



WAVE 13 SURVEYS

THE HEALTH EFFECTS OF TOBACCO  
AND HEALTH WARNING MESSAGES  
ON CIGARETTE PACKAGES

SURVEY OF ADULTS AND ADULT SMOKERS

**EXECUTIVE SUMMARY**

Prepared for: Health Canada

HC-POR-07-24

Contract# H4133-07-0926/001/CY

POR 201-07

*Aussi disponible en français*

Prepared by: Environics Research Group Limited

January 2008

pn6216

Environics Research Group Limited was commissioned by Health Canada to conduct surveys of the general population, including adult smokers and non-smokers. The main objective of the surveys was to provide information to assist in the evaluation of the impact of health warning messages on tobacco packaging on public and consumer knowledge and behaviours. The health warning messages began appearing on the major tobacco brands on approximately January 1, 2001 and on all brands as of approximately June 30, 2001.

The surveys assessed sources of information about the effects of tobacco, awareness and knowledge of the health effects of tobacco, and the extent to which specific diseases are believed to be caused by tobacco. As well, the surveys looked at perceptions of the health effects of chemicals or toxic substances in cigarettes, particularly hydrogen cyanide. The surveys also measured awareness and recall of the warning messages on the exterior of the packages, as well as on the package slides and inserts, their effect on knowledge and behaviours, including behaviours intended to avoid the labels. Finally, the survey examined awareness of chemicals or toxic substances present in cigarettes, and recall of the information on toxic chemicals printed on the side of cigarette packages.

One goal of these surveys, conducted in November and December 2007, was to conduct the sampling and questionnaire design in such a manner as to allow comparison with 12 previous waves of surveys conducted by Environics: baseline surveys, which were conducted in November and December 2000 prior to the introduction of new health warning messages into the marketplace; surveys conducted in March and April 2001, a few months after new health warning messages were first introduced into the marketplace; surveys conducted in July 2001, after new labels had appeared on all brands; and tracking surveys conducted in November and December 2001, July 2002, December 2002, July and August 2003, December 2003, November-December 2004, July-August 2005, February-March 2006 and November-December 2006.

The general population survey, which included adult smokers and non-smokers, is based on a sample size of 620 Canadians. An additional oversample of 880 smokers was conducted to achieve a final sample size of 1,000 adult smokers. The general population survey was conducted between November 19 and November 27, 2007, and the smokers oversample survey between November 28 and December 8, 2007. Respondents for both surveys were aged 18 years and over.

A survey based on a sample of 620 has a margin of error of approximately plus or minus 3.9 percentage points, 19 times in 20. The corresponding margin for a sample of 1,000 is plus or minus 3.1 percentage points, 19 times in 20.

This report summarizes the findings of the research for the adult general population and adult smokers. In the tables included in this report, we present results for the general population (GP), smokers (S), non-smokers (NS) and the subset of smokers who are potential quitters (PQ – defined as smokers who are seriously thinking of quitting smoking). The sample sizes of these groups are:

	N	Margin of Error (MOE)
General population:	620	±3.9
Smokers:	1,000	±3.1
Non-smokers:	500	±4.4
Potential quitters:	606	±4.0

Appended to the report are copies of the English and French questionnaires and a description of the survey methods.

Among the findings of the survey are:

- Among adult smokers, seven in ten (72%) say cigarette smoking is a major health problem and two in ten (21%) say it is a minor problem.

- When asked top-of-mind what specific human health effects or diseases can be caused by smoking cigarettes, the largest number of adult smokers mention lung cancer (49%), followed by cancer in general (36%), emphysema (30%), heart attack/disease/angina (27%), lung disease (19%), oral cancer, including throat cancer (9%), asthma (9%), respiratory problems/difficulty breathing/shortness of breath (9%) and stroke (7%).
- When asked where they have recently seen or heard information that talks about the health effects of smoking cigarettes, six in ten adult smokers mention television (59%) and more than four in ten mention cigarette packages (43%) as sources of information about the health effects of smoking cigarettes.
- Among adult smokers, majorities strongly agree that lung cancer (85%), throat cancer (72%), emphysema (69%), heart disease (68%), mouth cancer (67%), gum or mouth diseases (65%), asthma (64%), chronic bronchitis (64%), stroke (54%), premature death (54%), and smaller babies or reduced growth of babies during pregnancy (52%) can be caused by smoking cigarettes.
- Majorities of adult smokers strongly agree that asthma attacks (58%) and bronchitis in children (50%) can be caused by second-hand smoke; more than four in ten each strongly agree that chest infections in children (47%) and lung cancer in non-smokers (46%) can be caused by second-hand smoke.
- When asked, top-of-mind, more than one-half of adult smokers (56%) cannot name any health effects that can be caused by hydrogen cyanide, and 16 percent say there are no health effects.
- Adult smokers (99%) express virtually unanimous recall of seeing health warning messages on cigarette packages, and 93 percent have seen the health warning messages on their main brand of cigarettes.

