

## **Take charge on toxics campaign Toxic use reduction legislation recommendations**

### **Who we are:**

The *Take charge on toxics* campaign is committed to supporting the development of an environmental and occupational carcinogen use reduction strategy in Ontario. The campaign is supported by:

- Canadian Cancer Society, Ontario Division
- Canadian Environmental Law Association
- Ontario Public Health Association
- United Steelworkers
- Toronto Cancer Prevention Coalition

Guided by the precautionary principle, the *Take charge on toxics* campaign looks forward to help make Ontario a leader in toxic use reduction and to reduce the burden of illness from environmental and occupational carcinogens. There is public concern around the issue of the environment and cancer because a number of cancers are potentially associated with exposure to environmental and occupational carcinogens. The Campaign believes all Ontarians should be protected from exposure to cancer-causing substances at home, at work and in their environment.

### **Why does Ontario need toxic use reduction legislation?**

- Toxic use reduction legislation will reduce or eliminate toxic chemicals resulting in less cancer-causing substances, as well as other toxic substances, in the environment:
  - Ontario ranks highest among the provinces in environmental carcinogen release.
  - In North America, Ontario is second only to Texas in the tonnes of toxic chemicals being released into the air and water and going to landfill sites.<sup>1</sup>
  - With Massachusetts' *Toxics Use Reduction Act*, companies reduced their toxic waste by 64 per cent and their off-site releases to the environment by 91 per cent.
- Toxic use reduction legislation reduces risk to the health of workers and the public:
  - Cancer, asthma, infertility, learning problems and birth defects have been increasingly linked with our exposure to toxic chemicals, although more research is needed.
  - In Ontario, every year the number of newly diagnosed cancers increases by 2.5 per cent; it is projected that in year 2020, there will be 91,000 new cancers diagnosed.<sup>2</sup>
  - Many individuals question the role environmental carcinogens play in causing cancer. Due to varying definitions of environmental exposures, the exact percentage of cancers linked to the environment is not known. However, research indicates percentages range from 5 per cent to as high as 18 per cent. Looking at the most conservative percentage (5 per cent), an estimated 3,150 Ontarians will be

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<sup>1</sup> PollutionWatch. *PollutionWatch Fact Sheet. National Pollution Highlights*. Environmental Defence and the Canadian Environmental Law Association; 2003. Available at: [pollutionwatch@cela.ca](mailto:pollutionwatch@cela.ca)

<sup>2</sup> Canadian Cancer Society, Cancer Care Ontario. *Targeting cancer: an action plan for cancer prevention and detection. Cancer 2020 background report*. Toronto: Canadian Cancer Society, Cancer Care Ontario, 2003.

diagnosed with cancer in 2008 and 1,365 will die as a result of environmental carcinogen exposure. Eighteen per cent is the equivalent to 11,340 people being diagnosed with cancer and 4,914 deaths.<sup>3</sup>

- It is important to note that environmental and occupational carcinogens disproportionately affect certain sectors of Ontario's labour force. For example, it is estimated that the number of Ontario workers exposed to asbestos 30 years ago to be about 16,641. The largest single group (32%) worked in the construction industry, 25% worked in non-metal mining (mostly asbestos; four asbestos mines operated in Ontario at one time, employing about 3,500 workers, and most ceased operations by the early 1980s), 22% worked in services such as automotive parts repair, 6% worked in the manufacture of products containing asbestos, and 3% worked in each of petroleum refineries, and wholesale and retail trade.<sup>4</sup>
  - Based on current scientific data on occupational exposures and cancer, it is estimated that occupational exposures account for approximately eight per cent of cancer cases in the population.<sup>5</sup> However, among those exposed to occupational carcinogens, the proportion of cancer attributable to these exposures is likely greater. This year 5,040 Ontario workers will be diagnosed with cancer and 2,192 will die as a result of occupational exposure to carcinogens.<sup>6</sup>
- Toxic use reduction legislation can save companies money and makes them more competitive internationally:
    - Massachusetts's companies saved \$14 million by changing to more efficient processes and safer chemicals.
    - European legislation sets high environmental standards that Ontario companies must meet if they want to be competitive and export to the world's largest market.

### **Campaign calls to action:**

The *Take charge on toxics* campaign calls on the Government of Ontario to ensure the province's toxic use reduction strategy is based on:

- The precautionary principle
- An emphasis on the reduction in use and exposure to environmental carcinogens, taking into account the cumulative effect of multiple pollutants and aggregate exposure
- Criteria determining higher hazards of toxic substances compared to lower hazards, rather than looking at them on a chemical by chemical basis.

