

# eRISK Online Quick Start Guide

CAREX Canada has developed a series of resources and tools for those looking to better understand Canadians' exposures to known and suspected carcinogens.

eRISK Online is an interactive tool that allows users to estimate the cancer risk associated with exposures to known and suspected carcinogens in the environment. The estimates generated are screening level and population-based. This guide shows you how to use the tool to explore an exposure scenario.

## eRISK Online

**1** Scenario 1 Substance Name: Benzene | Scenario 2 Substance Name: Cadmium and cadmium compounds

**2** Scenario 1 Exposure Pathway: Outdoor Air | Scenario 2 Exposure Pathway: Outdoor Air

**3** Scenario 1 Agency Name: Health Canada | Scenario 2 Agency name: Health Canada

**4** Scenario 1 Detection Frequency: 1 | Scenario 2 Detection Frequency: 1

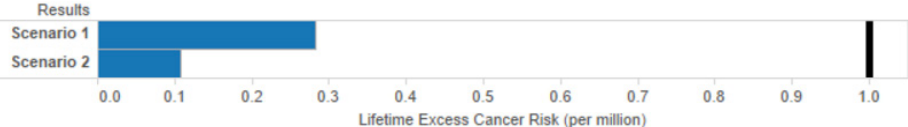
Scenario 1 Mean or Maximum Concentration: Mean | Scenario 2 Mean or Maximum Concentration: Mean

Scenario 1 Input Custom Concentration: 0 | Scenario 2 Input Custom Concentration: 0

**5** Environmental concentration: 0.840 µg/m<sup>3</sup> | Environmental concentration: 0.0001 µg/m<sup>3</sup>

**The lifetime excess cancer risk (LECR) associated with this exposure scenario is 0.282 per million people.** | **The lifetime excess cancer risk (LECR) associated with this exposure scenario is 0.107 per million people.**


**6** Results



Scenario	Lifetime Excess Cancer Risk (per million)
Scenario 1	0.282
Scenario 2	0.107

**TIP**  
Select either one or two scenarios to easily compare results

**TIP**  
Data sources and quality should be taken into consideration when interpreting the risk estimates. Detailed information on eRISK methods and data sources are available in the [eRISK manual](#) and on our [website](#).

 eRISK Online is available here: [www.carexcanada.ca/en/eRISK](http://www.carexcanada.ca/en/eRISK)

- 1** Choose one or two substances from our list of over 30 known and suspected carcinogens. **We've selected benzene and cadmium for this example.**
- 2** Choose the route of exposure. Note that not all exposure routes are relevant for all substances. **We've selected outdoor air for this example.**
- 3** The cancer potency factors used to calculate Lifetime Excess Cancer Risk (LECR) vary by government agency; choose from Health Canada, US Environmental Protection Agency, and California Office of Environmental Health Hazard Assessment (CAOEHHA). **We've selected Health Canada for this example.**
- 4** Change any of the default values for the data that we provide. Please see the manual for detailed information on using your own data to develop custom estimates. **We've used the default values for this example.**
- 5** The LECR associated with your exposure scenario is reported here, along with the associated environmental concentrations. **The LECR estimates for benzene and cadmium exposure in outdoor air are 0.282 per million people and 0.107 per million people, respectively, for this example.**
- 6** The LECR values are graphed to visualize and compare the results of your exposure scenario(s). **The estimated risks associated with exposure to benzene and cadmium in outdoor air are both below 1 per million for this example.** Most regulatory agencies consider LECRs below one per million negligible, and those above one per million warrant further investigation.