



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
PULMONARY THROMBOEMBOLISM
(Reasonable Hypothesis)
(No. 37 of 2021)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

Dated 5 March 2021

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

Professor Nicholas Saunders AO
Chairperson

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1 Name

This is the Statement of Principles concerning *pulmonary thromboembolism (Reasonable Hypothesis)* (No. 37 of 2021).

2 Commencement

This instrument commences on 5 April 2021.

3 Authority

This instrument is made under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

4 Repeal

The Statement of Principles concerning pulmonary thromboembolism No. 56 of 2012 (Federal Register of Legislation No. F2012L01796) made under subsection 196B(2) of the VEA is repealed.

5 Application

This instrument applies to a claim to which section 120A of the VEA or section 338 of the *Military Rehabilitation and Compensation Act 2004* applies.

6 Definitions

The terms defined in the Schedule 1 - Dictionary have the meaning given when used in this instrument.

7 Kind of injury, disease or death to which this Statement of Principles relates

- (1) This Statement of Principles is about pulmonary thromboembolism and death from pulmonary thromboembolism.

Meaning of pulmonary thromboembolism

- (2) For the purposes of this Statement of Principles, pulmonary thromboembolism means obstruction of the pulmonary artery or one of its branches by a mass of clotted blood.
- (3) While pulmonary thromboembolism attracts ICD-10-AM code I26, in applying this Statement of Principles the meaning of pulmonary thromboembolism is that given in subsection (2).

- (4) For subsection (3), a reference to an ICD-10-AM code is a reference to the code assigned to a particular kind of injury or disease in *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM)*, Tenth Edition, effective date of 1 July 2017, copyrighted by the Independent Hospital Pricing Authority, ISBN 978-1-76007-296-4.

Death from pulmonary thromboembolism

- (5) For the purposes of this Statement of Principles, pulmonary thromboembolism, in relation to a person, includes death from a terminal event or condition that was contributed to by the person's pulmonary thromboembolism.

Note: *terminal event* is defined in the Schedule 1 - Dictionary.

8 Basis for determining the factors

The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that pulmonary thromboembolism and death from pulmonary thromboembolism 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 MRCA.

Note: *MRCA*, *relevant service* and *VEA* are defined in the Schedule 1 - Dictionary.

9 Factors that must exist

At least one of the following factors must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting pulmonary thromboembolism or death from pulmonary thromboembolism with the circumstances of a person's relevant service:

- (1) having a deep vein thrombosis within the six months before the clinical onset of pulmonary thromboembolism;
- (2) having superficial vein thrombosis within the twelve months before the clinical onset of pulmonary thromboembolism;
- (3) having acute myocardial infarction within the six months before the clinical onset of pulmonary thromboembolism;
- (4) having heart failure or a thrombus within the right atrium or right ventricle at the time of the clinical onset of pulmonary thromboembolism;
- (5) having a malignant neoplasm at the time of the clinical onset of pulmonary thromboembolism;
- (6) having an aneurysm of a vein in the deep venous system at the time of the clinical onset of pulmonary thromboembolism;

- (7) being overweight or obese at the time of the clinical onset of pulmonary thromboembolism;
 Note: *being overweight or obese* is defined in the Schedule 1 - Dictionary.
- (8) having chronic obstructive pulmonary disease at the time of the clinical onset of pulmonary thromboembolism;
- (9) having sleep apnoea at the time of the clinical onset of pulmonary thromboembolism;
- (10) being pregnant within the three months before the clinical onset of pulmonary thromboembolism;
- (11) having cytomegalovirus infection of new onset within the 30 days before the clinical onset of pulmonary thromboembolism;
- (12) having infection with human immunodeficiency virus or hepatitis C virus at the time of the clinical onset of pulmonary thromboembolism;
- (13) having active tuberculosis disease within the 30 days before the clinical onset of pulmonary thromboembolism;
 Note: *active tuberculosis disease* is defined in the Schedule 1 - Dictionary.
- (14) having infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) within the three months before the clinical onset of pulmonary thromboembolism;
 Note: SARS-CoV-2 is the virus which causes coronavirus disease 2019 (COVID-19).
- (15) having an autoimmune disease at the time of the clinical onset of pulmonary thromboembolism;
 Note: Examples of autoimmune diseases that may cause pulmonary thromboembolism include rheumatoid arthritis, polymyositis and Sjögren syndrome.
- (16) having diabetes mellitus at the time of the clinical onset of pulmonary thromboembolism;
- (17) having a hypercoagulable state as specified at the time of the clinical onset of pulmonary thromboembolism;
 Note: *hypercoagulable state as specified* is defined in the Schedule 1 - Dictionary.
- (18) having a kidney disease from the specified list of kidney diseases at the time of the clinical onset of pulmonary thromboembolism;
 Note: *specified list of kidney diseases* is defined in the Schedule 1 - Dictionary.
- (19) having implantation of an intravenous device for a continuous period of at least 24 hours within the six months before the clinical onset of pulmonary thromboembolism;
 Note: Examples of implanted devices include a central venous catheter, an indwelling cardiac pacemaker and defibrillator leads.