A comprehensive toxic use reduction strategy should:

- **Reduce** toxic chemicals in places where people live, work and play.

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<sup>3</sup> Canadian Cancer Society & National Cancer Institute of Canada: *Canadian Cancer Statistics 2008*, Toronto, Canada, 2008.

<sup>4</sup> Cancer Care Ontario, *A Model for occupational carcinogen exposure surveillance in Ontario*. <http://www.cancercare.on.ca/english/home/ocs/snapshot/ont-cancer-facts/carcinogen-exposure-surveillance/>, Toronto: Cancer Care Ontario, May 2005.

<sup>5</sup> Alberta Cancer Foundation. *Cancer and the Workplace – An Overview for Workers and Employers*. Alberta: Alberta Cancer Board, 2005.

<sup>6</sup> Canadian Cancer Society and National Cancer Institute of Canada: *Canadian Cancer Statistics 2008*, Toronto, Canada, 2008, page 18.

- **Replace** toxic chemicals with safer alternatives.
- **Restrict** the use of toxic chemicals that are still in use.
- **Report** annually on progress and monitor emissions.
- **Reveal** to all Ontarians the toxic chemicals in their workplaces, community and homes through an identifiable product label or symbol and access to a public database.

*Take charge on toxics'* key recommendations are:

**Recommendation 1: Develop a set of criteria to prioritize toxic substances whose use and exposure should be reduced, building upon best practices in other jurisdictions, and where possible, existing federal provincial programs.**

- Substances of concern should be prioritized based on their carcinogenicity, mutagenicity, teratogenicity, hormone disruption activity and other criteria which may be identified. Where possible the criteria should build on the prioritized 4,600 substances from the federal domestic substances list and the 148 PBiT (Persistent, Bioaccumulative and Inherently Toxic) substances.

**Recommendation 2: Develop toxic use reduction planning for manufacturers and users, including the provision of technical assistance via a toxic use reduction institute.**

- The government should require Ontario companies to substitute and/or phase out all non-essential uses of toxic substances in order to accelerate elimination and to protect industrial capacity in Ontario, with particular and urgent reference to the requirements of the European Union's (EU) Registration Evaluation and Authorization of Chemicals (REACH) program. It is important for the government to build upon the best practices already in place in Massachusetts and Scandinavia.
- The government can do this by fully funding and mandating by law an Ontario Toxics Use Reduction Institute (OTURI) that will promote product substitution (the obligation to use the less harmful of two or more choices of chemicals) and comparative assessment (the determination of which product or process has the least adverse impact among a set of similar products or processes) as cornerstones of provincial chemicals management, supported by legal framework. It is important that the OTURI be linked with a university and/or other technical school, such as in Massachusetts, in order to promote excellence and independence. Also, firms using toxic chemicals should be required to pay an annual fee to the OTURI in order to guarantee the Institute's financial independence from government. However, the fee should be sliding based on the size of a firm and its chemical usage.

**Recommendation 3: Implement extensive community right-to-know provisions including, but not limited to, product labelling.**

- All Ontarians should be informed of exposure to cancer-causing substances at home, at work and in their environment. It is also essential that consumers be made aware of cancer-causing substances in products they use everyday through a label or symbol that is visible at point of sale. The government

should make information available to the public about toxins released in communities across Ontario through an easily-searchable and easily-accessible format on the internet and in print literature. A mechanism should also be in place to answer specific questions the public may have about toxins in their environment. In addition, employees must be made aware of the toxic substances they are exposed to in their workplace and the possible health consequences.

***Recommendation 4: Implement a supportive legal and regulatory framework including, but not limited to, requirements for substance reduction, substance substitution, or elimination via prohibition where necessary, to be accompanied by an appropriate mandatory surveillance and reporting framework.***

- The government should place a legal obligation on producers and users of chemicals to provide data on their safety and toxicity. Also, a framework which incorporates comparative assessment and substitution as its method would ensure that one toxic substance (e.g., carcinogen) is not replaced with another toxic substance (e.g., endocrine disruptor). Provisions for the systematic substitution of safer chemicals for known chemicals of high concern should also be incorporated into Ontario's toxics use reduction legislation. Those who fit the criteria of producing or using toxic chemicals should be required to report annually on their use to the Ministry of the Environment. To ensure efficiency, a system should be in place whereby industry only needs to report once, satisfying federal, provincial and municipal requirements for reporting toxic chemical use.
- The government and OTURI should be required to do regular progress and reduction summary reporting to the public to ensure a level of transparency and to hold government and industry accountable. In addition, enforcement mechanism should be put in place to ensure effective progress in reducing toxins.

