



Statement of Principles concerning tinnitus No. 33 of 2012

made under subsection 196B(2) of the

Veterans' Entitlements Act 1986

Compilation No. 1

Compilation date: 18 September 2017

Includes amendments up to: Veterans' Entitlements (Statements of Principles—Cumulative Equivalent Dose) Amendment Determination 2017 (No. 58 of 2017) (F2017L01067)

The day of commencement of this Amendment Determination is 18 September 2017.

Prepared by the Repatriation Medical Authority Secretariat, Brisbane

About this compilation

This compilation

This is a compilation of the *Statement of Principles concerning tinnitus No. 33 of 2012* that shows the text of the law as amended and in force on 18 September 2017.

The notes at the end of this compilation (the *endnotes*) include information about amending laws and the amendment history of provisions of the compiled law.

Uncommenced amendments

The effect of uncommenced amendments is not shown in the text of the compiled law. Any uncommenced amendments affecting the law are accessible on the Legislation Register (www.legislation.gov.au). The details of amendments made up to, but not commenced at, the compilation date are underlined in the endnotes. For more information on any uncommenced amendments, see the series page on the Legislation Register for the compiled law.

Application, saving and transitional provisions for provisions and amendments

If the operation of a provision or amendment of the compiled law is affected by an application, saving or transitional provision that is not included in this compilation, details are included in the endnotes.

Modifications

If the compiled law is modified by another law, the compiled law operates as modified but the modification does not amend the text of the law. Accordingly, this compilation does not show the text of the compiled law as modified. For more information on any modifications, see the series page on the Legislation Register for the compiled law.

Self-repealing provisions

If a provision of the compiled law has been repealed in accordance with a provision of the law, details are included in the endnotes.



Australian Government
Repatriation Medical Authority

Statement of Principles concerning

TINNITUS

No. 33 of 2012

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 tinnitus No. 33 of 2012.

Determination

2. The Repatriation Medical Authority under subsection **196B(2)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 25 of 2001 concerning tinnitus; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3. (a) This Statement of Principles is about **tinnitus** and **death from tinnitus**.
(b) For the purposes of this Statement of Principles, "**tinnitus**" means a persistent perception of sound in one or both ears, such as buzzing, ringing, whistling or clicking, occurring without an external stimulus.

-
- (c) Tinnitus attracts ICD-10-AM code H93.1.
 - (d) In the application of this Statement of Principles, the definition of "**tinnitus**" is that given at paragraph 3(b) above.

Basis for determining the factors

- 4. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **tinnitus** and **death from tinnitus** 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 **tinnitus** or **death from tinnitus** with the circumstances of a person's relevant service is:
 - (a) being exposed to a peak sound pressure level at the tympanic membrane of at least 140 dB(C), before the clinical onset of tinnitus; or
 - (b) being exposed to a sound pressure level at the tympanic membrane of at least 85 dB(A) as an 8-hour time-weighted average (TWA) with a 3 dB exchange rate for a cumulative period of at least six months, before the clinical onset of tinnitus; or
 - (c) having trauma, including surgery, to auditory structures or central auditory neural pathways, within the five years before the clinical onset of tinnitus; or
 - (d) having sensorineural hearing loss or conductive hearing loss at the time of the clinical onset of tinnitus; or
 - (e) taking a drug or a drug from a class of drugs from the specified list within the one month before the clinical onset of tinnitus; or
 - (f) receiving a specified ototopical medication directly into the inner ear, in the presence of tympanic membrane perforation, before the clinical onset of tinnitus; or
 - (g) having a vascular, muscular or other anatomical source of sound that can be transmitted to the affected ear at the time of the clinical onset of tinnitus; or

