



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HIKINA WHAKATUTUKI



Consultation paper

*Proposed amendments to the Accident Insurance
(Occupational Hearing Assessment Procedures)
Regulations 1999*

August 2022

Permission to reproduce



Crown Copyright ©

This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

Important notice

The opinions contained in this document are those of the Ministry of Business, Innovation and Employment and do not reflect official Government policy. Readers are advised to seek specific legal advice from a qualified professional person before undertaking any action in reliance on the contents of this publication. The contents of this discussion paper must not be construed as legal advice. The Ministry does not accept any responsibility or liability whatsoever whether in contract, tort, equity or otherwise for any action taken as a result of reading, or reliance placed on the Ministry because of having read, any part, or all, of the information in this discussion paper or for any error, inadequacy, deficiency, flaw in or omission from the discussion paper.

ISBN 978-1-99-104121-0 (online)

How to have your say

Submissions process

On behalf of the Minister for ACC, the Ministry of Business, Innovation and Employment (MBIE) seeks written submissions on the issues raised in this document by 5pm on **14 September 2022**.

Your submission may respond to any or all of these issues. Where possible, please include evidence to support your views, for example references to independent research, facts and figures, or relevant examples.

Please use the submission template provided at: <https://www.mbie.govt.nz/have-your-say/updating-accident-compensation-hearing-assessment-regulations>. This will help us to collate submissions and ensure that your views are fully considered. Please also include your name and (if applicable) the name of your organisation in your submission.

Please include your contact details in the cover letter or e-mail accompanying your submission.

You can make your submission by:

- sending your submission in as Adobe Acrobat, Microsoft Word document or a compatible format as an attachment to ACregs@mbie.govt.nz
- mailing your submission to:

The Manager, Accident Compensation Policy

Ministry of Business, Innovation & Employment
PO Box 1473

Wellington 6140
New Zealand

Please direct any questions that you have in relation to the submissions process to ACregs@mbie.govt.nz

Use of information

The information provided in submissions will be used to inform MBIE's policy development process, and will inform advice to Ministers on any proposed updates to the Hearing Assessment Regulations. We may contact submitters directly if we require clarification of any matters in submissions.

Release of information

MBIE intends to upload PDF copies of submissions received to MBIE's website at www.mbie.govt.nz. MBIE will consider you to have consented to uploading by making a submission, unless you clearly specify otherwise in your submission.

If your submission contains any information that is confidential or you otherwise wish us not to publish, please:

- indicate this on the front of the submission, with any confidential information clearly marked within the text
- provide a separate version excluding the relevant information for publication on our website.

Submissions remain subject to request under the Official Information Act 1982. Please set out clearly in the cover letter or e-mail accompanying your submission if you have any objection to the release of any information in the submission, and in particular, which parts you consider should be withheld, together with the reasons for withholding the information. MBIE will take such objections into account and will consult with submitters when responding to requests under the Official Information Act 1982.

Private information

The Privacy Act 2020 establishes certain principles regarding the collection, use and disclosure of information about individuals by various agencies, including MBIE. Any personal information you supply to MBIE in the course of making a submission will only be used for the purpose of assisting in the development of policy advice in relation to this review. Please clearly indicate in the cover letter or e-mail accompanying your submission if you do not wish your name, or any other personal information, to be included in any summary of submissions that MBIE may publish.

List of abbreviations and acronyms

AC Act	Accident Compensation Act 2001
The AC Scheme	Accident Compensation Scheme (administered by ACC)
ACC	Accident Compensation Corporation
MBIE	Ministry of Business, Innovation and Employment
ONIHL	Occupational Noise Induced Hearing Loss
The Regulations	The Accident Insurance (Occupational Hearing Assessment Procedures) Regulations 1999

Contents

- How to have your say.....3**
- List of abbreviations and acronyms.....5**
- Executive summary7**
- 1 Introduction9**
 - Purpose of this document9
 - Background.....9
 - The Hearing Assessment Regulations10
 - Process and timeline.....12
- 2 Issues identified with the age scale.....12**
 - The age scale no longer reflects the hearing profile of the current population12
- 3 Objectives for the Regulations13**
 - Objectives.....13
- 4 Proposed options15**
 - Introduction.....15
 - Option 1: Maintain the current age scale based on ISO 7029:198415
 - Option 2: Update the age scale based on ISO 7029:2017.....15
 - Discarded options19
- 5 Analysis of options21**
 - Objectives.....21
- 6 Additional amendments.....23**
 - Remove reference to tests conducted by otolaryngologists.....23
 - Update the reference to ISO 8253.1-2010 from AS ISO 8253.1-200923
- 7 What happens next?24**
 - Full list of questions24
 - Resources25

Executive summary

The Accident Compensation Scheme (the AC Scheme) provides cover for personal injury caused by a work-related gradual process, disease, or infection (section 30 of the *Accident Compensation Act 2001* (the AC Act)). This includes work-related hearing loss. ACC provides cover and entitlements where there is a certain proportion of hearing loss caused by a work-related injury. The current legislative settings contain two features to ensure that claimants with Occupational Noise Induced Hearing Loss (ONIHL) receive consistent outcomes and that ACC funds hearing aids only where they are needed due to injury:

- A six per cent hearing loss injury-related cover threshold (based on clinical evidence that hearing aids provide benefit beginning at five-six per cent hearing loss). This threshold is prescribed in the AC Act (primary legislation).
- An age scale adjustment (based on clinical evidence that a certain amount of hearing loss will be caused by age (presbycusis), not injury). This adjustment is prescribed in regulations (secondary legislation)¹. These regulations are specific to noise-induced hearing loss caused by work-related gradual process (work-related hearing loss)^{2, 3}.

