



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
CHRONIC SOLVENT ENCEPHALOPATHY
No. 71 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 chronic solvent encephalopathy No. 71 of 2013.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 39 of 2005 concerning solvent related chronic encephalopathy; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **chronic solvent encephalopathy** and **death from chronic solvent encephalopathy**.
 - (b) For the purposes of this Statement of Principles, "**chronic solvent encephalopathy**" means a chronic, irreversible, non-progressive, degenerative disease of the brain, which has the following features:
 - (A) Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

- (i) Concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; and
 - (ii) A substantial impairment in cognitive performance, documented by standardised neuropsychological testing.
- (B) The cognitive deficits interfere with independence in everyday activities.
 - (C) There must be evidence from the history, physical examination, or laboratory findings that the deficits are aetiologically related to the persisting effects of organic solvents.
 - (D) The neurocognitive impairments do not occur exclusively during the course of a delirium and persist beyond the usual duration of intoxication and acute withdrawal.
 - (E) The involved solvent and duration and extent of exposure are capable of producing the neurocognitive impairment.
 - (F) The temporal course of the neurocognitive deficits is consistent with the timing of solvent exposure.
 - (G) The neurocognitive disorder is not attributable to another medical condition or is not better explained by another mental disorder.

This definition excludes disorders resulting from the use of alcohol, anaesthetic gases and short-acting vasodilators.

Basis for determining the factors

- 4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **chronic solvent encephalopathy** and **death from chronic solvent encephalopathy** 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 **chronic solvent encephalopathy** or **death from chronic solvent encephalopathy** with the circumstances of a person's relevant service is:
 - (a) having drug dependence or drug abuse involving an inhalant, or a severe substance use disorder involving an inhalant, within the five years before the clinical onset of chronic solvent encephalopathy; or
 - (b) having at least fifty episodes of acute volatile substance intoxication within a consecutive period of two years before the clinical onset of

chronic solvent encephalopathy, and where that exposure has ceased, the clinical onset of chronic solvent encephalopathy occurred within two years of cessation; or

- (c) inhaling, ingesting or having cutaneous contact with a volatile substance from the specified list, in an unventilated and confined space, on more working days than not for a consecutive period of at least five years before the clinical onset of chronic solvent encephalopathy, and where that exposure has ceased, the clinical onset of chronic solvent encephalopathy occurred within five years of cessation; or
- (d) inability to obtain appropriate clinical management for chronic solvent encephalopathy.

Factors that apply only to material contribution or aggravation

- 7. Paragraph 6(d) applies only to material contribution to, or aggravation of, chronic solvent encephalopathy where the person's chronic solvent encephalopathy 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 severe substance use disorder" means a psychiatric disorder characterised by a problematic pattern of use of a substance leading to clinically significant impairment or distress, as manifested by at least six of the following criteria, occurring within a 12-month period:

- (a) the substance is often taken in larger amounts or over a longer period than was intended;
- (b) there is a persistent desire or unsuccessful efforts to cut down or control use of the substance;
- (c) a great deal of time is spent in activities necessary to obtain the substance, use it, or recover from its effects;
- (d) craving, or a strong desire or urge to use the substance;
- (e) recurrent use of the substance resulting in a failure to fulfil major role obligations at work, school, or home;
- (f) continued use of the substance despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of its use;
- (g) important social, occupational, or recreational activities are given up or reduced because of use of the substance;

- (h) recurrent use of the substance in situations in which it is physically hazardous;
- (i) use of the substance is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance; or
- (j) tolerance, defined by either:
 - (i) a need for markedly increased amounts of the substance to achieve intoxication or desired effect; or
 - (ii) a markedly diminished effect with continued use of the same amount of the substance;

"a volatile substance from the specified list" means:

- (a) carbon disulphide;
- (b) dichloromethane;
- (c) ethyl acetate;
- (d) styrene;
- (e) tetrachloroethane;
- (f) toluene (methyl benzene);
- (g) trichloroethylene;
- (h) white spirit; or
- (i) xylene;

"acute volatile substance intoxication" means short-term, high-dose exposure to a volatile substance from the specified list, with clinically significant problematic behavioural or psychological changes (e.g., belligerence, assaultiveness, apathy, impaired judgement) that developed during or shortly after, exposure, and accompanied by two or more of the following signs or symptoms developing during, or shortly after exposure:

- (a) blurred vision or diplopia;
- (b) depressed reflexes;
- (c) dizziness;
- (d) euphoria;
- (e) generalised muscle weakness;
- (f) incoordination;
- (g) lethargy;
- (h) nystagmus;
- (i) psychomotor retardation;
- (j) slurred speech;
- (k) stupor or coma;
- (l) tremor; or
- (m) unsteady gait;

where the signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance;

"an inhalant" means:

- (a) a volatile substance from the specified list;
- (b) butane; or
- (c) petrol;

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

"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;

"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 13 November 2013.

Dated this **first** day of **November** 2013

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

PROFESSOR NICHOLAS SAUNDERS AO
CHAIRPERSON