



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
ROTATOR CUFF SYNDROME
(Reasonable Hypothesis)
(No. 109 of 2022)

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

Dated 21 October 2022.

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

Professor Terence Campbell AM
Chairperson

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1 Name

This is the Statement of Principles concerning *rotator cuff syndrome (Reasonable Hypothesis)* (No. 109 of 2022).

2 Commencement

This instrument commences on 21 November 2022.

3 Authority

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

4 Repeal

The Statement of Principles concerning rotator cuff syndrome No. 100 of 2014 (Federal Register of Legislation No. F2014L01376) made under subsections 196B(2) and (8) of the VEA is repealed.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 rotator cuff syndrome and death from rotator cuff syndrome.

Meaning of rotator cuff syndrome

- (2) For the purposes of this Statement of Principles, rotator cuff syndrome:
 - (a) means a clinically symptomatic inflammatory or degenerative disorder of the rotator cuff of the shoulder joint or the long head of biceps and their associated bursae; and
 - (b) includes:
 - (i) calcifying tendonitis of the shoulder;
 - (ii) rotator cuff tear or rupture;
 - (iii) rotator cuff impingement syndrome;
 - (iv) rotator cuff tendinopathy or tendonitis;
 - (v) subacromial impingement syndrome;

- (vi) supraspinatus syndrome; or
 - (vii) tendonitis of the long head of the biceps; and
- (c) excludes adhesive capsulitis of the shoulder.

Note 1: The rotator cuff is the musculotendinous cuff of the shoulder joint comprising supraspinatus, infraspinatus, subscapularis and teres minor muscles. Associated bursae include the subacromial or subdeltoid bursae.

Note 2: Rotator cuff syndrome is characterised by persistent pain and tenderness in the shoulder that usually worsens when the arm is abducted into an overhead position.

- (3) While rotator cuff syndrome attracts ICD-10-AM codes M75.1, M75.2, M75.3, M74.4 or M74.5 in applying this Statement of Principles the meaning of rotator cuff syndrome 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 rotator cuff syndrome

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

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 rotator cuff syndrome and death from rotator cuff syndrome 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 rotator cuff syndrome or death from rotator cuff syndrome with the circumstances of a person's relevant service:

- (1) having an injury to the affected shoulder within the 3 months before the clinical onset of rotator cuff syndrome;

Note 1: Examples of activities or circumstances that can cause an injury to the affected shoulder include a fall, a violent pull or sudden traction injury, sports injury, a blow or direct trauma to the shoulder, lifting weights, and improperly administered vaccination to the shoulder.

Note 2: *injury to the affected shoulder* is defined in the Schedule 1 – Dictionary.

- (2) undergoing a surgical procedure involving the affected shoulder joint before the clinical onset of rotator cuff syndrome;
- (3) performing any combination of:
 - (a) repetitive or sustained activities of the affected shoulder when the shoulder on the affected side is abducted or flexed by at least 60 degrees; or
 - (b) forceful activities with the affected upper limb;

for at least 80 hours within a period of 120 consecutive days before the clinical onset of rotator cuff syndrome, and where the repetitive or sustained or forceful activities have not ceased more than 30 days before the clinical onset of rotator cuff syndrome;

Note: *forceful activities* are defined in the Schedule 1 - Dictionary.

- (4) performing repetitive or sustained activities of the affected shoulder when the shoulder on the affected side is abducted or flexed by at least 60 degrees for at least 2,000 hours within the 10 years before the clinical onset of rotator cuff syndrome;

Note: Sports that require overhead activities (for example, tennis, swimming, and volleyball) often involve abduction or flexion of the shoulder by at least 60 degrees.

- (5) lifting or carrying loads of at least 20 kilograms using the upper limb of the affected side for at least 200 hours within the 10 years before the clinical onset of rotator cuff syndrome;
- (6) using a hand-held, vibrating, percussive, heavy industrial tool with the affected upper limb, for at least 2,000 hours within the 10 years before the clinical onset of rotator cuff syndrome;
- (7) having dialysis-related amyloidosis before the clinical onset of rotator cuff syndrome;

Note: *dialysis-related amyloidosis* is defined in the Schedule 1 - Dictionary.

