



Australian Government
Repatriation Medical Authority

Statement of Principles concerning

HYPERTENSION

No. 63 of 2013

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 hypertension No. 63 of 2013.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 35 of 2003, as amended by Instrument No. 3 of 2004 and Instrument No. 11 of 2008, concerning hypertension; and
 - (b) determines in their place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **hypertension** and **death from hypertension**.
 - (b) For the purposes of this Statement of Principles, "**hypertension**" means persistently elevated blood pressure, diagnosed by a medical practitioner and evidenced by:
 - (i) a usual clinic blood pressure reading of greater than or equal to 140 mmHg systolic or greater than or equal to 90 mmHg diastolic, or equivalent levels using ambulatory blood pressure measurement; or

- (ii) a usual home blood pressure reading of greater than or equal to 135 mmHg systolic or greater than or equal to 85 mmHg diastolic; or
- (iii) for persons aged under 18, a usual systolic or diastolic blood pressure reading of greater than or equal to the 95th centile for age and sex; or
- (iv) the regular administration of antihypertensive therapy to reduce blood pressure.

This definition excludes temporary elevations in blood pressure from conditions such as acute renal failure, neurogenic hypertension, eclampsia, pre-eclampsia, gestational hypertension or medications.

- (c) Hypertension attracts ICD-10-AM code I10 or I15.
- (d) In the application of this Statement of Principles, the definition of "**hypertension**" 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 **hypertension** and **death from hypertension** 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 **hypertension** or **death from hypertension** with the circumstances of a person's relevant service is:
 - (a) being overweight or obese at the time of the clinical onset of hypertension; or
 - (b) consuming an average of at least 300 grams of alcohol per week for at least the six months before the clinical onset of hypertension; or
 - (c) consuming at least 12 grams (200 millimoles) of salt per day on average for at least the six months before the clinical onset of hypertension; or
 - (d) having renal artery stenosis, including renal artery stenosis due to renal artery atherosclerotic disease or fibromuscular dysplasia, at the time of the clinical onset of hypertension; or
 - (e) undergoing renal or other solid organ transplantation before the clinical onset of hypertension; or

- (f) having a chronic renal disease or injury, or chronic renal failure, at the time of the clinical onset of hypertension; or
- (g) having a specified endocrine-related disorder at the time of the clinical onset of hypertension; or
- (h) being treated with a drug or a drug from a class of drugs from Specified List 1, where that drug cannot be ceased or substituted, for a continuous period of at least the one month before the clinical onset of hypertension; or
- (i) being treated with a specified antineoplastic drug, where that drug cannot be ceased or substituted, at the time of the clinical onset of hypertension; or
- (j) having glucocorticoid therapy as specified before the clinical onset of hypertension, and where the glucocorticoid therapy as specified has ceased or decreased, the last dose of the therapy was received within the one month before the clinical onset of hypertension; or
- (k) having sleep apnoea at the time of the clinical onset of hypertension; or
- (l) an inability to undertake more than a mildly strenuous level of physical activity for at least the one year before the clinical onset of hypertension; or
- (m) having extrinsic compression of the renal parenchyma from a haematoma or mass at the time of the clinical onset of hypertension; or
- (n) having an arteriovenous fistula involving the blood supply of the kidney or an arteriovenous malformation involving the blood supply of the kidney before the clinical onset of hypertension;
- (o) having a clinically significant psychiatric disorder from the specified list before the clinical onset of hypertension; or
- (p) being exposed to arsenic as specified before the clinical onset of hypertension; or
- (q) being overweight or obese at the time of the clinical worsening of hypertension; or
- (r) consuming an average of at least 300 grams of alcohol per week for at least the six months before the clinical worsening of hypertension; or
- (s) consuming at least 12 grams (200 millimoles) of salt per day on average for at least the six months before the clinical worsening of hypertension; or
- (t) having renal artery stenosis, including renal artery stenosis due to renal artery atherosclerotic disease or fibromuscular dysplasia, at the time of the clinical worsening of hypertension; or
- (u) undergoing renal or other solid organ transplantation before the clinical worsening of hypertension; or
- (v) having a chronic renal disease or injury, or chronic renal failure, at the time of the clinical worsening of hypertension; or