-
- (h) having a specified disease or injury involving the auditory structures or central auditory neural pathways of the affected ear at the time of the clinical onset of tinnitus; or
 - (i) having cerebral arterial gas embolism or decompression sickness involving the auditory apparatus or central auditory neural pathways of the affected ear within the one month before the clinical onset of tinnitus; or
 - (j) having an episode of otitic barotrauma involving the affected ear within the one month before the clinical onset of tinnitus; or
 - (k) having acoustic shock at the time of the clinical onset of tinnitus; or
 - (l) having a specified infection within the one month before the clinical onset of tinnitus; or
 - (m) having received a cumulative equivalent dose of at least 10 sieverts of ionising radiation to the auditory apparatus before the clinical onset of tinnitus; or
 - (n) undergoing a course of therapeutic radiation for cancer, where the auditory apparatus was in the field of radiation, before the clinical onset of tinnitus; or
 - (o) having a serum cobalt concentration of at least 5 micrograms per litre for at least the one month before the clinical onset of tinnitus; or
 - (p) having vitamin B1 (thiamine) or vitamin B12 (cobalamin) deficiency at the time of the clinical onset of tinnitus; or
 - (q) having carbon monoxide poisoning within the 48 hours before the clinical onset of tinnitus; or
 - (r) having hypothyroidism for at least the three months before the clinical onset of tinnitus; or
 - (s) being exposed to a peak sound pressure level at the tympanic membrane of at least 140 dB(C), before the clinical worsening of tinnitus; or
 - (t) being exposed to a sound pressure level at the tympanic membrane of at least 85 dB(A) as an 8-hour time-weighted average (TWA) with a 3 dB exchange rate for a cumulative period of at least six months, before the clinical worsening of tinnitus; or
 - (u) having trauma, including surgery, to auditory structures or central auditory neural pathways, within the five years before the clinical worsening of tinnitus; or

-
- (v) having sensorineural hearing loss or conductive hearing loss at the time of the clinical worsening of tinnitus; or
 - (w) taking a drug or a drug from a class of drugs from the specified list within the one month before the clinical worsening of tinnitus; or
 - (x) receiving a specified ototopical medication directly into the inner ear, in the presence of tympanic membrane perforation, before the clinical worsening of tinnitus; or
 - (y) having a vascular, muscular or other anatomical source of sound that can be transmitted to the affected ear at the time of the clinical worsening of tinnitus; or
 - (z) having a specified disease or injury involving the auditory structures or central auditory neural pathways of the affected ear at the time of the clinical worsening of tinnitus; or
 - (aa) having cerebral arterial gas embolism or decompression sickness involving the auditory apparatus or central auditory neural pathways of the affected ear within the one month before the clinical worsening of tinnitus; or
 - (bb) having an episode of otitic barotrauma involving the affected ear within the one month before the clinical worsening of tinnitus; or
 - (cc) having acoustic shock at the time of the clinical worsening of tinnitus; or
 - (dd) having a specified infection within the one month before the clinical worsening of tinnitus; or
 - (ee) having received a cumulative equivalent dose of at least 10 sieverts of ionising radiation to the auditory apparatus before the clinical worsening of tinnitus; or
 - (ff) undergoing a course of therapeutic radiation for cancer, where the auditory apparatus was in the field of radiation, before the clinical worsening of tinnitus; or
 - (gg) having a serum cobalt concentration of at least 5 micrograms per litre for at least the one month before the clinical worsening of tinnitus; or
 - (hh) having vitamin B1 (thiamine) or vitamin B12 (cobalamin) deficiency at the time of the clinical worsening of tinnitus; or
 - (ii) having carbon monoxide poisoning within the 48 hours before the clinical worsening of tinnitus; or
 - (jj) having hypothyroidism for at least the three months before the clinical worsening of tinnitus; or

-
- (kk) inability to obtain appropriate clinical management for tinnitus.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(s) to 6(kk)** apply only to material contribution to, or aggravation of, tinnitus where the person's tinnitus 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 drug or a drug from a class of drugs from the specified list" means:

- (a) aminoglycosides;
- (b) carbimazole;
- (c) cisplatin and other antineoplastic platinum compounds;
- (d) propylthiouracil;
- (e) quinidine; or
- (f) quinine and quinine derivatives;

"a specified autoimmune disorder" means one of the following:

- (a) Behçet's syndrome;
- (b) Cogan's syndrome;
- (c) dermatomyositis;
- (d) immune thrombocytopaenic purpura;
- (e) inclusion-body myositis;
- (f) microscopic polyangiitis;
- (g) polyarteritis nodosa;
- (h) polymyositis;
- (i) relapsing polychondritis;
- (j) rheumatoid arthritis;
- (k) Sjogren's syndrome;
- (l) Susac's syndrome;
- (m) systemic lupus erythematosus;
- (n) systemic sclerosis (scleroderma); or
- (o) Wegener's granulomatosis;

