MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HIKINA WHAKATUTUKI

Discussion Document

Proposed Review Framework for the List of Occupational Diseases in the Accident Compensation Act 2001

17 March 2022

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How to Have Your Say

Submissions Process

On behalf of the Minister for ACC, the Ministry of Business, Innovation and Employment (MBIE) invites submissions on the issue raised in this document by **5pm on 28 April 2022.** A submission may range from a short letter on one issue to a detailed response covering multiple issues. Please provide relevant facts, figures, data, examples and documents where possible to support your views. You can:

- Complete your submission on the MBIE website at: ***https://www.mbie.govt.nz/have-your-say/a-proposed-review-framework-for-Schedule-2***
- Email a submission to us at: ***ACregs@mbie.govt.nz***
- Mail your submission to us at:
  The Manager, Accident Compensation Policy
  Ministry of Business, Innovation & Employment
  PO Box 1473
  Wellington 6140
  Aotearoa New Zealand

If possible, we appreciate receiving submissions electronically. If emailing an attachment, we prefer a Microsoft Word or searchable PDF format.

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

MBIE will publish a summary of submissions

After submissions close, MBIE will publish a summary of submissions on our website at www.mbie.govt.nz. 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.

When businesses or organisations make a submission, MBIE will consider that you have consented to the content being included in the summary of submissions unless you clearly state otherwise. If your submission contains any information that is confidential or that you do not want published, you can say this in your submission. The Privacy Act 2020 applies to submissions and survey responses.

The Privacy Act 2020 establishes certain principles with respect to 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.

Any personal information you supply to MBIE in the course of making a submission will be used by MBIE only in conjunction with matters covered by this document. Submissions and survey responses may be the subject of requests for information under the Official Information Act 1982 (OIA). Please set out clearly if you object to the release of any information in the submission, and in particular, which part (or parts) you consider should be withheld (with reference to the relevant section of the OIA). MBIE will take your views into account when responding to requests under the OIA and will consult with submitters when responding to requests under the OIA. Any decision to withhold information requested under the OIA can be reviewed by the Ombudsman.

Contents

List of Acronyms

AC Act	Accident Compensation Act 2001
ACC	Accident Compensation Corporation
AC Scheme	Accident Compensation Scheme (administered by ACC)
MBIE	Ministry of Business, Innovation and Employment
Schedule 2	Schedule 2 of the Accident Compensation Act 2001

Full list of questions

Views on the objectives

1. Do you agree with the presented objectives?

2. Are there alternative objectives that should be considered to help shape the development of a review framework for Schedule 2? (Please provide detail on any alternative objectives you consider relevant).

Views on the proposed review framework and technical criteria

3. How much do you agree or disagree that the review framework proposed will adequately address the issues and objectives identified?
    - Strongly agree
    - Agree
    - Neither
    - Disagree
    - Strongly disagree
4. Which aspects do you agree/disagree with and why?

5. Based on your experience and/or other information, how should we estimate the expected costs and timeframe required for the independent researcher analysis in stage 5?

6. Are there any further inclusionary/exclusionary technical criteria that we should consider? Why?

Views on MBIE's analysis against the status quo

7. How much do you agree or disagree with MBIE's analysis of the proposed framework against the status quo?
    - Strongly agree
    - Agree
    - Neither
    - Disagree
    - Strongly disagree
8. Which aspects do you agree/disagree with and why?

Views on MBIE's analysis of alternative options

9. How much do you agree or disagree with MBIE's analysis of the alternative options?
    - Strongly agree
    - Agree
    - Neither
    - Disagree
    - Strongly disagree
10. Which aspects do you agree/disagree with and why?

Executive Summary

Aotearoa New Zealand's Accident Compensation Scheme provides cover for injuries caused by a gradual process, disease, or infection as a result of a work-related task or environment. These are commonly referred to as "gradual process" injuries. Schedule 2 in the AC Act provides one pathway to cover for these injuries, through a list of occupational diseases. An example in Schedule 2 is lung cancer or mesothelioma diagnosed as caused by exposure to asbestos.

Schedule 2 is based on the International Labour Organization's (ILO) List of Occupational Diseases, which was created in 1934 and most recently updated in 2010.

Currently, Schedule 2 does not have a formal process for review and has not been updated since 2008. The Government is proposing to introduce a regular review for Schedule 2 that will enable it to be kept up-to-date with modern science. This could better reflect diseases that working New Zealanders experience and improve claimants' access to the AC Scheme's gradual process cover. It could also address gaps in our understanding of how occupational diseases impact different population groups in Aotearoa New Zealand.

Our proposed review framework that this document is seeking views on can be summarised as follows:

- The review occurs every four to five years: An initial determination of whether a review should occur and what illnesses should be included is conducted by MBIE officials with wider input from relevant agencies, which can occur outside of the four to five year period if new evidence arises.
- MBIE officials prepare and launch a consultation document: An open submissions process for stakeholders and the public to respond to proposals and make submissions for changes to Schedule 2.
- MBIE collates the submissions for independent researchers to analyse: Independent researchers analyse the submissions against detailed criteria and provide an analysis report.
- Officials consider the independent report and make recommendations: Officials consider the analysis, as well as cost estimates and other policy considerations, and make recommendations to the Minister for ACC.
- Consultation with stakeholders on proposals to make changes to Schedule 2.
- Following a Ministerial decision, an Order in Council process begins: Any changes are considered by Cabinet and taken to the Executive Council in an Order-in-Council.

