

Determination
of
Statement of Principles
concerning
OSTEOPOROSIS

ICD CODE: 733.0

Veterans' Entitlements Act 1986

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

Kind of injury, disease or death

2. (a) This Statement of Principles is about **osteoporosis** and **death from osteoporosis**.
- (b) For the purposes of this Statement of Principles, "**osteoporosis**" means a disease of the skeleton characterised by widespread reduction in bone density and microarchitectural deterioration of bone tissue with the normal ratio of mineral to organic content of bone retained, which leads to a propensity to fracture. Osteoporosis is considered to be present when:
 - (i) bone mineral density is 2.5 standard deviations below the mean bone mineral density of young adult sex-matched controls, and bone mineral density is 1.0 standard deviation below the mean bone mineral density of age-matched and sex-matched controls; or

- (ii) there is radiological evidence of a fracture together with radiological evidence of reduced bone density in the region of the fracture prior to or at the time of the fracture,

attracting ICD code 733.0.

Basis for determining the factors

- 3. On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that **osteoporosis and death from osteoporosis** can be related to relevant service rendered by veterans or members of the Forces.

Factors that must be related to service

- 4. Subject to clause 6, at least one of the factors set out in clause 5 must be related to any relevant service rendered by the person.

Factors

- 5. The factors that must exist before it can be said that, on the balance of probabilities, **osteoporosis** or **death from osteoporosis** is connected with the circumstances of a person's relevant service are:
 - (a) smoking at least 20 pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical onset of osteoporosis; or
 - (b) for men, consuming at least 220kg of alcohol (contained within alcoholic drinks) within any ten year period within the 20 years before the clinical onset of osteoporosis; or
 - (c) for women, consuming at least 110kg of alcohol (contained within alcoholic drinks) within any ten year period within the 20 years before the clinical onset of osteoporosis; or
 - (d) suffering from chronic renal failure or chronic cholestatic liver disease at the time of the clinical onset of osteoporosis; or
 - (e) being treated with a specified drug before the clinical onset of osteoporosis; or
 - (f) suffering from hypogonadism or hyperprolactinaemia, for a continuous period of at least one year within the ten years immediately before the clinical onset of osteoporosis; or

- (g) suffering from Cushing's syndrome, thyrotoxicosis (or receiving treatment for thyrotoxicosis), or hyperparathyroidism, for a continuous period of at least one year within the ten years immediately before the clinical onset of osteoporosis; or
- (h) suffering from rheumatoid arthritis at the time of the clinical onset of osteoporosis; or
- (j) suffering from multiple myeloma, systemic mastocytosis or disseminated malignancy at the time of the clinical onset of osteoporosis; or
- (k) undergoing a renal, liver, or cardiac transplant or bone marrow transplantation before the clinical onset of osteoporosis; or
- (m) suffering from a disease causing gastrointestinal malabsorption from the specified list, for a continuous period of at least one year within the ten years immediately before the clinical onset of osteoporosis; or
- (n) suffering from anorexia nervosa at the time of the clinical onset of osteoporosis; or
- (o) being immobile for a continuous period of at least 120 days within the year immediately before the clinical onset of osteoporosis; or
- (p) suffering from Crohn's disease or ulcerative colitis before the clinical onset of osteoporosis; or
- (q) smoking at least 20 pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical worsening of osteoporosis; or
- (r) for men, consuming at least 220kg of alcohol (contained within alcoholic drinks) within any ten year period within the 20 years before the clinical worsening of osteoporosis; or
- (s) for women, consuming at least 110kg of alcohol (contained within alcoholic drinks) within any ten year period within the 20 years before the clinical worsening of osteoporosis; or
- (t) suffering from chronic renal failure or chronic cholestatic liver disease at the time of the clinical worsening of osteoporosis; or
- (u) being treated with a specified drug before the clinical worsening of osteoporosis; or