***Recommendation 5: Improve management of proprietary business information in a way that ensures full disclosure of all information concerning health risks and other health and safety information.***

- Government should work with industry to develop specific requirements for submitting confidential information. There is some business information which may need to be treated confidentially. However, it should be noted that while protection of limited information may be acceptable in some controlled cases, health and safety information can never be kept from workers who come in contact with toxic chemicals as a result of employment. Therefore, government will have to work to develop regulations concerning what information can be kept confidential and what cannot.

***Recommendation 6: The development of an environmental carcinogen surveillance strategy that will easily link into the federal information gathering database and produce an annual report on regional and provincial trends on environmental carcinogens in the air, water and soil.***

- The Campaign encourages the Government of Ontario to support an action plan to monitor, analyze and report on patterns and trends in carcinogen exposures and cancer in the Ontario population. This information will enable Ontario to set priorities for action, provide evidence for policy decisions and

enable public health and other health care providers to interpret and manage risk.

- One aspect of an action plan on surveillance is an extension of the CAREX (CARcinogen EXposure) project, which with support from the Canadian Partnership Against Cancer is a new Canadian program that will monitor and assess the impact of workplace exposures to carcinogens. The Campaign supports extending this national project so that CAREX Ontario can be applied specifically to the needs of Ontario by monitoring and assessing environmental carcinogen exposures in the general environment beyond the workplace.
- A second component of the plan is an environment and cancer spatial surveillance program. Geographic Information Systems (GIS) tools can support comprehensive assessment of environmental exposures and cancer down to the level of small areas within communities. The Campaign supports the development of a system that can be used by government, public health and health professionals to rapidly analyze whether local environmental exposures are associated with cancer (and other health problems and diseases) and to enable rapid response to exposures linked to cancer.

***Recommendation 7: Design a system in order to fully account for the impact of off-shore toxic reduction control strategies such as the European Union's Registration Evaluation and Authorization of Chemicals (REACH) program.***

- Currently Ontario's laws and policies are not reflective of REACH's many provisions, which will increase year by year. In order to ensure Ontario's industry is prepared for the European Union's REACH program and other global chemical safety standards, the government should appoint a task force (with representation from the chemical industry, major Ontario manufacturers, and small business sector) to assess how chemical management is implemented in Ontario. The government should assist both large and small companies to move to the use of safer chemicals in order to comply with REACH.

***Recommendation 8: Develop an intensive education campaign, with emphasis on education of industry as well as the broader public.***

- It is important for industry to be made aware of how toxic use reduction legislation will affect their organizations. In addition, educating the public about the benefit of toxic use reduction legislation will bring awareness to this issue.

***Recommendation 9: Develop economic or other incentives to spur innovation, including a greater focus on applied green chemistry.***

- The Campaign recommends the government work with the Centre for Green Chemistry at the University of Massachusetts to learn from their best practices and develop a thriving green manufacturing base in Ontario. Green chemistry involves a set of principles for reducing or eliminating the use or generation of hazardous substances in the design, manufacture or application of chemical products. For technology to be green, it must be:
  - More environmentally benign than alternatives
  - Be more economically viable than alternatives

- Functionally outperform the alternatives<sup>7</sup>

**Recommendation 10: Set targets for reductions on both the release and usage of priority chemicals with annual public reporting:**

- Implementation of the above recommendations will help Ontario reach the Campaign's overall goal of a 50% reduction in the release of toxic substances in the province within 5 years of the passage of the legislation. In addition, we recommend a 20% reduction in the use of toxic substances in the province within 5 years after the first mandated reporting period, and a 40% reduction in use within 10 years.

**Conclusion:**

- The *Take charge on toxics* campaign welcomes the government's commitment to reduce the use and release of toxic chemicals, which include cancer-causing substances, in Ontario. This is an important step towards reducing people's exposure to cancer-causing chemicals in the environment and in workplace settings.

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<sup>7</sup> Toxic Use Reduction Institute – Green Chemistry, [University of Massachusetts Lowell](http://www.turi.org/home/hot_topics/green_chemistry) [http://www.turi.org/home/hot\\_topics/green\\_chemistry](http://www.turi.org/home/hot_topics/green_chemistry). Massachusetts: 2008.