This document also presents the alternative options that we considered when determining our preferred option for the review framework. This included reinstating a ministerial panel to review Schedule 2 and MBIE reviewing the list solely based on the ILO's List of Occupational Diseases.

We welcome your views on the proposed framework, alternative options and/or any other relevant points. Submissions containing alternative approaches for reviewing Schedule 2 are encouraged. Details on how you can submit your response are found on page 3, and online at: ***https://www.mbie.govt.nz/have-your-say/a-proposed-review-framework-for-Schedule-2***

1 Introduction

1. This section of the paper describes the purpose of the paper, what we are consulting on and the objectives of the proposed changes.

1.1 Purpose and Scope of this Discussion document

2. The purpose of this discussion document is to obtain feedback on a proposed review framework for the list of occupational diseases covered under the AC Act, as set out in Schedule 2 of that Act.

3. We are consulting on the proposed framework because we want to ensure that the list of occupational diseases appropriately reflects those that working New Zealanders experience. This process would also support fair claimant access to the AC Scheme's gradual process cover.

4. We are seeking views on the whole framework, specific stages, the objectives we have assessed it against and our assessment of alternative options. We also welcome suggestions of alternative review frameworks. We are not seeking views on any expansion of the AC Scheme in this consultation, including additional occupational diseases to include in Schedule 2.

1.2 Objectives

5. In order to analyse the proposed framework and alternative options for consideration, MBIE considered the following five objectives:

   - **Clinical knowledge**: the framework enables Schedule 2 to reflect current clinical knowledge on occupational diseases
   - **Clarity**: the framework is easy to understand
   - **Transparency and consistency**: honesty and openness about what is involved in the review framework
   - **Balance of certainty and flexibility**: people can understand how the review works generally, without compromising the ability of the review to respond to developments in research
   - **Maintains existing scope of AC Scheme**: does not narrow or expand the existing scope of the AC Scheme (it could lead to changes to Schedule 2, but these changes would be occupational diseases based on supporting evidence)

2 An Overview of Work-Related Gradual Process Injuries

1. This section of the paper describes work-related gradual process injuries, explains why they are covered under the Accident Compensation Scheme (the AC Scheme), and outlines the ways that they are covered by the AC Act with a focus on Schedule 2.

2.1 What is a gradual process injury?

2. A work-related gradual process injury is a personal injury, caused by gradual process, disease, or infection, as a result of a work-related task or environment.

3. Examples of work-related gradual process injuries include those arising from working repetitively with agents, dusts, compounds, substances, radiation, or other things which cause illness over time. Other examples include performing tasks that involve a particular forceful and repeated movement that causes a gradual onset injury.

2.2 Why is cover for work-related gradual process injuries provided under the AC Scheme?

4. Cover for work-related gradual process injuries has been a fundamental component of workers compensation schemes in Aotearoa New Zealand in the past and of workers compensation schemes internationally to date. It is a requirement under ILO Convention 42, to which Aotearoa New Zealand is a party, for members to provide compensation to workers incapacitated by occupational diseases.

5. When we look at the AC Scheme, it generally provides cover for injury (for example, a sprain or strain), but not for illness. However, the gradual process provisions provide cover for gradual process physical injuries, illnesses, and diseases that arise from work. These provisions acknowledge that not all injuries have instant effects, and workers may have restricted control over their work tasks or environments that cause disease, injury, or illness.

6. There are two ways that work-related gradual process injuries are covered in the AC Act. The first is by meeting all the requirements of a three-step test (set out in section 30(2) of the AC Act), which looks for a causal relationship between the claimant's gradual process injury and their work.

7. The second is being diagnosed with an occupational disease that is on a list of Occupational Diseases in Schedule 2 of the AC Act, which is what this discussion document focuses on.

2.3 Schedule 2

8. In order for an occupational disease to be included in Schedule 2, there must be strong scientific evidence of a causal link to render any other cause unlikely. This would typically require a very high work-related risk demonstrated over multiple clinical studies.

9. Claims for cover under Schedule 2 can be declined under section 60 of the AC Act if a claimant does not have a personal injury (e.g. they make a claim for exposure only), or if a personal injury was not caused by their employment (e.g. the causal factor for the condition described in Schedule 2 was not present in their workplace).

10. The occupational diseases listed in Schedule 2 are largely based on the ILO's List of Occupational Diseases ('ILO List'). The ILO List was created in 1934, and the ILO recommends to its members that they implement a list, test, or mixed approach.

11. The Aotearoa New Zealand approach under the AC Act has been to use both Schedule 2 and the three-step test for gradual process injuries. This hybrid approach combines certainty of cover from the Schedule 2 list, with the three-step test providing the ability for a flexible response to claims with less causative evidence or new and emerging circumstances.

12. Schedule 2 was most recently updated in 2008 and the ILO List was most recently updated in 2010. There has not been an exercise to review Schedule 2 following the latest ILO changes.