For work-related hearing loss, claimants often lodge claims where their age-related hearing loss, alongside their work-related hearing loss, starts to negatively impact their lives. However, the AC Act specifically excludes any degree of hearing loss caused by the ageing process or any other non-personal injury related factors (section 26(1B))⁴.

As employers should not be responsible for costs that are caused by factors that are not related to work, ACC uses the age scale to determine the amount of hearing-loss which can be attributed to age as opposed to work-related injury. The age scale is contained in Schedule 2 of the *Accident Insurance (Occupational Hearing Assessment Procedures) Regulations 1999* (the Regulations). The current age scale for hearing loss is based on the 1988 National Acoustic Laboratories (NAL) report table⁵, which

¹ Injury-related hearing loss due to a single event (eg from an explosion), while this can be covered by the AC Scheme, does not fall under the regulations requiring the age adjustment. Additionally, the six percent threshold does not apply to auditory symptoms resulting from traumatic brain injury (eg following a car crash).

² Section 323 of the AC Act.

³ Also commonly referred to as Occupational Noise-Induced Hearing Loss (ONIHL). This document will refer to work-related hearing loss, however as stated, the Regulations are specific to noise-induced hearing loss caused by work-related gradual process, rather than the broader definition of work-related hearing loss (eg, work-related one-off trauma or chemical exposure).

⁴ The AC Scheme also provides cover for other personal injuries caused by a work-related gradual process, disease or infection (WRGPDI) through two pathways: under a list of specified occupational diseases in the AC Act; or through a three-step test. This test includes a requirement that a claimant must have performed a work task, or have been employed in a work environment that caused or contributed to their personal injury.

⁵ The application of an age correction using NAL tables is adopted in most Australian states. A 2019 report in New South Wales (Ian Cameron and Candice McBain, 'Occupational Noise Induced Hearing Loss and Audiometry') noted that the NAL tables are based on an older version of the ISO 7029 standard, and recommended they be updated.

is in turn based on the ISO 7029:1984 standard. A new international standard has since been developed (ISO 7029:2017). MBIE recommends the age scale be updated based on the new standard.

We encourage the submission of any additional options to address the age-related portion of hearing loss when conducting hearing assessments.

In addition to changing the age-related hearing loss table, there are two additional technical amendments which we would like feedback on. These are:

- removing the reference to tests conducted by otolaryngologists, and
- updating the reference from ISO 8253.1-2010 to AS ISO 8253.1-2009.

1 Introduction

Purpose of this document

1. The purpose of this discussion paper is to obtain feedback on proposals to update the Regulations. The contents of this discussion paper reflect work undertaken to consider the purpose of the Regulations and how they work in practice. MBIE encourages the submission of alternative approaches for accounting for non-injury related hearing loss.
2. This review only considers changes to the Regulations, which are specific to noise-induced hearing loss caused by work-related gradual process (work-related hearing loss). Injury-related hearing loss due to a single event (eg from an explosion), while this can be covered by the AC Scheme, does not fall under the regulations requiring the age adjustment.

Background

The Accident Compensation Scheme provides cover for gradual process work-related hearing loss

3. The AC Scheme provides cover for personal injury caused by a work-related gradual process, disease, or infection (section 30 of the AC Act). Gradual process hearing loss claims, also known as Occupational Noise Induced Hearing Loss (ONIHL), are subject to specific settings within the AC Scheme. These settings ensure that cover is provided for work-related injury only, rather than other non-work factors, meaning levy payers contributing to the work account are paying only for work-related injury.
4. The current legislative settings contain two provisions to ensure that claimants with Work-Related hearing loss receive consistent outcomes from assessment providers, and that ACC funds hearing aids only where they are needed due to injury⁶:
 - a. A six per cent hearing loss injury-related cover threshold (based on clinical evidence that hearing aids provide benefit beginning at five-six per cent hearing loss). This threshold is prescribed in the AC Act (primary legislation).
 - b. An age scale adjustment (based on clinical evidence that a certain amount of hearing loss will be caused by age (presbycusis), not injury). This adjustment is prescribed in regulations (secondary legislation).

⁶ Section 30 of the AC Act defines the circumstances for an injury to be regarded as a personal injury caused by work-related gradual process, disease, or infection. This test also applies to work-related gradual process hearing loss claims. The test and associated entitlements (part 4 of the AC Act) ensure consistent outcomes across all work-related gradual process claims.

