



Australian Government
Repatriation Medical Authority

Statement of Principles concerning

DEEP VEIN THROMBOSIS

No. 54 of 2012

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 deep vein thrombosis No. 54 of 2012.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 74 of 2008, as amended by Instrument No. 45 of 2009, concerning deep vein thrombosis; and
 - (b) determines in their place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **deep vein thrombosis** and **death from deep vein thrombosis**.
 - (b) For the purposes of this Statement of Principles, "**deep vein thrombosis**" means an aggregation of blood factors, primarily platelets and fibrin with entrapment of cellular elements, that forms in the deep venous system. This definition excludes thrombosis of the retinal, cerebral, pulmonary, hepatic, renal, portal and mesenteric veins.

Basis for determining the factors

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **deep vein thrombosis** and **death from deep vein thrombosis** 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 **deep vein thrombosis** or **death from deep vein thrombosis** with the circumstances of a person's relevant service is:
 - (a) having trauma to the affected vein within the six months before the clinical onset of deep vein thrombosis; or
 - (b) undergoing a course of therapeutic radiation, where the affected vein was in the field of radiation, within the six months before the clinical onset of deep vein thrombosis; or
 - (c) having a central venous catheter, indwelling cardiac pacemaker or defibrillator leads, or implantation of another device within the affected vein for a continuous period of at least 24 hours within the six months before the clinical onset of deep vein thrombosis; or
 - (d) smoking at least one pack-year of cigarettes, or the equivalent thereof in other tobacco products, within the three years before the clinical onset of deep vein thrombosis, and where smoking has ceased, the clinical onset of deep vein thrombosis has occurred within three months of cessation; or
 - (e) having restricted mobility for a continuous period of at least four hours within the eight weeks before the clinical onset of deep vein thrombosis; or
 - (f) being an inpatient in a hospital or a resident in a nursing home for a continuous period of at least seven days, within the six months before the clinical onset of deep vein thrombosis; or
 - (g) having surgery requiring a general, spinal or epidural anaesthetic, within the six months before the clinical onset of deep vein thrombosis; or
 - (h) having an injury or illness as specified within the six months before the clinical onset of deep vein thrombosis; or
 - (i) immobilisation of the affected upper or lower limb in a plaster cast or similar restraining or bracing device, including a below-knee cast, for a

continuous period of at least three days within the six months before the clinical onset of deep vein thrombosis; or

- (j) having a neurological disease causing motor impairment within the six months before the clinical onset of deep vein thrombosis; or
- (k) having a cardiac disease from the specified list within the six months before the clinical onset of deep vein thrombosis; or
- (l) having a malignant neoplasm at the time of the clinical onset of deep vein thrombosis; or
- (m) being treated with a drug or a drug from a class of drugs from the specified list, within the three months before the clinical onset of deep vein thrombosis; or
- (n) using hormone replacement therapy or using combined oestrogen-progestin contraception for a continuous period of at least one month, within the three months before the clinical onset of deep vein thrombosis; or
- (o) having external compression of the affected vein or a vein draining the affected vein, at the time of the clinical onset of deep vein thrombosis; or
- (p) having osteomyelitis, an abscess or other infection involving the affected vein, at the time of the clinical onset of deep vein thrombosis; or
- (q) having an autoimmune disease or inflammatory vasculitis from the specified list at the time of the clinical onset of deep vein thrombosis; or
- (r) having a hypercoagulable state at the time of the clinical onset of deep vein thrombosis; or
- (s) having an aneurysm of the affected vein at the time of the clinical onset of deep vein thrombosis; or
- (t) being obese at the time of the clinical onset of deep vein thrombosis; or
- (u) being pregnant or being within the three months postpartum, at the time of the clinical onset of deep vein thrombosis; or
- (v) having superficial vein thrombosis within the three months before the clinical onset of deep vein thrombosis; or
- (w) for deep vein thrombosis in an upper limb only, engagement in exercise of the affected upper limb for a cumulative period of at least two hours within the seven days before the clinical onset of deep vein thrombosis; or
- (x) being infected with human immunodeficiency virus before the clinical onset of deep vein thrombosis; or
- (y) having cytomegalovirus infection of new onset within the six weeks before the clinical onset of deep vein thrombosis; or

- (z) having chronic bronchitis or emphysema at the time of the clinical onset of deep vein thrombosis; or
- (aa) having nephrotic syndrome, or any acute or chronic renal disease requiring dialysis or renal transplant, at the time of the clinical onset of deep vein thrombosis; or
- (bb) being at an altitude of at least 3000 metres for a continuous period of at least the three months before the clinical onset of deep vein thrombosis; or
- (cc) having depressive disorder with severe psychomotor retardation at the time of the clinical onset of deep vein thrombosis; or
- (dd) experiencing animal envenomation from the bite of a viper, *Crotalinae* spp or *Bitis gabonica* within the seven days before the clinical onset of deep vein thrombosis; or
- (ee) inability to obtain appropriate clinical management for deep vein thrombosis.

