



**Australian Government**  
**Repatriation Medical Authority**

**Statement of Principles**  
**concerning**  
**HYPERTENSION**  
**(Balance of Probabilities)**  
**(No. 22 of 2022)**

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The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(3) of the *Veterans' Entitlements Act 1986*.

Dated 4 March 2022

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

Professor Terence Campbell AM  
Chairperson

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**1 Name**

This is the Statement of Principles concerning *hypertension (Balance of Probabilities)* (No. 22 of 2022).

**2 Commencement**

This instrument commences on 4 April 2022.

**3 Authority**

This instrument is made under subsection 196B(3) of the *Veterans' Entitlements Act 1986*.

**4 Repeal**

The Statement of Principles concerning hypertension No. 64 of 2013 (Federal Register of Legislation No. F2013L01651) made under subsection 196B(3) of the VEA is repealed.

**5 Application**

This instrument applies to a claim to which section 120B of the VEA or section 339 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 hypertension and death from hypertension.

*Meaning of hypertension*

- (2) For the purposes of this Statement of Principles, hypertension:
- (a) means persistently elevated blood pressure, where that persistent elevation in blood pressure has been 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 years, 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; and
- (b) excludes temporary elevations in blood pressure from conditions such as acute renal failure, neurogenic hypertension, eclampsia, pre-eclampsia, gestational hypertension and medications.

Note: *equivalent levels using ambulatory blood pressure measurement* is defined in the Schedule 1 - Dictionary.

- (3) While hypertension attracts ICD-10-AM code I10 or I15, in applying this Statement of Principles the meaning of hypertension 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 hypertension*

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

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

### **8 Basis for determining the factors**

On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that hypertension and death from hypertension can be related to relevant service rendered by veterans 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 exist before it can be said that, on the balance of probabilities, hypertension or death from hypertension is connected with the circumstances of a person's relevant service:

- (1) being overweight or obese for at least the 5 years before the clinical onset of hypertension;

Note: *being overweight or obese* is defined in the Schedule 1 - Dictionary.

- (2) consuming an average of at least 400 grams of alcohol per week for a continuous period of at least the 6 months before the clinical onset of hypertension;

Note: Alcohol consumption is calculated utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink.

- (3) consuming an average of at least 12 grams (200 millimoles) of salt per day for at least the 1 year before the clinical onset of hypertension;

Note: Sodium-containing medications may contribute to daily salt intake. Sodium-containing medications include the effervescent or soluble version of standard medicines, such as acetaminophen, ascorbic acid, aspirin, calcium carbonate, ibuprofen, sodium bicarbonate and zinc sulphate.

- (4) having renal artery stenosis at the time of the clinical onset of hypertension;

Note: Causes of renal artery stenosis include renal artery atherosclerotic disease and fibromuscular dysplasia.

- (5) having a solid organ, stem cell or bone marrow transplant before the clinical onset of hypertension;

- (6) having diabetes mellitus for at least the 5 years before the clinical onset of hypertension;

- (7) having chronic kidney disease at the time of the clinical onset of hypertension;

Note: *chronic kidney disease* is defined in the Schedule 1 - Dictionary.

- (8) having an endocrine disorder from the specified list of endocrine disorders at the time of the clinical onset of hypertension;

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

- (9) having sleep apnoea at the time of the clinical onset of hypertension;

- (10) having extrinsic compression of the renal parenchyma from a haematoma or mass at the time of the clinical onset of hypertension;

- (11) having:

- (a) an aneurysm of the renal artery; or
- (b) an arteriovenous fistula involving the blood supply of the kidney; or
- (c) an arteriovenous malformation involving the blood supply of the kidney;

before the clinical onset of hypertension;

- (12) having a clinically significant disorder of mental health as specified at the time of the clinical onset of hypertension;

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

- (13) taking a drug from the Specified List 1 of drugs, where that drug cannot be ceased or substituted, for a continuous period of at least the 28 days before the clinical onset of hypertension;

Note: *Specified List 1 of drugs* is defined in the Schedule 1 - Dictionary.

- (14) taking a drug from the Specified List 2 of drugs at the time of the clinical onset of hypertension;

Note: *Specified List 2 of drugs* is defined in the Schedule 1 - Dictionary.