5. MBIE has completed work on determining whether the current work-related hearing loss settings are up to date and fit for purpose. This included considering the hearing loss injury-related threshold contained within the AC Act (section 26(1A)), and the age scale.

The Government is currently looking to change the hearing loss injury-related cover threshold to five per cent

6. Epidemiological evidence suggests that hearing aids do not have any benefit until a person has five-six per cent hearing loss⁷. As the current settings use a six per cent threshold, those with lower levels are not eligible for cover. This may disadvantage those who sit on the precipice of the threshold (5-5.9 per cent). There is currently a Bill, before the New Zealand House of Representatives, which is seeking to change the current threshold to five per cent⁸. This would amend section 26(1A) of the AC Act.

The Hearing Assessment Regulations

7. The age scale used as a part of the hearing assessment settings is contained within the *Accident Insurance (Occupational Hearing Assessment Procedures) Regulations 1999*. The Regulations describe the procedures that claimants must undergo for a gradual process hearing test. The test must be undertaken by an otolaryngologist or audiologist (specialists). The specialists conduct a pure tone audiometry test of hearing loss (hearing loss in each ear). The specialist will measure a claimant's hearing loss threshold at each audiometric frequency (500, 1,000, 1,500, 2,000, 3,000, 4,000, 6,000, and 8,000 Hz) for each ear. The audiogram in Diagram 1 below shows an example of what a claimant's hearing loss could look like (Diagram 2 – degrees of hearing loss, is provided below for context).

⁷ JH Macrae, "Workers Compensation for Industrial Deafness", *Acoustics Australia*, Vol 26, No 1, 1998, pp 13-16; Leyla Jalilv and Karimi, Majid Ashrafi, Elham Khosravi, Zahra Shahidipour, Fatemeh Vafae, *Hearing screening in the elderly and evaluating the need for hearing aid*, *Audiology (Journal of the International Society of Audiology)*, Vol.16, No.2, 2008; Harvey Dillon, *National Acoustic Laboratories: a Division of Australian Hearing*, 12th Asia-Oceania Otolaryngology Head and Neck Congress, Auckland, 2011.

⁸ https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL_118133/accident-compensation-maternal-birth-injury-and-other

Diagram 1: Example audiogram

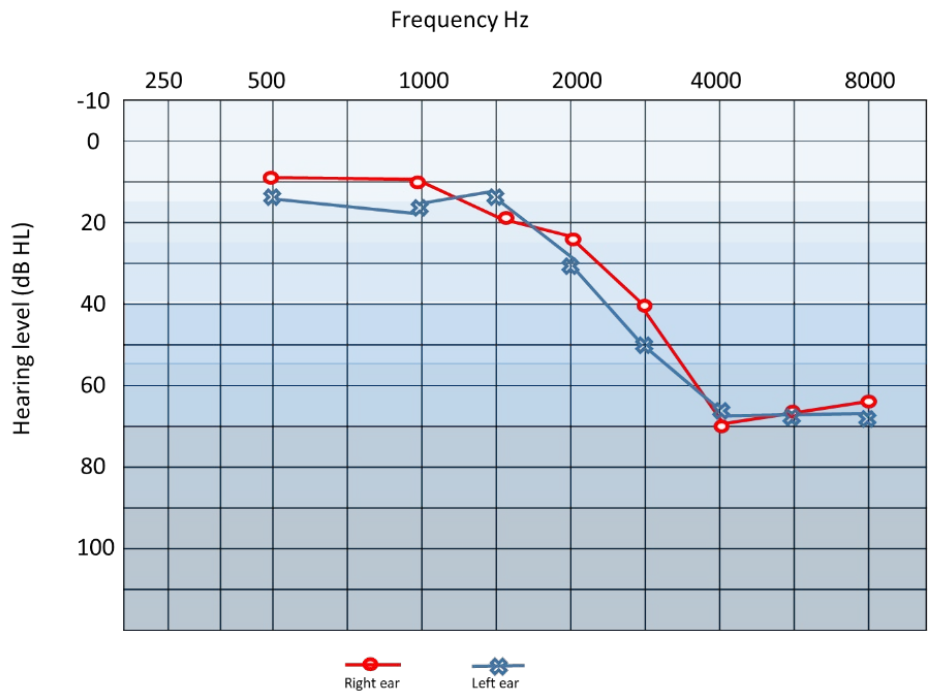
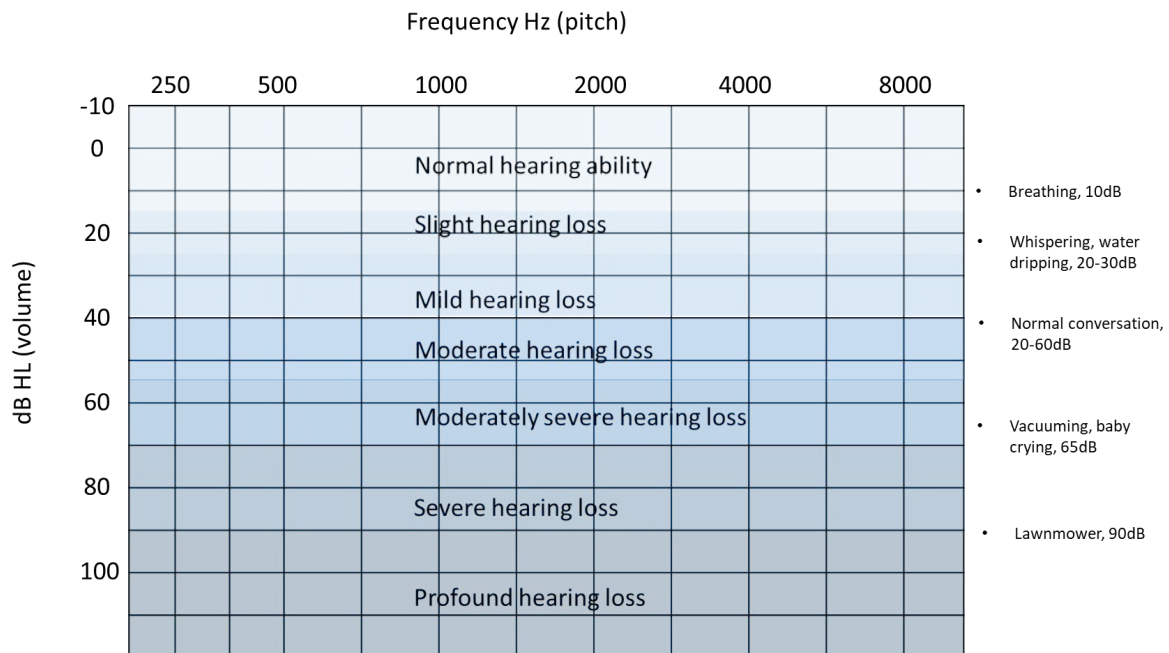


