

Statement of Principles
concerning

EPILEPTIC SEIZURE

No. 47 of 2005

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 epileptic seizure No. 47 of 2005.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 1 of 2005; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **epileptic seizure** and **death from epileptic seizure**.
 - (b) For the purposes of this Statement of Principles, "**epileptic seizure**" means a single paroxysmal clinical event due to abnormal, excessive and uncontrolled hypersynchronous electrical discharge from an aggregate of neurons in the brain that interferes with normal brain function, and which consists of sudden and transitory abnormal phenomena that may include alterations of consciousness, motor, sensory, autonomic, or psychic events, perceived by the subject or an observer. One or

more epileptic seizures occurring in a twenty-four hour period, or an episode of status epilepticus, is considered a single event.

- (c) This definition excludes:
 - (i) psychogenic seizure;
 - (ii) hysterical seizure;
 - (iii) neonatal seizure;
 - (iv) infantile seizure;
 - (v) febrile seizure;
 - (vi) myoclonic convulsions associated with G-force induced loss of consciousness (G-LOC); and
 - (vii) convulsions associated with syncope, vertigo, migraine or sleep and movement disorders.

Basis for determining the factors

- 4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **epileptic seizure** and **death from epileptic seizure** 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 **epileptic seizure** or **death from epileptic seizure** with the circumstances of a person's relevant service is:
 - (a) having cerebral trauma within the twenty years before the clinical onset of an epileptic seizure; or
 - (b) having a mild head injury within the six months before the clinical onset of an epileptic seizure; or
 - (c) having a cerebrovascular accident or subarachnoid haemorrhage within the twenty years before the clinical onset of an epileptic seizure; or
 - (d) having a hypoxic cerebral insult within the forty-eight hours before the clinical onset of an epileptic seizure; or

- (e) having central nervous system systemic lupus erythematosus at the time of the clinical onset of an epileptic seizure; or
- (f) having carbon monoxide poisoning within the forty-eight hours before the clinical onset of an epileptic seizure; or
- (g) having an intracranial space-occupying lesion within the twenty years before the clinical onset of an epileptic seizure; or
- (h) having an infection of the brain or meninges within the ten years before the clinical onset of an epileptic seizure; or
- (i) being infected with human immunodeficiency virus (HIV) at the time of the clinical onset of an epileptic seizure; or
- (j) using a drug from Specified List 1 at the time of the clinical onset of an epileptic seizure; or
- (k) having Alzheimer's disease at the time of the clinical onset of an epileptic seizure; or
- (l) having Cruetzfeldt-Jakob disease at the time of the clinical onset of an epileptic seizure; or
- (m) being exposed to a stimulus, which has been reported in a peer-reviewed medical publication to have triggered an epileptic seizure in people with reflex epilepsy, at the time of the clinical onset of an epileptic seizure; or
- (n) having alcohol dependence or alcohol abuse, or alcohol withdrawal, at the time of the clinical onset of an epileptic seizure; or
- (o) having an electrolyte imbalance at the time of the clinical onset of an epileptic seizure; or
- (p) having hypoglycaemia at the time of the clinical onset of an epileptic seizure; or
- (q) having non-ketotic hyperglycaemia at the time of the clinical onset of an epileptic seizure; or
- (r) having acute liver failure at the time of the clinical onset of an epileptic seizure; or

- (s) having acute or chronic renal failure at the time of the clinical onset of an epileptic seizure; or
- (t) undergoing dialysis treatment at the time of the clinical onset of an epileptic seizure; or
- (u) undergoing liver or kidney transplantation within the two weeks before the clinical onset of an epileptic seizure; or
- (v) being treated with a drug belonging to a class of drug from Specified List 2 at the time of the clinical onset of an epileptic seizure; or
- (w) reducing the intake of, or withdrawing from, a chronically administered sedative drug within the two weeks before the clinical onset of an epileptic seizure; or
- (x) having malignant hypertension, hypertensive encephalopathy or eclampsia within the four weeks before the clinical onset of an epileptic seizure; or
- (y) having multiple sclerosis at the time of the clinical onset of an epileptic seizure; or
- (z) being exposed to partial pressures of oxygen above 1.2 atmospheres absolute (120 kPa) from:
 - (i) the use of closed or semi-closed rebreathing apparatus; or
 - (ii) saturation diving; or
 - (iii) receiving hyperbaric oxygen therapy; or
 - (iv) breathing oxygen enriched air during diving,within the twenty-four hours before the clinical onset of an epileptic seizure; or
- (za) being exposed to an abrupt reduction in the pressure of the air surrounding the person, resulting in the development of pulmonary barotrauma, arterial gas embolism or decompression illness, within the twenty-four hours before the clinical onset of an epileptic seizure; or
- (zb) ingesting, inhaling or absorbing an organochlorine insecticide within the forty-eight hours before the clinical onset of an epileptic seizure; or

- (zc) being stung by a scorpion within the twenty-four hours before the clinical onset of an epileptic seizure; or
- (zd) having not slept within the forty-eight hours after the end of the last period of four hours or more of uninterrupted sleep, at the time of the clinical onset of an epileptic seizure; or
- (ze) inability to obtain appropriate clinical management for an epileptic seizure.

