Canadian Cancer Society | Société canadienne du cancer

Submission on the *Toxics Reductions Act, 2009*

January 18, 2019

The Canadian Cancer Society is a national, community-based organization of volunteers whose mission is to eradicate cancer and enhance the quality of life of Canadians living with and beyond cancer. Prevention is a central pillar to our mission. Prevention offers a cost-effective long-term strategy for the control of cancer and can be achieved through policies that promote healthy lifestyles and shape healthy environments.

Cancer in Ontario – Environmental and Occupational Factors

Nearly 1 in 2 Canadians are expected to develop cancer in their lifetime.[1] Half of all cancers can be prevented through policies that promote healthy lifestyles and shape healthy environments.[2]

In 2015-16, Cancer Care Ontario and the Ministry of Health and Long-Term Care spent a combined total of about $1.6 billion to treat cancer.[3] Prevention is a cost-effective, long-term strategy to reduce the burden of cancer in Ontario.

In Ontario, more than 90,000 people were expected to be diagnosed with cancer in 2018.[4] More than 6,500 cases of cancer could be prevented each year in Ontario if exposures to environmental and occupational carcinogens were reduced.[5]

Approximately half of reported toxic releases to air come from industrial sources in Ontario, making industries a significant contributor of air contaminants in the province, compared to other sources such as road emissions.[6] Lung carcinogens (nickel, arsenic and hexavalent chromium) are among the most used in industrial facilities in Ontario[7] and are responsible for at least 1,395 occupational cancer diagnoses every year.[8]

[1] Canadian Cancer Society's Advisory Committee on Cancer Statistics. (2017). Canadian Cancer Statistics 2017. Toronto: Canadian Cancer Society. ISSN 0835-2976. Available at: http://www.cancer.ca/~/media/cancer.ca/CW/cancer%20information/cancer%20101/Canadian%20cancer%20statistics/Canadian-Cancer-Statistics-2017-EN.pdf

[2] Canadian Cancer Society. (2014). About half of cancers can be prevented. Available at: http://www.cancer.ca/en/about-us/for-media/mediareleases/national/2014/world-cancer-day-2014/?region=on

[3] http://www.auditor.on.ca/en/content/annualreports/arreports/en17/v1_302en17.pdf

[4] Cancer Care Ontario. Ontario Cancer Statistics 2018. Toronto, Ontario: Cancer Care Ontario, 2018. Available at: https://www.cancercareontario.ca/en/statistical-reports/ontario-cancer-statistics-2018-report

[5] Cancer Care Ontario, Ontario Agency for Health Protection and Promotion. Environmental Burden of Cancer in Ontario. Toronto, Ontario: Queen's Printer for Ontario, 2016.

[6] Setton, E., Veerman, B., Erickson, A., Deschenes, S., Cheasley, R., Keller, C., et al. (2015). Identifying potential exposure reduction priorities using regional rankings based on emissions of known and suspected carcinogens to outdoor air in Canada. Environmental Health, 14, 69–84.

[7] Slavik, C., Kalenge, S., & Demers, P. (2017). Recent trends in the industrial use and emission of known and suspected carcinogens in Ontario, Canada. Reviews on Environmental Health 2018; 33(1): 99-107.

[8] Cancer Care Ontario, Occupational Cancer Research Centre. Burden of occupational cancer in Ontario: Major workplace carcinogens. Toronto, ON: Queen's Printer for Ontario, 2017

The Toxics Reduction Act

The Toxics Reduction Act (TRA), implemented in 2010, requires industrial facilities belonging to four major manufacturing and mineral processing industrial groups, that already report their releases of pollutants federally to the National Pollutant Release Inventory, to additionally track and report their use and creation of toxic substances to the Ontario Ministry of Environment. The TRA also requires companies to develop public plans to reduce their use and release of toxins, though the implementation of these plans is voluntary.

Recommendation: Keep the Toxics Reduction Act

Federal Program Lacks Important Occupational Tracking

The federal Chemicals Management Program is not an adequate substitute for the TRA. The federal program tracks the *release* of toxins and does not include mandatory reporting on the *use* or *input* of toxic chemicals. Reported toxic releases serve as an indicator of environmental hazard, but equally important is the reported use of chemicals which indicate potential occupational hazard.

An Important Tool for Prevention

The TRA serves as an important tool in cancer prevention by tracking potential carcinogen exposures in the environment and in the workplace.

One study of the effects of the TRA, found that there was a 28% decrease in industrial releases of lung carcinogens from 2011-2015 in Ontario.[9] This highlights the potential for reducing the cancer burden by reducing the use and release of select carcinogens associated with particularly prevalent cancers. Toxics use reductions programs can support cancer prevention initiatives by promoting targeted reductions in exposures to industrial carcinogens.[10]

Furthermore, the TRA offers one of the only sources of complete data that is publicly and freely available, making it an important source of information for further research in this area and to support policy-making.[11]

Stimulating Innovation

The goal of toxics use reduction is to reduce, substitute or eliminate the use and release of hazardous industrial pollutants by altering industry production processes, redesigning products and systems and rewarding innovative industries for using less hazardous chemicals.[12]

The TRA is a tool that stimulates companies to innovate, mandating them to investigate ways to reduce use and release of chemicals and thus opening the possibility that innovation can save money and make

[9] Slavik, C., Kalenge, S., & Demers, P. (2017). Recent trends in the industrial use and emission of known and suspected carcinogens in Ontario, Canada. Reviews on Environmental Health 2018; 33(1): 99-107.
[10] Ibid.
[11] Pulles, T. (2008). Quality of emission data: community right to know and national reporting. Environmental Sciences, 5(3), 151–160.
[12] Thorpe B, Rossi M. Require safer substitutes and solutions: making the substitution principle the cornerstone of sustainable chemical policies. New Solut 2007;(17):177–92.

their products more marketable as well. Studies have documented the corporate economic benefits of toxics use reduction in Massachusetts.[13]

Conclusion

Ontario's TRA was modeled after Massachusetts' Toxics Use Reduction Act of 1989 which has been very successful in reducing toxic chemical use and carcinogen release. Industrial facilities in Massachusetts reduced the use of chemicals by 32% and the release of carcinogens by 93% from 1990 to 2010.[14] This is evidence that the TRA could be an effective tool for similar reductions in Ontario, if similar support and regulations were in place. Massachusetts has had this law in place for approximately three decades. The TRA has only really been fully in effect since 2013 and therefore the timeframe for evaluating the program's effectiveness in toxic reduction has not been fully realized.

The TRA has important benefits as it is, however these benefits could be expanded through improved regulation. **The Canadian Cancer Society recommends that the TRA not be repealed, however it could be evaluated to find ways to increase its impact.**

[13] Reibstein, Rick. (2011). The experiences of four corporate officials managing compliance with the Massachusetts Toxics Use Reduction Act. Journal of Cleaner Production 19(2011): 498-504.

[14] Jacobs, M. M., Massey, R. I., Tenney, H., & Harriman, E. (2014). Reducing the use of carcinogens: the Massachusetts experience. Reviews on Environmental Health, 29(4), 319–340.