

# Summary of submissions

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**2022 RESTRICTED ENTRY INTERVALS  
(REI) CONSULTATION**

July 2024



**Te Kāwanatanga o Aotearoa**  
New Zealand Government

**WORKSAFE**  
Mahi Haumarū Aotearoa



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## Background

In March 2022, WorkSafe New Zealand consulted on a proposal to set a number of restricted entry intervals (REIs) for pesticides based on a report by Toxicology Consulting Ltd which was commissioned by WorkSafe.

WorkSafe received 32 submissions on the proposal.

There was a high level of concern from the submitters regarding the conservatism in the data used to calculate the REIs. It was also clear that guidance was needed to set out in practical terms what an REI means and what is required to manage the risk during the REI period.

WorkSafe set up a working group in late 2022 to help refine the REIs and develop guidance material.

The working group consisted of representatives from industry associations, an agriculture training organisation, manufacturers and grower groups, who were able to bring a grower perspective. The EPA and MPI were also part of the group alongside technical and guidance specialists from WorkSafe.

With the generous mahi of the working group and the information provided in the submissions we have been able to significantly refine most of the REIs in the initial proposal.

WorkSafe would like to thank the submitters who provided additional data which helped reduced the reliance on default parameters.

WorkSafe has also engaged with a number of grower groups regarding the REIs since the consultation and would like to thank them for their input.

This document provides a summary of the submissions received. It is not intended to address every comment individually.

## Submitter feedback and WorkSafe's response

### Non-substance specific submissions

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#### FEEDBACK AND WORKSAFE RESPONSE

##### QUESTION

**Do you agree with setting a 24 hour REI for substances that are skin sensitisers which otherwise do not require an REI?**

##### Feedback

8 submitters responded to this question.

3 submitters agreed with a 24 hour REI for skin sensitisers and 5 submitters disagreed.

##### WorkSafe response

This topic was discussed by the working group and it was agreed that 24 hours may not be required. The options discussed were to set a 4 hour REI or until dry. It was generally considered that most substances would be dry 4 hours after application. The proposal has been updated to until dry for an REI based on a skin sensitising classification.

##### QUESTION

**Is it valid to assume that dermal exposure of re-entry workers is unlikely for existing label claims for pre- and post-emergence weed control?**

##### Feedback

5 submitters responded to this question and all 5 submitters agreed that dermal exposure was unlikely for pre- and post-emergence weed control.

##### WorkSafe response

The updated proposal is that a number of herbicides no longer require REIs. If there are still substances with REIs proposed that you think fit this use pattern please let us know in your submission.

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## FEEDBACK AND WORKSAFE RESPONSE

### QUESTION

In the Toxicology Consulting Ltd report there are some substance specific questions under the consultation section for specific substances.

### Feedback

A small number of submitters answered some of these questions.

### WorkSafe response

Responses are given under the specific actives the answers applied to.

### Feedback

General feedback was also given in this box rather than answering specific questions in the Toxicology Consulting Ltd report.

### WorkSafe response

General feedback is covered in the topics covered below.

### QUESTION

Do you agree with having an REI for crops not listed on the label?

### Feedback

11 submitters responded to this question.

8 submitters did not agree that REIs should be set for off-label uses.

3 submitters agreed that REIs should be set for off-label uses.

### WorkSafe response

WorkSafe has updated the proposal and does not intend to set REIs for off label uses. Primarily because manufacturers can generally only include information on the label for the approved label uses.

If an REI was to be set for off-label use it would be calculated using the most conservative application rate and other parameters. For many off-label uses this would be overly conservative.

Off-label users need to carry out their own risk assessment to determine an appropriate REI for the application rate, activity and the type of crop.

### TOPIC

#### Consultation

### Feedback/Comments

Submitters felt that WorkSafe should have consulted industry before going out for public consultation and that the REIs should be reviewed and reconsulted on before they are set.

### WorkSafe response

WorkSafe acknowledges that targeted consultation could have been undertaken before the public consultation. However, the public consultation was a genuine consultation after which we have listened to submitters and made every effort to refine the REIs based on the best data available.

As significant changes have been made we are now reconsulting.

### TOPIC

#### Additional data provided

### Feedback/Comment

A number of submissions provided additional data and remodelling for various substances. In general, this information was provided in confidence so no detail will be provided in this summary.

