

# Occupational Exposure Limits for Asbestos – Know the Laws of Your Province



In most jurisdictions, the occupational exposure limit (OEL, sometimes referred to as permissible exposure limit, or PEL) for asbestos is 0.1 fibers per cubic centimeter of air over a time-weighted average (TWA). To make sense of that, you need to know that 'f' means respirable fibers longer than 5 microns and at least 3 times as long as their diameter as measured by the membrane filter method at 400-450 X magnification (4-mm objective) using phase contrast illumination. Not coincidentally, 0.1 f/cc is also the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) for asbestos exposure over an 8-hour period. However, there are some important variations in OELs by jurisdiction. Most notably, Newfoundland and Yukon have separate OELs for different types of asbestos weighed over different time periods of exposure. Here are the current OELs in each part of Canada.

## Asbestos OELs Across Canada

### FEDERAL

#### OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)

0.1 f/cc (reduced from 1.0 f/cc in 2018)

### ALBERTA

#### OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)

0.1 f/cc

## BRITISH COLUMBIA

### OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)

0.1 f/cc

## MANITOBA

### OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)

0.1 f/cc

## NEW BRUNSWICK

### OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)

0.1 f/cc

## NEWFOUNDLAND

	Average 90 days previous <sup>1</sup>	Maximum Allowable Concentration <sup>2</sup> (single shift – 8 hr.)	Short Term <sup>3</sup> (15 min.)
Chrysotile Asbestos	2 fibres/ml	5 fibres/ml	12 fibres/ml
Amphibole Asbestos	0.5 fibres/ml	2 fibres/ml	5 fibres/ml
Crocidolite Asbestos	Not to be used		
Crystalline Silica	As in ACGIH		

<sup>1</sup> A 90 day previous average is the average of all program samples taken during last 90 days

<sup>2</sup> A maximum allowable concentration is determined by the time weighted average of the samples taken of a single occupation during a single eight hour shift. The sum of the sampling times of all samples used for this determination must total not less than one hour.

<sup>3</sup> A short term exposure is determined by the time weighted average of consecutive samples taken of a single occupation during a single shift. The sum of the sampling times of all samples used for this determination must total not less than 15 minutes. Each exposure over the short term limit must be reported in writing to the chief inspector with a description of the action taken to correct the condition and reduce the exposure.

## **NOVA SCOTIA**

None specified

## **NORTHWEST TERRITORIES/NUNAVUT**

### **OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)**

0.1 f/cc (best practice, not regulatory requirement)

## **ONTARIO**

### **OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)**

0.1 f/cc

## **PRINCE EDWARD ISLAND**

### **OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)**

0.1 f/cc

## **QUÉBEC**

### **OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)**

0.1 f/cc

## **SASKATCHEWAN**

### **OCCUPATIONAL EXPOSURE LIMIT (all types unless indicated otherwise)**

0.1 f/cc (best practice, not regulatory requirement)

## **YUKON**

<b>Asbestos Type</b>	<b>8-Hour Concentration Limit</b>	<b>15-Minute Limit</b>
Amosite	0.2	2 f/mL
Chrysotile	0.5	5 f/mL
Crocidolite	0.1	'
Tremolite	0.5	5 f/mL
Talc (fibrous)	0.5	5 f/mL