(20) having surgery requiring a general, spinal or epidural anaesthetic within the six months before the clinical onset of pulmonary thromboembolism;

(21) having an injury or illness as specified within the six months before the clinical onset of pulmonary thromboembolism;

Note: *injury or illness as specified* is defined in the Schedule 1 - Dictionary.

(22) having restricted mobility for a continuous period of at least four hours within the eight weeks before the clinical onset of pulmonary thromboembolism;

Note: Examples of situations in which restricted mobility can occur include travel by road, rail or air and physical restraint.

(23) having a neurological disease that causes loss or impairment of motor function of a limb within the three months before the clinical onset of pulmonary thromboembolism;

Note: Examples of neurological diseases that cause loss or impairment of motor function of a limb include cerebrovascular accident, multiple sclerosis and motor neurone disease.

(24) having a clinically significant disorder of mental health as specified at the time of the clinical onset of pulmonary thromboembolism;

Note: *clinically significant disorder of mental health as specified* is defined in the Schedule 1 - Dictionary.

(25) taking a drug from the specified list of drugs within the three months before the clinical onset of pulmonary thromboembolism;

Note: *specified list of drugs* is defined in the Schedule 1 - Dictionary.

(26) taking combined estrogen-progestogen contraception or taking menopausal hormone therapy as an oral estrogen, or a non-oral estrogen combined with a progestogen, for a continuous period of at least four weeks, within the three months before the clinical onset of pulmonary thromboembolism;

Note: *menopausal hormone therapy* is defined in the Schedule 1 - Dictionary.

(27) having smoked tobacco products:

(a) in an amount of at least one pack-year before the clinical onset of pulmonary thromboembolism; or

(b) in an amount of at least 10 cigarettes per day, or the equivalent thereof in other tobacco products, for a period of at least three months before the clinical onset of pulmonary thromboembolism;
and

if smoking has ceased before the clinical onset of pulmonary thromboembolism, then that onset occurred within six months of cessation;

Note: *cigarettes per day, or the equivalent thereof in other tobacco products* and *pack-year* are defined in the Schedule 1 - Dictionary.

- (28) being at an altitude of at least 3,000 metres for a continuous period of at least five days within the three months before the clinical onset of pulmonary thromboembolism;
- (29) inability to obtain appropriate clinical management for pulmonary thromboembolism.

10 Relationship to service

- (1) The existence in a person of any factor referred to in section 9, must be related to the relevant service rendered by the person.
- (2) The factor set out in subsection 9(29) applies only to material contribution to, or aggravation of, pulmonary thromboembolism where the person's pulmonary thromboembolism was suffered or contracted before or during (but did not arise out of) the person's relevant service.

11 Factors referring to an injury or disease covered by another Statement of Principles

In this Statement of Principles:

- (1) if a factor referred to in section 9 applies in relation to a person; and
- (2) that factor refers to an injury or disease in respect of which a Statement of Principles has been determined under subsection 196B(2) of the VEA;

then the factors in that Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Schedule 1 - Dictionary

Note: See Section 6

1 Definitions

In this instrument:

abnormality of kidney structure or function means:

- (a) having a glomerular filtration rate of less than 60 mL/min/1.73 m²; or
- (b) having kidney damage, as evidenced by renal biopsy, imaging studies, albuminuria, urinary sediment abnormalities or other markers of abnormal renal function; or
- (c) having had a kidney transplant.

active tuberculosis disease means an illness in which tuberculosis bacteria are multiplying and inducing an inflammatory response.

acute kidney injury means:

- (a) having an increase in serum creatinine of at least 26.5 µmol/L within a period of 48 hours; or
- (b) having an increase in serum creatinine of at least 1.5 times baseline levels, which has occurred within the previous seven days; or
- (c) having a urine volume of less than 0.5 mL/kg/h for six hours.

being overweight or obese means having a Body Mass Index (BMI) of 25 or greater.