### WorkSafe response

WorkSafe would like to thank the submitters who provide additional data and updated modelling in their submissions. This information has helped WorkSafe refine the original proposal and in general the new proposed REIs are shorter than the original proposal thanks to the input from submitters.

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## FEEDBACK AND WORKSAFE RESPONSE

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### AOELs

In consultation with the EPA, WorkSafe has decided that we are unable to use updated AOELs and dermal absorption values in the modelling as these values are also used to determine other potential exposures, like operator exposure during application. Redetermining other exposures is out of scope of this current piece of work. A modified reassessment under the HSNO Act would be required to update AOEL and dermal absorption values to use in the risk assessment of a substance.

### Dermal absorption diluted vs undiluted

A common comment was regarding the use of dermal absorption value of 13% for pirimicarb ingredient. This has been wrongly attributed to be the dermal absorption of undiluted EC product containing pirimicarb, and therefore the assumption that undiluted product dermal absorption value should be used in the re-entry worker assessment. However, the 13% value is derived from the Footprint database, accessed in 2011, where a dermal absorption range of 0.1-13% was identified, and where the highest value, 13%, was used for exposure values. The 13% dermal absorption of an undiluted EC product containing pirimicarb is a coincidence and was not used in exposure calculations.

The use of the dermal absorption value for diluted spray product is the correct value to use in re-entry interval exposure assessment.

#### TOPIC

#### Interpretation of 13.23(b)

### Feedback/Comment

Clarification was sort on WorkSafe's interpretation of 13.23(b) 'scientific data available for the substance is sufficiently reliable to enable a restricted entry interval to be set'.

Two interpretations were put forward:

- scientific data available for the substance provides sufficient evidence of harm; or
- scientific data available for the substance is sufficient to calculate a meaningful REI.

### WorkSafe response

WorkSafe's interpretation is that scientific data available for the substance is sufficient to calculate a meaningful REI.

That does not exclude the use of default values being used for some parameters. The AOEL provides the basis for concern when the calculated exposure is greater than the AOEL.

#### TOPIC

#### Methodology

### Feedback/Comment

Submitters thought that the risk assessment approach used is outdated, that other methodologies should be considered and that setting of REIs should align with overseas methodologies and values.

REIs should be scientifically justified.

### WorkSafe response

The regulation under which WorkSafe can set restricted entry intervals requires that the scientific data available for the substance is sufficiently reliable to enable a restricted entry interval to be set. The EPA methodology which the original proposals were based on is scientifically based and internationally acceptable therefore should be considered reliable. The input parameters such as the transfer coefficients, the AOEL, DT<sub>50</sub> and DFR are also scientifically derived by standard international methods.

While other methodologies could have been used WorkSafe generally relies on the EPA to undertake the risk assessment for worker exposure.

This is a one-off proposal that WorkSafe is undertaking in order to transfer the REIs that were previously set under HSNO approvals.

Going forward the EPA will continue to undertake the risk assessment for worker exposure using their standard methodologies which were consulted on and approved.

Changing the methodology for worker exposure assessment is therefore out of scope for this piece of work.

WorkSafe also considered other scientifically based data such as withholding periods and residue testing to derive appropriate restricted entry intervals but these methods are not internationally accepted and are not considered an appropriate way of determining appropriate REIs.

Accepting international values without reviewing information on how the values were set would not meet the criteria required by the regulations.

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## FEEDBACK AND WORKSAFE RESPONSE

### TOPIC

#### Peer review

#### Feedback/Comment

Submitters considered that the data in the Toxicology Consulting Limited report should have been peer reviewed.

#### WorkSafe response

The method used to calculate the proposed REIs in that report is part of the methodology used by the EPA when they carry out a risk assessment as part of the application process. This methodology was consulted on publicly before being implemented.

The method used is recognised internationally and was developed by experts in the field.

Results generated by the model are highly dependent on the values of various parameters. One of the main purposes of the consultation was to seek better data inputs so the REIs could be refined. Having the document peer reviewed would not have achieved this goal.

### TOPIC

#### Substance specific data

#### Feedback/Comment

A number of submitters were concerned that the use of default parameters in the calculations leads to overly conservative REIs.

It was noted that conservatism is built into six of the inputs into the model, resulting in a cumulative effect that likely exaggerates the risk and the proposed REIs.

