



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
**CHRONIC OBSTRUCTIVE PULMONARY
DISEASE**

No. 37 of 2014

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 obstructive pulmonary disease No. 37 of 2014.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 30 of 2004 concerning chronic bronchitis and emphysema; 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 obstructive pulmonary disease** and **death from chronic obstructive pulmonary disease**.
 - (b) For the purposes of this Statement of Principles, "**chronic obstructive pulmonary disease**" means a family of lung diseases of diverse phenotypes, usually characterised clinically by chronic and persistent cough, sputum production or dyspnoea, and physiologically by progressive airflow limitation that is poorly reversible. This definition comprises chronic bronchitis, emphysema and chronic airflow limitation, where:

"chronic bronchitis" means a clinically defined respiratory tract disorder characterised by mucus hypersecretion sufficient to cause cough with sputum production for at least three months of each year for at least two consecutive years, where such mucus production is not attributable to another respiratory disease;

"emphysema" means a bilateral and diffuse respiratory tract disorder which is characterised by enlargement of the airspaces distal to the terminal bronchioles, with destruction of alveolar septa and enlargement of the alveoli, and without obvious fibrosis. This definition includes centroacinar, panacinar and distal acinar emphysema. This definition excludes isolated emphysematous bleb; irregular emphysema associated with fibrosis; surgical, traumatic, unilateral, focal or localised emphysema; and Swyer-James syndrome (also known as MacLeod's syndrome or hyperlucent lung syndrome); and

"chronic airflow limitation" means persistent post-bronchodilator spirometry values of:

- (i) forced expiratory volume in one second (FEV₁) of less than 80 percent of the normal predicted value for a person of the same age, height and sex; and
 - (ii) a ratio of FEV₁ to forced vital capacity of less than 70 percent;
- which are not attributable to another disease.

These definitions exclude irreversible airflow obstruction as a manifestation of advanced asthma, bronchiectasis, bronchiolitis obliterans, extrinsic allergic alveolitis, fibrosing interstitial lung disease, asbestosis and other fibrosing lung disease.

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 obstructive pulmonary disease** and **death from chronic obstructive pulmonary disease** 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 obstructive pulmonary disease** or **death from chronic obstructive pulmonary disease** with the circumstances of a person's relevant service is:

- (a) smoking at least five pack-years of cigarettes, or the equivalent thereof in other tobacco products, before the clinical onset of chronic obstructive pulmonary disease; or
- (b) inhaling a respiratory tract irritant from the specified list:
 - (i) resulting in signs and symptoms of severe acute lower respiratory damage requiring medical attention within 48 hours after exposure; and
 - (ii) the persistence of respiratory symptoms and signs for at least one week after exposure, within the ten years before the clinical onset of chronic obstructive pulmonary disease; or
- (c) inhaling smoke from the combustion of wood, charcoal, coal or other biomass or fossil fuel, in an enclosed space:
 - (i) for a cumulative period of at least 5 000 hours, before the clinical onset of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical onset of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (d) being in an atmosphere with a visible tobacco smoke haze in an enclosed space:
 - (i) for at least 10 000 hours before the clinical onset of chronic obstructive pulmonary disease; and
 - (ii) where the person was a non-smoker during the entire period of the exposure; and
 - (iii) where the last exposure to that atmosphere occurred within the 20 years before the clinical onset of chronic obstructive pulmonary disease; or
- (e) smoking at least ten joint-years of cannabis, or the equivalent dose of other cannabis products, before the clinical onset of chronic obstructive pulmonary disease, and where smoking has ceased, the clinical onset of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (f) inhaling vapour, gas, dust or fumes of a substance from the specified list in an enclosed space:
 - (i) for a cumulative period of at least 10 000 hours, before the clinical onset of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical onset of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (g) inhaling vapour, gas, dust or fumes of a substance from the specified list, or smoke from fire, in an open environment:
 - (i) for a cumulative period of at least 20 000 hours, before the clinical onset of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical onset of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or