Factors that apply only to material contribution or aggravation

7. Paragraph 6(ee) applies only to material contribution to, or aggravation of, deep vein thrombosis where the person's deep vein thrombosis 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 cardiac disease from the specified list" means:

- (a) acute myocardial infarction; or
- (b) congestive cardiac failure;

"a drug or a drug from a class of drugs from the specified list" means:

- (a) anti-psychotic drugs;
- (b) bevacizumab;
- (c) cytotoxic agents for a malignant disease;
- (d) desmopressin acetate;
- (e) erythropoiesis-stimulating agents (erythropoietin, darbepoietin);
- (f) intravenous thrombin or fibrin sealant;
- (g) lenalidomide;
- (h) selective oestrogen receptor modulators; or
- (i) thalidomide;

"a hypercoagulable state" means:

- (a) acquired activated protein C resistance;
- (b) acquired antithrombin III deficiency;
- (c) acquired protein C deficiency;
- (d) acquired protein S deficiency;
- (e) antiphospholipid antibody syndrome;
- (f) cirrhosis of the liver;
- (g) Cushing's syndrome;
- (h) disseminated intravascular coagulation;
- (i) heparin-induced thrombocytopenia;
- (j) hyperhomocysteinaemia;
- (k) hyperthyroidism;
- (l) hypothyroidism;
- (m) inability to access anticoagulant treatment for an existing coagulation disorder;
- (n) monoclonal gammopathy of undetermined significance;
- (o) myeloproliferative disease;
- (p) paroxysmal nocturnal haemoglobinuria; or
- (q) thrombocytosis;

"a neurological disease causing motor impairment" means loss or impairment of motor function of a limb, occurring in cerebrovascular accident, peripheral neuropathy, Guillain Barre syndrome, non-traumatic spinal cord disease, neurological infection or neuro-muscular degenerative diseases, including demyelinating diseases, parkinsonian syndromes, dementia and muscular dystrophies;

"an autoimmune disease or inflammatory vasculitis from the specified list" means:

- (a) antineutrophil cytoplasmic antibodies-associated vasculitis (Churg–Strauss syndrome, microscopic polyangiitis, Wegener's granulomatosis);
- (b) Behçet's disease;
- (c) diabetes mellitus;
- (d) inflammatory bowel disease;
- (e) polyarteritis nodosa;
- (f) systemic lupus erythematosus; or
- (g) thromboangiitis obliterans (Buerger's disease);

"an injury or illness as specified" means:

- (a) a fracture or crush injury of the clavicle or humerus, or a bone in the spinal column, pelvis, hip, chest, or lower limb (femur, tibia, fibula);
- (b) a moderate to severe traumatic brain injury;
- (c) a physical injury or illness requiring mechanical ventilation support or admission to an intensive care unit;
- (d) a spinal cord injury; or
- (e) a tear, rupture or avulsion of a muscle, tendon or ligament in the lower limb;

"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;

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

"exercise of the affected upper limb" means strenuous, repetitive activity that involved abduction of the shoulder or arm of the affected upper limb. Examples of activities include gardening, sawing and chopping wood, painting, badminton, baseball, softball, handball, squash, tennis, volleyball, waterpolo, weight lifting, canoeing, judo, push-ups, rowing, swimming, wrestling and basketball;

"external compression of the affected vein or a vein draining the affected vein" means an endogenous or exogenous pathological structure that compresses, occludes, displaces or infiltrates the vein or a vein draining the affected vein;

"having restricted mobility" means gross diminution and near complete absence of movement of a lower limb while sitting or reclining in a cramped or restricted space, such as may occur during travel by road, rail or air;

"hormone replacement therapy" means administration of oestrogen preparations often in combination with progesterone to offset a hormone deficiency following surgically induced or naturally occurring menopause;

"pack-year 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 means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

"psychomotor retardation" means visible generalised slowing of movements and speech;

"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;

"trauma to the affected vein" means injury to the affected vein occurring after:

- (a) a laceration, crush or tearing injury of the affected vein; or
- (b) injection, cannulation or incision of the affected vein.

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 5 September 2012.

Dated this *twenty-seventh* day of *August* 2012

The Common Seal of the
Repatriation Medical Authority
was affixed to this instrument
at the direction of:

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PROFESSOR NICHOLAS SAUNDERS AO
CHAIRPERSON