#### WorkSafe response

WorkSafe agrees that using default parameters may overestimate the risk. The consultation process is about providing an opportunity for submitters to provide WorkSafe with relevant data so the proposal can be refined. A number of submitters have provided data that has allowed WorkSafe to refine the proposal for a number of substances.

### TOPIC

#### Relevance of modelling to specific uses

#### Feedback/Comment

The relevance of the model used for some uses was questioned. In particular, for biosecurity uses and some herbicides that are not directly sprayed on crops. Another example given was diazinon application for pasture where the substance is watered in.

#### WorkSafe response

WorkSafe agrees that the methodology that has been used to determine the proposed REIs is not representative of biosecurity uses and therefore should not be applied to biosecurity uses. As the methodology used does not include scenarios that cover biosecurity uses WorkSafe does not have an alternative method for determining if REIs are required for biosecurity uses. It is also acknowledged that biosecurity uses are varied in many aspects including the application rate, the frequency of application and the type of application method.

REIs will be set for label crops and the application specified on the label only. For other uses the users will need to do their own risk assessment to determine if there are risks to re-entry workers and apply an appropriate REI based on the risk assessment.

Some herbicides have been removed from the proposal as it is considered that the modelling is not suitable for determining REIs for these uses. For example, glufosinate ammonium.

Some label uses have been excluded based on how they are used. Refer to the individual substances. If there are still REIs proposed for uses you do not believe the modelling is suitable for, please let us know by making a submission.

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## FEEDBACK AND WORKSAFE RESPONSE

TOPIC  
**Dry residues**

### Feedback/Comment

The re-entry intervals (REI) values have been calculated using a flawed assumption that the products are not dry on the plant. The DFR factor for dried substances is much lower than for wet, newly applied product.

### WorkSafe response

The model used to calculate the REIs is an EFSA model. EFSA guidance says:

“Worker, resident and bystander exposure towards surface deposits and re-entry into treated crops, the higher of the values for the undiluted product and the in-use dilution should be taken from the dermal absorption study. The use of higher dermal absorption value is based on the precautionary principle as currently no validated method to measure dermal absorption of dried residue after application of dilutions is available.”

EFSA guidance also states:

Where experimentally determined DFR data are not available a first tier assessment should assume 3µg active substance/cm<sup>2</sup> of foliage/kg a.s. applied/ha.

TOPIC  
**Guidance**

### Feedback/Comment

Submission responses showed that there was not a consistent understanding of the purpose of an REI and how to manage the REI. A number of submitters suggested that guidance was required.

### WorkSafe response

WorkSafe acknowledges that there is currently no guidance regarding REIs and agrees that guidance is required.

Following the consultation a working group was established and one of the main focusses of the working group was to develop guidance.

A draft guidance document is being consulted on along with the updated REIs.

TOPIC  
**PPE requirements**

### Feedback/Comment

PPE needs to be appropriate to the use and practical.

Some understood PPE to be the PPE required for application.

### WorkSafe response

WorkSafe agrees that PPE should be chosen to manage the identified risk. The REIs proposed were generally based on dermal exposure to treated plant material which is not the same as the potential exposure during application which might also be through inhalation. Appropriate PPE to manage exposure during the REI is not necessarily the same PPE required for application. For volatile actives there may be a short period of time where it is appropriate to wear respiratory protection.

Setting a restricted entry interval requires a worker entering the application plot to wear appropriate PPE in accordance with regulation 13.8 and GRWM regulations 15-20. GRWM regulation 17 requires that the PPE provided by the PCBU is worn or used by the worker, so far as is reasonably practicable.

WorkSafe does not intend to set mandatory PPE requirements for the REI.

The guidance developed by the REI working group has a large section regarding choosing appropriate PPE that is dependent on the type and maturity of crop and activities that will be carried out.

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## FEEDBACK AND WORKSAFE RESPONSE

TOPIC  
Level of risk

### Feedback/Comment

Submitters stated that interventions should be proportionate to the level of risk.

### WorkSafe response

WorkSafe agrees that interventions should be proportionate to the risk. The intention of setting restricted entry intervals is to manage potential long term health effects that may not be easily linked back to the pesticide use as the effects may occur many years after exposure. We understand that the level of risk in this situation is not necessarily obvious but we do believe that the requirement to wear appropriate PPE is reasonable.

With the help of the working group guidance has been developed to help PCBUs determine the appropriate PPE for the activities that might be undertaken during an REI.

