

Statement of Principles concerning CARPAL TUNNEL SYNDROME (Balance of Probabilities) (No. 94 of 2021)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(3) of the *Veterans' Entitlements Act 1986*.

Dated 20 August 2021

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 | 4 |
| | 10 | Relationship to service | 7 |
| | 11 | Factors referring to an injury or disease covered by another Statement of Principles | 8 |
| Schedule 1 - Dictionary | | | |
| | 1 | Definitions | 9 |

1 Name

This is the Statement of Principles concerning *carpal tunnel syndrome* (*Balance of Probabilities*) (No. 94 of 2021).

2 Commencement

This instrument commences on 20 September 2021.

3 Authority

This instrument is made under subsection 196B(3) of the *Veterans' Entitlements Act 1986*.

4 Repeal

The Statement of Principles concerning carpal tunnel syndrome No. 8 of 2013 (Federal Register of Legislation No. F2013L00023) made under subsection 196B(3) of the VEA is repealed.

5 Application

This instrument applies to a claim to which section 120B of the VEA or section 339 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 carpal tunnel syndrome and death from carpal tunnel syndrome.

Meaning of carpal tunnel syndrome

- (2) For the purposes of this Statement of Principles, carpal tunnel syndrome means an entrapment neuropathy of the median nerve at the wrist producing altered sensation, pain or weakness of the hand.
- (3) While carpal tunnel syndrome attracts ICD-10-AM code G56.0, in applying this Statement of Principles the meaning of carpal tunnel 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 carpal tunnel syndrome

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

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

8 Basis for determining the factors

On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that carpal tunnel syndrome and death from carpal tunnel syndrome can be related to relevant service rendered by veterans 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 exist before it can be said that, on the balance of probabilities, carpal tunnel syndrome or death from carpal tunnel syndrome is connected with the circumstances of a person's relevant service:

- (1) performing any combination of specified activities with the affected hand or forearm:
 - (a) for an average of at least 8 hours per week; and
 - (b) for a cumulative period of at least 6 months before the clinical onset of carpal tunnel syndrome; and

if those activities have ceased before the clinical onset of carpal tunnel syndrome, then that onset occurred within 30 days of cessation;

Note: *specified activities with the affected hand or forearm* is defined in the Schedule 1 - Dictionary.

- (2) having trauma or surgery to the affected wrist or hand before the clinical onset of carpal tunnel syndrome, which:
 - (a) alters the normal contour of the carpal tunnel; or
 - (b) damages the flexor tendons within the carpal tunnel;

Note: trauma to the affected wrist or hand is defined in the Schedule 1 - Dictionary.

(3) having oedema involving the affected carpal tunnel at the time of the clinical onset of carpal tunnel syndrome;

Note: Examples of situations in which oedema involving the affected carpal tunnel may occur include external burn, fracture, lymphoedema and animal envenomation.

(4) being overweight or obese at the time of the clinical onset of carpal tunnel syndrome;

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

(5) having amyloidosis at the time of the clinical onset of carpal tunnel syndrome;

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

(6) having chronic renal failure at the time of the clinical onset of carpal tunnel syndrome;

Note: chronic renal failure is defined in the Schedule 1 - Dictionary.

- (7) having acromegaly before the clinical onset of carpal tunnel syndrome; Note: *acromegaly* is defined in the Schedule 1 - Dictionary.
- (8) having gout involving the affected wrist or hand at the time of the clinical onset of carpal tunnel syndrome;
- (9) having a space-occupying lesion in the affected carpal tunnel at the time of the clinical onset of carpal tunnel syndrome;

Note: Examples of a space-occupying lesion include neoplasm, ganglion, tenosynovitis and muscle intrusion.

(10) having haemorrhage involving the affected carpal tunnel at the time of the clinical onset of carpal tunnel syndrome;

Note: Examples of situations in which haemorrhage involving the affected carpal tunnel may occur include haemophilia, von Willebrand's disease and taking anticoagulants.

(11) having infection involving the affected carpal tunnel at the time of the clinical onset of carpal tunnel syndrome;

Note: Examples of infections that may involve the carpal tunnel include histoplasmosis, tuberculosis and chikungunya fever.

(12) having osteoarthritis or inflammatory arthritis involving the affected wrist or hand at the time of the clinical onset of carpal tunnel syndrome;

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

- (13) having diabetes mellitus at the time of the clinical onset of carpal tunnel syndrome;
- (14) taking an aromatase inhibitor within the 2 years before the clinical onset of carpal tunnel syndrome;

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

(15) taking an immune checkpoint inhibitor within the 2 years before the clinical onset of carpal tunnel syndrome;

Note: Examples of immune checkpoint inhibitors include pembrolizumab, nivolumab, ipilimumab and avelumab.

- (16) being pregnant within the 3 months before the clinical onset of carpal tunnel syndrome;
- (17) performing any combination of specified activities with the affected hand or forearm:
 - (a) for an average of at least 8 hours per week; and
 - (b) for a cumulative period of at least 6 months before the clinical worsening of carpal tunnel syndrome; and

if those activities have ceased before the clinical worsening of carpal tunnel syndrome, then that worsening occurred within 30 days of cessation;

Note: *specified activities with the affected hand or forearm* is defined in the Schedule 1 - Dictionary.

- (18) having trauma or surgery to the affected wrist or hand before the clinical worsening of carpal tunnel syndrome, which:
 - (a) alters the normal contour of the carpal tunnel; or
 - (b) damages the flexor tendons within the carpal tunnel;

Note: trauma to the affected wrist or hand is defined in the Schedule 1 - Dictionary.

(19) having oedema involving the affected carpal tunnel at the time of the clinical worsening of carpal tunnel syndrome;

Note: Examples of situations in which oedema involving the affected carpal tunnel may occur include external burn, fracture, lymphoedema and animal envenomation.