Note: ***BMI*** is also defined in the Schedule 1 - Dictionary.

BMI means W/H^2 where:

- (a) W is the person's weight in kilograms; and
- (b) H is the person's height in metres.

chronic kidney disease means an abnormality of kidney structure or function that has been present for at least three months.

Note: ***abnormality of kidney structure or function*** is also defined in the Schedule 1 - Dictionary.

cigarettes per day, or the equivalent thereof in other tobacco products means either:

- (a) cigarettes, pipe tobacco or cigars, alone or in any combination, where one tailor-made cigarette approximates one gram of tobacco; or
- (b) one gram of cigar, pipe or other smoking tobacco.

clinically significant disorder of mental health as specified means one of the following conditions, which is of sufficient severity to warrant ongoing management:

- (a) depressive disorder;
- (b) posttraumatic stress disorder; or
- (c) schizophrenia.

Note 1: Management of the condition may involve regular visits (for example, at least monthly) to a psychiatrist, counsellor or general practitioner.

Note 2: To warrant ongoing management does not require that any actual management was received or given for the condition.

hypercoagulable state as specified means:

- (a) antiphospholipid antibody syndrome;
- (b) cirrhosis of the liver;
- (c) Cushing syndrome;
- (d) disseminated intravascular coagulation;
- (e) heparin-induced thrombocytopenia;
- (f) hyperhomocysteinaemia;
- (g) hyperthyroidism and thyrotoxicosis;
- (h) hypothyroidism;
- (i) inability to access anticoagulant treatment for an existing coagulation disorder;
- (j) paroxysmal nocturnal haemoglobinuria;
- (k) thrombocytosis; or
- (l) venom-induced thrombosis.

injury or illness as specified means:

- (a) a limb, pelvic, rib or spinal fracture;
- (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;
- (e) a tear, rupture or avulsion of a muscle, tendon or ligament in the lower limb;
- (f) a traumatic upper or lower limb amputation;
- (g) an injury requiring immobilisation of an upper or lower limb in a plaster cast or similar restraining or bracing device; or
- (h) any other injury or illness that causes significantly reduced mobility.

Note: ***traumatic upper or lower limb amputation*** is also defined in the Schedule 1 - Dictionary.

menopausal hormone therapy means administration of estrogen preparations often in combination with a progestogen to offset a hormone deficiency following surgically induced or naturally occurring menopause.

MRCAs means the *Military Rehabilitation and Compensation Act 2004*.

pack-year means an amount of tobacco equivalent to:

- (a) 20 cigarettes per day for a period of one calendar year; or
- (b) 7,300 cigarettes in a period of one calendar year; or
- (c) 7,300 grams of smoking tobacco by weight, either in cigarettes, pipe tobacco or cigars, or a combination of same.

pulmonary thromboembolism—see subsection 7(2).

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.

Note: *MRCA* and *VEA* are also defined in the Schedule 1 - Dictionary.

specified list of drugs means:

- (a) anti-psychotic drugs;
- (b) chemotherapy for a malignant disease;
- (c) erythropoiesis-stimulating agents (including erythropoietin and darbepoietin);
- (d) intravenous thrombin or fibrin sealant;
- (e) lenalidomide;
- (f) selective estrogen receptor modulators (including tamoxifen); or
- (g) thalidomide.

specified list of kidney diseases means:

- (a) acute kidney injury;
- (b) chronic kidney disease; or
- (c) nephrotic syndrome.

Note: *acute kidney injury* and *chronic kidney disease* are also defined in the Schedule 1 - Dictionary.

terminal event means the proximate or ultimate cause of death and includes the following:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function.

traumatic upper or lower limb amputation means loss of an upper or lower limb as a result of an accidental injury, including blast injury.

VEA means the *Veterans' Entitlements Act 1986*.