TOPIC  
NZS 8409

### Feedback/Comment

NZS 8409 recommends to users to wait until spray has dried before re-entering for any activities.

### WorkSafe response

WorkSafe agrees that this is good practice.

WorkSafe can only set REIs based on the criteria set in the regulations.

Firstly, the substance has to be a class 6. Many of the new generation pesticides do not have human health classifications so they would be excluded.

Scientific data must be used to determine an appropriate REI. If the methodology used shows the level of exposure to be below the AOEL then an REI could not be set.

TOPIC  
REI vs WHP (PHI)

### Feedback/Comment

Some REIs are longer than the withholding period. Submitters commented that this did not make sense.

### WorkSafe response

Withholding periods are based on good agricultural practice which does not mean that there are no residues present at the end of the withholding period.

Toxicity is related to the amount of exposure. The potential exposure from contact with foliage that has pesticide residues on it when working in an application area for a full day is significantly different from eating, for example, a few apples a day. A worker is likely to pick 100s of apples and brush up against foliage for up to 8 hours or more increasing the potential for exposure.

WorkSafe have discussed that some of the proposed REIs are longer than the withholding periods with ACVM and they are aware of the current proposal.

TOPIC  
REIs for active ingredients

### Feedback/Comment

It was recommended that REIs should be set for active ingredients rather than specific substances and just have one REI for a substance.

### WorkSafe response

WorkSafe agrees that this would be the simplest approach but it is not a risk based approach and does not fit with the criteria of being scientifically justified.

The new proposal uses more realistic transfer coefficients (TC) from the USEPA. Not only are the TCs significantly different for various crops they can vary significantly depending on the activity being undertaken.

Many crops where minimal exposure to foliage occurs do not require an REI whereas larger crops where exposure is greater require longer REIs to protect workers.

The application rates may also vary significantly between crops which affects potential residues.

If WorkSafe were to set one REI per active it would be too conservative for many crops.



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## FEEDBACK AND WORKSAFE RESPONSE

### TOPIC Signage

#### Feedback/Comment

A requirement for the use of signage should be considered.

#### WorkSafe response

The regulations require signage for indoor REIs but there is no mandatory signage requirement for outdoor REIs.

Signage was discussed by the working group and some members indicated that they had other means of managing entry into application areas under an REI.

We decided to add advice regarding signage to the guidance document suggesting that signage is one way of managing entry into a restricted area. Please refer to the guidance document.

It is noted that NZS 8409 provides the following guidance.

G4.3.1 Application in public areas – Ground based application – Signs shall remain in place for a period equivalent to the REI sign shall include the name, type of product (for example, herbicide, fungicide), the date of application, the name and contact details of the PIC of the application and any REI conditions.

G4.4 Indoor application – Signs shall be displayed outside the application area at every routine point of entry into an indoor area treated with plant protection products with a restricted entry interval. Signs shall include the following information – toxic to humans, entry prohibited unless PPE worn, date of spraying, start time and end time of REI and organisation name: Signs shall be removed within 72 hours of application or the end of the REI, whichever is the later.

### TOPIC Labels

#### Feedback/Comment

REIs should be included on the label.

#### WorkSafe response

WorkSafe agrees that REIs should be required to be on the label.

Labelling requirements are set by the EPA as labelling is a supplier/importer/manufacture requirement. While WorkSafe could set a requirement we do not want to complicate an already complex system.

The HSNO approvals for organophosphate pesticides currently have the following requirement to include the REI on the label.

The label for this substance must:

- include the relevant requirements relating to any restricted entry interval (REI) set under the HSW Regulations.

We are currently working with the EPA to get a generic control added to the EPA labelling notice to require REIs to be on the label.

Transitional provisions will be communicated once the EPA has updated the Labelling Notice.

### TOPIC Substances included

#### Feedback/Comment

Other trade name products with the same active are not included in proposal.

#### WorkSafe response

The substances in the original proposal were only the substances that previously had REIs set under HSNO. WorkSafe agrees that all substances containing the actives should be assessed. The updated proposal includes the approvals for all products that were registered with ACVM at the time the data was extracted. Substances that have been added are identified as 'New Substances'.

Note that some substances may not be included due to the way they are used.

For example, one submitter asked if chlorpyrifos used in the form of broadcasted prills would be included.