2.4 What stakeholders have told us

13. Stakeholder groups have previously raised concerns, on behalf of their members, about the current gradual process legislative provisions and occupational diseases in Schedule 2. While most stakeholders did not directly propose a review framework, we have provided a summary of their concerns to provide useful context surrounding Schedule 2 and gradual process cover.

Sawmill Workers Against Poisons (SWAP)

14. SWAP is an organisation created in the mid-1990s by timber workers in the Bay of Plenty. SWAP advocates for recognition of health conditions and health services for workers and whānau affected by their work in the industry, and for environmental remediation.

15. SWAP have previously requested for Pentachlorophenol (PCP) exposure to be added to Schedule 2. They have also indicated interest in the possibility of cover for secondary exposure and would seek to address barriers that they argue exist to accessing cover under the Accident Compensation Scheme.

16. Conditions resulting from PCP exposure have not previously been added to Schedule 2 and are not on the ILO List (including the latest 2010 version).

New Zealand Professional Firefighters Union

17. NZPFU have previously sought legislative change to introduce presumptive occupational cancer cover for professional firefighters. This involves identifying the type of worker for presumptive cover and their relevant work history. Presumptive legislation is not being considered in this consultation as an alternative option as it is not a review framework structure for Schedule 2 and would be an expansion of the AC Scheme.

18. NZPFU has previously suggested a model of presumptive legislative cover for cancer based on the models of Australian jurisdictions (at state and federal level) and Canadian provinces. Depending on the cancer, there are exclusionary provisions which might apply. For example, in some jurisdictions, access to presumptive cover for lung cancer is rebuttable and subject to exclusionary provisions for smokers and/or family medical history. NZPFU's proposal for the AC Act is set out in **Table 1.**

Table 1: Cancers and qualifying periods – proposed presumptive cover by NZPFU

Disease	*Qualifying period of service as a firefighter (years)*	*Exclusionary factors*
Primary site brain cancer	5	
Primary site bladder cancer	15	
Primary site kidney cancer	15	
Primary non-Hodgkins lymphoma	15	
Primary leukemia	5	
Primary site breast cancer	10	
Primary site testicular cancer	10	
Multiple myeloma	15	
Primary site prostate cancer	15	
Primary site ureter cancer	15	
Primary site colorectal cancer	15	
Primary site oesophageal cancer	25	
Primary site skin cancer	15	
Primary site mesothelioma (note: covered in Schedule 2 where caused by contact with asbestos)	20	
Primary site cervical cancer	10	
Primary site ovarian cancer	15	
Lung cancer and lung disease	15	The employee has been a non-smoker of tobacco products for no less than 15 years before diagnosis

19. To obtain Schedule 2 cover, there needs to be strong evidence of a causative factor in the work performed before a disease is included in the list. This is what distinguishes Schedule 2 from other types of presumptive cover used overseas, such as presumptive occupational cover in Australia and Canada, which is linked to the occupation rather than exposure to a specific agent in a workplace. For people with one of the diseases listed under Schedule 2 who meet the criteria, the disease is presumed to have resulted from work due to the causative factor evidence already existing to support this presumption.

20. To provide presumptive cover for a specific occupation group and form of injury would require a significant realignment of the statutory scheme. All occupations have certain levels of unavoidable risks for specific injuries and the AC Scheme is already constructed to effectively respond to injuries.

ACC Futures Coalition

21. The ACC Futures Coalition (ACC Futures), a group of health providers, lawyers, ACC consumers, academics and unions, have recommended that the Ministerial Advisory Panel for Work-Related Gradual Process Diseases and Injuries should be reinstated to review Schedule 2. The Panel was established in 2003 to assess and provide advice on the definition of WRGPDI in section 30 of the AC Act; how ACC deals with claims for WRGPDI cover and whether amendments should be made to Schedule 2. The Panel worked with the National Occupational Health and Safety Advisory Committee (NOHSAC)[1] to provide advice to the then-Minister of Labour. We do not consider reinstating the advisory panel as an approach that best meets the objectives and we have provided analysis of this in section 7 of this paper.

22. ACC Futures have also argued that a review process for Schedule 2 should involve a tripartite involvement of unions, employers and Government to ensure the issues that are being researched are relevant to Aotearoa New Zealand's workforce. We do agree that collaborative involvement in the review process will support the diseases in Schedule 2 being relevant to Aotearoa New Zealand, and this is why it is incorporated in the proposed review framework (section 5 of this paper).

[1] Previous NOHSAC reports available at ***https://cohsr.aut.ac.nz/resources***

3 Issues

1. This section outlines issues that we have identified that could be addressed through the introduction of an evidence-based framework for regular review of Schedule 2.

Keeping Schedule 2 up to date with current medical and epidemiological evidence

2. The ILO List, which Schedule 2 is based on, was last updated in 2010. There has not been an update of Schedule 2 since 2008, and prior to this, reviews did not follow a consistent approach. With a regular system of review, Schedule 2 could be kept up to date with current medical and epidemiological evidence. This could support increased awareness of these diseases and discourage the use of harmful substances and work practices which contribute to workers suffering from occupational diseases.