"a specified disease or injury" means:

-
- (a) a benign or malignant neoplasm;
 - (b) a cerebrovascular accident;
 - (c) a specified autoimmune disorder;
 - (d) delayed endolymphatic hydrops;
 - (e) ischaemia;
 - (f) Meniere's disease;
 - (g) multiple sclerosis;
 - (h) otosclerosis; or
 - (i) Paget's disease of the skull;

"a specified infection" means:

- (a) chronic otitis media of the affected side;
- (b) cytomegalovirus infection of the vestibulocochlear nerve of the affected side;
- (c) diphtheria;
- (d) encephalitis;
- (e) herpes zoster of the geniculate ganglion of the affected side;
- (f) human immunodeficiency virus infection;
- (g) leprosy;
- (h) Lyme disease;
- (i) measles;
- (j) meningitis;
- (k) mumps;
- (l) neurosyphilis;
- (m) suppurative labyrinthitis of the affected side;
- (n) suppurative otitis media of the affected side;
- (o) tuberculosis involving the temporal bone of the affected side; or
- (p) typhoid fever;

"a specified ototopical medication" means ear drops containing an agent from the following list:

- (a) acetic acid;
- (b) chloramphenicol;
- (c) chlorhexidine;
- (d) chloromycetin;
- (e) cresylate;
- (f) ethanol;
- (g) gentian violet;
- (h) povidone iodine; or
- (i) salicylates;

"a vascular, muscular or other anatomical source of sound" means:

- (a) an acquired arteriovenous fistula;
- (b) benign intracranial hypertension;

-
- (c) brachiocephalic artery stenosis;
 - (d) carotid artery stenosis or dissection;
 - (e) dural venous sinus stenosis;
 - (f) jugular bulb abnormalities;
 - (g) neoplastic and non-neoplastic space-occupying lesions involving or arising near the middle or inner ear;
 - (h) other vascular abnormalities or other conditions causing turbulent blood flow in structures close to the middle or inner ear;
 - (i) palatal myoclonus;
 - (j) patulous eustachian tube;
 - (k) spasm of the stapedius or tensor tympani muscles; or
 - (l) valvular heart disease;

"acoustic shock" means the development of a set of specific symptoms immediately after being exposed to a brief, sudden, unexpected, high frequency, high intensity sound. Symptoms in addition to tinnitus include otalgia, facial or jaw pain, aural fullness, hyperacusis, vertigo and dislike or fear of loud noises;

"auditory structures" means the tympanic membrane, ear ossicles, cochlea, cochlear nerve or vestibulocochlear nerve;

"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.

"dB(A)" means A-weighted sound pressure level in decibels, where A-weighting is a standardised frequency response used in sound measuring instruments;

"dB(C)" means C-weighted sound pressure level in decibels, where C-weighting is a standardised frequency response used in sound measuring instruments;

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

"ICD-10-AM code" means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), Seventh Edition, effective date of 1 July 2010, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 154 5;

"ischaemia" means reduced blood supply due to thrombosis, embolism, hypotension, vasospasm, hyperviscosity, coagulation disorders, vasculitis or another pathological process;

"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;

"time-weighted average (TWA) with 3-dB exchange rate" means the time-weighted average noise exposure level calculated according to the following formulae and shown in the table:

$$TWA = 10.0 \times \text{Log}(D/100) + 85$$

where D = daily dose; and

$$D = [C_1/T_1 + C_2/T_2 + \dots + C_n/T_n] \times 100$$

where C_n = total time of exposure at a specified noise level,

T_n = exposure duration for which noise at this level becomes hazardous

Table of noise exposure levels and durations based on 3-dB(A) exchange rate

Exposure Level, <i>L</i> (dB(A))	Duration, <i>T</i>			Exposure Level, <i>L</i> (dB(A))	Duration, <i>T</i>		
	Hours	Minutes	Seconds		Hours	Minutes	Seconds
80	25	24	—	106	—	3	45
81	20	10	—	107	—	2	59
82	16	—	—	108	—	2	22
83	12	42	—	109	—	1	53
84	10	5	—	110	—	1	29
85	8	—	—	111	—	1	11
86	6	21	—	112	—	—	56
87	5	2	—	113	—	—	45
88	4	—	—	114	—	—	35
89	3	10	—	115	—	—	28
90	2	31	—	116	—	—	22
91	2	—	—	117	—	—	18
92	1	35	—	118	—	—	14
93	1	16	—	119	—	—	11
94	1	—	—	120	—	—	9
95	—	47	37	121	—	—	7
96	—	37	48	122	—	—	6
97	—	30	—	123	—	—	4
98	—	23	49	124	—	—	3
99	—	18	59	125	—	—	3
100	—	15	—	126	—	—	2
101	—	11	54	127	—	—	1
102	—	9	27	128	—	—	1
103	—	7	30	129	—	—	1
104	—	5	57	130-140	—	—	<1
105	—	4	43	—	—	—	—

Source: National Institute of Occupational Safety and Health 1998 Guidelines
Publication No. 98-126

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 2 May 2012.

Endnotes

Endnote 1—About the endnotes

The endnotes provide information about this compilation and the compiled law.

The following endnotes are included in every compilation:

Endnote 1—About the endnotes

Endnote 2—Abbreviation key

Endnote 3—Legislation history

Endnote 4—Amendment history

Abbreviation key—Endnote 2

The abbreviation key sets out abbreviations that may be used in the endnotes.

Legislation history and amendment history—Endnotes 3 and 4

Amending laws are annotated in the legislation history and amendment history.

The legislation history in endnote 3 provides information about each law that has amended (or will amend) the compiled law. The information includes commencement details for amending laws and details of any application, saving or transitional provisions that are not included in this compilation.

The amendment history in endnote 4 provides information about amendments at the provision (generally section or equivalent) level. It also includes information about any provision of the compiled law that has been repealed in accordance with a provision of the law.

Misdescribed amendments

A misdescribed amendment is an amendment that does not accurately describe the amendment to be made. If, despite the misdescription, the amendment can be given effect as intended, the amendment is incorporated into the compiled law and the abbreviation “(md)” added to the details of the amendment included in the amendment history.

If a misdescribed amendment cannot be given effect as intended, the abbreviation “(md not incorp)” is added to the details of the amendment included in the amendment history.

Endnote 2—Abbreviation key

ad = added or inserted	o = order(s)
am = amended	Ord = Ordinance
amdt = amendment	orig = original
c = clause(s)	par = paragraph(s)/subparagraph(s) /sub-subparagraph(s)
C[x] = Compilation No. x	pres = present
Ch = Chapter(s)	prev = previous
def = definition(s)	(prev...) = previously
Dict = Dictionary	Pt = Part(s)
disallowed = disallowed by Parliament	r = regulation(s)/rule(s)
Div = Division(s)	
exp = expires/expired or ceases/ceased to have effect	reloc = relocated
F = Federal Register of Legislation	renum = renumbered
gaz = gazette	rep = repealed
LA = <i>Legislation Act 2003</i>	rs = repealed and substituted
LIA = <i>Legislative Instruments Act 2003</i>	s = section(s)/subsection(s)
(md) = misdescribed amendment can be given effect	Sch = Schedule(s)
(md not incorp) = misdescribed amendment cannot be given effect	Sdiv = Subdivision(s)
mod = modified/modification	SLI = Select Legislative Instrument
No. = Number(s)	SR = Statutory Rules
	Sub-Ch = Sub-Chapter(s)
	SubPt = Subpart(s)
	<u>underlining</u> = whole or part not commenced or to be commenced

Endnote 3—Legislation history

Name	Registration	Commencement	Application, saving and transitional provisions
<i>Statement of Principles concerning tinnitus No. 33 of 2012</i>	27 April 2012 F2012L00942	2 May 2012	
<i>Veterans' Entitlements (Statements of Principles—Cumulative Equivalent Dose) Amendment Determination 2017 (No. 58 of 2017)</i>	22 August 2017 F2017L01067	18 September 2017	

Endnote 4—Amendment history

Provision affected	How affected
Clause 9 – ' "cumulative equivalent dose".....'	rs. Instrument No. 58 of 2017