

## PREVENTING POLLUTION

- 1 ChemTRAC helps facilities better understand their use and release of chemicals and opportunities to green their practices. Greening has been shown to increase profitability, improve product quality and provide a competitive advantage in the marketplace.
- 2 Our annual survey data suggests that reporting requirements under the bylaw have made businesses more aware of what chemicals they use. Businesses have also become more knowledgeable about different options to reduce pollution.
- 3 Future pollution prevention efforts will focus on supporting businesses by addressing their knowledge and capacity barriers to implementing pollution prevention.

## TORONTO.CA/CHEMTRAC

You will find:

- Interactive maps that allow you to explore your neighbourhood
- List of priority substances, their sources and effects
- Latest information on what businesses are doing to green their operations
- Other City programs on air quality

# CHEMTRAC

## IMPROVING TORONTO'S AIR 2014 ANNUAL REPORT

Air quality in Toronto is affected by pollutants coming from various sources: transportation, commercial, residential and industrial sources both inside and outside of Toronto.

Toronto Public Health estimates that air pollution currently gives rise to **1300 premature deaths** and **3550 hospitalizations** in our city each year. Of those, pollution from local industries is responsible for about **120 of these deaths** and **200 of these hospitalizations**.

## WHAT IS CHEMTRAC?

ChemTRAC is a program designed to increase public awareness of priority chemicals and reduce pollution from industrial and commercial sources. It can be divided into three main areas:

- 1 The Environmental Reporting and Disclosure Bylaw, which requires businesses to track and report their manufacturing, use and release of priority chemicals. 
- 2 The analysis and release of chemical data. The [toronto.ca/chemTRAC](http://toronto.ca/chemTRAC) interactive map provides neighborhood-specific data. 
- 3 The greening of businesses through pollution prevention and innovation. 

### POLLUTION PREVENTION AND OUR SHARED ENVIRONMENT

In Toronto, your health is affected by different things in the environment, including chemicals that pollute the air, water and land. You come in contact with these chemicals outdoors and indoors, in homes and workplaces. Prolonged exposure to toxic substances, even at low levels, may cause:



Heart & Lung  
Damage



Cancer



Birth Defects



Reproductive  
Problems



Other Chronic  
Diseases

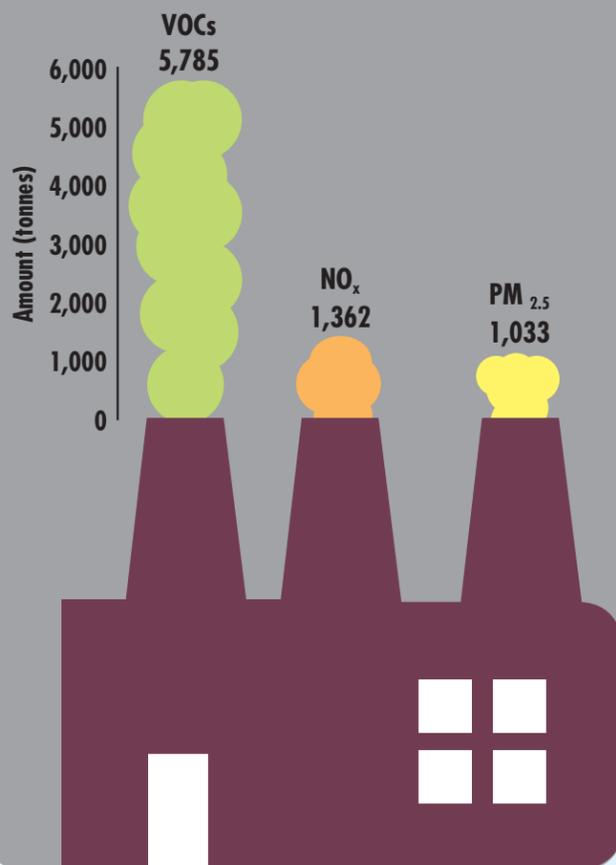
# A SNAPSHOT OF THE FINDINGS FROM OUR 2012 DATA

## FACILITIES FROM ACROSS TORONTO REPORTED INFORMATION ABOUT THEIR 2012 OPERATIONS

- More than 700 facilities reported a total of approximately 71,000 tonnes of priority substances as manufactured, processed or used.
- Of this, about 8,000 tonnes were released to the environment, mostly to air.
- Looking at data for facilities that reported in 2010, 2011 and 2012 overall releases decreased by 2%.

### TOTAL RELEASES IN 2012

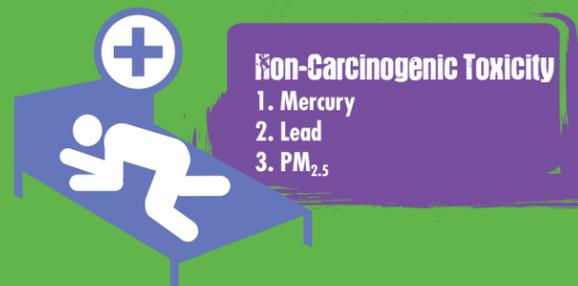
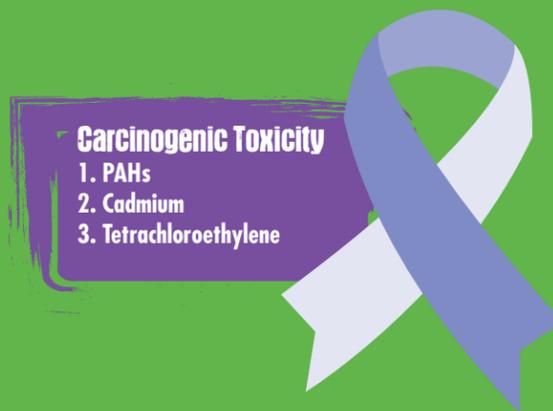
Air pollution causes health problems in Toronto and the top 3 most released substances - VOCs, NO<sub>x</sub> and PM<sub>2.5</sub> - are known contributors to smog formation.



## SUBSTANCES OF HIGHEST CONCERN

There are two ways to rank the substances:

- By the total amount released
- By how toxic they are. Calculated as toxic equivalency potential (TEP), this category can be divided into substances that:
  - Cause cancer (Carcinogenic)
  - Cause other health impacts (Non-Carcinogenic)



## NEW INFORMATION CAPTURED BY CHEMTRAC

Until the ChemTRAC program was introduced, Toronto relied on the National Pollutant Release Inventory (NPRI) which captures information from facilities with large emissions. ChemTRAC has lower reporting thresholds than NPRI and, as a result, captures information from a larger number of local facilities.



## WHAT CHEMTRAC HAS ACHIEVED SO FAR...



ChemTRAC provides more information on releases of highly toxic substances in comparison to existing programs, like NPRI.



Last year, ChemTRAC data was accessed almost 10,000 times online, making it one of the top downloaded datasets from Toronto's Open Data site. This information provides the public with valuable insights on key chemicals in their community and will help Toronto Public Health design better initiatives to improve Toronto's air.



ChemTRAC data has established a measurement of the current levels of chemical use and release. This provides a baseline to measure progress.