(20) being overweight or obese at the time of the clinical worsening of carpal tunnel syndrome;

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

(21) having amyloidosis at the time of the clinical worsening of carpal tunnel syndrome;

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

(22) having chronic renal failure at the time of the clinical worsening of carpal tunnel syndrome;

Note: chronic renal failure is defined in the Schedule 1 - Dictionary.

(23) having acromegaly before the clinical worsening of carpal tunnel syndrome;

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

(24) having gout involving the affected wrist or hand at the time of the clinical worsening of carpal tunnel syndrome;

(25) having a space-occupying lesion in the affected carpal tunnel at the time of the clinical worsening of carpal tunnel syndrome;

Note: Examples of a space-occupying lesion include neoplasm, ganglion, tenosynovitis and muscle intrusion.

(26) having haemorrhage involving the affected carpal tunnel at the time of the clinical worsening of carpal tunnel syndrome;

Note: Examples of situations in which haemorrhage involving the affected carpal tunnel may occur include haemophilia, von Willebrand's disease and taking anticoagulants.

(27) having infection involving the affected carpal tunnel at the time of the clinical worsening of carpal tunnel syndrome;

Note: Examples of infections that may involve the carpal tunnel include histoplasmosis, tuberculosis and chikungunya fever.

(28) having osteoarthritis or inflammatory arthritis involving the affected wrist or hand at the time of the clinical worsening of carpal tunnel syndrome;

Note: inflammatory arthritis is defined in the Schedule 1 - Dictionary.

- (29) having diabetes mellitus at the time of the clinical worsening of carpal tunnel syndrome;
- (30) taking an aromatase inhibitor within the 2 years before the clinical worsening of carpal tunnel syndrome;

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

(31) taking an immune checkpoint inhibitor within the 2 years before the clinical worsening of carpal tunnel syndrome;

Note: Examples of immune checkpoint inhibitors include pembrolizumab, nivolumab, ipilimumab and avelumab.

- (32) being pregnant within the 3 months before the clinical worsening of carpal tunnel syndrome;
- (33) inability to obtain appropriate clinical management for carpal tunnel 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(17) to 9(33) apply only to material contribution to, or aggravation of, carpal tunnel syndrome where the person's carpal tunnel 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(3) 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:

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

amyloidosis means the accumulation of insoluble fibrillar proteins in organs or tissues of the body such that vital function is compromised.

Note: Diseases that can be associated with amyloidosis include myeloma and chronic inflammatory diseases or chronic infectious diseases, such as inflammatory bowel disease, rheumatoid arthritis and tuberculosis.

being overweight or obese means:

- (a) having a Body Mass Index (BMI) of 25 or greater; or
- (b) for males, having a waist circumference exceeding 94 centimetres;
- (c) for females, having a waist circumference exceeding 80 centimetres.

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

BMI means W/H² where:

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

carpal tunnel syndrome—see subsection 7(2).

chronic renal failure means:

- (a) having a glomerular filtration rate of less than 15 mL/min/1.73 m² for a period of at least three months; or
- (b) a need for renal replacement therapy (dialysis or transplantation) for treatment of complications of decreased glomerular filtration rate which would otherwise increase the risk of morbidity and mortality; or
- (c) undergoing chronic dialysis.

inflammatory arthritis means an autoimmune inflammatory disease which is associated with the development of arthritis.

Note: Types of inflammatory arthritis include rheumatoid arthritis, systemic sclerosis, Sjögren syndrome, sarcoidosis, and other inflammatory arthritis requiring treatment with a disease modifying agent or a biological agent.

MRCA means the Military Rehabilitation and Compensation Act 2004.

relevant service means:

- (a) eligible war service (other than operational service) under the VEA;
- (b) defence service (other than hazardous service and British nuclear test defence service) under the VEA; or
- (c) peacetime service under the MRCA.

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

specified activities with the affected hand or forearm means:

- (a) repetitive activities using the affected hand, involving either:
 - (i) bending or twisting of the hand or wrist at least 50 times per hour; or
 - (ii) carrying out the same or similar movements in the hand or wrist at least 50 times per hour; or
- (b) forceful activities requiring the generation of force by the affected hand:
 - (i) equivalent to lifting or carrying loads of more than 3 kilograms; or
 - (ii) involving lifting or carrying an object in the hand greater than 1 kilogram in excess of 10 times per hour; or
- (c) activities where the affected hand or forearm is directly vibrated; or
- (d) activities where the affected hand is used for weight-bearing.
- Note 1: Forceful activities requiring generation of force by the hand include the use of crutches or other walking aids and hand propulsion of wheelchairs.
- Note 2: Activities where the hand may be used for weight-bearing include transfers from a wheelchair to a chair or bed, and the use of crutches or other walking aids.

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.

trauma to the affected wrist or hand means a discrete event involving the application of significant physical force to or through the affected wrist or hand, that causes:

- (a) damage to the wrist or hand; and
- (b) the development, within 24 hours of the event occurring, of symptoms and signs of pain and tenderness, and either altered mobility or range of movement of the wrist or hand. 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; and
- (c) the persistence of these symptoms and signs for a period of at least 7 days following their onset, save for where medical intervention for the trauma to that wrist or hand has occurred and that medical intervention involves one of the following:
 - (i) immobilisation of the wrist or hand by splinting or similar external agent;
 - (ii) injection of a corticosteroid or local anaesthetic into that wrist or hand; or
 - (iii) surgery to that wrist or hand.

Note: Examples of trauma include laceration, sprain, crush injury, fracture, dislocation, and a thermal, electrical or chemical burn.

VEA means the Veterans' Entitlements Act 1986.