- (15) having glucocorticoid therapy as specified before the clinical onset of hypertension, and if the glucocorticoid therapy as specified has ceased or decreased before the clinical onset of hypertension, then that onset occurred within 30 days of cessation or reduction of therapy;

Note: *glucocorticoid therapy as specified* is defined in the Schedule 1 - Dictionary.

- (16) taking medroxyprogesterone acetate or megestrol acetate for a malignant disease or human immunodeficiency virus infection:

- (a) for at least 28 days before the clinical onset of hypertension; and  
(b) if treatment has ceased before the clinical onset of hypertension, then that onset occurred within 30 days of cessation;

- (17) inability to undertake any physical activity greater than 3 METs for at least the 1 year before the clinical onset of hypertension;

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

- (18) being exposed to arsenic as specified before the clinical onset of hypertension;

Note: *being exposed to arsenic as specified* is defined in the Schedule 1 - Dictionary.

- (19) being overweight or obese for at least the 5 years before the clinical worsening of hypertension;

Note: *being overweight or obese* is defined in the Schedule 1 - Dictionary.

- (20) consuming an average of at least 400 grams of alcohol per week for a continuous period of at least the 6 months before the clinical worsening of hypertension;

Note: Alcohol consumption is calculated utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink.

- (21) consuming an average of at least 12 grams (200 millimoles) of salt per day for at least the 1 year before the clinical worsening of hypertension;

Note: Sodium-containing medications may contribute to daily salt intake. Sodium-containing medications include the effervescent or soluble version of standard medicines, such as acetaminophen, ascorbic acid, aspirin, calcium carbonate, ibuprofen, sodium bicarbonate and zinc sulphate.

- (22) having renal artery stenosis at the time of the clinical worsening of hypertension;

Note: Causes of renal artery stenosis include renal artery atherosclerotic disease and fibromuscular dysplasia.

- (23) having a solid organ, stem cell or bone marrow transplant before the clinical worsening of hypertension;
- (24) having diabetes mellitus for at least the 5 years before the clinical worsening of hypertension;
- (25) having chronic kidney disease at the time of the clinical worsening of hypertension;

Note: *chronic kidney disease* is defined in the Schedule 1 - Dictionary.

- (26) having an endocrine disorder from the specified list of endocrine disorders at the time of the clinical worsening of hypertension;

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

- (27) having sleep apnoea at the time of the clinical worsening of hypertension;
- (28) having extrinsic compression of the renal parenchyma from a haematoma or mass at the time of the clinical worsening of hypertension;
- (29) having:
  - (a) an aneurysm of the renal artery; or
  - (b) an arteriovenous fistula involving the blood supply of the kidney; or
  - (c) an arteriovenous malformation involving the blood supply of the kidney;

before the clinical worsening of hypertension;

- (30) having a clinically significant disorder of mental health as specified at the time of the clinical worsening of hypertension;

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

- (31) taking a drug from the Specified List 1 of drugs, where that drug cannot be ceased or substituted, for a continuous period of at least the 28 days before the clinical worsening of hypertension;

Note: *Specified List 1 of drugs* is defined in the Schedule 1 - Dictionary.

- (32) taking a drug from the Specified List 2 of drugs at the time of the clinical worsening of hypertension;

Note: *Specified List 2 of drugs* is defined in the Schedule 1 - Dictionary.

- (33) having glucocorticoid therapy as specified before the clinical worsening of hypertension, and if the glucocorticoid therapy as specified has ceased or decreased before the clinical worsening of

hypertension, then that worsening occurred within 30 days of cessation or reduction of therapy;

Note: *glucocorticoid therapy as specified* is defined in the Schedule 1 - Dictionary.

- (34) taking medroxyprogesterone acetate or megestrol acetate for a malignant disease or human immunodeficiency virus infection:
- (a) for at least 28 days before the clinical worsening of hypertension; and
  - (b) if treatment has ceased before the clinical worsening of hypertension, then that worsening occurred within 30 days of cessation;

- (35) inability to undertake any physical activity greater than 3 METs for at least the 1 year before the clinical worsening of hypertension;

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

- (36) being exposed to arsenic as specified before the clinical worsening of hypertension;

Note: *being exposed to arsenic as specified* is defined in the Schedule 1 - Dictionary.

- (37) inability to obtain appropriate clinical management for hypertension.

