



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
ACUTE LYMPHOBLASTIC
LEUKAEMIA/LYMPHOBLASTIC
LYMPHOMA
(Reasonable Hypothesis)
(No. 33 of 2021)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

Dated 5 March 2021

The Common Seal of the
Repatriation Medical Authority
was affixed to this instrument
at the direction of:

Professor Nicholas Saunders AO
Chairperson

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1 Name

This is the Statement of Principles concerning acute lymphoblastic leukaemia/lymphoblastic lymphoma (Reasonable Hypothesis) (No. 33 of 2021).

2 Commencement

This instrument commences on 5 April 2021.

3 Authority

This instrument is made under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

4 Repeal

The Statement of Principles concerning acute lymphoblastic leukaemia No. 75 of 2012 (Federal Register of Legislation No. F2012L02087) made under subsections 196B(2) and (8) of the VEA is repealed.

5 Application

This instrument applies to a claim to which section 120A of the VEA or section 338 of the *Military Rehabilitation and Compensation Act 2004* applies.

6 Definitions

The terms defined in the Schedule 1 - Dictionary have the meaning given when used in this instrument.

7 Kind of injury, disease or death to which this Statement of Principles relates

- (1) This Statement of Principles is about acute lymphoblastic leukaemia/lymphoblastic lymphoma and death from acute lymphoblastic leukaemia/lymphoblastic lymphoma.

Meaning of acute lymphoblastic leukaemia/lymphoblastic lymphoma

- (2) For the purposes of this Statement of Principles, acute lymphoblastic leukaemia/lymphoblastic lymphoma:
- (a) means a malignant neoplasm characterised by the clonal proliferation of morphologically immature, non-functioning lymphoid cells of B- or T-cell origin, which can present clinically as either a leukaemia or a lymphoma; and
 - (b) excludes:
 - (i) Burkitt leukaemia/lymphoma;
 - (ii) adult T-cell leukaemia/lymphoma;
 - (iii) acute undifferentiated leukaemia; and
 - (iv) indolent T-lymphoblastic proliferation.

Note: Acute lymphoblastic lymphoma and lymphoblastic leukaemia are considered to be tumours of the same lymphoid cell type, and are considered to be a single disease entity with two clinical presentations.

Death from acute lymphoblastic leukaemia/lymphoblastic lymphoma

- (3) For the purposes of this Statement of Principles, acute lymphoblastic leukaemia/lymphoblastic lymphoma, in relation to a person, includes death from a terminal event or condition that was contributed to by the person's acute lymphoblastic leukaemia/lymphoblastic lymphoma.

Note: *terminal event* is defined in the Schedule 1 - Dictionary.

8 Basis for determining the factors

The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that acute lymphoblastic leukaemia/lymphoblastic lymphoma and death from acute lymphoblastic leukaemia/lymphoblastic lymphoma 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 MRCA.

Note: *MRCA*, *relevant service* and *VEA* are defined in the Schedule 1 - Dictionary.

9 Factors that must exist

At least one of the following factors must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting acute lymphoblastic leukaemia/lymphoblastic lymphoma or death from acute lymphoblastic leukaemia/lymphoblastic lymphoma with the circumstances of a person's relevant service:

- (1) having received a cumulative equivalent dose of at least 0.01 sievert of ionising radiation to the bone marrow at least one year before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma;

Note: *cumulative equivalent dose* is defined in the Schedule 1 - Dictionary.

- (2) taking an alkylating agent or a DNA topoisomerase II inhibitor for the treatment of a malignant neoplasm before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma, and:

(a) the first exposure occurred at least one year before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma; and

(b) if exposure ceased before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma, then that onset occurred within 20 years of cessation;

- (3) undergoing organ or tissue transplantation, excluding corneal transplant, before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma;

Note: *organ or tissue transplantation* is defined in the Schedule 1 - Dictionary.

- (4) being exposed to benzene as specified:
 - (a) for a cumulative total of at least 2,500 hours within a continuous period of five years before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma; and
 - (b) where the first exposure in that period occurred at least five years before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma;

Note: *being exposed to benzene as specified* is defined in the Schedule 1 - Dictionary.

- (5) being exposed to benzene:
 - (a) in an amount greater than ten ppm-years of cumulative exposure before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma; and
 - (b) where the first exposure occurred at least five years before the clinical onset of acute lymphoblastic leukaemia/lymphoblastic lymphoma;

Note: *ppm-years* is defined in the Schedule 1 - Dictionary.

- (6) inability to obtain appropriate clinical management for acute lymphoblastic leukaemia/lymphoblastic lymphoma.

10 Relationship to service

- (1) The existence in a person of any factor referred to in section 9, must be related to the relevant service rendered by the person.
- (2) The factor set out in subsection 9(6) applies only to material contribution to, or aggravation of, acute lymphoblastic leukaemia/lymphoblastic lymphoma where the person's acute lymphoblastic leukaemia/lymphoblastic lymphoma was suffered or contracted before or during (but did not arise out of) the person's relevant service.

11 Factors referring to an injury or disease covered by another Statement of Principles

In this Statement of Principles:

- (1) if a factor referred to in section 9 applies in relation to a person; and
- (2) that factor refers to an injury or disease in respect of which a Statement of Principles has been determined under subsection 196B(2) of the VEA;

then the factors in that Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Schedule 1 - Dictionary

Note: See Section 6

1 Definitions

In this instrument:

acute lymphoblastic leukaemia/lymphoblastic lymphoma—see subsection 7(2).

being exposed to benzene as specified means:

- (a) having cutaneous contact with liquids containing benzene greater than 1% by volume; or
- (b) ingesting liquids containing benzene greater than 1% by volume; or
- (c) inhaling benzene vapour where such exposure occurs at an ambient 8-hour time-weighted average benzene concentration exceeding five parts per million.

cumulative equivalent dose means the total dose of ionising radiation received by the particular organ or tissue from external exposure, internal exposure or both, apart from normal background radiation exposure in Australia, calculated in accordance with the methodology set out in *Guide to calculation of 'cumulative equivalent dose' for the purpose of applying ionising radiation factors contained in Statements of Principles determined under Part XIA of the Veterans' Entitlements Act 1986 (Cth)*, Australian Radiation Protection and Nuclear Safety Agency, as in force on 2 August 2017.

Note 1: Examples of circumstances that might lead to exposure to ionising radiation include being present during or subsequent to the testing or use of nuclear weapons, undergoing diagnostic or therapeutic medical procedures involving ionising radiation, and being a member of an aircrew, leading to increased levels of exposure to cosmic radiation.

Note 2: For the purpose of dose reconstruction, dose is calculated as an average over the mass of a specific tissue or organ. If a tissue is exposed to multiple sources of ionising radiation, the various dose estimates for each type of radiation must be combined.

MRCA means the *Military Rehabilitation and Compensation Act 2004*.

organ or tissue transplantation means:

- (a) the transplantation of all or part of an organ or tissue; or
- (b) the transplantation of a substance obtained from an organ or tissue.

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) British nuclear test defence service under the VEA;
- (e) warlike service under the MRCA; or
- (f) non-warlike service under the MRCA.

Note: ***MRCA*** and ***VEA*** are also defined in the Schedule 1 - Dictionary.

terminal event means the proximate or ultimate cause of death and includes the following:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function.

VEA means the *Veterans' Entitlements Act 1986*.