#### **Revocation and Determination**

of

# Statement of Principles concerning

# **DIABETES MELLITUS**

## Veterans' Entitlements Act 1986

- 1. The Repatriation Medical Authority under subsection 196B(2) of the *Veterans' Entitlements Act 1986* (the Act):
  - (a) revokes Instrument No. 82 of 1999, as amended by Instrument No. 9 of 2001 and Instrument No. 91 of 2001; and
  - (b) determines in their place the following Statement of Principles.

## Kind of injury, disease or death

- 2. (a) This Statement of Principles is about diabetes mellitus and death from diabetes mellitus.
  - (b) For the purposes of this Statement of Principles, "diabetes mellitus" means an endocrine disease characterised by:
    - (i) a fasting venous plasma glucose concentration equal to or greater than 7.0 millimoles per litre on at least two separate occasions; or
    - (ii) a non-fasting venous plasma glucose concentration equal to or greater than 11.1 millimoles per litre on at least two separate occasions; or
    - (iii) a venous plasma glucose concentration equal to or greater than 11.1 millimoles per litre both within two hours and at two hours after ingestion of 75 grams of glucose.

- (c) Diabetes mellitus attracts ICD-10-AM code E10, E11, E12, E13 or E14.
- (d) In the application of this Statement of Principles, the definition of "diabetes mellitus" is that given at paragraph 2(b) above.

## **Basis for determining the factors**

3. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **diabetes mellitus** and **death from diabetes mellitus** can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces

#### Factors that must be related to service

4. Subject to clause 6, at least one of the factors set out in clause 5 must be related to any relevant service rendered by the person.

#### **Factors**

- 5. The factor that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting **diabetes mellitus** or **death from diabetes mellitus** with the circumstances of a person's relevant service is:
  - (a) in relation to *type 1* diabetes mellitus, being infected with rubella virus or Coxsackie B virus before the clinical onset of diabetes mellitus; or
  - (b) in relation to *type 2* diabetes mellitus, being obese for a period of at least five years before the clinical onset of diabetes mellitus; or
  - (c) in relation to *type 2* diabetes mellitus, smoking at least 10 pack years of cigarettes or the equivalent thereof in other tobacco products before the clinical onset of diabetes mellitus, and where smoking has ceased, the clinical onset has occurred within 10 years of cessation; or
  - (d) in relation to *type 2* diabetes mellitus, having cirrhosis of the liver at the time of clinical onset of diabetes mellitus; or
  - (e) having gestational diabetes before the clinical onset of diabetes mellitus; or
  - (f) having acute pancreatitis or chronic pancreatitis before the clinical onset of diabetes mellitus; or

- (g) having malignant neoplasm of the pancreas before the clinical onset of diabetes mellitus; or
- (h) undergoing surgery to the pancreas before the clinical onset of diabetes mellitus; or
- (i) having cystic fibrosis before the clinical onset of diabetes mellitus; or
- (j) having haemochromatosis before the clinical onset of diabetes mellitus; or
- (k) having Cushing's syndrome before the clinical onset of diabetes mellitus; or
- (l) having acromegaly before the clinical onset of diabetes mellitus; or
- (m) having phaeochromocytoma before the clinical onset of diabetes mellitus; or
- (n) having been treated with pentamidine within the two years immediately before the clinical onset of diabetes mellitus; or
- (o) being treated with a drug reported to have caused hyperglycaemia, for a condition for which the drug cannot be ceased or substituted, at the time of the clinical onset of diabetes mellitus; or
- (p) being treated with immunosuppressive drugs, for organ transplantation, at the time of the clinical onset of diabetes mellitus; or
- (q) hand decanting or spraying 2,3,7,8-TCDD contaminated herbicides on more days than not during a period of at least six months before the clinical onset of diabetes mellitus; or
- (r) cleaning and maintaining spray equipment used to apply 2,3,7,8-TCDD contaminated herbicides on more days than not during a period of at least six months before the clinical onset of diabetes mellitus; or
- (s) the presence of a serum 2,3,7,8-TCDD level of at least 10 parts per trillion at the time of the clinical onset of diabetes mellitus; or
- (t) in relation to *type 2* diabetes mellitus, having hepatitis C virus infection before the clinical onset of diabetes mellitus; or

