



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning

HEART BLOCK

No. 1 of 2014

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 heart block No. 1 of 2014.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 3 of 2006 concerning heart block; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **heart block** and **death from heart block**.
 - (b) For the purposes of this Statement of Principles, "**heart block**" means a cardiac disorder in which there is a delay in the conduction of electrical current as it passes through the atrioventricular node, bundle of His, or the bundle branches. This definition includes right and left bundle branch block; bifascicular and trifascicular block; first, second and third degree heart block; Mobitz block; Wenckebach's block and atrioventricular block.
 - (c) Heart block attracts ICD-10-AM code I44, I45.0, I45.1, I45.2, I45.3, I45.4 or I45.9.

- (d) In the application of this Statement of Principles, the definition of **"heart block"** 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 **heart block** and **death from heart block** 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 **heart block** or **death from heart block** with the circumstances of a person's relevant service is:
- (a) having a specified autoimmune disease before the clinical onset of heart block; or
 - (b) having infiltration of the myocardium due to sarcoidosis, Hodgkin's lymphoma, non-Hodgkin's lymphoma, amyloidosis or haemochromatosis at the time of the clinical onset of heart block; or
 - (c) having a primary or metastatic neoplasm involving the heart before the clinical onset of heart block; or
 - (d) having ischaemic heart disease at the time of the clinical onset of heart block; or
 - (e) having myocarditis before the clinical onset of heart block; or
 - (f) having an infection of the myocardium with an organism from the specified list before the clinical onset of heart block; or
 - (g) having infective endocarditis before the clinical onset of heart block; or
 - (h) having a specified mineral or electrolyte abnormality at the time of the clinical onset of heart block; or
 - (i) being treated with a drug or a drug from a class of drugs from the specified list, where that drug cannot be ceased or substituted, at the time of the clinical onset of heart block; or
 - (j) being treated daily with chloroquine sulphate, chloroquine phosphate or hydroxychloroquine for at least one year before the clinical onset of heart block; or
 - (k) experiencing penetrating trauma to the heart, including surgical trauma, within the two years before the clinical onset of heart block; or
 - (l) having a heart transplant before the clinical onset of heart block; or

- (m) having a bone marrow transplant within the 24 hours before the clinical onset of heart block; or
- (n) experiencing a powerful, non-penetrating blow to the chest, resulting in injury warranting medical attention, within the 60 days before the clinical onset of heart block; or
- (o) having received a cumulative equivalent dose of at least 0.5 sievert of ionising radiation to the heart within the 25 years before the clinical onset of heart block; or
- (p) undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, within the 25 years before the clinical onset of heart block; or
- (q) undertaking strenuous, high level, endurance physical activity greater than six METs, for an average of at least ten hours per week for a continuous period of at least the five years before the clinical onset of heart block; or
- (r) being envenomated by a scorpion or snake within the 24 hours before the clinical onset of heart block; or
- (s) having diabetes mellitus at the time of the clinical onset of heart block; or
- (t) having hypertension with left ventricular hypertrophy before the clinical onset of heart block; or
- (u) having obstructive sleep apnoea within the five years before the clinical onset of heart block; or
- (v) having a specified autoimmune disease before the clinical worsening of heart block; or
- (w) having infiltration of the myocardium due to sarcoidosis, Hodgkin's lymphoma, non-Hodgkin's lymphoma, amyloidosis or haemochromatosis at the time of the clinical worsening of heart block; or
- (x) having a primary or metastatic neoplasm involving the heart before the clinical worsening of heart block; or
- (y) having ischaemic heart disease at the time of the clinical worsening of heart block; or
- (z) having myocarditis before the clinical worsening of heart block; or
- (aa) having an infection of the myocardium with an organism from the specified list before the clinical worsening of heart block; or
- (bb) having infective endocarditis before the clinical worsening of heart block; or
- (cc) having a specified mineral or electrolyte abnormality at the time of the clinical worsening of heart block; or

