# Statement of Principles

# ADRENAL INSUFFICIENCY

# No. 75 of 2009

### 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 adrenal insufficiency No. 75 of 2009.

#### Determination

2. This Statement of Principles is determined by the Repatriation Medical Authority under subsection **196B(3)** of the *Veterans' Entitlements Act 1986* (the VEA).

#### Kind of injury, disease or death

- **3.** (a) This Statement of Principles is about **adrenal insufficiency** and **death from adrenal insufficiency**.
  - (b) For the purposes of this Statement of Principles, "adrenal insufficiency" also known as Addison's disease, means an endocrine disease characterised by abnormally diminished production of adrenal cortical hormones, sufficient to produce clinical symptoms and signs and to necessitate glucocorticoid or mineralocorticoid replacement therapy. This definition includes acute and chronic adrenal insufficiency. This definition excludes all heritable forms of adrenal insufficiency.
  - (c) Adrenal insufficiency attracts ICD-10-AM code E27.1, E27.2, E27.3, E27.4, E89.6, A18.7 or A39.1.

(d) In the application of this Statement of Principles, the definition of "adrenal insufficiency" is that given at paragraph 3(b) above.

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

4. On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that **adrenal insufficiency** and **death from adrenal insufficiency** can be related to relevant service rendered by veterans 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 exist before it can be said that, on the balance of probabilities, **adrenal insufficiency** or **death from adrenal insufficiency** is connected with the circumstances of a person's relevant service is:
  - (a) having an autoimmune disorder involving the adrenal glands at the time of the clinical onset of adrenal insufficiency; or
  - (b) having infiltration of the adrenal glands due to a specified disorder at the time of the clinical onset of adrenal insufficiency; or
  - (c) being infected with the human immunodeficiency virus (HIV) before the clinical onset of adrenal insufficiency; or
  - (d) having an injury or surgery to both adrenal glands or, where there is only one remaining functional adrenal gland, injury or surgery to that one remaining functional adrenal gland, at the time of the clinical onset of adrenal insufficiency; or
  - (e) having an infection of the adrenal glands with an organism from the specified list at the time of the clinical onset of adrenal insufficiency; or
  - (f) having haemorrhage or infarction of both adrenal glands or, where there is only one remaining functional adrenal gland, haemorrhage or infarction of that one remaining functional

adrenal gland, at the time of the clinical onset of adrenal insufficiency; or

- (g) being treated with a drug from specified list 1 at the time of the clinical onset of adrenal insufficiency; or
- (h) having hypopituitarism with adrenocorticotrophic hormone deficiency, at the time of the clinical onset of adrenal insufficiency; or
- having glucocorticoid therapy as specified, before the clinical onset of adrenal insufficiency, 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 adrenal insufficiency; or
- (j) being treated with either medroxyprogesterone acetate or megestrol acetate, for either malignant disease or human immunodeficiency virus infection (HIV), for at least the one month before the clinical onset of adrenal insufficiency, and where such treatment has ceased, the last dose was received within the one month before the clinical onset of adrenal insufficiency; or
- (k) having an autoimmune disorder involving the adrenal glands at the time of the clinical worsening of adrenal insufficiency; or
- (1) having infiltration of the adrenal glands due to a specified disorder at the time of the clinical worsening of adrenal insufficiency; or
- (m) being infected with the human immunodeficiency virus (HIV) before the clinical worsening of adrenal insufficiency; or
- (n) having an injury or surgery to both adrenal glands or, where there is only one remaining functional adrenal gland, injury or surgery to that one remaining functional adrenal gland, at the time of the clinical worsening of adrenal insufficiency; or
- (o) having an infection of the adrenal glands with an organism from the specified list at the time of the clinical worsening of adrenal insufficiency; or
- (p) having haemorrhage or infarction of both adrenal glands or, where there is only one remaining functional adrenal gland, haemorrhage or infarction of that one remaining functional

adrenal gland, at the time of the clinical worsening of adrenal insufficiency; or

- (q) being treated with a drug from specified list 1 at the time of the clinical worsening of adrenal insufficiency; or
- (r) having hypopituitarism with adrenocorticotrophic hormone deficiency, at the time of the clinical worsening of adrenal insufficiency; or
- (s) having glucocorticoid therapy as specified, before the clinical worsening of adrenal insufficiency, 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 adrenal insufficiency; or
- (t) being treated with either medroxyprogesterone acetate or megestrol acetate, for either malignant disease or human immunodeficiency virus infection (HIV), for at least the one month before the clinical worsening of adrenal insufficiency, and where such treatment has ceased, the last dose was received within the one month before the clinical worsening of adrenal insufficiency; or
- (u) inability to obtain appropriate clinical management for adrenal insufficiency.

#### Factors that apply only to material contribution or aggravation

7. Paragraphs **6(k) to 6(u)** apply to material contribution to, or aggravation of, adrenal insufficiency where the person's adrenal insufficiency 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 from specified list 1" means:

- (a) aminoglutethimide;
- (b) busulfan;
- (c) etomidate;
- (d) fluconazole;
- (e) itraconazole;
- (f) ketoconazole;
- (g) miconazole;
- (h) mitotane;
- (i) rifampicin;
- (j) suramin; or
- (k) treosulfan;

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

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

#### "a specified disorder" means:

- (a) a primary or metastatic neoplasm;
- (b) amyloidosis; or
- (c) iron overload;

#### "an organism from the specified list" means:

- (a) Blastomyces dermatitidis;
- (b) *Coccidioides immitis*;
- (c) *Cryptococcosis neoformans*;
- (d) Cytomegalovirus;
- (e) Herpes simplex virus;
- (f) *Histoplasma capsulatum*;
- (g) Mycobacterium avium-intracellulare;
- (h) *Mycobacterium tuberculosis*;
- (i) *Paracoccidioides brasiliensis*;
- (j) *Pneumocystis carinii*; or
- (k) Toxoplasmosis gondii;

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

"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	1875	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) 8000 micrograms of triamcinolone;
- (b) 1600 micrograms of budesonide;
- (c) 1000 micrograms of fluticasone; or
- (d) a therapeutically equivalent dose of another inhaled glucocorticoid;

#### "having glucocorticoid therapy as specified" means:

- (a) taking:
  - (i) hydrocortisone, orally, by injection, or per rectum,
    - (A) to a cumulative dose of at least 1500 milligrams, and

- (B) at a minimum dose rate averaging 50 milligrams per day, or
- (ii) equivalent glucocorticoid therapy, orally, by injection, or per rectum; or
- (b) inhaling at least 1600 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% 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;

**"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), Sixth Edition, effective date of 1 July 2008, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 016 6;

"iron overload" means an accumulation of excess iron in tissues and organs which has been confirmed by elevated ferritin or transferrin saturation levels. Causes include haemochromatosis and blood transfusions;

"relevant service" means:

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

#### **Date of effect**

This Instrument takes effect from 11 November 2009. 10.

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Dated this

twenty-eighth

day of **October** 2009

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

> KEN DONALD **CHAIRPERSON**