



## **2,4,6-Trichlorophenol**

**Environmental estimates (circa 2011): Supplemental data**

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## 1. Data for lifetime excess cancer risk estimates

### Overview

The summary data used to calculate lifetime excess cancer risk and the results for 2,4,6-trichlorophenol are provided in the tables below. For more detailed information on supporting data and sources, see below for each exposure pathway.

#### i. Environmental Concentrations

Exposure pathway	Units	Average	Maximum	Notes
Drinking water	µg/L		0.04	Maximum is the detection limit.
Foods and beverages		Insufficient data		

#### ii. Calculated Lifetime Daily Intake

Exposure pathway	Average intake (mg/kg bodyweight per day)	Maximum intake (mg/kg bodyweight per day)
Drinking water	--	0.036
Foods and beverages	Insufficient data	

#### iii. Cancer Potency Factors

Exposure route	Health Canada	US EPA	CA OEHHA
Inhalation	--	0.011	0.07
Ingestion	0.02	0.011	0.07

Sources for Cancer Potency Factors:

- Health Canada, 2010. Federal Contaminated Site Risk Assessment in Canada, Part I: Guidance on Human Health Preliminary Quantitative Risk Assessment. Version 2.0.
- Health Canada, 2010. Federal Contaminated Site Risk Assessment in Canada, Part II: Health Canada Toxicological Reference Values (TRVs) and Chemical-Specific Factors. Version 2.0.
- United States Environmental Protection Agency Integrated Risk Information System.
- California Office of Environmental Health Hazard Assessment, 2009. Air Toxics Hot Spots Risk Assessment Guidelines Part II: Technical Support Document for Cancer Potency Factors, Appendix A. (Updated 2011)

#### iv. Lifetime Excess Cancer Risk (per million people)

Exposure pathway	Average <sup>1</sup>			Maximum <sup>2</sup>
	Health Canada	US EPA	CA OEHHA <sup>3</sup>	
Drinking water	--	--	--	0.036
Foods and beverages	Insufficient data			

<sup>1</sup>Lifetime excess cancer risk based on average intake x cancer potency factor from each agency

<sup>2</sup>Lifetime excess cancer risk based on maximum intake x highest cancer potency factor

<sup>3</sup>California Office of Environmental Health Hazard Assessment

## Supporting data by exposure pathway

### i. Outdoor air

2,4,6-trichlorophenol is not expected to be present in outdoor air in significant amounts.

### ii. Indoor air

2,4,6-trichlorophenol is not expected to be present in indoor air in significant amounts.

### iii. Dust

2,4,6-trichlorophenol is not expected to be present in indoor dust in significant amounts.

### iv. Drinking water

Drinking water data are from the Ontario Drinking Water Surveillance Program (DWSP) for 2006. A review of published reports was also conducted in order to compare how well the Ontario data represented other regions in Canada.

Source	Units	DL							
Ontario DWSP 2006	(µg/L)	0.02							
Sample Type	Parameter	Mean	SD	Min	25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	Max	N
Treated		0.02	0.0	0.02	0.02	0.02	0.02	0.02	54

DL = Detection limit  
 SD = Standard Deviation

### v. Food and Beverages

No recent data or studies were identified.

## 2. Data quality for lifetime excess cancer risk estimates

Only publicly available data were used to calculate these indicators. Data that are not publicly available may produce different results.

No systematic method for measuring data quality was possible, so we provide the following assessments of how well the data used may represent the actual Canadian average levels. Quality is rated higher when there are data from a number of Canadian monitors, or from Canadian studies that show results similar to other comparable studies. Quality is rated lower when data from few monitors or studies were available and lowest when estimates are based on non-Canadian data. Others may rate data quality differently.

Exposure Pathway	Data Quality	Notes
Drinking water	Very Low	<ul style="list-style-type: none"> <li>2,4,6-trichlorophenol was not measured in 2011 in the Ontario Drinking Water Surveillance Program. It was not detected in any samples (n=69) from distribution systems in 2006. The detection limit was 0.02 µg/L.</li> </ul>
Foods and beverages	Gap	<ul style="list-style-type: none"> <li>No recent data or studies on concentrations of 2,4,6-trichlorophenol in foods and beverages were identified.</li> </ul>