

Revocation and Determination

Statement of Principles concerning

CEREBROVASCULAR ACCIDENT

**ICD 9-CM 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.8 of 1999; 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 **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-9-CM 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) the presence of hypertension before the clinical onset of cerebrovascular accident; or
 - (b) experiencing a 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 more than a mildly strenuous level of physical activity for at least the 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) evidence of a potential source of cerebral embolus at the time of the clinical onset of cerebrovascular accident; or
- (vi) using heroin within the 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 those haematological disorders, specified in the list of haematological disorders that are also associated with a hypercoagulable state at the time of the clinical onset of cerebrovascular accident; or
- (x) experiencing an acute hypotensive episode within the 24 hours immediately before the clinical onset of cerebrovascular accident; or
- (xi) undergoing a course of therapeutic radiation to the head or neck before the clinical onset of cerebrovascular accident; or

- (xii) suffering from hyperhomocystinaemia before the clinical onset of cerebrovascular accident; or
- (xiii) suffering from nephrotic syndrome at the time of the clinical onset of cerebrovascular accident; or
- (xiv) for vertebrobasilar ischaemia only,
 - (A) suffering trauma to the neck or the base of the skull within the 12 months immediately before the clinical onset of cerebrovascular accident; or
 - (B) suffering from cervical spondylosis where the osteophytes are impinging on the vertebral artery at the time of the clinical onset of cerebrovascular accident; or
- (m) 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; andwhere 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) suffering from one of the haematological disorders, from the specified list of haematological disorders that are associated with an excessive bleeding tendency at the time of the clinical onset of cerebrovascular accident; or
 - (v) bleeding of an intracerebral space occupying lesion 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
 - (vii) undergoing intracranial surgery within the seven days immediately before the clinical onset of cerebrovascular accident; or
 - (viii) bleeding from a cerebral aneurysm or a cerebral arteriovenous malformation at the time of the clinical onset of cerebrovascular accident; or
- (n) inability to obtain appropriate clinical management for cerebrovascular accident.

Factors that apply only to material contribution or aggravation

6. Paragraph 5(n) 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.

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:

“acute hypotensive episode” means a sudden drop in blood pressure of a sufficient degree to cause cerebral hypoperfusion;

“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;

“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.);

“anticoagulant therapy” means therapeutic administration of heparin, low molecular weight heparin, warfarin, danaparoid sodium, phenindione, anisindione, fluindione, dicumarol, acenocoumarol, phenprocoumon, ethyl biscoumacetate, lepirudin, nicoumalone, tiocloamarol, or fenprocoumon;

“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;

“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;

“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 cerebrovascular accident” in relation to a person includes death from a terminal event or condition that was contributed to by the person’s cerebrovascular accident;

“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;

“evidence of a potential source of cerebral embolus” means the presence of at least one of the following:

- (a) thrombus formation within:
 - (i) pulmonary vein; or
 - (ii) left atrium; or
 - (iii) left ventricle; or
 - (iv) arteries supplying the affected area of the brain; or
- (b) any of the following forms of arrhythmia:

- (i) atrial fibrillation (intermittent or sustained); or
 - (ii) sick sinus syndrome; or
- (c) any of the following mitral or aortic valve disorders:
- (i) stenosis; or
 - (ii) regurgitation; or
 - (iii) calcification; or
 - (iv) valvulitis; or
 - (v) prosthetic valve; or
 - (vi) mitral valve prolapse; or
- (d) any of the following postinfarction states:
- (i) acute myocardial infarction; or
 - (ii) left ventricular aneurysm; or
 - (iii) left ventricular dyskinesia; or
- (e) dilating cardiomyopathy; or
- (f) left atrial aneurysm or dilatation; or
- (g) any of the following means of paradoxical embolism:
- (i) atrial septal defect; or
 - (ii) ventricular septal defect; or
 - (iii) pulmonary arteriovenous fistula; or
- (h) infective or non-infective (marantic) endocarditis; or
- (j) primary cardiac tumours or secondary cardiac tumours; or
- (k) any of the following surgical procedures within the seven days immediately before the clinical onset of cerebral ischaemia:
- (i) cardiac surgery or cardiac catheterisation; or
 - (ii) surgery to, or catheterisation of, the arteries supplying the affected area of the brain;

“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 another person’s, physical integrity.

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;

“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;

“hyperhomocystinaemia” means a condition characterised by an excess of homocystine in the blood;

“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;

“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;

“inflammatory vascular disease” means one of the following diseases associated with vasculitis:

- (a) giant-cell arteritis; or
- (b) Takayasu’s disease; or
- (c) systemic lupus erythematosus; or
- (d) Wegener’s granulomatosis; or
- (e) allergic granulomatous angiitis; or
- (f) serum sickness; or
- (g) Sjogren’s syndrome; or
- (h) Behcet’s disease; or
- (j) polyarteritis nodosa;

“intracerebral haemorrhage” means bleeding within the cerebrum, brain stem or cerebellum;

“intracerebral space occupying lesion” means one of the following entities occupying a delimited area within the brain:

- (a) neoplasm; or
- (b) abscess; or
- (c) tuberculoma; or
- (d) cyst; or

“nephrotic syndrome” means a kidney disease characterised by massive proteinuria with varying degrees of oedema, hypoalbuminaemia, lipiduria and hyperlipidaemia;

“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;

“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 than hazardous service);

“specified list of conditions leading to cerebral vasospasm” means:

- (a) subarachnoid haemorrhage; or
- (b) migraine; or
- (c) eclampsia of pregnancy;

“specified list of haematological disorders that are associated with an excessive bleeding tendency” means:

- (a) thrombocytopenia; or
- (b) essential thrombocythaemia; or
- (c) thrombotic thrombocytopenic purpura; or
- (d) disseminated intravascular coagulation; or
- (e) inherited coagulation protein disorders associated with excessive bleeding tendency; or
- (f) plasma cell dyscrasias; or

- (g) qualitative platelet defects associated with coagulation defect; or
- (h) bleeding disorder secondary to snake bite; or
- (j) bleeding disorder secondary to Vitamin K deficiency; or
- (k) severe liver disease; or
- (m) leukaemia;

“specified list of haematological disorders that are associated with a hypercoagulable state” means:

- (a) primary or secondary polycythaemia; or
- (b) primary or secondary thrombocytosis; or
- (c) myeloproliferative disease; or
- (d) hyperproteinaemia; or
- (e) sickle cell disease or sickle cell trait; or
- (f) disseminated intravascular coagulation; or
- (g) thrombotic thrombocytopenic purpura; or
- (h) hyperviscosity syndrome; or
- (j) inherited coagulation protein disorders associated with hypercoagulability;

“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;

“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;

“thrombolytic therapy” means therapeutic administration of streptokinase, urokinase, tissue plasminogen activator, pro-urokinase, acyl-SK-plasminogen, anistreplase, alteplase, defibrotide, duteplase, lanoteplase, monteplase, nasaruplase, saruplase, staphylokinase or reteplase;

“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 cerebral ischaemia occurring in the distribution of the vertebrobasilar arteries.

Application

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

Dated this *Twenty-Fourth* day of *June* 1999

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

KEN DONALD
CHAIRMAN