develops soon after the lesions of secondary syphilis resolve or many years later, and is characterised by destructive lesions involving many organs and tissues such as mucocutaneous, musculoskeletal, cardiovascular or central nervous system lesions;

"trauma to the aorta" means that the wall of the aorta has been damaged as the result of either penetrating or blunt major thoracic or abdominal trauma. Most injuries occur as a result of motor vehicle accidents, falls from a height, crushing injuries, or gunshot wound;

"tuberculous aortitis" means the infection of the aortic wall by Mycobacteria, and resultant inflammation within the aortic wall;

"undergoing therapy with BCG vaccine" means treatment with the Bacille Calmette-Guerin vaccine for cancer. The Bacille Calmette-Guerin vaccine is made from a strain of Mycobacterium bovis.

Dated this	Thirteenth	day of	October	1998
The Common Seal of the)		
Repatriation Medical Authority)		
was affixed to this instrument)		
in the presence of)		
		KEN DONAI	LD	

CHAIRMAN