## **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(19) to 9(37) apply only to material contribution to, or aggravation of, hypertension where the person's hypertension 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(3) 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:

***acromegaly*** means a chronic disease of adults resulting from excessive production of growth hormone after closure of the epiphyses.

***albuminuria*** means an albumin to creatinine ratio of at least 3 mg/mmol.

***being exposed to arsenic as specified*** means:

- (a) consuming drinking water with an average arsenic concentration of at least 50 micrograms per litre for a cumulative period of at least 10 years; or
- (b) consuming drinking water resulting in a cumulative total arsenic exposure equivalent to having consumed drinking water containing at least 50 micrograms per litre for at least 10 years; or
- (c) having clinical evidence of chronic arsenic toxicity.

***being overweight or obese*** means:

- (a) having a Body Mass Index (BMI) of 25 or greater; or
- (b) for males, having a waist circumference exceeding 94 centimetres; or
- (c) for females, having a waist circumference exceeding 80 centimetres.

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:

- (a) having a glomerular filtration rate of less than 60 mL/min/1.73 m<sup>2</sup> for at least 3 months; or
- (b) having albuminuria for at least 3 months; or
- (c) having kidney damage, as evidenced by renal biopsy, imaging studies, urinary sediment abnormalities or other markers of abnormal renal function; or
- (d) having had a kidney transplant.

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

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

- (a) agoraphobia;
- (b) anxiety disorder;
- (c) obsessive-compulsive disorder;
- (d) panic disorder;
- (e) posttraumatic stress disorder;

- (f) social anxiety disorder; or
- (g) specific phobia.

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.

***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 (milligram) | Minimum average rate (milligram/day) |
|--------------------|-------------------------------------|--------------------------------------|
| betamethasone      | 45                                  | 1.5                                  |
| cortisone          | 1,875                               | 62.5                                 |
| dexamethasone      | 55                                  | 1.8                                  |
| methylprednisolone | 300                                 | 10                                   |
| paramethasone      | 150                                 | 5                                    |
| prednisolone       | 375                                 | 12.5                                 |
| prednisone         | 375                                 | 12.5                                 |
| triamcinolone      | 300                                 | 10                                   |

***equivalent inhaled glucocorticoid*** means:

- (a) 2,000 micrograms of beclometasone;
- (b) 1,600 micrograms of ciclesonide;
- (c) 2,500 micrograms of fluticasone propionate;
- (d) 1,000 micrograms of fluticasone furoate;
- (e) 10,000 micrograms of triamcinolone; or
- (f) 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.

***glucocorticoid therapy as specified*** means:

- (a) applying a high or very high potency topical glucocorticoid to at least 30% of total skin surface area, daily, for at least 6 months; or
- (b) inhaling at least 4,000 micrograms of budesonide, or equivalent inhaled glucocorticoid, daily, for at least 6 months; or
- (c) 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
- (d) using a glucocorticoid concurrently with a drug, daily, for at least 4 weeks, where that drug can inhibit the activity of the metabolising enzyme cytochrome P450 3A4 by at least 30% (moderate to strong inhibition); or
- (e) using a glucocorticoid concurrently with a drug from the Specified List 3 of drugs, daily, for at least 4 weeks; or
- (f) using a clobetasol containing oral preparation, daily, for at least 4 weeks; or
- (g) using glucocorticoid containing enemas, daily, for at least 6 months.

Note: *equivalent glucocorticoid therapy*, *equivalent inhaled glucocorticoid*, *high or very high potency topical glucocorticoid* and *Specified List 3 of drugs* are also defined in the Schedule 1 – Dictionary.

***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%;
- (f) methylprednisolone 0.1%;
- (g) mometasone 0.1%;
- (h) triamcinolone acetonide 0.5%; or
- (i) another topical glucocorticoid of equivalent potency.

***hyperparathyroidism*** means an excess level of parathyroid hormone.

***hypertension***—see subsection 7(2).

***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, 1.0 kcal/kg of body weight per hour, or resting metabolic rate.

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

***paraganglioma*** means a neoplasm of chromaffin tissue which is associated with excess secretion of catecholamines, and is located in an extra-adrenal sympathetic ganglion.

***phaeochromocytoma*** means a neoplasm of chromaffin tissue which is associated with excess secretion of catecholamines, and is located in the adrenal medulla.