Broadcast use of prills or pellets does not have the same risk profile as a sprayed product. The risk assessment methodology that has been used considers contact with foliage that had been sprayed by the pesticide which is not relevant to the broadcast use of prills or pellets. There may be risks associated with re-entry activities in application areas where prills or pellets have been applied but this is outside the scope of the current REI consultation process.

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## FEEDBACK AND WORKSAFE RESPONSE

### TOPIC Off label crops

#### Feedback/Comment

There was some concern regarding the REIs that would be applied to off-label uses. By using the worst case scenarios the application rates used in the calculations may be too high for some off label crops which results in an overly conservative REI for these uses.

#### WorkSafe response

REIs will not be set for off-label uses. REIs will be set for label crops and the application specified on the label only. For other uses the users will need to do their own risk assessment to determine if there are risks to re-entry workers and apply an appropriate REI based on the risk assessment.

### TOPIC Exposure timeframes for calculating REIs

#### Feedback/Comment

The EFSA methodology uses two different exposure timeframes when calculating REIs; 8 hours and 2 hours.

#### WorkSafe response

New modelling was done using a 2-hour exposure time. 2 hours vs 8 hours roughly halves the REI. This was presented to the working group for discussion. The working group agreed that industry practices were varied and it would not be possible to confirm that activities on certain crops would only be undertaken for 2 hours rather than a full 8 hours a day. The updated proposed REIs are based on an 8 hour working day. However, if a specific activity for a crop can be confirmed to only be undertaken for 2 hours a day the modelling can be refined.

### TOPIC Revision of REIs

#### Feedback/Comment

Submitters wanted a formal process for revision of REIs and for WorkSafe to undertake periodic reviews.

#### WorkSafe response

As outlined above updating the AOEL and dermal absorption values is out of scope when REI review is the only worker exposure being considered as other worker exposures also use these parameters to identify potential risks. For these parameters the appropriate review process would be a reassessment of the substance approval under HSNO.

Worksafe may review an REI if data (other than AOEL or dermal absorption) is provided and remodelling submitted for review.

WorkSafe does not intend to periodically review REIs but would consider reviewing REIs if the EPA methodology was updated.

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## Active specific feedback

A number of submissions provided additional data and remodelling for various substances. In general, this information was provided in confidence so the details will not be provided in this summary.

WorkSafe would like to thank the submitters who provided additional data and updated modelling in their submissions. This information has helped WorkSafe refine the original proposal and in general the new proposed REIs are shorter than those in the original proposal thanks to the input from submitters.

In consultation with the EPA, WorkSafe has decided that we are unable to use updated AOELs or dermal absorption values in the modelling as these parameters are also used to determine other potential exposures, like operator exposure during application. Redetermining other exposures is out of the scope of this current piece of work. A modified reassessment under the HSNO Act would be required to update AOEL and dermal absorption values to use in the risk assessment of a substance.

If the active is not in the table below no submissions were received relating to that active.

