

Statement of Principles
concerning

RENAL STONE DISEASE

No. 65 of 2010

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 renal stone disease No. 65 of 2010.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 178 of 1995 concerning nephrolithiasis and Instrument No. 180 of 1995 concerning ureteric calculus; and
 - (b) determines in their place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **renal stone disease** and **death from renal stone disease**.
 - (b) For the purposes of this Statement of Principles, "**renal stone disease**" means the presence of one or more calculi in the kidney (nephrolithiasis) or ureter (ureterolithiasis), predominantly composed of calcium salts (calcium oxalate or calcium phosphate), uric acid, cystine or struvite (magnesium, ammonium and phosphate), which result from crystallisation of mineral salts in the urine. This definition excludes primary stones of the urinary bladder. Renal stone disease is also known as urolithiasis.

- (c) Renal stone disease attracts ICD-10-AM code N20.0, N20.1 or N20.2.
- (d) In the application of this Statement of Principles, the definition of "**renal stone disease**" 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 **renal stone disease** and **death from renal stone disease** 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 **renal stone disease** or **death from renal stone disease** with the circumstances of a person's relevant service is:
 - (a) being a prisoner of war of the Japanese before the clinical onset of renal stone disease; or
 - (b) having primary hyperparathyroidism at the time of the clinical onset of renal stone disease; or
 - (c) having hyperthyroidism at the time of the clinical onset of renal stone disease; or
 - (d) having a malignant neoplasm, other than non-metastatic non-melanotic malignant neoplasm of the skin, at the time of the clinical onset of renal stone disease; or
 - (e) having gout at the time of the clinical onset of renal stone disease; or
 - (f) having a myeloproliferative disorder at the time of the clinical onset of renal stone disease; or
 - (g) having haemolytic anaemia at the time of the clinical onset of renal stone disease; or

- (h) having chemotherapy-induced tumour lysis at the time of the clinical onset of renal stone disease; or
- (i) having diarrhoea for a continuous period of at least four weeks within the three months before the clinical onset of renal stone disease; or
- (j) having hypokalaemia for a continuous period of at least the four weeks before the clinical onset of renal stone disease; or
- (k) for magnesium ammonium phosphate stones (staghorn calculi) only, having a chronic urinary tract infection with urease-producing bacteria within the five years before the clinical onset of renal stone disease; or
- (l) having an acquired narrowing or acquired obstruction of the affected ureter or the affected renal calyx, at the time of the clinical onset of renal stone disease; or
- (m) having inflammatory bowel disease involving the small intestine, at the time of the clinical onset of renal stone disease; or
- (n) having chronic pancreatitis at the time of the clinical onset of renal stone disease; or
- (o) having biliary cirrhosis at the time of the clinical onset of renal stone disease; or
- (p) having a partial or complete ileal resection or ileal bypass surgery, within the two years before the clinical onset of renal stone disease; or
- (q) having Roux-en-Y gastric bypass surgery within the two years before the clinical onset of renal stone disease; or
- (r) having type 2 diabetes mellitus at the time of the clinical onset of renal stone disease; or
- (s) having sarcoidosis at the time of the clinical onset of renal stone disease; or
- (t) having Sjogren's syndrome at the time of the clinical onset of renal stone disease; or

