REVOKED

Statement of Principles

concerning

HYPERTENSION

ICD CODES: 401-405

Veterans' Entitlements Act 1986 subsection 196B(2)

- 1. Being of the view that there is sound medical-scientific evidence that indicates that **hypertension** and **death from hypertension** can be related to operational service rendered by veterans, peacekeeping service rendered by members of Peacekeeping forces and hazardous service rendered by members of the Forces, the Repatriation Medical Authority hereby determines, under subsection 196B(2) of the *Veterans' Entitlements Act 1986*, that the factors that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting **hypertension** or **death from hypertension** with the circumstances of that service, are:
 - (a) suffering from persistent obesity before and continuing at least until the accurate determination of hypertension; or
 - (b) suffering from psychoactive substance abuse involving daily consumption of alcohol before and continuing at least until the accurate determination of hypertension; or
 - (c) ingesting an additional 12 grams per day of salt for a continuous period of at least 6 months immediately before the accurate determination of hypertension; or
 - (d) suffering from renal artery stenosis before the accurate determination of hypertension; or

- (e) suffering from chronic renal failure before the accurate determination of hypertension; or
- (f) suffering from pyelonephritis before the accurate determination of hypertension; or
- (g) suffering from glomerulonephritis before the accurate determination of hypertension; or
- (h) suffering from diabetic nephrosclerosis before the accurate determination of hypertension; or
- (j) suffering from obstructive nephropathy before the accurate determination of hypertension; or
- (k) suffering from analgesic nephropathy before the accurate determination of hypertension; or
- (m) suffering from a collagen vascular disease before the accurate determination of hypertension; or
- (n) suffering from Cushing's syndrome before the accurate determination of hypertension; or
- (o) suffering from primary aldosteronism before the accurate determination of hypertension; or
- (p) suffering from a renin-secreting neoplasm before the accurate determination of hypertension; or
- (q) suffering from hypertension secondary to a direct, blunt, or penetrating injury to the kidney or renal artery causing scarring to that kidney or artery; or
- (r) suffering from renal tuberculosis before the accurate determination of hypertension; or
- (s) suffering from polycystic kidney disease before the accurate determination of hypertension; or
- (t) suffering from pheochromocytoma before the accurate determination of hypertension; or
- (u) suffering from hypertension secondary to medication used in the clinical management for another condition; or
- (v) suffering from persistent obesity which developed before and continued at least until the clinical worsening of hypertension; or

- (w) suffering from psychoactive substance abuse involving daily consumption of alcohol that commenced before and continued at least until the clinical worsening of hypertension; or
- (x) inability to obtain appropriate clinical management for hypertension.
- 2. Subject to clause 3 (below) at least one of the factors set out in paragraphs **1(a) to 1(x)** must be related to any service rendered by a person.
- 3. The factors set out in paragraphs $\mathbf{1}(\mathbf{v})$ to $\mathbf{1}(\mathbf{x})$ apply only where:
 - (a) the person's **hypertension** is accurately determined prior to a period, or part of a period, of service to which the factor is related; and
 - (b) the relationship suggested between the **hypertension** and the particular service of a person is a relationship set out in paragraph 8(1)(e), 9(1)(e), 70(5)(d), or 70(5A)(d) of the Act.
- 4. For the purpose of this Statement of Principles:

"accurate determination of hypertension" generally means the accurate measurement of blood pressure on a number of occasions. As stated in *The Management of Hypertension: a consensus statement*The Medical Journal of Australia Vol 160 Supplement, 21 March 1994, to obtain accurate measurement of blood pressure, the conditions for measurement should be standardised as much as possible before readings by ensuring the following:

- a mercury sphygmomanometer should be used in the diagnosis of hypertension;
- patients should be relaxed and seated. Additional information may be provided by supine and standing readings. This is particularly important in the elderly and diabetics, as both groups are prone to postural hypotension;
- the bare arms should be supported and positioned at heart level;
- a cuff of suitable size should be applied evenly to the exposed upper arm, with the bladder of the cuff positioned over the brachial artery. the bladder length should be at least 80%, and the width at least 40%, of the circumference of the upper arm;
- the cuff should be snugly wrapped around the upper arm and inflated to 30 mmHg above the pressure at which the radial pulse disappears;
- in older patients, if the radial artery remains palpable when the cuff pressure exceeds the
 expected systolic pressure, the cuff reading may be inappropriately high (pseudohypertension);
- the cuff should be deflated at a rate no greater than 2 mmHg/beat (2 mmHg/sec);
- if initial readings are high, several further readings should be taken after five minutes of quiet rest;
- on each occasion two or more readings should be averaged. If the first two readings differ by more than 4 mmHg systolic or 4 mmHg diastolic, further readings should be taken. For the diastolic reading, the disappearance of sound (phase V Korotkoff) should be used. Muffling of sound (phase IV Korotkoff) should only be used if sound continues towards zero.

