



Australian Government  
Repatriation Medical Authority

## Statement of Principles concerning

# VASCULAR DEMENTIA

## No. 78 of 2014

for the purposes of the

*Veterans' Entitlements Act 1986*  
and

*Military Rehabilitation and Compensation Act 2004*

### Title

1. This Instrument may be cited as Statement of Principles concerning vascular dementia No. 78 of 2014.

### Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
  - (a) revokes Instrument No. 21 of 2006, as amended by Instrument No. 63 of 2006 and Instrument No. 61 of 2010, concerning vascular dementia; and
  - (b) determines in their place this Statement of Principles.

### Kind of injury, disease or death

3.
  - (a) This Statement of Principles is about **vascular dementia** and **death from vascular dementia**.
  - (b) For the purposes of this Statement of Principles, "**vascular dementia**" means a chronic disease of the brain, which has the following features:
    - A. Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

- (i) concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; and
  - (ii) a substantial impairment in cognitive performance, documented preferably by standardised neuropsychological testing, or, in its absence, by another quantified clinical assessment.
- B. The cognitive deficits interfere with independence in everyday activities.
- C. The cognitive deficits do not occur exclusively in the context of a delirium.
- D. The cognitive deficits are not better explained by another mental disorder (for example, major depressive disorder, schizophrenia).
- E. The clinical features are consistent with a vascular aetiology, as suggested by either of the following:
  - (i) onset of the cognitive deficits is temporally related to one or more documented cerebrovascular events; or
  - (ii) evidence for decline is prominent in complex attention (including processing speed) and frontal-executive function.
- F. There is evidence of the presence of cerebrovascular disease from history, physical examination, and/or neuroimaging considered sufficient to account for the neurocognitive deficits.
- G. The symptoms are not better explained by another brain disease or systemic disorder.

This definition includes multi-infarct dementia, strategic infarct dementia, acquired diffuse white matter disease (Binswanger's disease), subcortical vascular dementia and major vascular cognitive disorder, but excludes mild neurocognitive disorder due to vascular disease or vascular mild cognitive impairment without dementia, inherited diffuse white matter disease and mitochondrial disorders.

- (c) Vascular dementia attracts ICD-10-AM code F01.
- (d) In the application of this Statement of Principles, the definition of "**vascular dementia**" is that given at paragraph 3(b) above.

#### **Basis for determining the factors**

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **vascular dementia** and **death from vascular dementia** 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 *Military Rehabilitation and Compensation Act 2004* (the MRCA).

#### **Factors that must be related to service**

5. Subject to clause 7, at least one of the factors set out in clause 6 must be related to the relevant service rendered by the person.

## Factors

6. The factor that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting **vascular dementia** or **death from vascular dementia** with the circumstances of a person's relevant service is:
- (a) having a cerebrovascular accident before the clinical onset of vascular dementia; or
  - (b) having a specified disease of the cerebral vessels, in the presence of neuroimaging (magnetic resonance imaging or computed tomography) findings of cerebral white matter lesions, haemorrhage or infarction, before the clinical onset of vascular dementia; or
  - (c) having hypertension before the clinical onset of vascular dementia; or
  - (d) having dyslipidaemia before the age of 65 years, and at least ten years before the clinical onset of vascular dementia; or
  - (e) having sick sinus syndrome, atrial fibrillation or atrial flutter, at the time of the clinical onset of vascular dementia; or
  - (f) having hyperhomocysteinaemia before the age of 50 years, and at least ten years before the clinical onset of vascular dementia; or
  - (g) having carotid arterial disease or ischaemic heart disease before the clinical onset of vascular dementia; or
  - (h) having cardiac surgery within the 12 months before the clinical onset of vascular dementia; or
  - (i) having diabetes mellitus at least ten years before the clinical onset of vascular dementia; or
  - (j) smoking at least ten pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical onset of vascular dementia, and
    - (i) smoking commenced at least 20 years before the clinical onset of vascular dementia; and
    - (ii) the smoking dose was attained before the age of 65 years; and
    - (iii) where smoking has ceased, the clinical onset of vascular dementia has occurred within 20 years of cessation; or
  - (k) an inability to undertake any physical activity greater than three METs for at least the five years before the clinical onset of vascular dementia; or
  - (l) being obese for a continuous period of at least five years before the age of 65 years, at least 15 years before the clinical onset of vascular dementia; or
  - (m) having depressive disorder before the age of 65 years, and where depressive disorder was diagnosed at least five years before the clinical onset of vascular dementia; or
  - (n) having posttraumatic stress disorder for at least ten years before the clinical onset of vascular dementia; or