- (v) suffering from hypogonadism or hyperprolactinaemia, for a continuous period of at least one year within the ten years immediately before the clinical worsening of osteoporosis; or
- (w) suffering from Cushing's syndrome, thyrotoxicosis (or treatment for thyrotoxicosis), or hyperparathyroidism, for a continuous period of at least one year within the ten years immediately before the clinical worsening of osteoporosis; or
- (x) suffering from rheumatoid arthritis at the time of the clinical worsening of osteoporosis; or
- (y) suffering from multiple myeloma, systemic mastocytosis or disseminated malignancy at the time of the clinical worsening of osteoporosis; or
- (z) undergoing a renal, liver, or cardiac transplant or bone marrow transplantation before the clinical worsening of osteoporosis; or
- (za) suffering from a disease causing gastrointestinal malabsorption from the specified list, for a continuous period of at least one year within the ten years immediately before the clinical worsening of osteoporosis; or
- (zb) suffering from anorexia nervosa at the time of the clinical worsening of osteoporosis; or
- (zc) being immobile for a continuous period of at least 120 days within the year immediately before the clinical worsening of osteoporosis; or
- (zd) suffering from Crohn's disease or ulcerative colitis before the clinical worsening of osteoporosis; or
- (ze) inability to obtain appropriate clinical management for osteoporosis.

Factors that apply only to material contribution or aggravation

6. Paragraphs 5(q) to 5(ze) apply only to material contribution to, or aggravation of, osteoporosis where the person's osteoporosis was suffered or contracted before or during (but not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e) or 70(5)(d) of the Act refers.

Other definitions

7. For the purposes of this Statement of Principles:

“alcohol” consumption is measured using the Australian Standard of 10 grams absolute alcohol per standard alcoholic drink;

“anorexia nervosa” means a mental disorder occurring predominantly in females, having onset usually in adolescence, and characterised by refusal to maintain a normal minimal body weight; intense fear of becoming obese that is undiminished by weight loss; disturbance of body image resulting in a feeling of being fat even when extremely emaciated; and amenorrhoea (in females), attracting ICD code 307.1;

“being immobile” means continuous restriction to a lying or sitting position; examples may include prolonged hospitalisation with strict bed rest, quadriplegia, or prolonged spinal traction;

“being treated with a specified drug” means being treated with any of the drugs (including where those drugs are contained in preparations) listed in the following Table of Drugs, under the circumstances as specified in the Table, with regard to the mode of administration, dose level, minimum duration of treatment, and temporality (time relationship between the administration of the drug and the onset of the disease):

Table of Drugs

| Drug or Group of Drugs | Mode * | Dose | Minimum Duration of Treatment | Temporality |
|---|---------------|--------------------------------|--------------------------------------|--------------------------------------|
| glucocorticoids | IV, IM, O | any daily or second daily dose | 6 months | within two years immediately before |
| glucocorticoids (beclomethasone depropionate or budesonide) | Inhal. | > 1500µg/day or pharm. equiv. | 12 months | within two years immediately before |
| corticotrophins | NS | at least weekly | 12 months | within two years immediately before |
| heparin | IV, SC | at least 20,000 units/day | 3 months | within 12 months immediately before |
| thyroid hormone/ thyroxine | O | any | 6 months | within two years immediately before. |

* Abbreviations: IV = intravenous; IM = intramuscular; SC = subcutaneous; O = oral; Inhal = inhalation; NS = not specified.

“chronic renal failure” means renal injury of a sustained nature that is not reversible and leads to destruction of nephron mass and is associated with a demonstrable functional abnormality of the kidney which raises the level of creatinine, attracting ICD code 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93 or 585;

“chronic cholestatic liver disease” means any chronic intrahepatic or extrahepatic disorder which inhibits bile secretion into the gastrointestinal tract, allowing accumulation of biliary substances particularly bile acids in the plasma and which is associated with conjugated hyperbilirubinemia and resultant jaundice;

“Crohn's disease” means a type of inflammatory bowel disease affecting any part of the gastrointestinal tract, which is characterised by chronic inflammation which may extend through all layers of the gastrointestinal tract wall, and is also known as regional enteritis, attracting ICD code 555;

“Cushing's syndrome” means a systemic condition due to the excessive production of glucocorticoids in the adrenal gland or as a result of therapy with glucocorticoids, attracting ICD code 255.0;