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Abamectin	<input checked="" type="radio"/> 4 No <input type="radio"/> Yes <input checked="" type="radio"/> 3 Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>Update data for AOEL and remodelling was carried out and the using updated parameters. The calculated REIs for most substances and crops was 0 days except the following:</p> <ul style="list-style-type: none"> <li>- HSR101003 Bulb onions 2 days</li> <li>- HSR000734, HSR000735, HSR100729, HSR101002, HSR101034, HSR101144, HSR101211, HSR101316 Apples and pears 4 days (note the REI for apples and pears is based on the fruit thinning fruit, if this is not an activity undertaken when abamectin is applied the REI may be refined further)</li> <li>- HSR100716 until dry based on the skin sensitising classification.</li> </ul>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p>
Acephate	<input checked="" type="radio"/> 1 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Do you agree with having an REI for crops not listed on the label?</p> <p><b>Feedback</b> Disagreed with biosecurity uses for fresh flowers and as foliar dip.</p> <p><b>WorkSafe response</b> REIs will only be set for label uses and are not intended to cover biosecurity uses. However, a risk assessment should be carried out to determine potential risk from exposure of workers to residue after application.</p> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Acibenzolar-S methyl	<input checked="" type="radio"/> 2 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> Updated data for HSR100588 was submitted.</p> <p><b>WorkSafe response</b> Remodelling was carried out and the calculated REI was 0 days. Due to the skin sensitising classification an updated REI of until dry is proposed.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Updated information on worker activities was provided.</p> <p><b>WorkSafe response</b> Remodelling was carried out and the calculated REI was 0 days. Due to the skin sensitising classification an updated REI of until dry is proposed.</p>
Aureobasidium	<input checked="" type="radio"/> 3 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> Submitters did not agree with a 24hr REI for a skin sensitiser.</p> <p><b>WorkSafe response</b> We are now proposing an until dry REI for skin sensitisers.</p>
Benzovindiflupyr (Solatenol)	<input checked="" type="radio"/> 1 No <input checked="" type="radio"/> 1 Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> Alternative dermal absorption value suggested. This was reviewed by the EPA.</p> <p><b>WorkSafe response</b> Proposed REI was based on skin sensitising classification not on modelling. New proposed REI is until dry.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> One submitter did not agree with a 24hr REI for a skin sensitiser. The other submitter said that 24 hr was workable.</p> <p><b>WorkSafe response</b> We are now proposing an until dry REI for skin sensitisers.</p>
Bifenthrin	<input checked="" type="radio"/> 1 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Bifenthrin is used for biosecurity question the relevance of the proposed REI for biosecurity use.</p> <p><b>WorkSafe response</b> WorkSafe agrees that REIs may not be appropriate for biosecurity uses. The new proposed REIs are for label uses only. When used in for biosecurity a risk assessment should be carried out to determine if there is potential for workers to be exposed to harmful residues.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Carbaryl	<input checked="" type="radio"/> 4 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b></p> <p>Carbaryl may be used for biosecurity.</p> <p>Information on activities undertake was provided for avocados.</p> <p>It was submitted that apple thinning may be and activity undertaken after carbaryl application.</p> <p>It was suggested that it may be more appropriate to use USEPA TC values.</p> <p><b>WorkSafe response</b></p> <p>REIs will only be set for label uses. Biosecurity uses will need to carry out their own risk assessment.</p> <p>Modelling has been updated based on information provided and the USEPA transfer coefficients have been used in the remodelling. Refer to the remodelling document for details of the parameters used and the consultation document for the proposed REIs.</p>
Chlorpyrifos	<input checked="" type="radio"/> 4 No <input type="radio"/> 1 Yes <input type="radio"/> 1 Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b></p> <p>Information on crop application for field nurseries was provided and used for remodelling.</p> <p>Applicability to biosecurity application questioned.</p> <p>A study conducted by the Ministry of Health was cited that tested cholinesterase levels of 42 people spraying and working in orchards. None of the workers showed depressed cholinesterase.</p> <p><b>WorkSafe response</b></p> <p>REIs will only be set for label uses. Biosecurity uses will need to carry out their own risk assessment.</p> <p>Modelling has been updated based on information provided and the USEPA transfer coefficients have been used in the remodelling.</p> <p>No REIs are being proposed for substances containing chlorpyrifos except for:</p> <ul style="list-style-type: none"> <li>- pipfruit and stonefruit where the proposed REIs are 24 hours</li> <li>- substances where no registered product were identified. HSR000165, HSR000170, HSR000171, HSR000173.</li> </ul>
Deltamethrin	<input type="radio"/> 1 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b></p> <p>Relevant of REI for biosecurity application was questioned.</p> <p><b>WorkSafe response</b></p> <p>WorkSafe agrees that REIs may not be appropriate for biosecurity uses.</p> <p>The new proposed REIs are for label uses only. When used in for biosecurity a risk assessment should be carried out to determine if there is potential for workers to be exposed to harmful residues.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Diazinon	<input checked="" type="radio"/> 6 No <input type="radio"/> Yes <input type="radio"/> 1 Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> An updated DT<sub>50</sub> was proposed for diazinon.</p> <p><b>WorkSafe response</b> The updated DT<sub>50</sub> has been used in the re-modelling and the proposed REIs are based on this value.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Proposed REIs would make the product unusable. Not all diazinon products included, for example, granular forms. Diazinon is applied in the rain for grass grub control therefore no need for an REI. Information on re-entry activities provided for avocados and forage brassicas. Are REIs applicable to forage brassicas? Off label use is prohibited for diazinon.</p> <p><b>WorkSafe response</b> Updated modelling has been carried out using USEPA transfer coefficient which are specific to crops and activities. The activity information provided in the submissions has informed which transfer coefficient has been used for different crops. USEPA TCs applicable to forage brassicas have been used. WorkSafe would be interested in feedback on the TCs that have been chosen.</p>
Dichlorvos	<input type="radio"/> No <input checked="" type="radio"/> 1 Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> Dichlorvos is used for biosecurity purposes.</p> <p><b>WorkSafe response</b> WorkSafe agrees that REIs may not be appropriate for biosecurity uses. The new proposed REIs are for label uses only. When used for biosecurity a risk assessment should be carried out to determine if there is potential for workers to be exposed to harmful residues.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p>
Dimethoate	<input type="radio"/> No <input checked="" type="radio"/> 1 Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> Dimethoate is used for biosecurity purposes.</p> <p><b>WorkSafe response</b> WorkSafe agrees that REIs may not be appropriate for biosecurity uses. The new proposed REIs are for label uses only. When used for biosecurity a risk assessment should be carried out to determine if there is potential for workers to be exposed to harmful residues.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Emamectin benzoate	<input type="radio"/> No <input checked="" type="radio"/> 1 Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> Submitter supported the proposed REI.</p> <p><b>WorkSafe response</b> The REI has been refined and the new proposal is No REI.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Information on re-entry activities provided.</p> <p><b>WorkSafe response</b> Transfer coefficients updated based on activity information provided. New proposal is No REI.</p>
Fenamiphos	<input checked="" type="radio"/> 3 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Used for biosecurity. REI not appropriate for application to bare ground.</p> <p><b>WorkSafe response</b> As a non label use there will not be an REI for biosecurity use. No REIs will be set for fenamiphos as the approvals for substances containing fenamiphos are currently being phased out and are likely to be revoked before or shortly after this proposal is finalised.</p>
Fluxapyroxad	<input checked="" type="radio"/> 1 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> REI impractical for late season control.</p> <p><b>WorkSafe response</b> REIs have been remodelled and the new proposal is No REI for this active.</p>
Glufosinate ammonium	<input checked="" type="radio"/> 1 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> Support the proposed REI for kiwifruit.</p> <p><b>WorkSafe response</b> Glufosinate ammonium has been removed from the proposal as it is considered that the modelling is not suitable for determining REIs for the use of this active.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Kasugamycin	<input checked="" type="radio"/> 3 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> One submitter proposed that the US and Canadian REI should be used.</p> <p><b>WorkSafe Response</b> Remodelling has been undertaken and the new proposal is No REI for products containing this active.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Alternative transfer coefficients were proposed to be used in the modelling.</p> <p><b>WorkSafe response</b> Remodelling has been undertaken and the new proposal is No REI for products containing this active.</p>
Maldison	<input type="radio"/> 1 No <input type="radio"/> Yes <input checked="" type="radio"/> 1 Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> The PreHarvest Interval is 7 days. Maldison is used as a stored grain product.</p> <p><b>WorkSafe response</b> Updated parameters have been used to refine the REI for maldison. Proposed REIs now range from 13 days to 48 hours depending on the crop. Please refer to the crop and remodelling documents for details. REIs are intended to manage application areas and do not apply to the crop once the crop has been harvested. The REI will not apply to stored grain.</p>
Mancozeb	<input checked="" type="radio"/> 3 No <input type="radio"/> Yes <input type="radio"/> 1 Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p><b>Feedback</b> Mancozeb is used as a seed coating for biosecurity purposes. Proposed REI is unworkable. Information was given on tasks and PPE that would be workable. 48 hours was seen as a reasonable REI.</p> <p><b>WorkSafe response</b> Remodelling has been carried out with updated parameters. Proposed REIs range from no REI to 8 days depending on the crop. Please refer to the crop and remodelling documents for details. REIs would not apply to a seed coating. REIs are not intended to apply to biosecurity uses. REIs will only be applied to label uses.</p>



ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Methamidophos	<input checked="" type="radio"/> 2 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> Methamidophos is used for biosecurity purposes. Proposed REI is not practical.</p> <p><b>WorkSafe response</b> No REIs will be set for methamidophos as the approvals for substances containing methamidophos are currently being phased out and are likely to be revoked before or shortly after this proposal is finalised.</p>
Metamitron	<input checked="" type="radio"/> 2 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p><b>Feedback</b> Substance specific data was provided by one submitter. Proposed REI is impractical.</p> <p><b>WorkSafe response</b> The submitter data was reviewed and updated values used to model for the specific substance.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p>WorkSafe have remodelled using USEPA transfer coefficients. The updated modelling has reduced the REIs significantly for specific substances. Note there are a large number of new substances (substances that were not in the original proposal) that have been added to the proposal for this active.</p>
Oxyfluorfen	<input checked="" type="radio"/> 1 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> Propose when fully dry for REI.</p> <p><b>WorkSafe response</b> Remodelling has been carried out with updated parameters. The new proposal is No REI for oxyfluorfen.</p>
Permethrin	<input type="radio"/> No <input checked="" type="radio"/> 1 Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling?</p> <p>None provided.</p>
		<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> Permethrin is used for biosecurity purposes. The use patterns modelled are not relevant to these uses.</p> <p><b>WorkSafe response</b> REIs will only be set for label uses and will not apply to biosecurity uses.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Primicarb	<input checked="" type="radio"/> No	Is there better data available to input into the REI modelling?
	<input checked="" type="radio"/> Yes	None provided.
	<input checked="" type="radio"/> Not indicated	<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>None provided.</p> <p><b>Feedback</b> REI impractical. REI workable except for potatoes. Information on interval between applications for cucurbits provided. Activity based modelling provided. Work Rate was all proposed as a parameter that could be reviewed.</p> <p><b>WorkSafe response</b> Re-modelling was carried out using updated transfer co-efficients. The only crops requiring an REI based on the updated modelling are: - apples 8 days - stonefruit 3 days The proposed REI for Dovetail HSR008052 is until dry as it has a skin sensitising classification. Work rate was a parameter that was discussed by the working group but it was decided that work rates were too diverse throughout the industry to refine.</p>
Pirimiphos-methyl	<input checked="" type="radio"/> No	Is there better data available to input into the REI modelling?
	<input checked="" type="radio"/> Yes	None provided.
	<input type="radio"/> Not indicated	<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>Information on activities for specific crops provided.</p> <p><b>Feedback</b> Pirimiphos-methyl is used for biosecurity purposes. 48 hours is the longest reasonable REI.</p> <p><b>WorkSafe response</b> REIs have been modelled using USEPA transfer coefficients for crops and activities. Please refer to the consultation of crop documents for the details. WorkSafe would welcome feedback on whether the appropriate TCs have been used. REIs will only be set for label uses and not intended to apply to biosecurity uses.</p>
Prodiamine	<input checked="" type="radio"/> No	Is there better data available to input into the REI modelling?
	<input type="radio"/> Yes	Remodelling was provided.
	<input type="radio"/> Not indicated	<p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses?</p> <p>Updated transfer coefficients for turf were suggested.</p> <p><b>Feedback</b> An updated REI of 15 days was proposed. PPE was also proposed.</p> <p><b>WorkSafe response</b> Updated modelling was undertaken with a new proposed REI of 13 days for turf.</p>

