



Australian Government
Repatriation Medical Authority

**Statement of Principles
concerning
SOFT TISSUE SARCOMA
(Reasonable Hypothesis)
(No. 76 of 2023)**

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

Dated 25 August 2023.

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

Professor Terence Campbell AM
Chairperson

Contents

1	Name	3
2	Commencement	3
3	Authority	3
4	Repeal	3
5	Application.....	3
6	Definitions.....	3
7	Kind of injury, disease or death to which this Statement of Principles relates	3
8	Basis for determining the factors	4
9	Factors that must exist.....	5
10	Relationship to service	7
11	Factors referring to an injury or disease covered by another Statement of Principles.....	7
Schedule 1 - Dictionary		8
1	Definitions.....	8

1 Name

This is the Statement of Principles concerning *soft tissue sarcoma (Reasonable Hypothesis)* (No. 76 of 2023).

2 Commencement

This instrument commences on 26 September 2023.

3 Authority

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

4 Repeal

The Statement of Principles concerning soft tissue sarcoma No. 5 of 2015 (Federal Register of Legislation No. F2014L01817) made under subsections 196B(2) and (8) of the VEA is repealed.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 soft tissue sarcoma and death from soft tissue sarcoma.

*Meaning of **soft tissue sarcoma***

- (2) For the purposes of this Statement of Principles, soft tissue sarcoma:
- (a) means a malignant neoplasm of soft connective tissue including fibrous, fat, muscle (cardiac, skeletal muscle and smooth muscle), tendon, nerve sheath, vascular, histiocytic and synovial tissue; and
 - (b) includes:
 - (i) non-articular cartilage sarcoma;
 - (ii) synovial sarcoma;
 - (iii) malignant mast cell tumour (mast cell sarcoma);
 - (iv) dendritic cell sarcoma including interdigitating (dendritic cell) sarcoma, Langerhans cell sarcoma, and sarcoma of follicular dendritic cells;

- (v) histiocytic sarcoma (malignant histiocytosis);
- (vi) malignant odontogenic tumours;
- (vii) atypical fibroxanthoma; and
- (viii) Mullerian adenosarcoma; and

(c) excludes:

- (i) carcinosarcoma (malignant mesodermal mixed tumour or malignant mixed Mullerian tumour);
- (ii) Kaposi sarcoma;
- (iii) malignant neoplasm of the bone and articular cartilage (osteosarcoma and chondrosarcoma);
- (iv) malignant neoplasm of the cerebral meninges;
- (v) mesothelioma;
- (vi) leukaemia;
- (vii) non-Hodgkin lymphoma, and Hodgkin lymphoma;
- (viii) myeloma and malignant plasma cell neoplasms;
- (ix) primary myelofibrosis; and
- (x) myeloid sarcoma and granulocytic sarcoma.

Note: Some of the names of soft tissue sarcoma include liposarcoma, fibrosarcoma, angiosarcoma, leiomyosarcoma, rhabdomyosarcoma, extraskelatal chondrosarcoma, and synovial sarcoma.

- (3) While soft tissue sarcoma attracts ICD-10-AM codes C22.3, C22.4, C32.3, C48, C49, C54.2, C96.2, C96.4, or C96.8, in applying this Statement of Principles the meaning of soft tissue sarcoma is that given in subsection (2).
- (4) For subsection (3), a reference to an ICD-10-AM code is a reference to the code assigned to a particular kind of injury or disease in *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification* (ICD-10-AM), Tenth Edition, effective date of 1 July 2017, copyrighted by the Independent Hospital Pricing Authority, ISBN 978-1-76007-296-4.

Death from soft tissue sarcoma

- (5) For the purposes of this Statement of Principles, soft tissue sarcoma, in relation to a person, includes death from a terminal event or condition that was contributed to by the person's soft tissue sarcoma.

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 soft tissue sarcoma and death from soft tissue sarcoma 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 soft tissue sarcoma or death from soft tissue sarcoma with the circumstances of a person's relevant service:

(1) being:

- (a) on land in Vietnam; or
 - (b) at sea in Vietnamese waters; or
 - (c) on board a vessel and consuming potable water supplied on that vessel, when the water supply had been produced by evaporative distillation of estuarine Vietnamese waters;
- for a cumulative period of at least 30 days, at least 5 years before the clinical onset of soft tissue sarcoma;

Note: *being: (i) on land in Vietnam; or (ii) at sea in Vietnamese waters and estuarine Vietnamese waters* are defined in the Schedule 1 – Dictionary.

(2) inhaling, ingesting or having cutaneous contact with a chemical agent contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD) for a cumulative period of at least 250 hours, at least 2 years before the clinical onset of soft tissue sarcoma;

Note: *inhaling, ingesting or having cutaneous contact with a chemical agent contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD)* is defined in the Schedule 1 – Dictionary.

(3) undergoing a course of therapeutic radiation for cancer, where the affected region was in the field of radiation, at least 3 years before the clinical onset of soft tissue sarcoma;

(4) having received a cumulative equivalent dose of at least 0.1 sievert of ionising radiation to the affected region, at least 3 years before the clinical onset of soft tissue sarcoma;

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

(5) for angiosarcoma only: having received a cumulative equivalent dose of at least 0.1 sievert of ionising radiation to the affected region, at least one year before the clinical onset of soft tissue sarcoma;

Note: *cumulative equivalent dose* and *angiosarcoma* are defined in the Schedule 1 - Dictionary.

