

# WES Review 2018

*Selection of sources for  
workplace exposure standards,  
notations and supporting data*

*Australian workplace exposure standards  
and advisory notations*

Safe Work Australia (2018)



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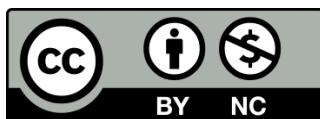
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# Selection of sources for exposure standards, notations and supporting data

This document records the outcomes of the first part of the methodology for recommending and reviewing health-based workplace exposure standards and notations.

## Background

A methodology has been developed to identify appropriate sources of data to inform recommendations for workplace exposure standards for hazardous chemicals. This methodology aligns with the Australian Government's principle to adopt international standards and risk assessments from trusted international sources where appropriate.

The methodology aims to identify sources that:

- are credible and trusted
- use scientific evaluation of the results of validated test methods to establish health-based standards, identify points of departure (no observed adverse effect concentrations [NOAEC], lowest observed adverse effect concentrations [LOAEC] or benchmark dose [BMD]<sup>1</sup>) or human health hazard classifications
- communicate scientific approach and publishes or makes available supporting documentation of the scientific evaluations or classifications, and
- incorporate a peer review and consultation process.

The documentation and classifications developed by these sources can then be collated and evaluated to efficiently recommend or review a workplace exposure standard and notation(s). This approach will ensure the standard and notations recommended are based on a robust weight of evidence.

## Method

The selection of sources of standards, notations and supporting data has been undertaken using the methodology for the selection of sources for exposure standards, notations and supporting data<sup>2</sup>.

## Outcomes

### Primary sources for workplace exposure standards

Based on the criteria for primary sources of data, the following bodies are considered appropriate:

- American Conference of Governmental Industrial Hygienists (ACGIH®) – Threshold Limit Values (TLV)
- Deutsche Forschungsgemeinschaft (DFG) – [Maximum workplace values](#) (MAK values)
- EU Scientific Committee on Occupational Exposure Limits (SCOEL) – [Occupational exposure limits](#) (OEL)
- American Industrial Hygiene Association/[Occupational Alliance for Risk Science](#) (AIHA/OARS)
- [Health Council of the Netherlands](#) (Dutch Expert Committee on Occupational Safety)

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<sup>1</sup> This may include no observed adverse effect level (NOAEL) and lowest observed adverse effect level (LOAEL) depending on the human health endpoint and data available.

<sup>2</sup> [WES Methodology: Criteria for the selection of sources for workplace exposure standards, notations and supporting data](#)

## Secondary sources for workplace exposure standards

Based on the criteria for secondary sources of data, the following bodies are considered appropriate:

### Group A

- UK Health and Safety Executive
- Australian Institute of Occupational Hygienists (AIOH) [position papers – recommendations for WES](#)
- Nordic Council: [The Nordic Expert Group for Criteria Documentation of Health Risks of Chemicals](#)

### Group B

- [National Industrial Chemicals Notification and Assessment Scheme](#) (NICNAS)
- [Australian Pesticides and Veterinary Medicines Authority](#) (APVMA)
- [The European Chemicals Agency](#) (ECHA)
- [The International Agency for Research on Cancer](#) (IARC)
- [National Toxicology Program](#) (NTP)
- [US Environmental Protection Agency](#) (US EPA)
- [Organisation for Economic Cooperation and Development](#) (OECD)
- US [National Institute for Occupational Safety and Health](#) (NIOSH)

## Sources for notation recommendations

The basis for the criteria for notation recommendations is classification as a carcinogen, sensitiser or toxic via the dermal route. For Australia, the most appropriate classification system is the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The following bodies are considered appropriate:

- [National Industrial Chemicals Notification and Assessment Scheme](#) (NICNAS)
- [Australian Pesticides and Veterinary Medicines Authority](#) (APVMA)
- [The European Chemicals Agency](#) (ECHA)
- [European Union's Annex VI to CLP](#)

Information available in the primary and secondary sources listed in the previous section can also inform whether a classification or notation may be required.

## Next steps

These sources will be used to inform recommendations for workplace exposure standards for hazardous chemicals and notations using a process to review data. Only documentation that is publicly available will be used during the evaluation process.