- (o) having chronic renal failure before the clinical onset of vascular dementia; or
- (p) having a cerebrovascular accident before the clinical worsening of vascular dementia; or
- (q) having a specified disease of the cerebral vessels, in the presence of neuroimaging (magnetic resonance imaging or computed tomography) findings of cerebral white matter lesions, haemorrhage or infarction, before the clinical worsening of vascular dementia; or
- (r) having hypertension before the clinical worsening of vascular dementia; or
- (s) having dyslipidaemia before the age of 65 years, and at least ten years before the clinical worsening of vascular dementia; or
- (t) having sick sinus syndrome, atrial fibrillation or atrial flutter, at the time of the clinical worsening of vascular dementia; or
- (u) having hyperhomocysteinaemia before the age of 50 years, and at least ten years before the clinical worsening of vascular dementia; or
- (v) having carotid arterial disease or ischaemic heart disease before the clinical worsening of vascular dementia; or
- (w) having cardiac surgery within the 12 months before the clinical worsening of vascular dementia; or
- (x) having diabetes mellitus at least ten years before the clinical worsening of vascular dementia; or
- (y) smoking at least ten pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical worsening of vascular dementia, and
  - (i) smoking commenced at least 20 years before the clinical worsening of vascular dementia; and
  - (ii) the smoking dose was attained before the age of 65 years; and
  - (iii) where smoking has ceased, the clinical worsening of vascular dementia has occurred within 20 years of cessation; or
- (z) an inability to undertake any physical activity greater than three METs for at least the five years before the clinical worsening of vascular dementia; or
- (aa) being obese for a continuous period of at least five years before the age of 65 years, at least 15 years before the clinical worsening of vascular dementia; or
- (bb) having depressive disorder before the age of 65 years, and where depressive disorder was diagnosed at least five years before the clinical worsening of vascular dementia; or
- (cc) having posttraumatic stress disorder for at least ten years before the clinical worsening of vascular dementia; or

- (dd) having chronic renal failure before the clinical worsening of vascular dementia; or
- (ee) inability to obtain appropriate clinical management for vascular dementia.

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

- 7. Paragraphs **6(p) to 6(ee)** apply only to material contribution to, or aggravation of, vascular dementia where the person's vascular dementia was suffered or contracted before or during (but not arising out of) the person's relevant service.

#### **Inclusion of Statements of Principles**

- 8. 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 as in force from time to time.

#### **Other definitions**

- 9. For the purposes of this Statement of Principles:

**"a specified disease of the cerebral vessels"** means:

- (a) antiphospholipid syndrome;
- (b) cerebral amyloid angiopathy;
- (c) cerebral amyloidosis;
- (d) cerebral arteriolosclerosis;
- (e) cerebral venous thrombosis;
- (f) hippocampal sclerosis;
- (g) inflammatory or immunologically mediated vasculitis;
- (h) intravascular lymphomatosis;
- (i) laminar cortical necrosis; or
- (j) Moyamoya disease;

**"being obese"** means an increase in body weight by way of fat accumulation which results in a Body Mass Index (BMI) of 30 or greater.

The  $BMI = W/H^2$  and where:

W is the person's weight in kilograms; and

H is the person's height in metres;

**"cerebral arteriolosclerosis"** means fibrinoid necrosis, lipohyalinosis, microatheroma, microaneurysms, segmental arterial disorganisation or other pathological process of the small arteries, arterioles, venules and capillaries of the brain;

**"chronic renal failure"** means having a glomerular filtration rate of less than 60 mL/min/1.73 m<sup>2</sup> for a period of at least three months, or the presence of irreversible kidney damage;

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

**"dyslipidaemia"** 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 cholesterol level greater than or equal to 5.5 millimoles per litre (mmol/L);
- (b) a triglyceride level greater than or equal to 2.0 mmol/L; or
- (c) a high density lipoprotein cholesterol level less than 1.0 mmol/L;

**"hyperhomocysteinaemia"** means a condition characterised by a persistent level of total plasma homocysteine greater than 15 micromoles per litre;

**"ICD-10-AM code"** means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), Eighth Edition, effective date of 1 July 2013, copyrighted by the Independent Hospital Pricing Authority, and having ISBN 978-1-74128-213-9;

**"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;

**"pack-years of cigarettes, or the equivalent thereof in other tobacco products"** means a calculation of consumption where one pack-year of cigarettes equals 20 tailor-made cigarettes per day for a period of one calendar year, or 7300 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 7.3 kilograms of smoking tobacco by weight. Tobacco products mean cigarettes, pipe tobacco or cigars, smoked alone or in any combination;

**"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;

**"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**

10. This Instrument applies to all matters to which section 120A of the VEA or section 338 of the MRCA applies.

**Date of effect**

11. This Instrument takes effect from 22 September 2014.

Dated this *twenty-second* day of *August* 2014

The Common Seal of the  
Repatriation Medical Authority  
was affixed at the direction of: )



PROFESSOR NICHOLAS SAUNDERS AO  
CHAIRPERSON