Diagram 2: Degrees of hearing loss



8. In the case shown in Diagram 1, the claimant struggles with hearing high-pitched sounds (4,000-8,000 Hz range). This would make hearing speech difficult.
9. The specialist will use the outcome of the hearing assessment to calculate the percentage loss of hearing using the tables contained in Schedule 1 of the Regulations. The percentage loss of hearing is then applied to the age scale contained in Schedule 2 to determine the final injury-related percentage of hearing loss. In this case, the tables contained in Schedule 1 show the claimant has an 11.7 per cent loss of hearing. Assuming the claimant is a 65 year old male, and using the age scale in Schedule 2, 2.4 per cent is subtracted from the diagnosed hearing loss for

age related hearing loss (presbycusis). This leaves the claimant with a 9.3 per cent loss of hearing, which is above the 6 per cent threshold,⁹ so this person could receive ACC cover

Table 1: Example of hearing loss cover under the current regulations

Current Regulations with Age scale based off ISO 7029:1984				
	Overall % hearing loss	Proportion attributable to age	Injury-related portion	Cover?
Male (65yr)	11.7%	2.4%	9.3%	Yes

Process and timeline

10. A current timeline for this consultation process is set out below.



2 Issues identified with the age scale

The age scale no longer reflects the hearing profile of the current population

11. The current age scale does not reflect the hearing profile of the current population. The current age scale for hearing loss is based on the 1988 NAL report table¹⁰, which is in turn based on the outdated ISO 7029:1984 standard. Recent studies have suggested that:

- a. The ISO 7029:1984 standard has had some critical comments on the validity of the thresholds, as the threshold data are mainly based on studies from the 1950s, 1960s,

⁹ Section 26(1A) specifies that injury-related hearing loss must exceed 6% or more. Note that there is currently a Bill before the New Zealand House of Representatives which includes changes to the threshold which would see it lowered to 5% or more.

¹⁰ The application of an age correction using NAL tables is adopted in most Australian states. A 2019 report in New South Wales (Ian Cameron and Candice McBain, 'Occupational Noise Induced Hearing Loss and Audiometry') noted that NAL tables are based on an older version of the ISO 7029 standard, and recommended they be updated.

and 1970s, and there is a possibility that the data may be inaccurate due to outdated selection criteria and calibration procedures.

- b. Studies also suggested that there may be an underestimation of hearing thresholds in otologically normal (ON) females^{11,12}.
12. The updated 2017 standard uses more recent research, conducted after the studies used to form the 1984 standard. Updating the scale based on the 2017 standard would reflect more precisely against what the expected aging profile is of the general population. For men this would mean that expected aging impacts will be lower before the age of 78 and for women this would mean the expected impacts of aging will be greater for all ages accounted for in the scale (65 and above).
13. We are now consulting in order to gain a better understanding of the range of views on this issue and whether there are any alternative options for accounting for age that we have not considered.

3 Objectives for the assessing the proposed options to update the Regulations

14. We are seeking your feedback on our proposed objectives for assessing the options proposed, for updating the Regulations.

Objectives

15. The Regulations are intended to ensure that assessments for claimants are consistent across providers, and that levy payers are only funding entitlements for work-related gradual process hearing loss claims, as opposed to hearing loss caused by other factors¹³. This reflects the AC Scheme's mandate to cover and provide entitlements for injury rather than illness¹⁴.
16. We set the following objectives, in priority order, in assessing the proposed approach to updating the Regulations:

¹¹ "Otologically normal person": a person in a normal state of health, who is free from all signs and symptoms of ear disease and from obstructing wax in the ear canals, and who has no history of undue noise exposure.