- Among adult smokers, 22 percent say they look at or read health warning messages several times a day, and 14 percent say once a day. A total of 41 percent look at them less frequently, including 18 percent who say they do this less than once a week. Twenty-two percent say they never look at them.
- Almost nine in ten (86%) adult smokers agree that the health warning messages are accurate, 84 percent agree that they provide important information about health effects, and 65 percent agree that they make smoking seem less attractive.
- Three-quarters (74%) of adult smokers say that the health warning messages have been effective in informing them about health effects of smoking, almost six in ten adult smokers say they have been effective in getting them to smoke less around others than they used to (57%) and one-half say that the messages have increased their desire to quit smoking (52%).
- When asked, top-of-mind, what specific health warning messages they can remember seeing on cigarette packages in Canada (without looking at a cigarette package), adult smokers are somewhat more likely than adults in general to recall specific health warning messages. Among adult smokers, the largest proportions mention impotence (25%), causes lung cancer (22%), heart disease/attacks (15%), harmful during pregnancies, harmful to fetus or low birth weight (14%), harm to others/children (14%), lung disease (13%) and mouth/gum disease (13%).
- When asked, top-of-mind, what pictures, images or graphics they can remember seeing on health warning messages on cigarette packages in Canada (without looking at a cigarette package), adult smokers are more likely than Canadians in general to offer an answer. They are also more likely than adults in general to recall many of these specific images or graphics, including lungs or diseased lungs (31%), pregnant women with cigarettes (28%), bad, rotten or big teeth (27%), heart or diseased heart (19%), mouth or diseased mouth (15%), children/kids/babies (11%), cigarette/curved cigarette (10%), brain or diseased brain (9%), pictures of kids watching (8%), respirators/people on breathing machines (7%), impotence (7%), gums or diseased gums (6%), limp, broken or burning cigarettes (6%), patient in bed/hospital bed (5%) and lung pictures (5%).
- When asked top-of-mind what, if any, chemicals or toxic substances they can name that are in cigarettes or cigarette smoke, 57 percent of adult smokers mention nicotine, 51 percent mention tar and 22 percent mention carbon monoxide. Smaller proportions mention formaldehyde (13%), hydrogen cyanide (11%), carbon dioxide (10%), benzene (8%), arsenic (6%) and poison/rat poison/strychnine/cyanide (5%). Ten percent mention other toxic substances, and six percent say there are no toxic substances.
- When asked what chemicals or substances in cigarettes, in tobacco or in smoking, if any, cause or can cause disease or harm to health, the largest proportions of adult smokers mention nicotine (33%), tar (32%) and carbon monoxide (12%). Smaller proportions mention formaldehyde (8%), hydrogen cyanide (6%) and carbon dioxide (5%). Twenty-four percent say that all the chemicals cause harm, 16 percent mention other specific substances, seven percent say none cause diseases, and 21 percent offer no opinion.
- Over seven in ten adult smokers (73%) say that chemicals are added to tobacco during manufacture.

To obtain a PDF version of the complete report, please contact the Tobacco Control Programme:

Mail: Tobacco Control Programme, Health Canada  
 P.L. 3507A1  
 Ottawa, Ontario, Canada  
 K1A 0K9

Telephone: 1-866-318-1116  
 Fax: (613) 954-2284  
 E-mail: [TCP-PLT-questions@hc-sc.gc.ca](mailto:TCP-PLT-questions@hc-sc.gc.ca)