



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
MALARIA
(Reasonable Hypothesis)
(No. 46 of 2017)

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

Dated 18 August 2017

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

A handwritten signature in black ink, appearing to read 'N. Saunders'.

Professor Nicholas Saunders AO
Chairperson

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1 Name

This is the Statement of Principles concerning *malaria (Reasonable Hypothesis)* (No. 46 of 2017).

2 Commencement

This instrument commences on 18 September 2017.

3 Authority

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

4 Revocation

The Statement of Principles concerning malaria No. 60 of 2009 made under subsection 196B(2) of the VEA is revoked.

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 malaria and death from malaria.

Meaning of malaria

(2) For the purposes of this Statement of Principles, malaria means an infection that is due to one of the human malaria species *Plasmodium falciparum*, *Plasmodium vivax*, *Plasmodium ovale* or *Plasmodium malariae*, or infection with *Plasmodium knowlesi* or other simian malaria species.

Note 1: Malaria typically presents with prostration, fever, chills, sweats, headaches, nausea, body aches and general malaise. Physical findings may include elevated temperature, perspiration, weakness, enlarged spleen, jaundice, enlargement of the liver and anaemia.

Note 2: Malaria due to *Plasmodium vivax* or *Plasmodium ovale* may relapse due to reactivation of a dormant liver phase.

(3) While malaria attracts ICD-10-AM code B50, B51, B52, B53 or B54, in applying this Statement of Principles the meaning of malaria 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)*, Ninth Edition, effective date of 1 July 2015, copyrighted by the Independent Hospital Pricing Authority, ISBN 978-1-76007-020-5.

Death from malaria

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

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 malaria and death from malaria 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: *relevant service* is 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 malaria or death from malaria with the circumstances of a person's relevant service:

- (1) being bitten by a mosquito infected with *Plasmodium vivax* or *Plasmodium ovale* at least four days, but less than five years, before the clinical onset of malaria;
- (2) being exposed to *Plasmodium vivax* or *Plasmodium ovale* as specified at least four days, but less than one year, before the clinical onset of malaria;

Note: *being exposed to Plasmodium vivax or Plasmodium ovale as specified* is defined in the Schedule 1 - Dictionary.

- (3) being exposed to *Plasmodium malariae*, *Plasmodium falciparum* or simian malaria species as specified at least four days, but less than one year, before the clinical onset of malaria;

Note: *being exposed to Plasmodium malariae, Plasmodium falciparum or simian malaria species as specified* is defined in the Schedule 1 - Dictionary.

- (4) being in an immunocompromised state as specified at the time of the clinical onset of malaria;

Note: *immunocompromised state as specified* is defined in the Schedule 1 - Dictionary.

- (5) being pregnant within the six months before the clinical onset of malaria;
- (6) being in an immunocompromised state as specified at the time of the clinical worsening of malaria;

Note: *immunocompromised state as specified* is defined in the Schedule 1 - Dictionary.

- (7) being pregnant within the six months before the clinical worsening of malaria;
- (8) for malaria due to *Plasmodium vivax* or *Plasmodium ovale* only, having a systemic infectious disease as specified within the 30 days before the clinical worsening of malaria;

Note: *systemic infectious disease as specified* is defined in the Schedule 1 - Dictionary.

- (9) inability to obtain appropriate clinical management for malaria.

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 factors set out in subsections 9(6) to 9(9) apply only to material contribution to, or aggravation of, malaria where the person's malaria 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:

being exposed to Plasmodium malariae, Plasmodium falciparum or simian malaria species as specified means:

- (a) being bitten by a mosquito infected with *Plasmodium malariae*, *Plasmodium falciparum* or simian malaria species; or
- (b) having percutaneous exposure to blood infected with *Plasmodium malariae*, *Plasmodium falciparum* or simian malaria species; or
- (c) having an organ transplant, where the organ is infected with *Plasmodium malariae*, *Plasmodium falciparum* or simian malaria species; or
- (d) having a blood transfusion, where the blood is infected with *Plasmodium malariae*, *Plasmodium falciparum* or simian malaria species.

being exposed to Plasmodium vivax or Plasmodium ovale as specified means:

- (a) having percutaneous exposure to blood infected with *Plasmodium vivax* or *Plasmodium ovale*; or
- (b) having an organ transplant, where the organ is infected with *Plasmodium vivax* or *Plasmodium ovale*; or
- (c) having a blood transfusion, where the blood is infected with *Plasmodium vivax* or *Plasmodium ovale*.

chronic renal failure means:

- (a) having a glomerular filtration rate of less than 15 mL/min/1.73 m² for a period of at least three months; or
- (b) a need for renal replacement therapy (dialysis or transplantation) for treatment of complications of decreased glomerular filtration rate which would otherwise increase the risk of morbidity and mortality; or
- (c) undergoing chronic dialysis.

immunocompromised state as specified means a condition of substantially lowered immune function, such as would occur in the following conditions or circumstances:

- (a) being infected with human immunodeficiency virus;
- (b) being treated with an immunosuppressive drug;
- (c) having a haematological or solid organ malignancy;
- (d) having asplenia or a splenectomy;
- (e) having chronic renal failure;
- (f) having severe malnutrition; or
- (g) undergoing solid organ, stem cell or bone marrow transplantation.

Note: *immunosuppressive drug* and *chronic renal failure* are also defined in the Schedule 1 - Dictionary.

immunosuppressive drug means a drug or an agent which results in substantial suppression of immune responses.

Note: Examples of an immunosuppressive drug include corticosteroids other than inhaled or topical corticosteroids, drugs used to prevent transplant rejection, tumour necrosis factor- α inhibitors and chemotherapeutic agents used for the treatment of cancer.

malaria—see subsection 7(2).

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

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.

systemic infectious disease as specified means a parasitic or bacterial infectious disease that causes systemic symptoms such as fever, and includes infection with *Plasmodium falciparum* and typhoid fever.

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.

VEA means the *Veterans' Entitlements Act 1986*.