Improve understanding of how Schedule 2 applies to both males and females in Aotearoa New Zealand

3. Since Schedule 2 was last updated, the ILO recommended recognising the biological differences in males and females when reviewing and developing occupational health research and legislation. The ILO named this approach 'gender-sensitive' and it is not designed to negatively impact any group of individuals[2]. This recommendation recognises that workers are exposed to different risks and may react differently to the same risks because of their different biological makeup. It would be independently determined by the group of researchers on how to take this approach.

4. It was also recognised by the National Occupational Health and Safety Advisory Committee's 2014 report that the vast majority of published research in Aotearoa New Zealand presents information only, or predominantly, on males[3]. This means it could be more difficult to prove a causal relationship between an occupation that females are more likely to participate in and its associated occupational disease.

5. Further work could be commissioned through the review to address gender bias in occupational disease research and gain a better understanding of gender issues in occupational health. This could support further work into what options exist to better support men and women injured at work, and to protect them from occupational diseases.

[2] International Labour Organization, *10 Keys for Gender Sensitive OSH practice – Guidelines for Gender Mainstreaming in Occupational Safety and Health*, 2013.

[3] National Occupational Health and Safety Advisory Committee, *The Burden of New Zealand Occupational Disease and Injury,* 2004.

Improve understanding on how Schedule 2 impacts different population groups

6. There is also a lack of detailed information regarding ethnicity and occupational diseases in much of the published research in Aotearoa New Zealand[4]. Currently, we are not aware of research reviewing how the diseases listed in Schedule 2 proportionately impact different population groups in Aotearoa New Zealand.

7. We recommend that researchers consider reviewing how the diseases in Schedule 2, and any additional recommended diseases, impact different population groups in Aotearoa New Zealand to the extent that is possible. Further work could be commissioned through this review to highlight gaps and understand how groups are impacted by occupational diseases, and this information could be used to stimulate awareness and preventative action.

Improve our ability to meet the Government's Regulatory Stewardship expectations

8. As the government agency responsible for the AC Act, MBIE has a responsibility for monitoring, reviewing and reporting on the AC Scheme's regulatory systems. It is also required to ensure robust analysis for changes to the regulatory systems.

9. A regular review, initiated by MBIE and informed by independent researchers, would improve MBIE's regulatory stewardship of the AC Act. A review process would provide consistency to updating Schedule 2, and the involvement of independent researchers enables robust analysis to inform any changes.

[4] Denison, HJ., Eng, A., Barnes, LA., Cheng, S., Mannetje, A., Haddock, K., and Ellison-Loschmann, L., *Inequities in exposure to occupational risk factors between Māori and non- Māori workers in Aotearoa New Zealand,* Journal of Epidemiology and Community Health*. 72(9), 809-816,* 2018.

4 Objectives for a Review Framework

1. This section outlines the objectives that we have assessed the options for a review of Schedule 2 against.

4.1 Objectives

2. In order to analyse the proposed review framework and alternative options, we have considered the following five objectives. These are largely based on MBIE's fit-for-purpose assessment ratings, which determine how fit for purpose a regulatory system is. These aim to support Schedule 2 serving its purpose of enabling gradual process cover for New Zealanders who suffer an occupational disease.

3. We have included an additional objective of 'clinical knowledge' to ensure the development of an evidence-based framework. Reflecting clinical knowledge should be the primary objective of any review framework for Schedule 2, as well as maintaining the existing scope of the AC Scheme. The objectives are:

    - **Clinical knowledge**: the framework supports Schedule 2 in reflecting current clinical knowledge on occupational diseases
    - **Clarity**: the framework is easy to understand
    - **Transparency and consistency**: honesty and openness about what is involved in the review framework
    - **Balance of certainty and flexibility**: people can understand how the review works generally, without compromising the ability of the review to respond to developments in research
    - **Maintains existing scope of AC Scheme**: does not narrow or expand the existing scope of the AC Scheme (it could lead to changes to Schedule 2, but these changes would be occupational diseases based on supporting evidence)

4. We encourage submitters to use these objectives to guide their own responses and input. We also encourage comment on whether these objectives best reflect what a Schedule 2 review framework should achieve.

What do you think?

1. **Do you agree with the presented objectives?**

2. **Are there alternative objectives that should be considered to help shape the development of a review framework for Schedule 2? (Please provide detail on any alternative objectives you consider relevant)**

5 Proposed Review Framework

1. This section outlines the framework that MBIE is proposing for the review of Schedule 2. We are seeking your feedback on the proposed framework and the technical criteria involved.

5.1 Proposed Review Framework

2. We are proposing to introduce a consistent and principles-based form of review for Schedule 2 to ensure it remains up to date with current epidemiology and continues to serve its purpose of enabling gradual process cover for New Zealanders who suffer an occupational disease.

3. In the proposed review framework, reviews would be undertaken every four to five years. This period of time is sufficiently long for relevant evidence to develop and change. In particular, this would enable concerned stakeholders to have submissions reconsidered on the basis of new evidence. It would also allow us to take into account ACC's experience and any patterns from claims under the three-step test.

4. The review would take a tripartite approach. It would provide an opportunity for stakeholders and the wider public to submit occupational diseases which should be considered for inclusion in Schedule 2 through an open submissions process. This would ensure that the process reflects workers' experiences of gradual process injuries, as well as reflecting updates to modern epidemiology.