ACTIVE	AGREE WITH REI	QUESTION, FEEDBACK AND WORKSAFE RESPONSE
Salicylic acid	<input type="radio"/> No <input checked="" type="radio"/> 1 Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling? None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses? None provided.</p> <p><b>Feedback</b> Submitter agreed with no REI being set for this active.</p> <p><b>WorkSafe response</b> No change to proposal. No REI is proposed for salicylic acid.</p>
Tau-fluvalinate	<input checked="" type="radio"/> 2 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling? The a.i.per hectare rate for avocados is too high.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses? None provided.</p> <p><b>Feedback</b> 3 days OK, 13 days is impractical.</p> <p>REIs don't make sense when crops which have the same risk have significantly different REIs.</p> <p><b>WorkSafe response</b> Remodelling has been undertaken and for most crops no REI is being proposed.</p> <p>One new substance containing tau-fluvalinate has been added and has a proposed REI for flowers of 12 days. WorkSafe would welcome feedback on whether the right transfer coefficient has been used to determine the REI for flowers.</p>
Tea-tree oil	<input checked="" type="radio"/> 3 No <input type="radio"/> Yes <input type="radio"/> Not indicated	<p>Is there better data available to input into the REI modelling? None provided.</p> <hr/> <p>Is there any better data available on re-entry worker activities for any existing and potential future 'off label' uses? None provided.</p> <p><b>Feedback</b> Submitter said the proposed 7 day REI was impractical and there should be no change to the existing REI</p> <p><b>WorkSafe response</b> The REI has been reassessed and the updated REI proposal is until dry based on the skin sensitising classification.</p>



### **Disclaimer**

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ISBN 978-1-99-105728-0 (online)

Published: July 2024

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