¹² Noise induced hearing loss (NIHL) assessment for workers' compensation, Monash University Centre for Occupational and Environmental Health, 2010, Research Brief No. 0810-004-R6B.

¹³ Note that the Regulations only apply to work-related hearing loss (gradual process claims), claims for hearing loss resulting from a single event do not need to meet the testing requirements contained in the Regulations.

¹⁴ Section 3 of the *Accident Compensation Act 2001*.

- a. **Entitlements are targeted at work-related hearing loss:** employers should not be responsible for hearing loss costs that are caused by factors that are not related to work (ie employers should not bear the costs of ageing). Equally, claims for justified work-related injury should receive entitlements.
- b. **Based on up to date scientific research:** the Regulations reflect current research to keep in line with international studies and support evidence-based scheme settings, as well as ensuring the AC Scheme is not over or undercompensating individuals for non-injury related causes.
- c. **Consistent outcomes for claimants:** claimants receive consistent outcomes no matter which specialist they visit for an assessment.
- d. **Ease of implementation:** the hearing assessment settings are easy to implement for providers and ACC.
- e. **Financial impact:** the impact of updates to levy payers and the sustainability of the Work account.

Questions on the proposed objectives

1	Do you agree with the objectives?	
	Strongly Disagree	
	Disagree	
	Neither	
	Agree	
	Strongly agree	
	If you disagree, which of the objectives listed do you disagree with and why?	
2	Are there other/alternative objectives that should be considered to help shape the discussion?	

4 Proposed options

Introduction

17. Option 1 proposes no change to the age scale (the status quo). Option 2 proposes updating the age scale based on ISO 7029:2017.

Option 1: Maintain the current age scale based on ISO 7029:1984

18. Option 1 would see the age scale continue to be based on ISO 7029:1984.
19. Maintaining the current age scale would mean that some women, and men aged 78 and over, are potentially receiving cover for non-injury related hearing loss, while others, mostly men aged below 78, may receive decline decisions for justified injury-related hearing loss. Maintaining the current age scale will also mean continuing to base cover on outdated science. This would not match other parts of the AC Scheme which deal with the impacts of ageing on injury claims, ie ACC does not cover injury caused wholly or substantially by the ageing process.
20. Gradual process hearing injuries tend to begin showing impacts to those who are already retired or are in their later years of employment, as the impacts of ageing compound on any work-related hearing loss. Where claims for ACC have been declined, MOH funding is available to support those who do require hearing aids¹⁵. The amount of funding available from MOH for those who do receive cover under the AC Scheme is apportioned to the percentage of hearing loss attributable to work-related causes, ie the greater the funding amount provided by ACC, the lower the contribution from MOH (for the non-work-related portion)¹⁶. Maintaining the current settings impacts on the portion being funded through general taxation (MOH for health-related conditions) and that being funded through work levies on employers (for work-related injuries).

Option 2: Update the age scale based on ISO 7029:2017

21. The ISO standard (ISO 7029 Acoustics - Statistical distribution of hearing thresholds related to age and gender) was updated in 2017 to match new international research¹⁷. The update was a technical revision¹⁸.

¹⁵ <https://www.health.govt.nz/publication/guide-getting-hearing-aids-hearing-aid-subsidy-scheme>

¹⁶ Claimants may fall within different bands for the maximum payable cost for hearing aids. These bands are set in the *Accident Compensation (Apportioning Entitlements for Hearing Loss) Regulations 2010* (Apportionment Regulations), and provide different rates based on whether covered hearing loss (as a portion of the total hearing loss) is 29 per cent or below, 30-59 per cent, or 60 per cent and above

¹⁷ Refer to <https://www.iso.org/obp/ui/#iso:std:iso:7029:ed-3:v1:en>.

¹⁸ Key changes include: the estimation accuracy of expected medians and statistical distributions of hearing thresholds, and the calculable age range was extended to the age of 80 years at audiometric frequencies of 2,000 Hz and below.

22. The new age scale starts at age 66 (down from 69) for women and age 61 (up from 56) for men. Updating to the new ISO standards would set a level of age-related hearing loss more favourable to most claimants, as over 80% of all claims (ie, accepted and declined) are from men. Table 2 below contains the current (1988 NAL report table) and new (ISO 7029:2017) age corrections expressed as percentage loss of hearing for males and females (data derived from ISO 7029 (Acoustics Statistical distribution of hearing thresholds related to age and gender, mean values).