5. Independent researchers could undertake the first stage of the analysis of the submissions, using the proposed technical criteria **(Table 3)** and an approach that is considerate of the Aotearoa New Zealand population. How this approach operates would be solely determined by the independent researchers.

6. The researchers would be able to supplement the submissions provided by officials, stakeholders and the public with any additional diseases and infections that they consider appropriate for review, based on modern and relevant clinical literature.

7. The researchers would provide an analysis report and MBIE officials would then use it to make recommendations to the Minister, based on the technical criteria and wider policy considerations.

8. The first review could commence in 2022 with the aim of any changes being made by an Order in Council for Schedule 2 in 2023. An Order in Council is a type of secondary legislation that is made by the Executive Council presided over by the Governor-General. There are no requirements for publicly consulting on this Order in Council in the AC Act, and as the change to the AC Act is done via an Order in Council instead of a Bill, there will be less chance for the

public to submit on the changes compared to a Bill (as there is no Select Committee process). However, this proposed review framework provides an opportunity for the public to submit evidence to inform policy recommendations, which currently does not exist. For any changes to Schedule 2, consultation must also occur with persons or organisations that the Minister considers appropriate.[5]

9. Table **2** below provides an overview of the proposed framework.

Table 2: Step-by-Step of Proposed Review Framework

Stage	*Description*
1	Reviews are proposed to occur every 4 to 5 years.
2	Officials prepare a consultation document explaining Schedule 2 and work-related gradual process disease or infection in the AC Act for the engagement of stakeholders and the public. This will enable informed submissions and properly shape engagement with the process.
3	Officials begin engaging with key stakeholders one month ahead of opening the submissions process.
4	MBIE releases a consultation document on its website and requests submissions.
5	MBIE compiles the submissions for engagement with researchers. Researchers analyse and evaluate submissions against detailed technical criteria **(Table 3)** to produce an independent report. Researchers would consider how to take a gender-sensitive approach and how Aotearoa New Zealand population groups are impacted by Schedule 2 diseases.
6	Officials consider the independent report, as well as cost estimates and other policy considerations to inform recommendations to the Minister on proposed changes to Schedule 2.
7	Following the Minister's consideration and decision, we will seek Cabinet permission to consult on the changes and if approved, consult with relevant stakeholders.
8	The Minister will bring the proposals to Cabinet and any changes to Schedule 2 will be taken to the Executive Council through an Order-in-Council process.

10. We have not provided estimated costs of a review framework in this discussion document, as final costs will be determined when the detail of how to progress the independent review is decided upon.

11. We are seeking views on the whole framework, as well as on specific stages. Specifically, we are seeking information to inform stage 5.

12. The timeframe and costs required for the independent researcher report would be dependent on a number of factors including, but not limited to, the:

- **type of expertise being engaged** – for example, occupational medicine specialists, and/or researchers who undertake literature reviews

[5] Section 336(2) of the Accident Compensation Act (2001)

- **model used to engage researchers** – for example, researchers conducting an initial literature review of the clinical literature on submissions, with a second phase involving a committee of occupational medicine specialists
- **amount of time** researchers/specialists could commit.

13. We welcome information on the above factors, and any that we have not considered, to inform how to incorporate independent analysis in a review of Schedule 2. We have provided questions on this topic on page 21.

5.2 Proposed Technical Criteria

14. Detailed technical criteria would be used in Stage 5 of the proposed review framework. They consist of inclusionary criteria, which form a positive case for inclusion in Schedule 2, and exclusionary criteria that would explain when diseases would not be included.

15. To evidence a strong causal link, the criteria to use are based on the Bradford-Hill criteria, an internationally recognised evidence approach established in 1965 (set out in detail in **Annex 2**). **Table 3** provides an overview of the proposed criteria, to be used by MBIE officials and researchers when developing recommendations.

Table 3: Proposed technical criteria

Inclusionary Criteria
Strength of association: The greater the impact of an exposure on the occurrence or development of a disease, the stronger the likelihood of a causal relationship.
Consistency or reproducibility: Consistent findings observed by different persons in different places with different samples strengthen the likelihood of an effect.
Specificity: Causation is likely if there is a very specific population at a specific site and disease with no other likely explanation. The more specific an association between a factor and an effect is, the bigger the probability of a causal relationship.
Temporality or time sequence: The effect has to occur after the cause (and if there is an expected delay between the cause and expected effect, then the effect must occur after that delay).
Biological gradient: Greater exposure should generally lead to greater incidence of the effect. However, in some cases, the mere presence of the factor can trigger the effect. In other cases, an inverse proportion is observed: greater exposure leads to lower incidence.
Biological plausibility: From what is known of toxicology, chemistry, physical properties, or other attributes of the studied risk or hazard, it makes biological sense to suggest that exposure leads to the disease or injury.
Coherence: A general synthesis of all the evidence (eg human epidemiology and animal studies) leads to the conclusion that there is a cause-effect relationship in a broad sense and in terms of general common sense.
Analogy: The use of analogies or similarities between the observed association and any other associations.
Experimental evidence: this can be considered if relevant.
Exclusionary Criteria
Insufficient causal evidence: Diseases will be excluded if evidence of the causal connection of the disorder to occupation is insufficient to allow a connection to work to be automatically accepted. 'Insufficient' here is not generally quantifiable. For each condition on Schedule 2 it would be based on an expert assessment of the evidence available and its quality.
Low proportion of work cases: Diseases will be excluded if the proportion of cases due to work is so low, that it is likely that, in any individual, even if they are a worker with relevant exposures, the disorder arose as a result of non-work exposure.