At the same time heart rate and rhythm should be measured and recorded. When the cardiac rhythm is irregular, eg. atrial fibrillation, the systolic pressure should be recorded as an average

of a series of phase 1 readings, and diastolic pressures should be recorded as an average of phases IV and V.

- For adequate standardisation, caffeine ingestion and smoking should be avoided for two hours before blood pressure measurement;
- "analgesic nephropathy" means a form of renal impairment characterised by tubulointerstitial damage and papillary necrosis in individuals with a history of ingestion of large quantities of analgesic drugs containing phenecetin, attracting ICD code 583.89;
- "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 585;
- "clinical worsening of hypertension" means an accurate determination of a persisting increase in blood pressure where:
- (a) the systolic reading is greater than or equal to 140 mmHg and/ or where the diastolic reading is greater than or equal to 90 mmHg; or
- (b) where the treatment for hypertension is changed to deal with the clinical worsening;
- "collagen vascular disease" means a group of autoimmune disorders with widespread immunologic and inflammatory alterations of connective tissue attracting an ICD code in the range 446.0 to 446.7 or 710;
- "Cushing's Syndrome" means a condition due to hyperadrenocorticism resulting from neoplasms of the adrenal cortex or the anterior lobe of the pituitary, or from prolonged excessive intake of glucocorticoids for therapeutic purposes, attracting ICD code 255.0;
- "diabetic nephrosclerosis" means the lesions occurring in the kidneys of patients with diabetes mellitus, including glomerosclerosis (diffuse or nodular), arterionephrosclerosis, chronic interstitial nephritis, papillary necrosis, and various tubular lesions, attracting ICD code 250.4 or an ICD code in the range 581.1 to 583.9;
- **'DSM-IV"** means the fourth edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*;
- "glomerulonephritis" means a type of nephritis characterised by inflammation of the capillary loops in the glomeruli of the kidney, attracting an ICD code in the range 580 to 583;

"hypertension" means:

- (a) a usual blood pressure reading where the systolic reading is greater than or equal to 140 mmHg and/ or where the diastolic reading is greater than or equal to 90 mmHg; or
- (b) where treatment for hypertension is being administered,

attracting an ICD code in the range 401 to 405;

"ICD code" means a number assigned to a particular kind of injury or disease in the tenth edition of the *International Classification of Diseases* 9th Revision, effective date of 1 October 1993, copyrighted by the US Commission on Professional and Hospital Activities, and having the Library of Congress number 77-94472;

"obesity" means having a Body Mass Index (BMI) greater than 30, where:

BMI = W. H²

and where:

W is the person's weight in kilograms; and

H is the person's height in metres.

(for example, a person would be obese if the person weighed 120 kg and was 1.8 metres in height: $BMI = 120 \div (1.8 \times 1.8) = 37.04$)

Note: the sources for this definition are:

NH & MRC report of the 98th session, Canberra AGPS 1984; NH & MRC report of the 100th session, Canberra AGPS 1985; NHF Australia, Risk Factor Prevalence Study Survey 3, Canberra NHF & AIH, 1990.

"obstructive nephropathy" means those nephropathies caused by obstruction of the upper or lower urinary tract;

"pheochromocytoma" means a disease characterised by paroxysmal or sustained hypertension due to a tumour located in either adrenal gland or anywhere along the sympathetic nervous chain, or in aberrant locations including the thorax, bladder or brain, attracting ICD morphology codes 8700/1 or 8700/3;

"polycystic kidney disease" means the adult form of polycystic kidney disease being an hereditary tubular disorder of cortex and medulla of the kidneys whereby these parts of the kidneys are filled with thin walled, spherical cysts which enlarge these organs and impair their function, attracting ICD code 753.1.

"primary aldosteronism" means a syndrome associated with hypersecretion of the major adrenal mineralocortoid, aldosterone, attracting ICD code 255.1;

"psychoactive substance abuse or dependence" means a maladaptive pattern of use, as derived from DSM-IV, attracting ICD code 303 or 304, that is indicated by either:

- (a) continued use of the substance despite knowledge of having a persistent or recurrent social, occupational, psychological or physical problem that is caused or exacerbated by use of the substance; or
- (b) recurrent use of the substance when use is physically hazardous (for example, driving while intoxicated);

"pyelonephritis" means inflammation due to bacterial infection of the kidney and its pelvis beginning in the interstitium and extending to involve the tubules, glomeruli and blood vessels, attracting ICD code 590.0, 590.1 or 590.80;

"renal artery stenosis" means a narrowing or stricture of the main renal artery and/or its major branches, attracting ICD code 440.1;

"renal tuberculosis" means an infectious disease of the kidney caused by species of mycobacterium and characterised by the formation of tubercles and caseous necrosis in the tissues, attracting ICD code 016.0;

"renin-secreting neoplasm" means a neoplasm that secretes a proteolytic enzyme synthesised, stored and secreted by the juxtaglomerular cells of the kidney.

Dated this	day of	1995
The Common Seal of the)	
Repatriation Medical Authority)	
was affixed to this instrument)	
in the presence of:)	

KEN DONALD CHAIRMAN