Table 2: *Current (1988) and new (2017) age corrections – percentage to be taken from the overall test results to determine the injury-related portion of a claimant’s hearing loss*

Age	Male 1988 (%)	Male 2017 (%)	Female 1988 (%)	Female 2017 (%)
55	0.0			
56	0.1			
57	0.2			
58	0.4			
59	0.6			
60	0.8			
61	1.0	0.1		
62	1.3	0.4		
63	1.7	0.6		
64	2.0	1.1		
65	2.4	1.2		0.0
66	2.9	1.5		0.1
67	3.3	1.8		0.7
68	3.8	2.6	0.0	0.9
69	4.4	3.1	0.2	1.1
70	4.9	3.6	0.4	1.7
71	5.5	4.3	0.6	2.2
72	6.2	5.3	0.8	3.2
73	6.8	6.0	1.1	3.9
74	7.5	7.0	1.4	4.5
75	8.3	7.7	1.7	6.1
76	9.0	8.6	2.1	7.2
77	9.8	9.6	2.5	8.1
78	10.7	11.1	2.9	9.7
79	11.5	12.8	3.4	11.1
80	12.5	14.0	3.9	13.4

23. Updating the age scale will affect the total proportion of a claimant’s hearing loss that is considered to be injury related. This will affect new claims by some claimants in two different ways:
- a. Some claimants who would have cover, if existing settings were retained, would instead fall below the threshold for hearing loss cover. However, other claimants would be able to have cover, who would not currently meet the threshold.
 - b. Claimants may fall within different bands for the maximum payable cost for hearing aids. These bands are set in the *Accident Compensation (Apportioning Entitlements for Hearing Loss) Regulations 2010* (Apportionment Regulations), and provide

different rates based on whether covered hearing loss (as a portion of the total hearing loss) is 29 per cent or below, 30-59 per cent, or 60 per cent and above.

Option 2 will be unfavourable to some potential claimants, but better reflects the hearing profile of current levy payers

24. The new age scale in Option 2, in addition to the proposed change to the threshold from 6% to 5%, would mean that women aged 66 and over, and men aged 78 and over, are put in a less favourable position relative to the current scale. Based on the previous 10 years of accept / decline decisions by ACC¹⁹, 1,173 women aged 70–80 and 386 men aged 79-80 would have been declined under the proposed settings, but would be accepted under existing settings. Those that are declined under both the current and proposed settings would still be eligible to apply for funding through MOH.
25. However, the new age scale would also mean that men aged below 78 are put in a more favourable position relative to the current scale. Based on the previous 10 years of decline/ accept decisions by ACC, 2,729 men aged below 79²⁰ and 151 women would be accepted under the proposed settings, but would be declined under existing settings.
26. Under the proposed settings, the net number of additional accepted claims would have been 1,321. Table 3 below contains an estimate of the likely scale of change for these groups, noting that the proposed changes would not be retrospectively applied.

Table 3: Impacts on accepted claim numbers

	New accepted ('Decline changed to Accept' minus 'Accept changed to Decline')		
	M	F	Total
Decline changed to Accept	2729	151	2880
Accept changed to Decline	386	1173	1559
Decline changed to Accept minus Accept changed to Decline	2343	-1022	1321

27. However, the 2017 update is more likely to ensure that hearing loss attributable to ageing is accurately accounted for, thereby ensuring ACC is only covering hearing loss due to injury rather than other factors. This is also an important equity point for the AC Scheme, to ensure that

¹⁹ Note that changes in the future demography of New Zealand (more people in the 75+ age bracket relative to the 60 – 75 bracket) could skew these numbers, meaning the portion of people disadvantaged might be different than expected. Changing rates of labour force participation among older people may also impact on the number of claims expected within the AC Scheme.

²⁰ The positive impacts of the combined changes also include a small number of men at age 78.

claims where ageing is a factor are treated equitably, eg in a case where someone may be declined cover or entitlements because of ageing/ degeneration around their bones. The updated 2017 ISO standard uses audiometric data published after the establishment of the first edition (ISO 7029:1984). All the data on which the second and first editions (ISO 7019:1984 and ISO 7029:2000) had been based were discarded, meaning that the 2017 update describes the hearing profile of people in more recent years. While studies are based on international research, we have not identified any studies based solely on a New Zealand population with which to distinguish a difference based on population demographics. We welcome submitters suggestions of alternative studies and methods to account for ageing based on New Zealand's population.

28. The update also notes that the source data of the previous editions might not have been screened rigorously in terms of hearing abnormalities. Problems related to instrumentation might also have affected measurement data.
29. As stated above, there is some evidence that the current age scale does not properly account for hearing loss in (ON) women. The updated standard is more likely to reflect the hearing profile of the current population as it is based on more up to date evidence, this includes a more accurate picture of hearing loss among (ON) women. Table 4 considers two different claimants and how the proposed changes may impact on their cover decision by ACC.

Table 4: Impacts for claimants from updating the age scale

		Option 1 (Status quo) Age scale based off ISO 7029:1984			Option 2 Age scale based off ISO 7029:2017		
	Overall % hearing loss	Proportion attributable to age	Injury-related portion	Cover?	Proportion attributable to age	Injury-related portion	Cover?
Male (67yr)	7%	3.3%	3.7%	No	1.8%	5.2%	Yes
Female (70yr)	6%	0.4%	5.6%	Yes	1.7%	4.3%	No

Estimated cost impacts of Option 2

30. When costing changes to AC settings we look at up to four different components:
- What the estimated impact will be on the Outstanding Claims Liability, which is the remaining lifetime cost to the AC scheme of all existing injuries.
 - Government appropriation impact²¹. This is how much money the government will have to contribute from general taxation each year to fund the additional lifetime costs of the new

²¹ Note that, as we are proposing changes to a work-related injury, the Non-Earners' Account will not be impacted, therefore no additional impact on Government appropriations.

injuries to non-earners (eg children and retired people) that occur in a given year (including for treatment injuries)²².