What do you think?

3. **How much do you agree or disagree that the review framework proposed will adequately address the issues and objectives identified?**

    - **Strongly agree**
    - **Agree**
    - **Neither**
    - **Disagree**
    - **Strongly disagree**
    - **Don't know**

4. **Which aspects do you most agree/disagree with and why?**

5. **Based on your experience and/or other information, how should we estimate the expected costs and timeframe required to complete the independent researcher analysis in stage 5?**

6. **Are there any further inclusionary/exclusionary technical criteria that we should consider? Why?**

6 Analysis of Proposed Framework to Status Quo

1. This section compares our proposed approach, as set out in Section 5, against the status quo of Schedule 2 not having a consistent review framework. Section 2 of this discussion document outlined five objectives for a Schedule 2 review framework to meet.

    - **Clinical knowledge**: the framework supports Schedule 2 in reflecting current clinical knowledge of occupational diseases
    - **Clarity**: the framework is easy to understand
    - **Transparency and consistency**: honesty and openness about what is involved in the review framework
    - **Balance of certainty and flexibility**: sufficiently certain that people can understand how the review works generally, without compromising the ability of the review to respond to developments in research
    - **Maintains existing scope of AC Scheme**: does not narrow or expand the existing scope of the AC Scheme (it could lead to changes to Schedule 2, but these changes would be occupational diseases based on supporting evidence)

2. **Table 4** on the following page outlines MBIE's analysis of the proposed review framework compared to the status quo. We have not provided estimated costs in this discussion document, as final costs will be determined when the detail of how to progress the independent review is decided upon.

Table 4: **Analysis of proposed review framework compared to the status quo**

Objectives	*Use of the proposed review framework*	*Use of status quo*
Clinical knowledge	++ The review relies on clinical analysis, and decision-making will be shaped by epidemiological expertise.	The AC Scheme would not adapt to modern clinical evidence.
Clarity	++ The review framework has clear-decision making sections and enables engagement from the public and stakeholders, supported by the expertise of independent researchers.	There is not a clear process that is followed for Schedule 2.
Transparency and consistency	++ The review framework is consistent and enables the public to engage in processes which impact the diseases covered in Schedule 2.	There is not a consistent evidence-based framework for Schedule 2 reviews. Historically, some were based on the ILO List, others included a Ministerial Panel and National Occupational Health and Safety Advisory Committee input.
Balance of certainty and flexibility	++ Introduces flexibility to more regularly add conditions to the Schedule that meet requisite causation standards. Maintains certainty of cover for existing or added conditions.	It maintains certainty of cover for the existing conditions in Schedule 2. Conditions can be added, but there is no clear framework to follow on how to consider these additions.
Maintains existing scope of AC Scheme	**0** The established scope of cover is not expanded or narrowed by this change. Officials would make final recommendations with AC policy considerations.	The established scope of cover is not expanded or narrowed by the status quo.
Net Impact	**Positive**	**N/A**

Key:

++ much better than the status quo
+ better than doing the status quo
0 about the same as the status quo
- worse than the status quo
- - much worse than the status quo

What do you think?

7. **How much do you agree or disagree with MBIE's analysis of the proposed framework against the status quo?**

    - **Strongly agree**
    - **Agree**
    - **Neither**
    - **Disagree**
    - **Strongly disagree**
    - **Don't know**

8. **Which aspects do you most agree/disagree with and why?**

7 Alternative Options

1. This section sets out the alternative options that were considered during the development of this discussion document. However, these have been discounted due to insufficiently meeting the objectives. The analysis against the status quo is set out in **Table 5** below.

Reinstating the Ministerial Advisory Panel for Work-Related Gradual Process, Disease or Infection

2. The Ministerial Advisory Panel on Work-Related Gradual Process, Disease or Infection (WRGPDI) was established in 2003 under the Injury, Prevention, Rehabilitation and Compensation Act (2001) ('IPRC Act'). The panel's terms of reference included providing the Minister responsible for the IRPC Act advice on any matter relating to WRGPDI. Specifically, the panel was required to advise the Minister on:

    a. whether Schedule 2 should be amended

    b. how ACC deals with gradual process claims

    c. the definition of a gradual process injury/infection in section 30.

3. The panel consisted of union representatives, lawyers, occupational health providers and medical experts. It provided advice in 2006 on a revised Schedule 2 and worked with the National Occupational Health and Safety Advisory Committee (NOHSAC), which resulted in the latest update to Schedule 2 in 2008.

4. This option would involve establishing a requirement in the AC Act for the Minister for ACC to reinstate the WRGPDI Panel. The WRGPDI Panel could also, if reinstated, specifically focus on Schedule 2 and not wider gradual process injury matters. However, at the time of the Panel's disestablishment in 2010, it was considered that the tasks for the Panel could be achieved through alternative means, therefore, the Panel structure was not considered as necessary for a Schedule 2 review.