- (u) in relation to *type 2* diabetes mellitus, an inability to undertake any physical activity greater than 3 METs for at least the five years immediately before the clinical onset of diabetes mellitus; or
- (v) in relation to *type 1* diabetes mellitus, being infected with rubella virus or Coxsackie B virus before the clinical worsening of diabetes mellitus; or
- (w) in relation to *type 2* diabetes mellitus, being obese for a period of at least five years before the clinical worsening of diabetes mellitus; or
- (x) in relation to *type 2* diabetes mellitus, smoking at least 10 pack years of cigarettes or the equivalent thereof in other tobacco products before the clinical worsening of diabetes mellitus, and where smoking has ceased, the clinical worsening has occurred within 10 years of cessation; or
- (y) in relation to *type 2* diabetes mellitus, having cirrhosis of the liver at the time of clinical worsening of diabetes mellitus; or
- (z) being pregnant at the time of the clinical worsening of diabetes mellitus; or
- (za) having acute pancreatitis or chronic pancreatitis before the clinical worsening of diabetes mellitus; or
- (zb) having malignant neoplasm of the pancreas before the clinical worsening of diabetes mellitus; or
- (zc) undergoing surgery to the pancreas before the clinical worsening of diabetes mellitus; or
- (zd) having cystic fibrosis before the clinical worsening of diabetes mellitus; or
- (ze) having haemochromatosis before the clinical worsening of diabetes mellitus; or
- (zf) having Cushing's syndrome before the clinical worsening of diabetes mellitus; or
- (zg) having acromegaly before the clinical worsening of diabetes mellitus; or

- (zh) having phaeochromocytoma before the clinical worsening of diabetes mellitus; or
- (zi) having been treated with pentamidine within the two years immediately before the clinical worsening of diabetes mellitus; or
- (zj) being treated with a drug reported to have caused hyperglycaemia, for a condition for which the drug cannot be ceased or substituted, at the time of the clinical worsening of diabetes mellitus; or
- (zk) being treated with immunosuppressive drugs, for organ transplantation, at the time of the clinical worsening of diabetes mellitus; or
- (zl) in relation to *type 2* diabetes mellitus, having hepatitis C virus infection before the clinical worsening of diabetes mellitus; or
- (zm) in relation to *type 2* diabetes mellitus, an inability to undertake any physical activity greater than 3 METs for at least the five years immediately before the clinical worsening of diabetes mellitus; or
- (zn) inability to obtain appropriate clinical management for diabetes mellitus.

## Factors that apply only to material contribution or aggravation

6. Paragraphs 5(v) to 5(zn) apply only to material contribution to, or aggravation of, diabetes mellitus where the person's diabetes mellitus was suffered or contracted before or during (but not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e), 70(5)(d) or 70(5A)(d) of the Act refers.

## **Inclusion of Statements of Principles**

7. 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.

#### Other definitions

- **8.** For the purposes of this Statement of Principles:
  - **"2,3,7,8-TCDD contaminated herbicides"** means Agent Orange and other herbicides containing 2,4,5-trichlorophenoxyacetic acid alone or in combination;

"acromegaly" means a chronic disease of adults resulting from hypersecretion of growth hormone after closure of the epiphyses;

"being obese" means an increase in body weight by way of fat accumulation which results in a Body Mass Index (BMI) of 30 or greater.

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

W is the person's weight in kilograms and H is the person's height in metres;

"Coxsackie B virus" means one of a heterogeneous group of viruses of the genus *Enterovirus*, that in humans has a tendency to affect the meninges and occasionally the cerebrum, but which can cause a wide spectrum of clinical illness;

"cystic fibrosis" means a generalised, autosomal recessive disorder, in which there is widespread dysfunction of the exocrine glands, characterised by signs of chronic pulmonary disease, pancreatic deficiency, abnormally high levels of electrolytes in the sweat, and occasionally by biliary cirrhosis;

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

"gestational diabetes" means carbohydrate intolerance of variable severity with onset or first recognition during pregnancy;

"ICD-10-AM code" means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM), Third Edition, effective date of 1 July 2002, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 1 86487 413 9;

"MET" means a unit of measurement of the level of physical exertion. 1 MET = 3.5 ml of oxygen/kg of body weight per minute or, 1.0 kcal/kg of body weight per hour, or resting metabolic rate; "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 7 300 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 7 300 cigarettes, or 7.3kg of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

**"phaeochromocytoma"** means a neoplasm of chromaffin tissue usually located in the adrenal medulla or sympathetic ganglion, which produces, stores and secretes catecholamines:

## "relevant service" means:

- (a) operational service; or
- (b) peacekeeping service; or
- (c) hazardous service;

**"reported to have caused hyperglycaemia"** means a drug reported to have caused hyperglycaemia in the published peer-reviewed medical literature;

**"rubella virus"** means a member of the Togavirus family which causes rubella (German measles);

"serum 2,3,7,8-TCDD" means 2,3,7,8-tetrachlorodibenzo-para-dioxin as measured from an appropriately derived blood sample;

"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;

"type 1 diabetes mellitus" means insulin dependent diabetes mellitus. Insulin dependence is not equivalent to insulin therapy. Rather, it means that the patient is at risk of ketoacidosis in the absence of insulin;

"type 2 diabetes mellitus" means non-insulin dependent diabetes mellitus

## **Application**

applies.

9.

Dated this **24th** day of **May** 2004

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

KEN DONALD CHAIRMAN

This Instrument applies to all matters to which section 120A of the Act