- The levy impact. This is how much levies might need to be changed to fund the additional lifetime costs of the new injuries that occur in a given year at work, on the road, and to earners outside work (including for treatment injuries).
- The cash cost. This is what will be paid out each year from the Non-Earners' Account (Government appropriations and assets) and levied accounts (levies and assets).

31. ACC has estimated the OCL impact (including a risk margin) and levy impact of updating the age scale, in addition to the shift to a five per cent threshold. Table 5 provides the cost estimates.

32. These estimates can be seen in the context of existing costs for hearing loss claims. At June 2020, the OCL for work-related hearing loss claims was \$550 million (with a risk margin) and the June 2020 average levy rate for the Work Account was 67 cents per \$100 of payroll (for all Work injuries, not only ONIHL).

Table 5: *Estimated financial impact to ACC of updating the age scale and lowering the cover threshold to five per cent*

Financial year	Work OCL Impact	Annual Cash Cost	Work Account Levy Impact
2022/23	\$5 million	\$0.5 million	\$0.01 dollars
2023/24	\$7 million	\$1.5 million	\$0.01 dollars
2024/25	\$8 million	\$1.5 million	\$0.01 dollars

33. The two proposed policy changes, individually, are not estimated to result in a significant change in expected costs to ACC. However, the two changes together could shift some clients to a higher level of ACC-funded hearing loss entitlement, thereby increasing ACC's hearing loss costs (as represented above).

34. The Ministry of Health (MoH) also provides some funding for hearing aids, ACC works alongside MoH to apportion funding where a claimant has some injury related hearing loss alongside other factors. The proposed changes (inclusive of the five per cent threshold change and updated age scale) will have little to no impact on Vote: Health.

Discarded options

35. There are no other options on which to base the age scale that are considered viable. The overall process used in the Regulations is based on the 1988 National Acoustics Laboratories Report, making it difficult to fundamentally change the age scale table base without rewriting the entire testing process. Reconsidering the testing process would involve potentially high costs and an administrative burden placed on both providers and ACC. Consideration would also have to be given to the policy work involved and the operational viability of any suitable alternative process. While there may be merit in undertaking such a review, at this time it is not considered a priority.

²² Collecting the funding needed to meet lifetime costs means that the cost of these injuries is not passed onto future generations, no matter how long a person needs ACC's support.

36. It is also important to note that the methodology of the 1988 National Acoustics Laboratories Report has been accepted in all Australian jurisdictions, as the defined method for calculating percentage loss of hearing. It is used for the awarding of compensation to individuals who suffer hearing loss from workplace noise exposure. Providers are familiar with the current table which is similar to the proposed updated one. The tables used by assessors to determine the total percentage loss of hearing are also based on the 1988 NAL report (schedule 1 of the Regulations). It makes sense to align these tables.

Questions on the proposed options	
3	Do you think the use of ISO standards as the base for the age scale is appropriate? (Yes/no/not sure) Why/ Why not?
4	Do you have any evidence to support an alternative method for calculating the age scale? (please provide specific evidence and data)
5	What is your preferred option? (Option 1, Option 2, neither, no preference) (Please provide the reasons for your view)

5 Analysis of options

Objectives

37. The proposed objectives for assessing the update to the Regulations are:
- a. Entitlements are targeted at work-related hearing loss.
 - b. Based on up to date scientific research.
 - c. Consistent outcomes for claimants.
 - d. Ease of implementation.
 - e. Financial impact.
38. Table 6 below provides an analysis of the proposed option (Option 2) to update the age scale against the status quo (Option 1).

Table 6: Impact of proposed update to the age scale

	Option 1 (status quo) Maintain the current age scale based on ISO 7029:1984	Option 2 Update the age scale based on ISO 7029:2017
Entitlements are targeted at work-related hearing loss	0 The current age scale ensures the granting of entitlements (hearing aids) is primarily due to injury, but out of date calculations may mean some hearing loss due to injury is not accounted for, for men/ or vice versa, for women.	+ The updated scale ensures the granting of entitlements (hearing aids) is primarily due to injury. Maintains equity for the AC Scheme, to ensure that claims where aging is a factor are treated equitably.
Based on up to date scientific research	0 Based on out of date international research.	++ Based on up to date international research.
Consistent outcomes	0 The table provides clarity for providers during assessments which provides consistency in outcomes for claimants.	0 The table provides clarity for providers during assessments which provides consistency in outcomes for claimants.
Ease of implementation	0 Status quo, providers are already operating under the current settings. Guidance will need to be rewritten for the five per cent threshold shift.	0 Guidance will need to be rewritten, and communications made to providers, due to the five per cent threshold change. The roll-out of guidance and communications on the age scale change can be aligned with this threshold change, meaning only a small additional administrative burden placed on ACC or providers above this.
Financial impact	Status quo, no change to the current expected level of cost to levy payers.	Annual cash cost to ACC is expected to be \$0.5m in year one, increasing to \$1.5m in years two and three.
Key: ++ much better than doing nothing/the status quo + better than doing nothing/the status quo 0 about the same as doing nothing/the status quo - worse than doing nothing/the status quo -- much worse than doing nothing/the status quo		

Questions on the overall proposal

6

Are there any other impacts that may come about from updating the age scale that should be considered?

