



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning

HYPOTHYROIDISM

No. 29 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 hypothyroidism No. 29 of 2013.

Determination

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

Kind of injury, disease or death

3. (a) This Statement of Principles is about **hypothyroidism** and **death from hypothyroidism**.
(b) For the purposes of this Statement of Principles, "**hypothyroidism**" means an acquired functional disorder in which the thyroid gland does not provide adequate amounts of thyroid hormone to meet the requirements of peripheral tissues, with documented laboratory findings of low serum free thyroxine or triiodothyronine concentrations, sustained for a continuous period of at least three months, and with clinical symptoms or signs of inadequate thyroid function.

This definition includes primary hypothyroidism due to dysfunction of the thyroid gland, and central hypothyroidism due to decreased secretion of thyroid hormone from a functionally normal thyroid gland

due to hypothalamic or pituitary disease. This definition excludes transient hypothyroidism during recovery from non-thyroidal illness, congenital iodine-deficiency syndrome and congenital hypothyroidism, Hashimoto's thyroiditis, sick euthyroid syndrome and subclinical hypothyroidism.

Basis for determining the factors

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **hypothyroidism** and **death from hypothyroidism** 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 **hypothyroidism** or **death from hypothyroidism** with the circumstances of a person's relevant service is:
 - (a) being iodine deficient within the six months before the clinical onset of hypothyroidism; or
 - (b) having iodine excess from consuming foods, dietary supplements or medications with a high content of iodine, within the six months before the clinical onset of hypothyroidism; or
 - (c) being administered an iodine-containing radiographic contrast agent within the six months before the clinical onset of hypothyroidism; or
 - (d) being treated with an iodine-containing drug for a continuous period of at least four weeks, within the six months before the clinical onset of hypothyroidism; or
 - (e) being pregnant or in the twelve months postpartum at the time of the clinical onset of hypothyroidism; or
 - (f) having a specified form of thyroiditis within the six months before the clinical onset of hypothyroidism; or
 - (g) undergoing a course of therapeutic radiation for cancer, where the thyroid gland was in the field of radiation, before the clinical onset of hypothyroidism; or
 - (h) having received a cumulative equivalent dose of at least ten sieverts of ionising radiation to the thyroid gland, before the clinical onset of hypothyroidism; or
 - (i) receiving radioactive iodine (^{131}I) treatment before the clinical onset of hypothyroidism; or

- (j) having subtotal or total thyroidectomy, or neck surgery involving the thyroid gland, before the clinical onset of hypothyroidism; or
- (k) being treated with a drug or a drug from a class of drugs from the specified list, for a continuous period of at least six weeks, within the six months before the clinical onset of hypothyroidism; or
- (l) having a chronic infiltrative or infectious disease of the thyroid gland at the time of the clinical onset of hypothyroidism; or
- (m) having a primary or secondary malignant neoplasm of the thyroid gland at the time of the clinical onset of hypothyroidism; or
- (n) having hypopituitarism at the time of the clinical onset of hypothyroidism; or
- (o) having chronic renal disease requiring renal transplantation or dialysis at the time of the clinical onset of hypothyroidism; or
- (p) being iodine deficient within the six months before the clinical worsening of hypothyroidism; or
- (q) having iodine excess from consuming foods, dietary supplements or medications with a high content of iodine, within the six months before the clinical worsening of hypothyroidism; or
- (r) being administered an iodine-containing radiographic contrast agent within the six months before the clinical worsening of hypothyroidism; or
- (s) being treated with an iodine-containing drug for a continuous period of at least four weeks, within the six months before the clinical worsening of hypothyroidism; or
- (t) being pregnant or in the twelve months postpartum at the time of the clinical worsening of hypothyroidism; or
- (u) having a specified form of thyroiditis within the six months before the clinical worsening of hypothyroidism; or
- (v) undergoing a course of therapeutic radiation for cancer, where the thyroid gland was in the field of radiation, before the clinical worsening of hypothyroidism; or
- (w) having received a cumulative equivalent dose of at least ten sieverts of ionising radiation to the thyroid gland, before the clinical worsening of hypothyroidism; or
- (x) receiving radioactive iodine (¹³¹I) treatment before the clinical worsening of hypothyroidism; or
- (y) having subtotal or total thyroidectomy, or neck surgery involving the thyroid gland, before the clinical worsening of hypothyroidism; or
- (z) being treated with a drug or a drug from a class of drugs from the specified list, for a continuous period of at least six weeks, within the six months before the clinical worsening of hypothyroidism; or

- (aa) having a chronic infiltrative or infectious disease of the thyroid gland at the time of the clinical worsening of hypothyroidism; or
- (bb) having a primary or secondary malignant neoplasm of the thyroid gland at the time of the clinical worsening of hypothyroidism; or
- (cc) having hypopituitarism at the time of the clinical worsening of hypothyroidism; or
- (dd) having chronic renal disease requiring renal transplantation or dialysis at the time of the clinical worsening of hypothyroidism; or
- (ee) inability to obtain appropriate clinical management for hypothyroidism.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(p) to 6(ee)** apply only to material contribution to, or aggravation of, hypothyroidism where the person's hypothyroidism 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 infiltrative or infectious disease" means:

- (a) amyloidosis;
- (b) haemochromatosis;
- (c) *Pneumocystis carinii* infection;
- (d) sarcoidosis;
- (e) scleroderma;
- (f) systemic lupus erythematosus; or
- (g) tuberculosis;

"a drug or a drug from a class of drugs from the specified list" means:

- (a) aminoglutethimide;
- (b) antithyroid drugs;
- (c) carbamazepine;
- (d) didanosine;
- (e) dopamine and dopamine agonists;
- (f) ethionamide;
- (g) interferon alpha;
- (h) lithium carbonate;
- (i) oxcarbazepine;
- (j) rexinoids;

- (k) ritonavir;
- (l) somastostatin analogues;
- (m) sorafenib;
- (n) stavudine;
- (o) sulphonamides;
- (p) sulphonylurea;
- (q) sunitinib;
- (r) thalidomide; or
- (s) valproic acid;

"a specified form of thyroiditis" means:

- (a) Riedel's thyroiditis;
- (b) silent thyroiditis; or
- (c) subacute thyroiditis (de Quervain's thyroiditis, granulomatous thyroiditis or viral thyroiditis);

"being iodine deficient" means having an average intake of iodine of less than the recommended iodine intake for a continuous period of 30 days, or having a urinary iodine concentration of less than 100 micrograms per litre;

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

"having iodine excess" means having an average dietary intake of more than 1500 micrograms of iodine per day for a continuous period of three months, or having a urinary iodine excretion rate of greater than 800 micrograms per 24 hours;

"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;