5. We consider it would be more appropriate for a group of clinical experts to operate in a wider review framework with clear decision-making structures. We also do not think a statutory requirement for a group of experts is necessary, as this would make the set-up process less efficient than having it in the structure proposed in **Table 2 on page 17.**

Using the International Labour Organization List of diseases in isolation

6. The occupational diseases listed in Schedule 2 are largely based on the ILO List. The ILO List was created in 1934, and updated most recently in 2010. The 2010 list includes a wider range of illnesses than the current Schedule 2, including mental and behaviour disorders for the first time. The AC Act currently provides cover for mental injury if it is the result of a physical

injury, certain criminal acts, or exposure to a single traumatic event at work.[6]

7. The latest ILO List also includes open items, allowing the recognition of the occupational diseases not specified in the list if a link is established between exposure to risk factors arising from work activities and the illnesses developed by the worker[7]. For the AC Scheme, this function is currently delivered through the hybrid approach in the AC Act, particularly section 30 which includes a three-step test to determine causation and a link to a work-related characteristic for illnesses not included in Schedule 2.

8. This option would involve MBIE officials using the ILO's update in isolation as a key indicator for when to review Aotearoa New Zealand's Schedule 2. It would continue to enable Aotearoa New Zealand to deliver against international obligations as an ILO member.

9. However, ILO's updates are not Aotearoa New Zealand focussed and do not have a regular review framework, so whilst this considers clinical evidence, this option in isolation lacks a consideration of Aotearoa New Zealand's social environment and workforce. For clarity, as Schedule 2's last revision predates the 2010 ILO List, the proposed review framework in this paper would have due regard to the ILO List.

[6] Sections 21, 21B and 26 of the *Accident Compensation Act 2001.*
[7] International Labour Organization, *The List of Occupational Diseases*, 2010.

Table 5: Analysis of alternative options relative to status quo

Objectives	**Option 1: Re-establishing the Ministerial Advisory Panel for Work-Related Gradual Process, Disease, or Infection (WRGPDI)**	**Option 2: MBIE reviews Schedule 2 using the International Labour Organization (ILO)'s 2010 list of occupational diseases and any future updates.**
Clinical knowledge	+ The Panel approach did include occupational health providers with clinical knowledge and worked with NOHSAC. However, it did not include an evidence-based framework which raises a risk that updates to Schedule 2 could be reviewed against different criteria and objectives.	- The ILO review relies on clinical analysis and is shaped by epidemiological expertise. However, it doesn't include research relevant to Aotearoa New Zealand's unique social environment.
Clarity	- This does not set out a clear process for the public to understand how Schedule 2 is reviewed and how research is used in the decisions of a mixed-membership panel.	- The ILO is an international organisation and their review documents are complex.
Transparency and consistency	- With an established remit, this could provide a consistent review. However, this does not enable the public to engage in the process which impacts diseases covered in the Schedule.	- The review of the ILO List is not Aotearoa New Zealand-focussed so lacks the transparency of an Aotearoa New-Zealand-focussed framework. This is also a reactive approach and we would not have control over timing, so it would be inconsistent.
Balance of certainty and flexibility	- The statutory processes involved to establish a Panel reduce the ability of a review to respond quickly to developments in research.	+ Maintains certainty of cover for existing or added conditions. However, does not provide an evidence-based framework to make updates flexibly outside of ILO review.
Maintains existing scope of AC Scheme	**0** The established scope of ACC cover is not expanded or narrowed by this change.	**0** The established scope of ACC cover is not expanded or narrowed by this option, as officials would make recommendations based on the existing AC Scheme.
Net Impact	**Negative**	**Negative**

Key:

++ much better than the status quo
+ better than doing the status quo
0 about the same as the status quo
- worse than the status quo
- - much worse than the status quo

What do you think?

9. **How much do you agree or disagree with the analysis of the alternative review options?**

    - **Strongly agree**
    - **Agree**
    - **Neither**
    - **Disagree**
    - **Strongly disagree**
    - **Don't know**

10. **Which aspects did you agree or disagree with and why?**

8 What Happens Next?

1. Submissions on the proposed review framework close at 5pm on 28 April 2022. MBIE will analyse all submissions received and then report back to the Minister for ACC with recommendations on a review framework for Schedule 2 for consideration.

2. Your submission will help inform policy decisions to achieve an updated Schedule 2 that reflects up-to-date medical evidence and could better support injured New Zealanders. We aim to launch a review in 2022, depending on the development of a review framework following this consultation.

Annex 1 – Relevant Legislation

Accident Compensation Act 2001: Schedule 2 - Occupational diseases

1 Pneumoconioses caused by sclerogenetic mineral dust (silicosis, anthraco-silicosis, asbestosis) and silico-tuberculosis, provided that silicosis is an essential factor in causing the resultant incapacity or death.