- (w) having a specified endocrine-related disorder at the time of the clinical worsening of hypertension; or
- (x) being treated with a drug or a drug from a class of drugs from Specified List 1, where that drug cannot be ceased or substituted, for a continuous period of at least the one month before the clinical worsening of hypertension; or
- (y) being treated with a specified antineoplastic drug, where that drug cannot be ceased or substituted, at the time of the clinical worsening of hypertension; or
- (z) having glucocorticoid therapy as specified before the clinical worsening of hypertension, and where the glucocorticoid therapy as specified has ceased or decreased, the last dose of the therapy was received within the one month before the clinical worsening of hypertension; or
- (aa) having sleep apnoea at the time of the clinical worsening of hypertension; or
- (bb) an inability to undertake more than a mildly strenuous level of physical activity for at least the one year before the clinical worsening of hypertension; or
- (cc) having extrinsic compression of the renal parenchyma from a haematoma or mass at the time of the clinical worsening of hypertension; or
- (dd) having an arteriovenous fistula involving the blood supply of the kidney or an arteriovenous malformation involving the blood supply of the kidney before the clinical worsening of hypertension;
- (ee) having a clinically significant psychiatric disorder from the specified list before the clinical worsening of hypertension; or
- (ff) being exposed to arsenic as specified before the clinical worsening of hypertension; or
- (gg) inability to obtain appropriate clinical management for hypertension.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(q) to 6(gg)** apply only to material contribution to, or aggravation of, hypertension where the person's hypertension 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 chronic renal disease or injury" means chronic irreversible renal damage from a condition such as:

- (a) analgesic nephropathy;
- (b) chronic glomerulonephritis;
- (c) chronic pyelonephritis;
- (d) diabetic nephrosclerosis;
- (e) interstitial nephritis;
- (f) obstructive nephropathy;
- (g) polycystic kidney disease;
- (h) renal ischaemia, infarction or vasculitis;
- (i) renal scarring; or
- (j) renal tuberculosis;

"a clinically significant psychiatric disorder from the specified list" means one of the following conditions, which is of sufficient severity to warrant ongoing management, which may involve regular visits (for example, at least monthly) to a psychiatrist, counsellor or general practitioner:

- (a) depressive disorder;
- (b) generalised anxiety disorder; or
- (c) posttraumatic stress disorder;

"a drug from Specified List 2" means:

- (a) amprenavir;
- (b) atazanavir;
- (c) darunavir;
- (d) fosamprenavir;
- (e) indinavir;
- (f) itraconazole;
- (g) ketoconazole;
- (h) lopinavir;
- (i) nelfinavir;
- (j) ritonavir;
- (k) saquinavir; or
- (l) tipranavir;

"a drug or a drug from a class of drugs from Specified List 1" means:

- (a) androgens;
- (b) bromocriptine mesylate;
- (c) buspirone;
- (d) carbamazepine;
- (e) clozapine;
- (f) disulfiram;
- (g) erythropoietin;
- (h) lithium;
- (i) mineralocorticoids;
- (j) monoamine oxidase inhibitors;

- (k) non-steroidal anti-inflammatory drugs, excluding aspirin;
- (l) oral antiemetics;
- (m) oral antifungals;
- (n) oral contraceptives;
- (o) paracetamol;
- (p) physostigmine;
- (q) selegiline;
- (r) sibutramine;
- (s) sympathomimetics;
- (t) thioridazine hydrochloride;
- (u) tricyclic antidepressants;
- (v) vascular endothelial growth factor inhibitors; or
- (w) venlafaxine;

"a high or very high potency topical glucocorticoid" means:

- (a) betamethasone dipropionate 0.05%;
- (b) betamethasone valerate 0.1%;
- (c) clobetasol propionate 0.05%;
- (d) diflucortolone valerate 0.1%;
- (e) fluocinolone acetonide 0.025%; or
- (f) another topical glucocorticoid of equivalent potency;

"a mildly strenuous level of physical activity" means any physical activity greater than 3 METS, where a "MET" is 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;

"a specified antineoplastic drug" means:

- (a) an alkylating agent;
- (b) cis-diamminedichloroplatinum;
- (c) cyclosporine A;
- (d) paclitaxel;
- (e) rapamycin; or
- (f) tacrolimus;

"a specified endocrine-related disorder" means:

- (a) a renin-secreting neoplasm;
- (b) acromegaly;
- (c) Cushing's syndrome;
- (d) goitre which has resulted in hypothyroidism or hyperthyroidism;
- (e) Graves' disease which has resulted in hyperthyroidism;
- (f) Hashimoto's thyroiditis which has resulted in hypothyroidism;
- (g) hyperthyroidism;
- (h) hypothyroidism;
- (i) pheochromocytoma;
- (j) primary hyperaldosteronism; or
- (k) primary or tertiary hyperparathyroidism;

"acromegaly" means a chronic disease of adults resulting from excess secretion of growth hormone after closure of the epiphyses;

"alcohol" is measured by the alcohol consumption calculations utilising the Australian Standard of ten grams of alcohol per standard alcoholic drink;

"being exposed to arsenic as specified" means:

- (a) consuming drinking water with an average inorganic arsenic concentration of at least 50 micrograms per litre for a cumulative period of at least ten years;
- (b) consuming drinking water resulting in a cumulative total inorganic arsenic exposure equivalent to having consumed drinking water containing at least 50 micrograms per litre for at least ten years; or
- (c) having clinical evidence of chronic arsenic toxicity;

"being overweight or obese" means an increase in body weight by way of fat accumulation which results in at least one of the following:

- (a) a Body Mass Index (BMI) of 25 or greater; or
- (b) a waist circumference of greater than 80 centimetres in women or greater than 94 centimetres in men.

The BMI = W/H^2 and where:

W is the person's weight in kilograms; and

H is the person's height in metres;

"chronic renal failure" means having a glomerular filtration rate of less than 60 mL/min/1.73 m² for a period of at least three months, or the presence of irreversible kidney damage;

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

"equivalent glucocorticoid therapy" means a glucocorticoid in the following table, at the doses specified in the table, or a therapeutically equivalent dose of another glucocorticoid:

Glucocorticoid	Minimum cumulative dose (milligrams)	Minimum average rate (milligrams/day)
Cortisone	1 875	62.5
Prednisone	375	12.5
Prednisolone	375	12.5
Methylprednisolone	300	10
Triamcinolone	300	10
Paramethasone	150	5
Betamethasone	60	2
Dexamethasone	50	1.67

"equivalent inhaled glucocorticoid" means:

- (a) 8 000 micrograms of triamcinolone;
- (b) 1 600 micrograms of budesonide;
- (c) 1 000 micrograms of fluticasone; or
- (d) a therapeutically equivalent dose of another inhaled glucocorticoid;

"equivalent levels using ambulatory blood pressure measurement" means:

- (a) an average 24 hour blood pressure measurement of greater than or equal to 130 mmHg systolic or greater than or equal to 80 mmHg diastolic; or
- (b) an average daytime (awake) blood pressure measurement of greater than or equal to 135 mmHg systolic or greater than or equal to 85 mmHg diastolic; or
- (c) an average nighttime (asleep) blood pressure measurement of greater than or equal to 120 mmHg systolic or greater than or equal to 70 mmHg diastolic; or

"having glucocorticoid therapy as specified" means:

- (a) taking:
 - (i) hydrocortisone, orally or by injection,
 - (A) to a cumulative dose of at least 1 500 milligrams, and
 - (B) at a minimum dose rate averaging 50 milligrams per day, or
 - (ii) equivalent glucocorticoid therapy, orally or by injection; or
- (b) inhaling at least 2 000 micrograms of beclomethasone, or equivalent inhaled glucocorticoid, daily, for at least six months; or
- (c) using an ocular or intranasal glucocorticoid at above the recommended maximum therapeutic dosage level, daily, for at least six months; or
- (d) applying a high or very high potency topical glucocorticoid to at least 20 percent of total skin surface area, daily, for at least six months; or
- (e) using a glucocorticoid concurrently with a drug from Specified List 2, daily, for at least 30 days; or
- (f) using glucocorticoid containing enemas, daily, for at least six months;

"hyperparathyroidism" means an excess level of parathyroid hormone;

"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;

"phaeochromocytoma" means a neoplasm of chromaffin tissue, usually located in the adrenal medulla or a sympathetic ganglion, which is associated with excess secretion of catecholamines;

"primary hyperaldosteronism" means a syndrome associated with excess secretion of the major adrenal mineralocorticoid, aldosterone;

"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 4 September 2013.

Dated this *twenty-sixth* day of *August* 2013

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