

Statement of Principles
concerning

TUBERCULOSIS

No. 43 of 2007

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 tuberculosis No. 43 of 2007.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 81 of 1997 concerning tuberculosis; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **tuberculosis** and **death from tuberculosis**.
 - (b) For the purposes of this Statement of Principles, "**tuberculosis**" means an infection with bacteria belonging to the *Mycobacterium tuberculosis* complex. Tuberculosis may be latent, primary or reactivated. This definition includes infection with *M. tuberculosis*, *M. africanum*, *M. canettii*, *M. bovis* and *M. bovis* BCG. This definition excludes infection with atypical mycobacteria such as *M. avium*, *M. intracellulare*, *M. kansasii*, *M. marinum*, and *M. ulcerans*.

Basis for determining the factors

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **tuberculosis** and **death from tuberculosis** 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 **tuberculosis** or **death from tuberculosis** with the circumstances of a person's relevant service is:
 - (a) having frequent, prolonged or close exposure to a person with infectious tuberculosis at least 14 days before the clinical onset of tuberculosis; or
 - (b) being exposed to overcrowded and poorly ventilated living or working conditions for a continuous period of at least 30 days before the clinical onset of tuberculosis; or
 - (c) living or working in an area which, at that time, has an incidence of tuberculosis of at least 50 cases per 100 000 of population per year, before the clinical onset of tuberculosis; or
 - (d) being involved in handling biological material infected with organisms belonging to the *Mycobacterium tuberculosis* complex at least 14 days before the clinical onset of tuberculosis; or
 - (e) living or working with an animal from a species known to be susceptible to infection with an organism belonging to the *Mycobacterium tuberculosis* complex at least 14 days before the clinical onset of tuberculosis; or
 - (f) for infection with *Mycobacterium bovis* only, consuming unpasteurised milk, unpasteurised dairy products or meat from an infected animal at least 14 days before the clinical onset of tuberculosis; or

- (g) having protein-calorie malnutrition associated with a weight loss to at least ten percent below minimum ideal weight before the clinical onset of tuberculosis; or
- (h) being in an immunosuppressed state affecting cell-mediated immunity at the time of the clinical onset of tuberculosis; or
- (i) having a specified chronic disease at the time of the clinical onset of tuberculosis; or
- (j) inhaling respirable crystalline silica dust, at the time material containing crystalline silica was being:
 - (i) produced, or
 - (ii) excavated, or
 - (iii) drilled, or
 - (iv) used in manufacturing, cleaning or blasting,for a period or periods of time totalling at least 2000 hours before the clinical onset of tuberculosis; or
- (k) for pulmonary tuberculosis only, smoking at least one pack year of cigarettes or the equivalent thereof in other tobacco products, within the one year before the clinical onset of tuberculosis; or
- (l) having a gastrectomy or jejunioileal bypass before the clinical onset of tuberculosis; or
- (m) having intravesical BCG therapy for malignant neoplasm of the bladder, within the ten years before the clinical onset of tuberculosis; or
- (n) for active tuberculosis disease only, being vaccinated with BCG vaccine within the three months before the clinical onset of tuberculosis; or
- (o) having protein-calorie malnutrition associated with a weight loss to at least ten percent below ideal weight before the clinical worsening of tuberculosis; or
- (p) being in an immunosuppressed state affecting cell-mediated immunity at the time of the clinical worsening of tuberculosis; or
- (q) having a specified chronic disease at the time of the clinical worsening of tuberculosis; or

- (r) inhaling respirable crystalline silica dust, at the time material containing crystalline silica was being:
 - (i) produced, or
 - (ii) excavated, or
 - (iii) drilled, or
 - (iv) used in manufacturing, cleaning or blasting,for a period or periods of time totalling at least 2000 hours before the clinical worsening of tuberculosis; or
- (s) for pulmonary tuberculosis only, smoking at least one pack year of cigarettes or the equivalent thereof in other tobacco products, within the one year before the clinical worsening of tuberculosis; or
- (t) having a gastrectomy or jejunioileal bypass before the clinical worsening of tuberculosis; or
- (u) having intravesical BCG therapy for malignant neoplasm of the bladder within the ten years before the clinical worsening of tuberculosis; or
- (v) for active tuberculosis disease only, being vaccinated with BCG vaccine within the three months before the clinical worsening of tuberculosis; or
- (w) inability to obtain appropriate clinical management for tuberculosis.

Factors that apply only to material contribution or aggravation

- 7. Paragraphs 6(o) to 6(w) apply only to material contribution to, or aggravation of, tuberculosis where the person's tuberculosis 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 specified chronic disease" means

- (i) chronic moderate to severe renal failure; or
- (ii) cirrhosis of the liver; or
- (iii) diabetes mellitus;

"active tuberculosis disease" means an illness in which tuberculosis bacteria are multiplying and inducing an inflammatory response;

"an immunosuppressed state affecting cell-mediated immunity" means a condition of lowered cellular immune function. Examples of circumstances giving rise to this include:

- (i) having a haematological or solid organ malignancy; or
- (ii) undergoing chemotherapy for the treatment of a malignant or proliferative disease; or
- (iii) undergoing treatment with corticosteroids; or
- (iv) undergoing treatment with a tumour necrosis factor- α antagonist; or
- (v) undergoing solid organ, stem cell or bone marrow transplantation; or
- (vi) being infected with Human Immunodeficiency Virus (HIV); or
- (vii) being infected with human T-lymphotrophic virus type I or II;

"BCG" means Bacille Calmette-Guérin;

"being exposed to overcrowded and poorly ventilated living or working conditions" means living or working in close proximity to other people in a cramped or confined space with inadequate air circulation. This includes:

- (i) living as a prisoner of war; or
- (ii) travelling in a troop ship; or
- (iii) working below ground in a mine;

"biological material" means body tissues, body fluids, biopsy specimens, sputum or other pathological material;

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

"infectious tuberculosis" means evidence of active tuberculosis of the respiratory tract. Such evidence includes being positive for

tuberculosis organisms on sputum smear, sputum culture or bronchial washings, testing positive for tuberculosis-specific nucleic acid from sputum or bronchial washings, having chest x-ray cavitation, or having evidence of transmission to other contacts;

"minimum ideal weight" means a Body Mass Index (BMI) of 20,

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

W is the person's weight in kilograms and

H is the person's height in metres;

"moderate to severe renal failure" means a glomerular filtration rate of less than 60 ml/minute;

"pack year of cigarettes, or the equivalent thereof in other tobacco products" means a calculation of consumption where one pack year of cigarettes equals twenty tailor made cigarettes per day for a period of one calendar year, or 7300 cigarettes. One tailor made cigarette approximates one gram of tobacco or one gram of cigar or pipe tobacco by weight. One pack year of tailor made cigarettes equates to 7300 cigarettes, or 7.3 kg of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

"protein-calorie malnutrition" means a condition identified by acute weight loss and may be primary, due to inadequate intake of protein and/or energy, or secondary, due to illness that impairs intake or utilisation of nutrients or that increases nutrient requirements or metabolic losses;

"pulmonary tuberculosis" means tuberculosis infection that occurs in the lung or respiratory tract;

"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;

"undergoing treatment with corticosteroids" means receiving the equivalent of at least 15 milligrams per day of prednisolone for one month or more and does not include treatment with inhaled or topical steroids.

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 9 May 2007.

Dated this **twenty-fourth** day of
April 2007

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

KEN DONALD
CHAIRPERSON