



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning

MULTIPLE SCLEROSIS

No. 100 of 2011

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 multiple sclerosis No. 100 of 2011.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 44 of 2002, as amended by Instrument No. 76 of 2002, concerning multiple sclerosis; and
 - (b) determines in their place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **multiple sclerosis** and **death from multiple sclerosis**.
 - (b) For the purposes of this Statement of Principles, "**multiple sclerosis**" means a relapsing-remitting or progressive neurological disorder characterised by foci of demyelination, perivascular inflammation and scarring involving the white matter of the central nervous system. Clinical manifestations include visual loss, extra-ocular movement disorders, paraesthesiae, loss of sensation, weakness, dysarthria, spasticity, ataxia and bladder dysfunction.

- (c) Multiple sclerosis attracts ICD-10-AM code G35.
- (d) In the application of this Statement of Principles, the definition of "**multiple sclerosis**" 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 **multiple sclerosis** and **death from multiple sclerosis** 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 **multiple sclerosis** or **death from multiple sclerosis** with the circumstances of a person's relevant service is:
 - (a) inhaling an organic solvent or having cutaneous contact with an organic solvent on more days than not for a continuous 12 month period before the clinical onset of multiple sclerosis; or
 - (b) being infected with Epstein-Barr virus before the clinical onset of multiple sclerosis; or
 - (c) smoking at least five pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical onset of multiple sclerosis, and where smoking has ceased, the clinical onset of multiple sclerosis has occurred within five years of cessation; or
 - (d) undergoing a course of treatment with a tumour necrosis factor alpha antagonist within the two years before the clinical onset of multiple sclerosis; or
 - (e) having evidence of vitamin D insufficiency:
 - (i) for a period of one year; and
 - (ii) before the age of twenty years;before the clinical onset of multiple sclerosis; or
 - (f) having vitamin D deficiency for at least one year before the clinical onset of multiple sclerosis, where this vitamin D deficiency occurred more than ten years before the clinical onset of multiple sclerosis; or

- (g) experiencing the death of a related child at least seven years before the clinical onset of multiple sclerosis, where the death of a related child did not occur more than 20 years before the clinical onset of multiple sclerosis; or
- (h) having onset of a viral or bacterial infection within the five weeks before or the two weeks after the clinical worsening of multiple sclerosis; or
- (i) smoking at least five pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical worsening of multiple sclerosis, and where smoking has ceased, the clinical worsening of multiple sclerosis has occurred within five years of cessation; or
- (j) undergoing a course of treatment with a drug or a drug from a class of drugs from the specified list within the one year before the clinical worsening of multiple sclerosis; or
- (k) experiencing a category 1A stressor within the six months before the clinical worsening of multiple sclerosis; or
- (l) experiencing a category 1B stressor within the six months before the clinical worsening of multiple sclerosis; or
- (m) experiencing the death of a significant other within the six months before the clinical worsening of multiple sclerosis; or
- (n) experiencing a category 2 stressor within the six months before the clinical worsening of multiple sclerosis; or
- (o) having a medical illness or injury, other than multiple sclerosis, which is life-threatening or which results in serious physical or cognitive disability, within the six months before the clinical worsening of multiple sclerosis; or
- (p) for women only, using assisted reproductive technology within the three months before the clinical worsening of multiple sclerosis; or
- (q) being within six months postpartum at the time of the clinical worsening of multiple sclerosis; or
- (r) undergoing a course of therapeutic radiation, where the affected site was in the field of radiation, before the clinical worsening of multiple sclerosis; or
- (s) having received a cumulative equivalent dose of at least 10 sieverts of ionising radiation to the affected site before the clinical worsening of multiple sclerosis; or

- (t) inability to obtain appropriate clinical management for multiple sclerosis.

Factors that apply only to material contribution or aggravation

- 7. Paragraphs **6(h) to 6(t)** apply only to material contribution to, or aggravation of, multiple sclerosis where the person's multiple sclerosis 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 category 1A stressor" means one or more of the following severe traumatic events:

- (a) experiencing a life-threatening event;
- (b) being subject to a serious physical attack or assault including rape and sexual molestation; or
- (c) being threatened with a weapon, being held captive, being kidnapped, or being tortured;

"a category 1B stressor" means one of the following severe traumatic events:

- (a) being an eyewitness to a person being killed or critically injured;
- (b) viewing corpses or critically injured casualties as an eyewitness;
- (c) being an eyewitness to atrocities inflicted on another person or persons;
- (d) killing or maiming a person; or
- (e) being an eyewitness to or participating in, the clearance of critically injured casualties;

"a category 2 stressor" means one or more of the following negative life events, the effects of which are chronic in nature and cause the person to feel on-going distress, concern or worry:

- (a) being socially isolated and unable to maintain friendships or family relationships, due to physical location, language barriers, disability, or medical or psychiatric illness;
- (b) experiencing a problem with a long-term relationship including: the break-up of a close personal relationship, the need for marital or relationship counselling, marital separation, or divorce;
- (c) having concerns in the work or school environment including: on-going disharmony with fellow work or school colleagues, perceived lack of

social support within the work or school environment, perceived lack of control over tasks performed and stressful work loads, or experiencing bullying in the workplace or school environment;

- (d) experiencing serious legal issues including: being detained or held in custody, on-going involvement with the police concerning violations of the law, or court appearances associated with personal legal problems;
- (e) having severe financial hardship including: loss of employment, long periods of unemployment, foreclosure on a property, or bankruptcy;
- (f) having a family member or significant other experience a major deterioration in their health; or
- (g) being a full-time caregiver to a family member or significant other with a severe physical, mental or developmental disability;

"a course of therapeutic radiation" means one or more fractions (treatment portions) of ionising radiation administered with the aim of achieving palliation or cure with gamma rays, x-rays, alpha particles or beta particles;

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

- (a) carbamazepine;
- (b) granulocyte colony-stimulating factor;
- (c) interferon;
- (d) statin; or
- (e) tumour necrosis factor alpha antagonists;

"an eyewitness" means a person who observes an incident first hand and can give direct evidence of it. This excludes a person exposed only to media coverage of the incident;

"an organic solvent" means:

- (a) an aliphatic hydrocarbon solvent;
- (b) an aromatic hydrocarbon solvent;
- (c) a chlorinated organic solvent; or
- (d) an oxygenated organic solvent;

"a related child" means biological offspring, an adopted child, a step-child or a foster child;

"a significant other" means a person who has a close family bond or a close personal relationship and is important or influential in one's life;

"assisted reproductive technology" means artificial or partially artificial means to achieve pregnancy. These methods involve administration of gonadotrophin-releasing hormone analogues, agonists or antagonists, to down-regulate the endogenous gonadotrophin release and to achieve a superovulation, and/or progesterone supplementation during the luteal phase, following replacement in utero of in vitro-produced embryos.

"being infected with Epstein-Barr virus" means serological evidence of infection with Epstein-Barr virus;

"cumulative equivalent dose" means the total dose of ionising radiation received by the particular organ or tissue. The formula used to calculate the cumulative equivalent dose allows doses from multiple types of ionising radiation to be combined, by accounting for their differing biological effect. The unit of equivalent dose is the sievert. For the purposes of this Statement of Principles, the calculation of cumulative equivalent dose excludes doses received from normal background radiation, but includes therapeutic radiation, diagnostic radiation, cosmic radiation at high altitude, radiation from occupation-related sources and radiation from nuclear explosions or accidents;

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

"having evidence of vitamin D insufficiency " means:

- (a) a 25-hydroxyvitamin D serum level of less than 75 nanomoles per litre;
or
- (b) a history of circumstances which are likely to cause Vitamin D insufficiency, in the absence of vitamin D supplementation. Such circumstances include:
 - (i) an inability to meet the specified sunlight exposure levels for prolonged periods;
 - (ii) always covering the entire body with clothing when outdoors;
 - (iii) prolonged periods of institutionalisation; or
 - (iv) having a disorder or taking drug therapy which causes malabsorption of vitamin D;

"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), Seventh Edition, effective date of 1 July 2010, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 154 5;

"pack-years of cigarettes, or the equivalent thereof in other tobacco products" means a calculation of consumption where one pack-year of cigarettes equals twenty 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 7300 cigarettes, or 7.3 kilograms of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

"specified sunlight exposure levels" means sunlight exposure 4-6 times a week on exposed arms and legs, or an equivalent body surface for the following amount of time:

- (a) 5 to 15 minutes, excluding winter exposure; or
- (b) 9 to 15 minutes between 0° and 23° latitude in winter; or
- (c) 20 to 30 minutes between 23° and 34° latitude in winter; or
- (d) 30 to 50 minutes between 34° and 60° latitude in winter.

People with darker skin can require three to four times more sun to achieve the same vitamin D synthesis.

"relevant service" means:

- (a) operational service under the VEA;
- (b) peacekeeping service under the VEA;
- (c) hazardous service under the VEA;
- (d) warlike service under the MRCA; or
- (e) 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;

"vitamin D deficiency" means a serum 25-hydroxyvitamin D level of less than 50 nanomoles per litre.

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 31 August 2011.

Dated this *nineteenth* day of *August* 2011

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

KEN DONALD
CHAIRPERSON