



THE ONTARIO  
TOBACCO  
RESEARCH  
UNIT

UNITÉ  
DE RECHERCHE  
SUR LE TABAC  
DE L'ONTARIO

# Research *Update*

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## The Burden of Tobacco Use in Ontario

### The Issue

Tobacco use poses a significant economic burden to the people of Ontario, both in terms of direct costs such as health care, and indirect costs related to productivity losses resulting from disability and premature death. Recently, the Canadian Centre on Substance Abuse (CCSA), in partnership with various provincial and federal organizations, released a report *The Costs of Substance Abuse in Canada 2002*,<sup>1</sup> which provides estimates of morbidity, mortality and economic costs attributable to the use of tobacco, alcohol and illegal drugs in Canada. The report, compiled by an interdisciplinary team with Jürgen Rehm from the Centre for Addiction and Mental Health as Principal Investigator, provides national and provincial/territorial estimates based on 2002 data. This update highlights those estimates that are attributable to tobacco use in Ontario.

### Findings from *The Costs of Substance Abuse in Canada 2002*

The burden of tobacco products on morbidity and mortality in Ontario is extensive:

- In 2002, tobacco was responsible for an estimated 13,224 deaths in Ontario and 37,209 deaths nationally.
- Tobacco-related deaths resulted in 184,304 potential years of life lost (PYLL) in Ontario and 515,607 PYLL for all of Canada. PYLL are the years of life lost due to premature mortality related to smoking.
- Tobacco-related illness accounted for 782,520 days of acute care hospital stay in Ontario and 2,210,155 acute care hospital days for all of Canada.
- For Ontario, these estimates include 36 deaths and 36,429 acute care hospital days for children under the age of one who died or were hospitalized as a result of tobacco-related causes (low birth weight, short gestation, and sudden infant death syndrome).
- These estimates also include 315 deaths and 17,104 acute care hospital days for adults in Ontario who died or were hospitalized because of lung cancer and ischemic heart disease attributable to exposure to second hand smoke (SHS) inside the home.

The impact of tobacco use in terms of economic costs is also substantial:

- Overall cost: almost \$6.1 billion for Ontario and \$17 billion for Canada.
- Per capita cost: \$502 for Ontario and \$541 for Canada.

## Economic Costs of Tobacco Use for the Year 2002, in Millions of Dollars

	Ontario	Canada
Direct health care costs	1,553.1 (25.6%)	4,360.2 (25.7%)
Direct cost for prevention and research	30.0 (0.5%)	78.1 (0.5%)
Other direct costs	33.4 (0.6%)	87.0 (0.5%)
Indirect costs: productivity losses	4,440.6 (73.3%)	12,470.9 (73.4%)
Total*	6,057.2 (100%)	16,996.2 (100%)

\*Cost components may not add to totals due to rounding.

## Discussion

In Ontario, as in all of Canada, productivity losses account for the largest share of the total costs related to tobacco (over 73%). Direct health care costs account for the second largest share of the total costs (almost 26%) in Ontario during 2002. These are costs related to the treatment of illness resulting from smoking, including acute care hospitalization, ambulatory care, family physician visits and prescription drugs costs. Health care is the biggest single direct cost associated with tobacco use in Ontario and Canada in 2002.

Fire damage attributable to tobacco use (\$33.2 million) combined with losses associated with the work place (\$0.2 million) account for about one percent of the total other direct costs in Ontario in 2002.

The estimates of morbidity and mortality related to SHS are conservative in this study<sup>1</sup> and do not take into account all the adverse health effects that have been linked to SHS by other reports.<sup>3</sup> Exposure outside the home is also not considered.

Although the prevalence of current smoking in Ontario has exhibited a downward trend since 1996,<sup>2</sup> tobacco use still has a substantial financial impact on the health care system and indirect impact on productivity as a result of ill health and premature death.

## References

<sup>1</sup> Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, et al. *The Costs of Substance Abuse in Canada 2002*. Ottawa, ON: Canadian Centre on Substance Abuse; 2006. (ISBN number 1-897321-10-4.) Available from: [http://www.ccsa.ca/CCSA/EN/Research/Research\\_Activities/TheCostsofSubstanceAbuseinCanada.htm](http://www.ccsa.ca/CCSA/EN/Research/Research_Activities/TheCostsofSubstanceAbuseinCanada.htm)

<sup>2</sup> Ontario Tobacco Research Unit. *Indicators of OTS Progress*. [Special Reports: Monitoring and Evaluation Series, 2004-2005 (Vol. 11, No. 1)]. Toronto, ON: Ontario Tobacco Research Unit; 2006 Available from: [http://www.otru.org/pdf/11mr/11mr\\_no2\\_final.pdf](http://www.otru.org/pdf/11mr/11mr_no2_final.pdf)

<sup>3</sup> California Environmental Protection Agency. Air Resources Board. *Proposed Identification of Environmental Tobacco Smoke as a Toxic Air Contaminant. Scientific Review Panel Version*. Sacramento, CA: California Environmental Protection Agency. Air Resources Board; 2005. Available from: <http://www.arb.ca.gov/regact/ets2006/ets2006.htm>