## **REVOKED**

#### **Revocation and Determination**

of

# Statement of Principles concerning

## CEREBROVASCULAR ACCIDENT

ICD CODES: 431, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435, 436, 437.1, 674.0

#### Veterans' Entitlements Act 1986

- 1. The Repatriation Medical Authority under subsection **196B(3)** of the *Veterans' Entitlements Act 1986* (the Act):
  - (a) revokes Instrument No.143 of 1996, Instrument No. 196 of 1996, and Instrument No.86 of 1997; and
  - (b) determines in their place the following Statement of Principles.

#### Kind of injury, disease or death

- 2. (a) This Statement of Principles is about **cerebrovascular accident** and **death from cerebrovascular accident**.
  - (b) For the purposes of this Statement of Principles, "cerebrovascular accident" means cerebral ischaemia or intracerebral haemorrhage, attracting ICD code 431, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435, 436, 437.1 or 674.0.

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

3. On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that cerebrovascular accident and death from cerebrovascular accident

can be related to relevant service rendered by veterans 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 exist before it can be said that, on the balance of probabilities, cerebrovascular accident or death from cerebrovascular accident is connected with the circumstances of a person's relevant service are:
  - (a) suffering from hypertension before the clinical onset of cerebrovascular accident; or
  - (b) experiencing an acute severe stressor within the 48 hours immediately before the clinical onset of cerebrovascular accident; or
  - (c) suffering from panic disorder before the clinical onset of cerebrovascular accident; or
  - (d) an inability to undertake vigorous or moderate physical activity for a continuous period of at least seven years immediately before the clinical onset of cerebrovascular accident; or
  - (e) regularly consuming an average of 300g/week of alcohol (contained within alcoholic drinks), for a continuous period of at least one year immediately before the clinical onset of cerebrovascular accident; or
  - (f) suffering from meningitis, encephalitis or cerebral abscess at the time of the clinical onset of cerebrovascular accident; or
  - (g) suffering from inflammatory vascular disease affecting the cerebral vessels at the time of the clinical onset of cerebrovascular accident; or
  - (h) being pregnant, undergoing childbirth, or being within the puerperal period at the time of the clinical onset of cerebrovascular accident; or
  - (j) using cocaine within the 72 hours immediately before the clinical onset of cerebrovascular accident; or

- (k) for cerebral ischaemia only,
  - (i) smoking at least five cigarettes per day or the equivalent thereof in other tobacco products, for at least five years before the clinical onset of cerebrovascular accident and where smoking has ceased, the clinical onset has occurred within 10 years of cessation; or
  - (ii) suffering from diabetes mellitus at the time of the clinical onset of cerebrovascular accident; or
  - (iii) the presence of a serum total cholesterol level equal to or greater than 8 mmol/L before the clinical onset of cerebrovascular accident; or
  - (iv) regularly ingesting the combined (oestrogen and progestogen) oral contraceptive pill for a continuous period of at least three weeks immediately before the clinical onset of cerebrovascular accident; or
  - (v) the presence of a potential cardiac source of cerebral emboli at the time of the clinical onset of cerebrovascular accident; or
  - (vi) using heroin within 72 hours immediately before the clinical onset of cerebrovascular accident; or
  - (vii) suffering from disease of the precerebral artery supplying the area of cerebral ischaemia at the time of the clinical onset of cerebrovascular accident; or
  - (viii) suffering from one of the conditions from the specified list of conditions leading to cerebral vasospasm at the time of the clinical onset of cerebrovascular accident; or
  - (ix) suffering from one of the haematological disorders from the specified list of haematological disorders at the time of the clinical onset of cerebrovascular accident; or

- (m) for vertebrobasilar ischaemia only,
  - (i) suffering trauma to the neck or the base of the skull within the 12 months immediately before the clinical onset of cerebrovascular accident; or
  - (ii) suffering from cervical spondylosis where the osteophytes are impinging on the vertebral artery at the time of the clinical onset of cerebrovascular accident; or
- (n) for intracerebral haemorrhage only,
  - (i) undergoing anticoagulant therapy at the time of the clinical onset of cerebrovascular accident; or
  - (ii) taking aspirin:
    - (A) on at least three days per week; and
    - (B) for a continuous period of at least four weeks; and

where the last dose of aspirin taken before the cerebrovascular accident was taken within the seven days immediately before the clinical onset of cerebrovascular accident; or

- (iii) undergoing thrombolytic therapy at the time of the clinical onset of cerebrovascular accident; or
- (iv) the presence of one of the conditions from the specified list of conditions leading to haemostatic failure at the time of the clinical onset of cerebrovascular accident; or
- (v) bleeding of an intracerebral space occupying lesion of the brain immediately before the clinical onset of cerebrovascular accident; or
- (vi) suffering from a head injury within the four weeks immediately before the clinical onset of cerebrovascular disease; or
- (o) inability to obtain appropriate clinical management for cerebrovascular accident.