(please provide evidence where possible)

6 Additional amendments

39. In addition to the change to the age-related hearing loss table there are two additional technical amendments which we would like feedback on. They are both proposed to ensure the Regulations remain relevant and representative of best practice.

Remove reference to tests conducted by otolaryngologists

40. ACC's current operational practice requires that audiograms are to be carried out by audiologists who report on all aspects of the audiometric assessment. The otolaryngologist then advises ACC about wider aspects of a case, including the work and medical history, to inform ACC about the client's hearing loss and likely causality. Clauses 4 and 6 of the Regulations specify that testing must be conducted by an otolaryngologist or audiologist. We are proposing to remove the reference to otolaryngologists in order to match current operational practice. This is expected to have no impact on providers, rather, it will update the Regulations to match operational practice.

Update the reference to ISO 8253.1-2010 from AS ISO 8253.1-2009

41. ISO 8253.1 specifies procedures and requirements for pure-tone air conduction and bone conduction threshold audiometry. The current AS ISO 8253.1-2009 version was based on the first edition of the standard – ISO 8253-1 (1989). The 2010 version is the second edition, we propose to update the reference in order to match the newer international standard.
42. This change will not place any additional burden on providers, but simply ensures that the Regulations refer to current standards. The two key areas from the standard referred to in the Regulations are ambient noise and calibration. ACC has checked the wording and the values for these in the tables, and have noted that they are identical in the newer edition.

Questions on additional amendments

- | | |
|---|--|
| 7 | Do you think the reference, within the Regulations, to tests conducted by otolaryngologists should be removed from the regulations? (yes/no/not sure)
Why/ why not? (Please provide specific evidence where possible) |
| 8 | Do you think the reference, within the Regulations, to AS ISO 8253.1-2009 should be updated to ISO 8253.1-2010? (yes/no/not sure)
Why/ why not? (Please provide specific evidence where possible) |

7 What happens next?

43. Submissions on the proposed update to the Regulations close on 14 September 2022. The submissions will help inform MBIE's advice to the Minister for ACC on the future of the age scale.
44. Following the consultation period, the Minister for ACC will seek Cabinet agreement to any proposed changes, incorporating consultation feedback. If Option 2 is the preferred option then Regulations will likely be updated in 2023, with ACC producing updated guidance for providers at the time of enactment.

Full list of questions

Questions on the proposed objectives

- | | |
|---|--|
| 1 | Do you agree with the objectives? |
| | Strongly Disagree |
| | Disagree |
| | Neither |
| | Agree |
| | Strongly agree |
| | If you disagree, which of the objectives listed do you disagree with and why? |
| 2 | Are there other/alternative objectives that should be considered to help shape the discussion? |

Questions on the proposed options

- | | |
|---|--|
| 3 | Do you think the use of ISO standards as the base for the age scale is appropriate? (Yes/no/not sure)
Why/ Why not? |
| 4 | Do you have any evidence to support an alternative method for calculating the age scale? (please provide specific evidence and data) |

5	What is your preferred option? (Option 1, Option 2, neither, no preference) (Please provide the reasons for your view)
Questions on the overall proposal	
6	Are there any other impacts that may come about from updating the age scale that should be considered? (please provide evidence where possible)
Questions on additional amendments	
7	Do you think the reference, within the Regulations, to tests conducted by otolaryngologists should be removed from the regulations? (yes/no/not sure) Why/ why not? (Please provide specific evidence where possible)
8	Do you think the reference, within the Regulations, to AS ISO 8253.1-2009 should be updated to ISO 8253.1-2010? (yes/no/not sure) Why/ why not? (Please provide specific evidence where possible)

Resources

The NAL Percentage Loss of Hearing Scale, Anne Greville (Audiology Advisor, ACC) 2010.
https://docplayer.net/12117629-The-nal-percentage-loss-of-hearing-scale.html
Assessment of occupational noise-induced hearing loss for ACC: A practical guide for otolaryngologists (2018).
https://www.acc.co.nz/assets/provider/assessment-hearing-loss-acc7917.pdf
Noise induce hearing loss (NIHL) assessment for workers' compensation, Monash University Centre for Occupational and Environmental Health, 2010, Research Brief No. 0810-004-R6B
https://research.iscrr.com.au/_data/assets/pdf_file/0007/297142/Noise-induced-hearing-loss-assessment-for-workers-compensation-guidelines.pdf