- (u) being treated with a drug or a drug from a class of drugs from the specified list, within the six weeks before the clinical onset of renal stone disease; or
- (v) having undergone a urinary diversion procedure before the clinical onset of renal stone disease; or
- (w) having neurogenic bladder dysfunction at the time of the clinical onset of renal stone disease; or
- (x) having paraplegia or quadriplegia at the time of the clinical onset of renal stone disease; or
- (y) being bed-bound for a continuous period of at least 45 days within the three months before the clinical onset of renal stone disease; or
- (z) having a low dietary intake of calcium (<400 milligrams per day) for a continuous period of at least the three months before the clinical onset of renal stone disease; or
- (aa) being obese at the time of the clinical onset of renal stone disease; or
- (bb) having anorexia nervosa at the time of the clinical onset of renal stone disease; or
- (cc) being exposed to a heat-stressed, dehydrating environment, and having inadequate fluid intake, for a continuous period of at least four weeks within the three months before the clinical onset of renal stone disease; or
- (dd) having a renal transplantation before the clinical onset of renal stone disease; or
- (ee) ingesting ethylene glycol or diethylene glycol, within the seven days before the clinical onset of renal stone disease; or
- (ff) inhaling cadmium fumes from the smelting and refining of metals, from soldering or welding metal that contains cadmium, or working in plants that make cadmium products:
 - (i) (a) for at least four hours per day on more days than not for a cumulative period of at least five years before the clinical onset of renal stone disease; or

- (b) for a cumulative period of at least 3500 hours before the clinical onset of renal stone disease; and
- (ii) the last inhalation of cadmium fumes occurred within the ten years before the clinical onset of renal stone disease; or
- (gg) experiencing spaceflight for a continuous period of at least seven days within the one month before the clinical onset of renal stone disease; or
- (hh) inability to obtain appropriate clinical management for renal stone disease.

Factors that apply only to material contribution or aggravation

7. Paragraph **6(hh)** applies only to material contribution to, or aggravation of, renal stone disease where the person's renal stone disease 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 or a drug from a class of drugs from the specified list" means:

- (a) acetazolamide;
- (b) adrenocorticotrophic hormone;
- (c) allopurinol;
- (d) aluminium derivatives;
- (e) amino-4-quinolones;
- (f) aminopenicillins;
- (g) amlodipine;
- (h) ammonium chloride;
- (i) atorvastatin;
- (j) carbonate-or bicarbonate-containing drugs;
- (k) cephalosporins;
- (l) dichlorphenamide;
- (m) diclofenamide;

- (n) dorzolamide;
- (o) efavirenz;
- (p) ephedrine;
- (q) fenofibrate;
- (r) furanes;
- (s) furosemide;
- (t) guaifenesin;
- (u) indinavir;
- (v) losartan;
- (w) methazolamide;
- (x) methotrexate;
- (y) naftidrofuryl oxalate;
- (z) nelfinavir;
- (aa) nimesulide;
- (bb) phenytoin;
- (cc) phosphoric acid;
- (dd) piridoxilate;
- (ee) primidone;
- (ff) pteridines;
- (gg) pyridines;
- (hh) quinolones;
- (ii) silicium derivatives;
- (jj) sulphasalazine;
- (kk) sulphonamides;
- (ll) systemic corticosteroids;
- (mm) topiramate;
- (nn) uricosuric drugs;
- (oo) vitamin D supplements; or
- (pp) zonisamide;

"a urinary diversion procedure" means a surgical procedure, such as ureterosigmoidostomy or ileal conduit diversion, in which the ureter is transposed from its usual position;

"bed-bound" means confined to bed or to a recumbent position for an average of at least 20 hours per day;

"being obese" means an increase in body weight by way of fat accumulation which results in a Body Mass Index (BMI) of thirty or greater.

The $BMI = W/H^2$ and where:

W is the person's weight in kilograms and

H is the person's height in metres;

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

"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), Seventh Edition, effective date of 1 July 2010, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 154 5;

"inadequate fluid intake" means less than 1275 millilitres per day fluid intake or fluid intake that is inadequate to assure a consistent urine volume of at least one litre 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) warlike service under the MRCA; or
- (e) 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;

"urease-producing bacteria" means *Proteus* spp, *Haemophilus* spp, *Klebsiella* spp, *Ureaplasma urealyticum* or any other bacteria which possess the enzyme urease that degrades urea to ammonia and carbon dioxide.

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 1 September 2010.

Dated this *eighteenth* day of *August* 2010

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

KEN DONALD
CHAIRPERSON