2 Lung cancer or mesothelioma diagnosed as caused by asbestos.

3 Diseases of a type generally accepted by the medical profession as caused by beryllium or its toxic compounds.

4 Diseases of a type generally accepted by the medical profession as caused by phosphorus or its toxic compounds.

5 Diseases of a type generally accepted by the medical profession as caused by chrome or its toxic compounds.

6 Diseases of a type generally accepted by the medical profession as caused by manganese or its toxic compounds.

7 Diseases of a type generally accepted by the medical profession as caused by arsenic or its toxic compounds.

8 Diseases of a type generally accepted by the medical profession as caused by mercury or its toxic compounds.

9 Diseases of a type generally accepted by the medical profession as caused by lead or its toxic compounds.

10 Diseases of a type generally accepted by the medical profession as caused by carbon bisulfide.

11 Diseases of a type generally accepted by the medical profession as caused by the toxic halogen derivatives of hydrocarbons of the aliphatic series.

12 Diseases of a type generally accepted by the medical profession as caused by benzene or its toxic homologues.

13 Diseases of a type generally accepted by the medical profession as caused by nitro- and amido-toxic derivatives of benzene or its homologues.

14 Diseases of a type generally accepted by the medical profession as caused by ionising radiations.

15 Primary epitheliomatous cancer of the skin diagnosed as caused by tar, pitch, bitumen, mineral oil, anthracene, or the compounds, products, or residues of these substances.

16 Anthrax infection.

17 Leptospirosis diagnosed as caused by working with animals or their carcasses.

18 Brucellosis diagnosed as caused by working with animals or their carcasses.

19 Orf diagnosed as caused by working with animals or their carcasses.

20 Streptococcus suis diagnosed as caused by working with animals or their carcasses.

21 Angiosarcoma of the liver diagnosed as caused by vinyl chloride monomer.

22 Byssinosis diagnosed as caused by working with cotton, flax, hemp, or sisal dust.

23 Pneumoconiosis diagnosed as caused by tin, iron oxide, barium, or cobalt.

24 Diseases of a type generally accepted by the medical profession as caused by tungsten.

25 Hand-arm vibration syndrome diagnosed as caused by hand and/or arm vibration.

26 Sino-nasal carcinoma diagnosed as caused by working with wood dust.

27 Diseases of a type generally accepted by the medical profession as caused by ethylene oxide.

28 Extrinsic allergic alveolitis diagnosed as caused by work involving the inhalation of organic dusts.

29 Naso-pharyngeal carcinoma diagnosed as caused by formaldehyde.

30 Laryngeal carcinoma diagnosed as caused by sulphuric acid mists or organic solvents.

31 Lung cancer diagnosed as caused by bis (chloromethyl) ether (and chloromethyl methyl ether), cadmium, coke oven emissions, nickel, radon, silica, or soot.

32 Primary epitheliomatous cancer of the skin diagnosed as caused by shale oil.

33 Bladder carcinoma diagnosed as caused by 2-naphthylamine, benzidine, 4-aminobiphenyl, N, N-Bis (2-chloroethyl)-2-naphthylamine, other aromatic amines, or poly-cyclic aromatic hydrocarbons.

34 Hodgkin's lymphoma diagnosed as caused by wood dust.

35 Chronic solvent-induced encephalopathy diagnosed as caused by organic solvents, particularly styrene, toluene, xylene, trichloroethylene, methylene chloride, or white spirit.

36 Peripheral neuropathy diagnosed as caused by organic solvents such as n-hexane, carbon disulphide, or trichloroethylene; pesticides such as organophosphates; acrylamide.

37 Occupational asthma diagnosed as caused by recognised sensitising agents inherent in the work process such as, but not limited to, isocyanates, certain wood dusts, flour dusts, animal proteins, enzymes, and latex.

38 Chronic obstructive pulmonary disease diagnosed as caused by coal, silica, cotton dust, or grain dust.

39 Chronic renal failure diagnosed as caused by metals such as cadmium or copper, including via welding fumes.

40 Occupational allergic contact dermatitis diagnosed as caused by recognised sensitising agents inherent in the work process such as, but not limited to, nickel and other metals, rubber additives, resins, petroleum distillates, solvents, soaps, detergents, and plant allergens.

41 Vitiligo diagnosed as caused by para-tertiary-butylphenol, para-tertiary-butylcatechol, para-amylphenol, hydroquinone, or the monobenzyl or monobutyl ether of hydroquinone.

Annex 2 – Bradford-Hill Criteria

Sir Austin Bradford-Hill proposed a group of nine principles in 1965 used to establish strong evidence of a causal link. This is set out in the *Proceedings of the Royal Society of Medicine, 1965*. The Bradford-Hill criteria became an internationally reputable system used by international organisations, including the International Labour Organization, to establish if there is strong evidence of a causal link between occupational exposure and the relevant disorder.

Criteria	What this means
Strength	the demonstration of a strong association between the causative agent and the outcome
Consistency	consistency of the findings across research sites and methodologies
Specificity	the demonstration of specificity of the causative agent in terms of the outcomes it produces
Temporality	the demonstration of the appropriate temporal sequence, so that the causative agent occurs prior to the outcome
Biological gradient	the demonstration of a biological gradient, in which more of the causative agent leads to a poorer outcome
Plausibility	the demonstration of a biologic rationale, such that it makes sense that the causative agent causes the outcome
Coherence	coherence of the findings, such that the causation argument is in agreement with what we already know
Experiment	the use of experimental evidence
Analogy	evidence from analogous conditions