- (dd) being treated with a drug or a drug from a class of drugs from the specified list, where that drug cannot be ceased or substituted, at the time of the clinical worsening of heart block; or
- (ee) being treated daily with chloroquine sulphate, chloroquine phosphate or hydroxychloroquine for at least one year before the clinical worsening of heart block; or
- (ff) experiencing penetrating trauma to the heart, including surgical trauma, within the two years before the clinical worsening of heart block; or
- (gg) having a heart transplant before the clinical worsening of heart block; or
- (hh) having a bone marrow transplant within the 24 hours before the clinical worsening of heart block; or
- (ii) experiencing a powerful, non-penetrating blow to the chest, resulting in injury warranting medical attention, within the 60 days before the clinical worsening of heart block; or
- (jj) having received a cumulative equivalent dose of at least 0.5 sievert of ionising radiation to the heart within the 25 years before the clinical worsening of heart block; or
- (kk) undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, within the 25 years before the clinical worsening of heart block; or
- (ll) undertaking strenuous, high level, endurance physical activity greater than six METs, for an average of at least ten hours per week for a continuous period of at least the five years before the clinical worsening of heart block; or
- (mm) being envenomated by a scorpion or snake within the 24 hours before the clinical worsening of heart block; or
- (nn) having diabetes mellitus at the time of the clinical worsening of heart block; or
- (oo) having hypertension with left ventricular hypertrophy before the clinical worsening of heart block; or
- (pp) having obstructive sleep apnoea within the five years before the clinical worsening of heart block; or
- (qq) inability to obtain appropriate clinical management for heart block.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(v) to 6(qq)** apply only to material contribution to, or aggravation of, heart block where the person's heart block 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 drug or a drug from a class of drugs from the specified list" means:

- (a) acetylcholinesterase inhibitors, including donepezil, galantamine and rivastigmine;
- (b) anthracycline chemotherapeutic agents, including doxorubicin and daunorubicin;
- (c) antimony, including trivalent and pentavalent antimony;
- (d) beta blockers;
- (e) calcium channel blockers, including diltiazem and nimodipine;
- (f) carbamazepine;
- (g) chloroquine, including chloroquine sulphate, chloroquine phosphate and hydroxychloroquine;
- (h) class 1A, class 1C or class III anti-arrhythmic agents, including procainamide, flecainide and amiodarone;
- (i) cough linctus containing squill;
- (j) dextropropoxyphene;
- (k) digitalis;
- (l) infliximab;
- (m) interferon;
- (n) lithium;
- (o) mefloquine;
- (p) paclitaxel;
- (q) quinine; or
- (r) trastuzumab;

"a specified autoimmune disease" means:

- (a) ankylosing spondylitis;
- (b) dermatomyositis;
- (c) inflammatory bowel disease;
- (d) polymyositis;
- (e) psoriatic arthritis;
- (f) reactive arthritis;
- (g) rheumatoid arthritis;
- (h) scleroderma;
- (i) Sjogren's syndrome;
- (j) systemic lupus erythematosus; or
- (k) Wegener's granulomatosis;

"a specified mineral or electrolyte abnormality" means:

- (a) hypercalcaemia;
- (b) hyperkalaemia;

- (c) hypermagnesaemia;
- (d) hypokalaemia;
- (e) hypomagnesaemia; or
- (f) hyponatraemia;

"an organism from the specified list" means:

- (a) *Borrelia burgdoferi* (Lyme disease);
- (b) *Cysticercus* species (cysticercosis);
- (c) *Echinococcus* species (hydatid disease);
- (d) *Treponema pallidum* (tertiary syphilis);
- (e) *Trypanosoma cruzi* (Chagas' disease); or
- (f) *Toxoplasma gondii* (toxoplasmosis);

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

"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), Eighth Edition, effective date of 1 July 2013, copyrighted by the Independent Hospital Pricing Authority, and having ISBN 978-1-74128-213-9;

"MET" means 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;

"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.

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 15 January 2014.

Dated this **nineteenth** day of **December** 2013

The Common Seal of the
Repatriation Medical Authority
was affixed at the direction of:)
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PROFESSOR NICHOLAS SAUNDERS AO
CHAIRPERSON