- (h) inhaling ambient polluted air as specified:
 - (i) for a cumulative period of at least 70 000 hours before the clinical onset of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical onset of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (i) being infected with human immunodeficiency virus at the time of the clinical onset of chronic obstructive pulmonary disease; or
- (j) smoking at least one pack-year of cigarettes, or the equivalent thereof in other tobacco products before the clinical worsening of chronic obstructive pulmonary disease, and where smoking has ceased, the clinical worsening of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (k) inhaling a respiratory tract irritant from the specified list:
 - (i) resulting in signs and symptoms of severe acute lower respiratory damage requiring medical attention within 48 hours after exposure; and
 - (ii) the persistence of respiratory symptoms and signs for at least one week after exposure, within the ten years before the clinical worsening of chronic obstructive pulmonary disease; or
- (l) inhaling smoke from the combustion of wood, charcoal, coal or other biomass or fossil fuel, in an enclosed space:
 - (i) for a cumulative period of at least 5 000 hours, before the clinical worsening of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical worsening of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (m) being in an atmosphere with a visible tobacco smoke haze in an enclosed space:
 - (i) for at least 10 000 hours before the clinical worsening of chronic obstructive pulmonary disease; and
 - (ii) where the person was a non-smoker during the entire period of the exposure; and
 - (iii) where the last exposure to that atmosphere occurred within the 20 years before the clinical worsening of chronic obstructive pulmonary disease; or
- (n) smoking at least ten joint-years of cannabis, or the equivalent dose of other cannabis products, before the clinical worsening of chronic obstructive pulmonary disease, and where smoking has ceased, the clinical worsening of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (o) inhaling vapour, gas, dust or fumes of a substance from the specified list in an enclosed space:

- (i) for a cumulative period of at least 10 000 hours, before the clinical worsening of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical worsening of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (p) inhaling vapour, gas, dust or fumes of a substance from the specified list, or smoke from fire, in an open environment:
- (i) for a cumulative period of at least 20 000 hours, before the clinical worsening of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical worsening of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (q) inhaling ambient polluted air as specified:
- (i) for a cumulative period of at least 70 000 hours before the clinical worsening of chronic obstructive pulmonary disease; and
 - (ii) where that exposure has ceased, the clinical worsening of chronic obstructive pulmonary disease has occurred within 20 years of cessation; or
- (r) being infected with human immunodeficiency virus at the time of the clinical worsening of chronic obstructive pulmonary disease; or
- (s) inability to obtain appropriate clinical management for chronic obstructive pulmonary disease.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(j) to 6(s)** applies only to material contribution to, or aggravation of, chronic obstructive pulmonary disease where the person's chronic obstructive pulmonary disease 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 respiratory tract irritant from the specified list"** means:
- (a) ammonia;
 - (b) chlorine;
 - (c) Lewisite;

- (d) oxides of nitrogen;
- (e) oxides of sulphur;
- (f) phosgene;
- (g) phthalic anhydride;
- (h) smoke from fires;
- (i) sulphur mustard (mustard gas); or
- (j) another respirable agent which causes comparable tissue damage;

"a substance from the specified list" means:

- (a) ammonia;
- (b) cadmium;
- (c) cement;
- (d) chlorine;
- (e) cleaning agents;
- (f) coal;
- (g) cotton/textiles;
- (h) diesel engine exhaust;
- (i) endotoxin;
- (j) isocyanate;
- (k) phthalic anhydride;
- (l) crystalline silica;
- (m) sulphur dioxide;
- (n) sulphur mustard (mustard gas);
- (o) welding materials; or
- (p) wood;

"ambient polluted air as specified" means air with annual average levels of:

- (a) particulates with an aerodynamic diameter $<2.5 \mu\text{m}$ (PM2.5) exceeding $30 \mu\text{g}/\text{m}^3$;
- (b) particulates with an aerodynamic diameter $<10 \mu\text{m}$ (PM10) exceeding $150 \mu\text{g}/\text{m}^3$;
- (c) nitrogen dioxide exceeding $18.0 \mu\text{g}/\text{m}^3$; or
- (d) nitrous oxides exceeding $31.5 \mu\text{g}/\text{m}^3$;

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

"joint-years of cannabis" means a calculation of consumption where one joint-year of cannabis equals one joint per day for a period of one year;

"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 7.3 kilograms of smoking tobacco by weight. Tobacco products mean cigarettes, pipe tobacco or cigars, smoked alone or in any combination;

"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 7 May 2014.

Dated this **twenty-fourth** day of **April** 2014

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

PROFESSOR NICHOLAS SAUNDERS AO
CHAIRPERSON