- (8) regularly using the upper limbs for weight-bearing for a continuous period of at least the 1 year before the clinical onset of rotator cuff syndrome;

Note: Examples of circumstances in which the upper limbs may regularly be used for weight-bearing include transfers from a wheelchair to a chair or bed, and the use of crutches or other walking aids.

- (9) having anatomical narrowing of the subacromial space on the affected side at the time of the clinical onset of rotator cuff syndrome;

Note: *anatomical narrowing of the subacromial space* is defined in the Schedule 1 - Dictionary.

- (10) having joint instability of the affected shoulder, or dislocation or subluxation of the affected shoulder joint before the clinical onset of rotator cuff syndrome;
- (11) having an infection of the subacromial bursa or subdeltoid bursa of the affected shoulder at the time of the clinical onset of rotator cuff syndrome;

- (12) having an autoimmune disease from the specified list of autoimmune diseases, involving the shoulder joint or associated bursae of the affected side, before the clinical onset of rotator cuff syndrome;

Note: *specified list of autoimmune diseases* is defined in the Schedule 1 - Dictionary.

- (13) having gout involving the affected shoulder at the time of the clinical onset of rotator cuff syndrome;
- (14) having acquired scapular dyskinesia of the affected side at the time of the clinical onset of rotator cuff syndrome;

Note: *acquired scapular dyskinesia* is defined in the Schedule 1 – Dictionary.

- (15) having smoked at least 20 pack-years of tobacco products before the clinical onset of rotator cuff syndrome;

Note: *one pack-year* is defined in the Schedule 1 – Dictionary.

- (16) having diabetes mellitus before the clinical onset of rotator cuff syndrome;

- (17) having dyslipidaemia before the clinical onset of rotator cuff syndrome;

Note: *dyslipidaemia* is defined in the Schedule 1 – Dictionary.

- (18) taking a glucocorticoid drug as specified before the clinical onset of rotator cuff syndrome;

Note: *taking a glucocorticoid drug as specified* is defined in the Schedule 1 – Dictionary.

- (19) taking a fluoroquinolone antibiotic within the 60 days before the clinical onset of rotator cuff syndrome;

- (20) taking an aromatase inhibitor for at least 4 weeks within the 2 years before the clinical onset of rotator cuff syndrome;

Note: Examples of aromatase inhibitors include anastrozole, exemestane and letrozole.

- (21) having an injury to the affected shoulder within the 3 months before the clinical worsening of rotator cuff syndrome;

Note 1: Examples of activities or circumstances that can cause an injury to the affected shoulder include a fall, a violent pull or sudden traction injury, sports injury, a blow or direct trauma to the shoulder, lifting weights, and improperly administered vaccination to the shoulder.

Note 2: *injury to the affected shoulder* is defined in the Schedule 1 – Dictionary.

- (22) undergoing a surgical procedure involving the affected shoulder joint before the clinical worsening of rotator cuff syndrome;
- (23) performing any combination of:
 - (a) repetitive or sustained activities of the affected shoulder when the shoulder on the affected side is abducted or flexed by at least 60 degrees; or
 - (b) forceful activities with the affected upper limb;

for at least 80 hours within a period of 120 consecutive days before the clinical worsening of rotator cuff syndrome, and where the repetitive or sustained or forceful activities have not ceased more than 30 days before the clinical worsening of rotator cuff syndrome;

Note: *forceful activities* are defined in the Schedule 1 - Dictionary.

- (24) performing repetitive or sustained activities of the affected shoulder when the shoulder on the affected side is abducted or flexed by at least 60 degrees for at least 2,000 hours within the 10 years before the clinical worsening of rotator cuff syndrome;

Note: Sports that require overhead activities (for example, tennis, swimming, and volleyball) often involve abduction or flexion of the shoulder by at least 60 degrees.

