

April 15, 2024

New or Revised ACGIH Threshold Limit Values and B.C. Exposure Limits

(Source: worksafebc.com)

The Occupational Health and Safety Regulation provides that, except as otherwise determined by WorkSafeBC, an employer must ensure no worker is exposed to a substance exceeding the Threshold Limit Values (TLVs) prescribed by the [American Conference of Governmental Industrial Hygienists](https://www.acgih.org/) (ACGIH).

Twice a year, the ACGIH publishes a list of substances for which they have set new or revised TLVs. When the new or revised TLVs for substances are adopted, these TLVs are referred to as B.C. Exposure Limits (ELs).

An EL is the maximum allowed airborne concentration for a chemical substance for which it is believed that nearly all workers may be exposed over a working lifetime and experience no adverse health effects. ELs may be set out as an 8-hour time-weighted average concentration, a 15-minute short-term exposure limit, or a ceiling limit.

When the ACGIH publishes its annual list, WorkSafeBC identifies the substances with new or revised TLVs and adds these substances (together with their existing B.C. ELs) to the Table of Exposure Limits for Excluded Substances in *Prevention Manual* Item [OHS Policy R5.48-1](#). Until our Board of Directors makes a decision on whether to adopt the changes, the existing ELs for these substances continue to be in effect in B.C.

Before bringing the new or revised ACGIH TLVs to the Board of Directors for decision, WorkSafeBC's Exposure Limit Review Committee reviews the relevant data on health effects and the availability of validated sampling methods for these substances and consults with stakeholders.

The ACGIH published its first batch of new or revised TLVs for 2024 in January of this year. The following substances with new or revised TLVs for 2024 have been added to the Table of Exposure Limits for Excluded Substances in *Prevention Manual* Item [OHS Policy R5.48-1](#):

- Benzene
- Captafol, Inhalable Fraction & Vapour
- Ethylene glycol dimethyl ether
- Fenoxycarb, Inhalable
- Fentanyl and fentanyl citrate, as Fentanyl, Inhalable
- Hexane (Commercial, <54% n-Hexane) and the branched hexane isomers
- Methylcyclohexane
- Pentaborane
- Phthalic anhydride, Inhalable Fraction & Vapour

All B.C. ELs can be found in the updated [Table of Exposure Limits for Chemical and Biological Substances](#).