

Statement of Principles  
concerning

**MYELODYSPLASTIC DISORDER**

**No. 37 of 2006**

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 myelodysplastic disorder No. 37 of 2006.

**Determination**

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
  - (a) revokes Instrument No. 15 of 2000 and
  - (b) determines in its place this Statement of Principles.

**Kind of injury, disease or death**

3.
  - (a) This Statement of Principles is about **myelodysplastic disorder** and **death from myelodysplastic disorder**.
  - (b) For the purposes of this Statement of Principles, **“myelodysplastic disorder”** is one of a diverse group of clonal haematopoietic stem cell disorders characterised by ineffective haematopoiesis, resulting in peripheral cytopaenias, and disordered maturation of one or more myeloid cell lines, with fewer than 20% myeloblasts in bone marrow or blood, and which is characterised by progressive marrow failure, and that may progress to acute myeloid leukaemia. This disease is also known as “myelodysplastic syndrome” and includes the conditions

known as refractory anaemia, refractory anaemia with ringed sideroblasts, refractory cytopenia with multilineage dysplasia, and refractory anaemia with excess blasts.

#### **Basis for determining the factors**

4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **myelodysplastic disorder** and **death from myelodysplastic disorder** 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 **myelodysplastic disorder** or **death from myelodysplastic disorder** with the circumstances of a person's relevant service is:
  - (a) smoking at least 15 pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical onset of myelodysplastic disorder and where smoking has ceased, the clinical onset occurred within ten years of cessation; or
  - (b) undergoing a course of chemotherapy, where the course of chemotherapy commenced at least six months before the clinical onset of myelodysplastic disorder and where that therapy has ceased, the clinical onset occurred within twenty years of cessation; or
  - (c) undergoing a course of therapeutic radiation, where the first exposure occurred at least one year before the clinical onset of myelodysplastic disorder; or
  - (d) having received a cumulative equivalent dose of at least 0.01 Sievert of atomic radiation to the bone marrow, where this dose was accumulated at least one year before the clinical onset of myelodysplastic disorder; or
  - (e) having received thorium dioxide (Thorotrast) at least one year before the clinical onset of myelodysplastic disorder; or

- (f) being exposed to benzene on at least 300 days within a continuous two year period before the clinical onset of myelodysplastic disorder, where the first exposure occurred at least five years before the clinical onset of myelodysplastic disorder; or
- (g) receiving greater than 20 ppm-years of cumulative exposure to benzene before the clinical onset of myelodysplastic disorder, where the first exposure occurred at least five years before the clinical onset of myelodysplastic disorder; or
- (h) inability to obtain appropriate clinical management for myelodysplastic disorder.

#### **Factors that apply only to material contribution or aggravation**

- 7. Paragraph **6(h)** applies only to material contribution to, or aggravation of, myelodysplastic disorder where the person's myelodysplastic disorder 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 course of chemotherapy”** means treatment of a malignant or proliferative disorder with the regular systemic administration of an alkylating agent;

**“a course of therapeutic radiation”** means one or more fractions (treatment portions) of ionising radiation administered with the aim of achieving palliation or cure with gamma rays, x-rays, alpha particles or beta particles;

**“atomic radiation”** means ionising radiation excluding:

- (a) natural background radiation;
- (b) therapeutic radiation; and
- (c) radiation from diagnostic procedures;

**“being exposed to benzene”** means:

- (a) inhaling benzene vapour where such exposure occurs at an ambient 8-hour time-weighted average benzene concentration exceeding five parts per million;
- (b) having cutaneous contact with liquids containing benzene; or
- (c) ingesting liquids containing benzene;

**“cumulative equivalent dose”** means the total equivalent dose of radiation from all types of ionising radiation. It accounts for the differences in biological effectiveness of various types of radiation and allows doses from different radiations to be combined. Each component is calculated by multiplying the absorbed dose in a particular tissue or organ for a given type of radiation by the radiation weighting factor for that radiation. The unit of equivalent dose is the Sievert;

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

**“pack years 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;

**“ppm-years”** means parts per million multiplied by years of exposure;

**“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;