(6) for hepatic angiosarcoma only, having received ionising radiation to the liver from internal deposition of thorium dioxide (Thorotrast), at least 5 years before the clinical onset of soft tissue sarcoma;

Note: *cumulative equivalent dose* and *angiosarcoma* are defined in the Schedule 1 - Dictionary.

- (7) inhaling a cumulative dose of at least 200 ppm-years of gaseous vinyl chloride, at least two years before the clinical onset of soft tissue sarcoma;

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

- (8) for hepatic angiosarcoma only, being exposed to arsenic before the clinical onset of soft tissue sarcoma, where the first exposure to arsenic occurred at least five years before the clinical onset of soft tissue sarcoma;

Note: *being exposed to arsenic* and *angiosarcoma* are defined in the Schedule 1 - Dictionary.

- (9) for uterine sarcoma only, undergoing treatment with tamoxifen for a period of at least 2 months before the clinical onset of soft tissue sarcoma;

- (10) being treated with an immunosuppressive drug resulting in substantial suppression of immune responses:

- (a) to prevent transplant rejection;
- (b) to treat malignant cancer; or
- (c) to treat systemic autoimmune disease;

before the clinical onset of soft tissue sarcoma;

- (11) being infected with human immunodeficiency virus before the clinical onset of soft tissue sarcoma;

- (12) for uterine sarcoma only, having diabetes mellitus for at least 5 years before the clinical onset of soft tissue sarcoma;

- (13) for angiosarcoma only, having persistent chronic lymphoedema of the affected region for at least 6 months before the clinical onset of soft tissue sarcoma;

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

- (14) having cutaneous scarring for at least 3 years before the clinical onset of soft tissue sarcoma at that site;

- (15) for cutaneous atypical fibroxanthoma only, having chronic solar skin damage involving the area of skin affected by the cutaneous atypical fibroxanthoma at the time of the clinical onset of soft tissue sarcoma;

- (16) being obese for a period of at least 5 years within the 20 years before the clinical onset of soft tissue sarcoma;

Note: *being obese* is defined in the Schedule 1 - Dictionary.

- (17) for angiosarcoma only, having an arteriovenous fistula at the site of the angiosarcoma, at least 5 years before the clinical onset of soft tissue sarcoma;

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

- (18) for angiosarcoma only, having a vascular graft at the site of the angiosarcoma, at least 5 years before the clinical onset of soft tissue sarcoma;

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

- (19) for endometrial stromal sarcoma only, having endometriosis before the clinical onset of soft tissue sarcoma, where the soft tissue sarcoma has arisen in close proximity to the endometriosis;
- (20) having chronic osteomyelitis at the affected site at least 15 years before the clinical onset of soft tissue sarcoma;
- (21) inability to obtain appropriate clinical management for soft tissue sarcoma before the clinical worsening of soft tissue sarcoma.

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(21) applies only to material contribution to, or aggravation of, soft tissue sarcoma where the person's soft tissue sarcoma 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:

angiosarcoma means angiosarcoma, lymphangiosarcoma or haemangiosarcoma.

being exposed to arsenic means:

- (a) consuming drinking water with an average arsenic concentration of at least 50 micrograms per litre for a cumulative period of at least ten years; or
- (b) consuming drinking water resulting in a cumulative total arsenic exposure equivalent to having consumed drinking water containing at least 50 micrograms per litre for at least ten years; or
- (c) having clinical evidence of chronic arsenic toxicity.

being obese means having a Body Mass Index (BMI) of 30 or greater where BMI means W/H^2 where:

- (a) W is the person's weight in kilograms; and
- (b) H is the person's height in metres.

being: (i) on land in Vietnam; or (ii) at sea in Vietnamese waters means service in at least one of the areas and at the times described in Items 4 and 8 of Schedule 2 of the VEA.

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.

estuarine Vietnamese waters means at least one of the waterways or harbours in the relevant areas described in Items 4 and 8 of Schedule 2 of the VEA.

inhaling, ingesting or having cutaneous contact with a chemical agent contaminated by 2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD) means:

- (a) decanting or spraying;
- (b) cleaning or maintaining equipment used to apply;
- (c) being sprayed with;
- (d) handling or sawing timber treated with;
- (e) being in an environment shrouded in dust from timber treated with; or
- (f) using cutting oils contaminated with;

one of the following chemicals:

- (a) 2,4,5-trichlorophenoxyacetic acid;
- (b) 2,4,5-trichlorophenoxypropionic acid;
- (c) 2,4,5-trichlorophenol;
- (d) 2-(2,4,5-trichlorophenoxy)-ethyl 2,2-dichloropropionate;
- (e) o,o-dimethyl-o-(2,4,5-trichlorophenyl)-phosphorothioate;
- (f) pentachlorophenol;
- (g) 2,3,4,6-tetrachlorophenol;
- (h) 2,4,6-trichlorophenol;
- (i) 1,3,4-trichloro-2-(4-nitrophenoxy)benzene;
- (j) 2,4-dichloro-1-(4-nitrophenoxy)benzene; or
- (k) 2,4-dichloro-1-(3-methoxy-4-nitrophenoxy)-benzene.

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

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.

soft tissue sarcoma—see subsection 7(2).

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*.