***primary hyperaldosteronism*** means a syndrome associated with excess production of the major adrenal mineralocorticoid, aldosterone.

***relevant service*** means:

- (a) eligible war service (other than operational service) under the VEA;
- (b) defence service (other than hazardous service and British nuclear test defence service) under the VEA; or
- (c) peacetime service under the MRCA.

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

***Specified List 1 of drugs*** means:

- (a) abiraterone;
- (b) androgen receptor blockers including flutamide, bicalutamide, darolutamide and enzalutamide;
- (c) androgens including the anabolic steroids stanozolol and nandrolone;
- (d) antiretroviral therapy;
- (e) clozapine;
- (f) combined hormonal contraceptives;
- (g) cyclizine;
- (h) disulfiram;
- (i) gonadotrophin releasing hormone agonists including goserelin and leuprorelin;
- (j) gonadotrophin releasing hormone antagonists including degarelix;
- (k) leflunomide;
- (l) lithium;
- (m) metoclopramide;
- (n) mineralocorticoids including fludrocortisone;
- (o) non-steroidal anti-inflammatory drugs excluding aspirin;
- (p) olanzapine;
- (q) psychostimulants including amphetamines and methylphenidate;
- (r) sibutramine;
- (s) serotonin-norepinephrine re-uptake inhibitors including venlafaxine, duloxetine, desvenlafaxine and levomilnacipran;
- (t) sympathomimetics including mirabegron, nasal decongestants, oral decongestants and 10% phenylephrine eye drops;
- (u) systemic anti-fungal agents including itraconazole and posaconazole;
- (v) thioridazine;
- (w) tricyclic antidepressants;
- (x) tropisetron; or
- (y) tumour necrosis factor inhibitors.

Note 1: Examples of nasal decongestants include oxymetazoline, phenylephrine, tramazoline and xylometazoline.

Note 2: Examples of oral decongestants include phenylephrine and pseudoephedrine.

***Specified List 2 of drugs*** means:

- (a) alkylating agents including cyclophosphamide;
- (b) bromocriptine mesylate;
- (c) cisplatin;
- (d) cyclosporine A;
- (e) docetaxel;
- (f) erythropoietins including epoetin alfa, epoetin beta, darbepoetin alfa and methoxy polyethylene glycol-epoetin beta;
- (g) ibrutinib;
- (h) mammalian target of rapamycin inhibitors including sirolimus and everolimus;
- (i) monoamine oxidase inhibitors including phenelzine, tranylcypromine and selegiline;
- (j) physostigmine;

- (k) proteasome inhibitors including bortezomib and carfilzomib;
- (l) tacrolimus; or
- (m) vascular endothelial growth factor (VEGF) inhibitors.

Note: Vascular endothelial growth factor (VEGF) inhibitors include monoclonal antibodies, such as bevacizumab and ramucirumab; the fusion molecule aflibercept; and tyrosine kinase inhibitors, such as cabozantinib, sorafenib, sunitinib and vandetanib.

***Specified List 3 of drugs*** means:

- (a) amprenavir;
- (b) atazanavir;
- (c) boceprevir;
- (d) clarithromycin;
- (e) darunavir;
- (f) delavirdine;
- (g) erythromycin;
- (h) fosamprenavir;
- (i) indinavir;
- (j) isoniazid;
- (k) itraconazole;
- (l) ketoconazole;
- (m) lopinavir;
- (n) nelfinavir;
- (o) posaconazole;
- (p) ritonavir;
- (q) saquinavir;
- (r) telaprevir;
- (s) telithromycin;
- (t) tipranavir; or
- (u) voriconazole.

***specified list of endocrine disorders*** means:

- (a) a renin-secreting neoplasm;
- (b) acromegaly;
- (c) Cushing syndrome;
- (d) hyperparathyroidism;
- (e) hyperthyroidism, including goitre or Graves disease that has resulted in hyperthyroidism;
- (f) hypothyroidism, including Hashimoto thyroiditis that has resulted in hypothyroidism;
- (g) pheochromocytoma or paraganglioma;
- (h) primary hyperaldosteronism; or
- (i) thyrotoxicosis.

Note: *acromegaly*, *hyperparathyroidism*, *phaeochromocytoma*, *paraganglioma* and *primary hyperaldosteronism* 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.

**VEA** means the *Veterans' Entitlements Act 1986*.