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

6. Paragraph **5(o)** applies only to material contribution to, or aggravation of, cerebrovascular accident where the person's cerebrovascular accident was

suffered or contracted before or during (but not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e) or 70(5)(d) of the Act refers.

#### Other definitions

**7.** For the purposes of this Statement of Principles:

"alcohol (contained within alcoholic drinks)" is measured by the alcohol consumption calculations utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink;

"anticoagulant therapy" means therapeutic administration of any substance that prevents blood clotting, for example, heparin, warfarin, or Dicumarol and congeners;

"cerebral ischaemia" means a reduction or interruption of blood supply to an area of the brain which usually presents as a transient ischaemic attack (TIA) or stroke, attracting ICD code 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435, 436, 437.1, or 674.0:

**"cervical spondylosis"** means degenerative changes affecting the cervical vertebrae and/or intervertebral discs, causing local pain and stiffness and/or symptoms and signs of cervical cord or cervical nerve root compression, attracting ICD code 721.0, 721.1 or 722.4;

"diabetes mellitus" means an endocrine disease characterised by:

- (a) a fasting venous plasma glucose concentration of 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;

"experiencing an acute 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' Entitlement Act applies, events that qualify as acute 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;

**"head injury"** means a blunt or penetrating wound of the head which results directly from the impact of a blow to the head, or indirectly from acceleration or deceleration forces applied to the head, and which causes:

- (i) closed or open fracture of the skull; or
- (ii) concussion, loss of consciousness, or post-traumatic amnesia; or
- (iii) cerebral laceration, contusion, or other intracranial injury;

#### "hypertension" means:

- (a) a usual blood pressure reading where the systolic reading is greater than or equal to 140mmHg and/or where the diastolic reading is greater than or equal to 90mmHg; or
- (b) where treatment for hypertension is being administered,

attracting an ICD code in the range 401 to 405;

"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;

"inflammatory vascular disease" means one of several acute, subacute or chronic inflammatory disorders of the arterial or venous wall, such as:

- (a) giant-cell arteritis, attracting ICD code 446.5; or
- (b) Takayasu's disease, attracting ICD code 446.7; or
- (c) systemic lupus erythematosus, attracting ICD code 710.0; or
- (d) Wegener's granulomatosis, attracting ICD code 446.4; or
- (e) allergic granulomatous angiitis, attracting ICD code 446.4; or
- (f) serum sickness, attracting ICD code 999.5; or
- (g) Sjogren's syndrome, attracting ICD code 710.2; or
- (h) Behcet's disease, attracting ICD code 136.1; or
- (j) polyarteritis nodosa, attracting ICD code 446.0;

"intracerebral haemorrhage" means bleeding within the cerebrum, attracting ICD code 431;

"intracerebral space occupying lesion" means any pathological entity occupying a delimited area within the brain, including:

- (a) primary or secondary malignant neoplasms of the brain; or
- (b) intracerebral abscess; or
- (c) tuberculoma of the brain; or
- (d) cerebral cysts; or
- (e) idiopathic space occupying lesion;

"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, attracting ICD code 300.01 or 300.21;

"potential cardiac source of cerebral emboli" means one of the following:

- (a) Paradoxical embolism from the venous system:
  - (i) atrial septal defect, attracting ICD code 745.5; or
  - (ii) ventricular septal defect, attracting ICD code 745.4; or
  - (iii) pulmonary arteriovenous fistula, attracting ICD code 417.0;
- (b) Left atrium:
  - (i) atrial fibrillation, attracting ICD code 427.31; or
  - (ii) sinoatrial disease, attracting ICD code 426.6; or
  - (iii) cardiac myxoma, attracting ICD code 212.7; or
  - (iv) interatrial septal aneurysm, attracting ICD code 414.10;
- (c) Mitral valve:
  - (i) rheumatic stenosis or regurgitation, attracting ICD code 394.0, 394.1, 394.2 or 396; or
  - (ii) infective endocarditis, attracting ICD code 036.42, 074.22, 098.84, 115.04, 115.14, 115.94, 112.81, 421.0, 421.1 or 093.21; or
  - (iii) non-bacterial thrombotic (marantic) endocarditis, attracting ICD code 391.1, 392.0, 397.9, 421.9 or 424.0; or
  - (iv) prosthetic valve, attracting ICD code 996.61; or