- (25) lifting or carrying loads of at least 20 kilograms using the upper limb of the affected side for at least 200 hours within the 10 years before the clinical worsening of rotator cuff syndrome;
- (26) using a hand-held, vibrating, percussive, heavy industrial tool with the affected upper limb, for at least 2,000 hours within the 10 years before the clinical worsening of rotator cuff syndrome;
- (27) having dialysis-related amyloidosis before the clinical worsening of rotator cuff syndrome;

Note: *dialysis-related amyloidosis* is defined in the Schedule 1 - Dictionary.

- (28) regularly using the upper limbs for weight-bearing for a continuous period of at least the 1 year before the clinical worsening of rotator cuff syndrome;

Note: Examples of circumstances in which the upper limbs may regularly be used for weight-bearing include transfers from a wheelchair to a chair or bed, and the use of crutches or other walking aids.

- (29) having anatomical narrowing of the subacromial space on the affected side at the time of the clinical worsening of rotator cuff syndrome;

Note: *anatomical narrowing of the subacromial space* is defined in the Schedule 1 - Dictionary.

- (30) having joint instability of the affected shoulder, or dislocation or subluxation of the affected shoulder joint before the clinical worsening of rotator cuff syndrome;
- (31) having an infection of the subacromial bursa or subdeltoid bursa of the affected shoulder at the time of the clinical worsening of rotator cuff syndrome;
- (32) having an autoimmune disease from the specified list of autoimmune diseases, involving the shoulder joint or associated bursae of the affected side, before the clinical worsening of rotator cuff syndrome;
Note: *specified list of autoimmune diseases* is defined in the Schedule 1 - Dictionary.
- (33) having gout involving the affected shoulder at the time of the clinical worsening of rotator cuff syndrome;
- (34) having acquired scapular dyskinesia of the affected side at the time of the clinical worsening of rotator cuff syndrome;
Note: *acquired scapular dyskinesia* is defined in the Schedule 1 – Dictionary.
- (35) having smoked at least 20 pack-years of tobacco products before the clinical worsening of rotator cuff syndrome;
Note: *one pack-year* is defined in the Schedule 1 – Dictionary.
- (36) having diabetes mellitus before the clinical worsening of rotator cuff syndrome;
- (37) having dyslipidaemia before the clinical worsening of rotator cuff syndrome;
Note: *dyslipidaemia* is defined in the Schedule 1 – Dictionary.
- (38) taking a glucocorticoid drug as specified before the clinical worsening of rotator cuff syndrome;
Note: *taking a glucocorticoid drug as specified* is defined in the Schedule 1 – Dictionary.
- (39) taking a fluoroquinolone antibiotic within the 60 days before the clinical worsening of rotator cuff syndrome;
- (40) taking an aromatase inhibitor for at least 4 weeks within the 2 years before the clinical worsening of rotator cuff syndrome;
Note: Examples of aromatase inhibitors include anastrozole, exemestane and letrozole.
- (41) inability to obtain appropriate clinical management for rotator cuff syndrome.

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 factors set out in subsections 9(21) to 9(41) apply only to material contribution to, or aggravation of, rotator cuff syndrome where the person's rotator cuff syndrome 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:

acquired scapular dyskinesis means abnormal position or motion of the scapula, and may be evidenced clinically by winging of the scapula. Scapular dyskinesis occurs with injuries to the long thoracic and spinal accessory nerves ("backpack palsy") and space occupying lesions in the scapulothoracic area.

anatomical narrowing of the subacromial space means an acquired reduction in the space between the coraco-acromial arch and the upper end of the humerus.