“disseminated malignancy” means the documented presence of multiple secondary deposits of neoplastic cells at sites distant from the primary malignancy (examples being disseminated prostate cancer and disseminated breast cancer); or in the case of leukaemias and lymphomas,

the documented presence of such neoplastic cells at multiple sites in the body;

“gastrointestinal malabsorption” means a condition which may be caused by a range of diseases, (for example those included in the specified list below) all of which are characterised by faulty absorption from the intestine of essential food stuffs, such as fat, vitamins and mineral salts, attracting ICD code 579. Symptoms and signs reflect the decreased absorption, and include generalised malnutrition and weight loss, diarrhoea, glossitis, cheilosis, stomatitis, abdominal pain, amenorrhoea, diminished libido, anaemia, haemorrhagic phenomena, bone pain, tetany, paresthesias, weakness, peripheral neuropathy, and a range of cutaneous disorders including eczema.

Specified list of disorders causing gastrointestinal malabsorption:

- (i) total or partial gastrectomy; or
- (ii) short loop syndromes; or
- (iii) alactasia; or
- (iv) pancreatic insufficiency (as seen in cystic fibrosis or chronic pancreatitis); or
- (v) coeliac disease;

“hyperparathyroidism” means the production and circulation of excessive amounts of parathyroid hormone, and attracting ICD code 252.0, 259.3 or 588.8. This may be due to primary hypersecretion from the parathyroid gland, secondary to renal disease or from an ectopic site; the excessive concentration of circulating hormone usually leading to hypercalcaemia and hypophosphatemia;

“hyperprolactinaemia” means increased levels of prolactin in the blood, which, in women, is associated with amenorrhoea and galactorrhea, attracting ICD code 253.1;

“hypogonadism” means a condition resulting from or characterised by abnormally decreased gonadal function. This condition may be primary (associated with retardation of growth and sexual development) or secondary and may be the result of disease, trauma, surgical excision or chemical castration techniques, attracting ICD code 253.4, 256.2, 256.3 256.4, 257.1, or 257.2;

“ICD code” means a number assigned to a particular kind of injury or disease in the Australian Version of The International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM), effective date of 1 July 1996, copyrighted by the National Coding Centre, Faculty of

Health Sciences, University of Sydney, NSW, and having ISBN 0 642 24447 2;

“multiple myeloma” means a disseminated plasma cell neoplasm of the osseous system, attracting ICD code 203.0, associated with widespread lesions of the skeletal system, hyperglobulinaemia, Bence-Jones proteinuria and normochromic, normocytic anaemia, and also includes the conditions known as myelomatosis and plasma cell myeloma;

“pack-year” means 7 300 cigarettes, or 1 460 cigars, or 7.3 kg of pipe tobacco;

“relevant service” means:

- (a) operational service; or
- (b) peacekeeping service; or
- (c) hazardous service;

“rheumatoid arthritis” means an adult chronic multisystem disease primarily of the joints, characterised by inflammatory synovitis, symmetrical joint involvement, muscle atrophy, and bone rarefaction, attracting ICD code 714.0-714.3 or 714.81;

“systemic mastocytosis” means a mast cell hyperplasia that in most instances is indolent and nonneoplastic. The hyperplasia is generally recognised in bone marrow and such peripheral sites as skin, gastrointestinal mucosa, liver, and spleen. Mastocytosis occurs at any age and has a slight preponderance in males, attracting ICD code 202.6;

“thyrotoxicosis” means a condition caused by excessive quantities of thyroid hormones, whether the excess results from overproduction by the thyroid gland (as in Graves' disease), originates outside the thyroid, or is due to loss of storage function and leakage from the gland, attracting ICD code 242;

“ulcerative colitis” means a chronic inflammation of the gastrointestinal tract, which primarily affects the large bowel and is usually limited to the mucosa and submucosa, but excluding idiopathic proctitis alone and pseudopolyposis of the colon, attracting ICD code of 556.

Dated this **Ninth** day of **September**
1997

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

KEN DONALD
CHAIRMAN