- (v) mitral annulus calcification, attracting ICD code 394.9; or
- (vi) Libman-Sacks endocarditis, attracting ICD code 424.91; or
- (vii) papillary fibroelastoma, attracting ICD code 425.3;
- (d) Left ventricular mural thrombus:
  - (i) acute myocardial infarction, attracting ICD code 410; or
  - (ii) left ventricular aneurysm, attracting ICD code 414.10; or
  - (iii) dilating cardiomyopathy, attracting ICD code 425; or
  - (iv) cardiac myxoma, attracting ICD code 212.7; or
  - (v) blunt chest injury, attracting ICD code 860, 861 or 862;
- (e) Aortic valve:
  - (i) rheumatic stenosis or regurgitation, attracting ICD code 395.0, 395.1, 395.2 or 396; or
  - (ii) infective endocarditis, attracting ICD code 036.42, 074.22, 098.84, 115.04, 115.14, 115.94, 112.81, 421.0, 421.1 or 093.22; or
  - (iii) non-bacterial thrombotic (marantic) endocarditis, attracting ICD code 391.1, 392.0, 397.9, 421.9 or 424; or
  - (iv) prosthetic valve, attracting ICD code 996.61; or
  - (v) calcification and/or sclerosis, attracting ICD code 395.9; or
  - (vi) syphilis, attracting ICD code 093.22;
- (f) Cardiac surgery, instrumentation of coronary arteries and aorta;

"precerebral artery" means extracerebral arteries supplying the brain, such as the carotid artery, vertebral artery and basilar artery;

"puerperal period" means the period of 42 days immediately following the end of the third stage of labour;

#### "relevant service" means:

- (a) eligible war service (other than operational service); or
- (b) defence service (other then hazardous service);

# "specified list of conditions leading to cerebral vasospasm" means the following:

- (a) subarachnoid haemorrhage, attracting ICD code 430; or
- (b) migraine, attracting ICD code 346.0, 346.1, 346.8 or 346.9; or
- (c) eclampsia of pregnancy, attracting ICD code 642.6;

"specified list of conditions leading to haemostatic failure" means the following list of conditions of the body in which impairment of normal blood clotting mechanisms due to a defect in the platelet or plasma coagulation system predisposes to cerebral haemorrhage:

- (a) haemophilia and other coagulation disorders, attracting ICD code 286; or
- (b) thrombocytopenia, attracting ICD code 287.3, 287.4 or 287.5; or
- (c) thrombotic thrombocytopenic purpura, attracting ICD code 446.6; or
- (d) polycythaemia rubra vera, attracting ICD code 238.4; or
- (e) essential thrombocythaemia, attracting ICD code 238.7; or
- (f) paraproteinaemias, attracting ICD code 273.1 or 273.2; or
- (g) disseminated intravascular coagulation, attracting ICD code 286.6; or
- (h) qualitative platelet defects, attracting ICD code 287.1; or
- (j) snake bite, attracting ICD code 989.5; or
- (k) other haemorrhagic conditions, attracting ICD code 287.8 or 287.9; or
- (m) aplastic anaemia, attracting ICD code 284; or
- (n) multiple myeloma, attracting ICD code 203.0; or
- (o) dysproteinaemia, attracting ICD code 273.8; or
- (p) macroglobulinaemia, attracting ICD code 273.3;

#### "specified list of haematological disorders" means the following:

- (a) polycythaemia, attracting ICD code 238.4, 289.0 or 289.6; or
- (b) essential thrombocythaemia, attracting ICD code 238.7; or
- (c) sickle cell disease, attracting ICD code, 282.6; or
- (d) sickle cell trait, attracting ICD code 282.5; or
- (e) multiple myeloma, attracting ICD code 203.0; or
- (f) macroglobulinaemia, attracting ICD code 273.3; or
- (g) essential thrombocytosis, attracting ICD code 289.9; or
- (h) hyperviscosity syndrome, attracting ICD code 273.3; or
- (i) chronic myeloid leukaemia, attracting ICD code 205.1; or
- (k) myeloproliferative disease, attracting ICD code 238.7;

"thrombocytopenia" means an acquired platelet count of less than 50 000 per microlitre on haematological testing, and due to a cause specified in the Repatriation Medical Authority's Statement about the causes of "thrombocytopenia" signed by the Chairman of the Authority on 27 March 1998, attracting ICD code 287.3, 287.4 or 287.5;

"thrombolytic therapy" means therapeutic administration of exogenous agents that dissolve blood clots, for example, streptokinase, urokinase or tissue plasminogen activator;

"trauma to the neck or the base of the skull" means a penetrating injury or a non-penetrating injury, involving extension or rotation of the neck, and includes any injury resulting in fracture or dislocation of the cervical spine;

"vertebrobasilar ischaemia" means infarction or ischaemia due to narrowing or occlusion of the vertebral or basilar arteries, attracting ICD code 433.01, 433.21 or 435;

"vigorous or moderate physical activity" means physical activity greater than 3 METs, where a "MET" is a unit of measurement of the level of physical exertion, of no greater than 2.5 kcal per minute. 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.).

#### **Application**

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

Dated this	Twenty-seventh	day of	March	1998
The Common Seal of the		)		
Repatriation	Medical Authority	)		
was affixed	to this instrument	)		
in the presen	nce of	)		
	KEN	DONALD		
	CH	AIRMAN		