Note: Examples of causes of acquired anatomical narrowing of the subacromial space include:

- (a) malunited fractures of the acromion, clavicle or greater tuberosity;
- (b) osteophytes or tumours projecting into the subacromial space; and
- (c) sutures, pins or wires from previous surgery.

dialysis-related amyloidosis means beta2-microglobulin amyloidosis secondary to long-term haemodialysis or continuous ambulatory peritoneal dialysis.

dyslipidaemia means persistently abnormal blood lipid levels, diagnosed by a medical practitioner and evidenced by:

- (a) a serum high density lipoprotein cholesterol level less than 1.0 mmol/L; or
- (b) a serum low density lipoprotein cholesterol level greater than 4.0 mmol/L; or
- (c) a serum triglyceride level greater than or equal to 2.0 mmol/L; or
- (d) total serum cholesterol level greater than 5.5 mmol/L; or
- (e) the regular administration of drug therapy to normalise blood lipid levels.

forceful activities means tasks requiring the generation of force by the hand or arm:

- (a) equivalent to lifting or carrying loads of more than 3 kilograms; or
- (b) involving lifting or carrying an object greater than 1 kilogram in excess of 10 times per hour.

Note 1: Use of crutches or other walking aids and hand propulsion of wheelchairs are included among the types of forceful activities that require generation of force by the hand or arm.

Note 2: Sports that require overhead activities (for example, tennis, swimming, and volleyball) often involve abduction or flexion of the shoulder by at least 60 degrees.

injury to the affected shoulder means an injury to the shoulder region that causes the development, within the 24 hours of the injury being sustained, of pain, tenderness, and altered mobility or range of movement of the shoulder joint. In the case of sustained unconsciousness or the masking of pain by

analgesic medication, these symptoms and signs must appear on return to consciousness or the withdrawal of the analgesic medication. These symptoms and signs must last for a continuous period of at least 7 days following their onset, save for where medical intervention for the injury to that shoulder has occurred and that medical intervention involves either:

- (a) immobilisation of the shoulder by splinting, or similar external agent;
- (b) injection of corticosteroids or local anaesthetics into that shoulder; or
- (c) surgery to that shoulder.

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

one pack-year means the amount of tobacco consumed in smoking 20 cigarettes per day for a period of 1 year, or an equivalent amount of tobacco products.

Note 1: An equivalent amount of tobacco products is 7,300 grams of smoking tobacco by weight, either in cigarettes, pipe tobacco or cigars, or a combination of same. For pipe tobacco, cigars or combinations of multiple tobacco types, 1 gram of tobacco is considered to be equal to one cigarette.

Note 2: Pack-years are calculated by dividing the number of cigarettes smoked per day by 20 and multiplying this number by the number of years the person has smoked. For example, smoking 10 cigarettes per day for 10 years is equal to 5 pack-years, and smoking 40 cigarettes per day for 10 years is equal to 20 pack-years.

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.

rotator cuff syndrome—see subsection 7(2).

specified list of autoimmune diseases means:

- (a) dermatomyositis;
- (b) polymyalgia rheumatica;
- (c) polymyositis;
- (d) rheumatoid arthritis;
- (e) sicca syndrome;
- (f) Sjogren syndrome;
- (g) systemic lupus erythematosus; or
- (h) systemic sclerosis (scleroderma).

taking a glucocorticoid drug as specified means:

- (a) taking prednisolone, in the combinations of mode of administration, dose, duration of treatment and proximity to the clinical onset or worsening of rotator cuff syndrome, as specified in Table 1 below; or
- (b) taking a glucocorticoid drug other than prednisolone, as specified in Table 1, and in doses having an efficacy equivalent to prednisolone, that being calculated for the drugs listed in accordance with Table 2 below.

Table 1

Drug	Mode	Dose	Minimum duration of treatment	Proximity to clinical onset or worsening
Prednisolone	IV, IM, O	≥ 0.5 grams over 6 months	6 months	within the 3 years
		≥ 3 grams	NS	within the 5 years
		≥ 10 grams	NS	NS
	Injection in tendon region	≥ 1 injection	NS	within the 2 weeks

Abbreviations: IV = intravenous; IM = intramuscular; O = oral; NS = not specified.

Table 2

Glucocorticoid drug	Dose efficacy equivalence to prednisolone
cortisone	5
hydrocortisone	4
prednisolone	1
prednisone	1
methylprednisolone	0.8
triamcinolone	0.8
paramethasone	0.4
dexamethasone	0.15
betamethasone	0.12

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*.