Factors that apply only to material contribution or aggravation

7. Paragraph 6(ze) applies only to material contribution to, or aggravation of, epileptic seizure where the person's epileptic seizure 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 class of drug from Specified List 2” means:

- (a) a smooth muscle relaxant (including theophylline and its derivatives, anti-cholinergic drugs);
- (b) an anaesthetic (including ether, halothane, ketamine, methohexitone, althesin, cocaine, lignocaine, ropivacaine, tetracaine);
- (c) an analgesic (including pethidine, dextropropoxyphene, meperidine, salicylate in overdose, tramadol, fentanyl opioids);
- (d) an anti-arrhythmic (including disopyramide);
- (e) an antibiotic (including penicillins, cephalosporins, carbapenems, quinolones, isoniazid);
- (f) an antimalarial (including chloroquine, primaquine);
- (g) an anticonvulsant in overdose (including phenobarbitone, phenytoin, ethosuximide, carbamazepine, vigabatrin);
- (h) an antipsychotic (including chlorpromazine, lithium, clozapine, olanzapine, quetiapine);
- (i) an antidepressant (including imipramine, amitriptyline, clomipramine, maprotiline, mianserin, maprotiline, fluoxetine,

- venlafaxine, trimipramine, paroxetine, clozapine, bupropion, fluvoxamine, citalopram);
- (j) radiographic contrast media (including meglumine carbamate, meglumine iothalamate, metrizamide, iopamidol);
 - (k) an immunomodulatory agent (including cyclosporin, interferon);
 - (l) an antineoplastic agent (including etoposide, ifosfamide, cisplatinum, chlorambucil, busulfan);
 - (m) bismuth in overdose;
 - (n) an antihistamine; or
 - (o) D-penicillamine;

“a drug from Specified List 1” means:

- (a) amphetamine and its derivatives, including methylenedioxymethamphetamine (MDMA);
- (b) cocaine;
- (c) phencyclidine;
- (d) methylphenidate;
- (e) g hydroxybutyrate (GHB);
- (f) ephedrine; or
- (g) phenylpropanolamine;

“a mild head injury” means a discrete, non-penetrating injury to the head which results directly from the impact of a blow to the head and which causes loss of consciousness lasting less than thirty minutes or post-traumatic amnesia lasting less than thirty minutes, but which does not result in skull fracture or intracranial haemorrhage;

“acute renal failure” means a kidney disorder characterised by rapid decline of glomerular filtration rate and retention of nitrogenous waste products that may complicate a wide variety of diseases;

“alcohol withdrawal” means ceasing or reducing the intake of alcohol after a continuous period of at least two weeks of heavy alcohol use;

“an electrolyte imbalance” means hyponatraemia, hypocalcaemia, hypercalcaemia, hypomagnesaemia or hypophosphataemia;

“cerebral trauma” means:

- (a) an injury to the head that penetrates the dura mater;

- (b) a head injury that results in skull fracture;
- (c) a blunt head injury that causes loss of consciousness lasting at least thirty minutes or post-traumatic amnesia lasting at least thirty minutes;
- (d) an injury that results in intracranial haemorrhage; or
- (e) a surgical procedure which involves craniotomy;

“chronic renal failure” means irreversible kidney damage which leads to impaired renal function;

“death from epileptic seizure” in relation to a person includes death from a terminal event or condition that was contributed to by the person’s epileptic seizure;

“eclampsia” means a condition occurring in pregnant or puerperal women, characterised by hypertension, coma, convulsions, oedema, or proteinuria;

“infection of the brain or meninges” means:

- (a) cerebral helminthic infection (cysticercosis, schistosomiasis, echinococcosis, onchocerciasis, paragonomiasis, toxacariasis or sparganosis);
- (b) cerebral protozoal infection (malaria, trypanosomiasis or toxoplasmosis);
- (c) amoebic meningoencephalitis;
- (d) viral encephalitis or meningoencephalitis;
- (e) bacterial meningitis, encephalitis or meningoencephalitis (including cerebral tuberculosis and neurosyphilis);
- (f) intracranial, subdural or extradural abscess; or
- (g) intracranial fungal infection;

“intracranial space-occupying lesion” means a pathological entity occupying a delineated area within the cranial cavity, including intracranial aneurysm, cerebral cyst or intracranial neoplasm;

“malignant hypertension” means a severe hypertensive state characterised by papilloedema of the ocular fundus, retinal haemorrhage and exudates, cardiac decompensation and declining renal function;

“reflex epilepsy” means an idiopathic seizure disorder in which a seizure can be triggered by controllable internal or external factors or sensory stimuli, such as intermittent photic stimulation;

“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;

“sedative drug” means a psychoactive agent used therapeutically to suppress central nervous system activity, including barbiturates, benzodiazepines, anticonvulsants, sedatives and hypnotics;

“status epilepticus” means:

- (a) a single epileptic seizure of more than thirty minutes duration; or
- (b) a series of epileptic seizures occurring over a period of more than thirty minutes, without a return to consciousness between seizures;

“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.

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 28 December 2005.

Dated this *fifteenth* day of *December* 2005

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

KEN DONALD
 CHAIRPERSON