



**Public Attitudes Toward the Listing of Toxic Ingredients
on Cigarette Packages: A Survey Report**

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 Methodology

1.0 INTRODUCTION

In March 1996, Environics Research Group Limited was retained by the Office of Tobacco Control of Health Canada, to conduct focus groups and quantitative survey research on the response of Canadians to the idea of listing the toxic ingredients in cigarette tobacco on cigarette packages.

This report summarizes the results of the quantitative survey. The results of the focus group research are presented under separate cover.

The survey was carried out in-home among a total of 2,438 Canadians. This consisted of 2,034 interviews with Canadians 18 years of age and over and an additional 405 interviews among 12 to 17 year olds who responded to most of the same questions. The field work was carried out from March 16 to April 11, 1996.

The results of the adult sample of 2,034 can be considered accurate to within + 2.2 percent, nineteen times out of twenty. The results of the sample of 405 12 to 17 year olds can be considered accurate to within + 5.0 percent, nineteen times out of twenty.

The objectives of the quantitative research were as follows:

- to analyze attitudes among Canadians towards package labelling in general and the extent to which more information about cigarettes is desired.
- to determine levels of awareness and knowledge regarding toxic constituents in cigarettes and their effects.
- to measure beliefs about the impact of more information about toxic constituents on smoking behaviour .
- to test formats for presenting information about toxic constituents.

A discussion of the survey methodology is appended to this report.

2.0 SUMMARY OF RESEARCH FINDINGS

Although most Canadians (70% of adults and 72% of young people, aged 12 to 17) feel at least somewhat informed about what is in cigarettes, almost three-quarters (73% and 83%) feel there should be more information available about the contents of cigarettes.

Canadians express almost unanimous support (89% and 91%) for requiring cigarette companies to display a list of toxic constituents on cigarette packages. Most Canadians (88% and 92%) also support the idea of requiring cigarette companies to display an informational statement about the effects of chemical constituents along with this list.

A majority of Canadians believe a list of toxic constituents along with an informational statement would be at least somewhat effective in the following ways: providing information about the chemicals and toxins in cigarettes (78% and 79%); discouraging young people not currently smoking from starting (73% and 80%); discouraging themselves from smoking (57% and 77%); and discouraging smoking among young people who currently smoke (53% and 55%). Just under half (48% and 45%) think this will be effective in discouraging adults who smoke.

Among the various label designs presented in the research, the following elements were preferred by the largest proportions: listing chemical and toxic constituents in order of weight, displaying weights in milligrams, and having an alternating black and white striped background.

Most Canadians are able to name nicotine (82% and 72%) and tar (64% and 63%), on an open-ended basis, as chemicals or toxins in cigarettes. Somewhat fewer name carbon monoxide (21% and 23%) and about one in ten or fewer mention other ingredients. Even when prompted, fewer than half indicate awareness that cigarettes contain toxins other than nicotine and tar. Similarly, there is higher awareness that nicotine (59% and 47%) and tar (52% and 41%) are currently listed on cigarette packages, than there is that carbon monoxide (15% versus 16%) is listed.

Canadians name, on an open-ended basis, a number of health risks associated with smoking including lung cancer, cancer in general, emphysema, heart disease, and asthma. An overwhelming proportion of Canadians (92% and 95%) agree that “people who smoke put their personal health in serious jeopardy”.

A majority of Canadians (86% and 93%) agree that “the health of non-smokers is put in serious jeopardy when

they are exposed to second-hand smoke” and agree that “quitting smoking reduces health damage even after many years of smoking” (82% versus 76%). In contrast, a majority disagree (63% and 65%) that “people have to smoke for many years before it will hurt their health.”

Canadians are divided as to whether “smoking is no worse than a lot of other things around us like chemicals in food and car exhaust fumes” (56% and 52% agree).

In spite of the fact that most Canadians take the health risks associated with smoking very seriously, most (70% and 75%) believe that “people who are taking up smoking today don’t understand the true health risks associated with smoking”.

In terms of smoking behaviour, 32 percent of adults and 12 percent of young people report that they smoke every day. Another four percent of adults and eight percent of young people smoke occasionally. On average, adult smokers smoke 18.3 cigarettes per day and young people smoke 8.9 per day.

The proportion of the population who have smoked in their lifetime (defined as having smoked more than 100 cigarettes) is 58 percent among adults and 17 percent among young people.

Among young people, smoking patterns differ greatly with age: those age 15 to 17 are much more likely than those 12 to 14 to be smoking daily (22% versus 3%), or to have smoked 100 cigarettes in their lifetime (27% versus 7%).

Seventy-six percent of adult smokers have tried to quit at some time, and 60 percent of young smokers have tried to quit.

3.0 ATTITUDES TOWARD CONTENT LABELLING AND INFORMATION

3.1 LEVEL OF INFORMATION ABOUT CONTENTS OF PRODUCTS

Canadians were asked about how well informed they feel about the ingredients in a variety of products. These include food products, cleaning products, personal grooming products like shampoo, cigarettes and alcohol.

A majority of adults feel at least somewhat well informed about the contents of all of these products. They are most likely to feel very well informed about what is in cigarettes (38%), followed by food products (32%), alcohol (31%), cleaning products (21%) and personal grooming products (21%). In the case of cigarettes, in addition to the 38 percent who consider themselves very well informed, another 32 percent consider themselves to be somewhat well informed. One-quarter (26%) say they are not very well informed (13%) or not at all informed (13%). There is little demographic variation in terms of how well informed Canadians feel they are about what is in cigarettes, although older people, Allophones, those with less than a high school education and those who do not smoke at all tend to feel somewhat less well informed than the rest of the population.

In comparison, young people are less likely than adults to feel very well informed about what is in food products (22%), and cleaning products (9%). However, they are as likely to feel very well informed about alcohol (32%) and personal grooming products (21%), and somewhat more likely to feel very well informed about cigarettes (43%). When it comes to cigarettes, 15 to 17 year olds (51%) are especially likely to feel very well informed.

Level of Information About Product Ingredients

April 1996

	Adults				Youth			
	Very well inf.	Somewhat well inf.	Not very well inf.	Not at all inf.	Very well inf.	Somewhat well inf.	Not very well inf.	Not at all inf.
Cigarettes	38	32	13	13	43	29	16	10
Food products	32	50	13	4	22	50	21	6
Alcohol	31	39	16	11	32	31	23	11
Cleaning products	21	46	25	7	9	34	37	18
Personal grooming products	21	45	24	9	21	38	28	11

How well informed would you say you are about what is in the following products? Would you say that you are very well informed, somewhat well informed, not very well informed, or not at all informed?

3.2 DESIRE FOR MORE INFORMATION

In spite of the fact that Canadians tend to feel better informed about what is in cigarettes compared with other products listed above, there is still strong agreement that there should be more information available about what is in them. To an overwhelming extent, adult Canadians at least somewhat agree that there should be more information available about what is in each of the following products, and in most cases close to a majority strongly agree that more information should be available about food products (49%, strongly agree), cigarettes (48%), cleaning products (47%), alcohol (46%) and personal grooming products like shampoo (41%).

In the case of cigarettes specifically, we find that three-quarters of adults (73%) strongly (48%) or somewhat (25%) agree that there should be more information available, compared to just 22 percent who somewhat (15%) or strongly (7%) disagree.

These results are quite consistent across most demographic groups. There is however, a significant difference between the attitudes of French and Anglophone Canadians: over half (52%) of Anglophone adults strongly agree that there should be more information about what is in cigarettes, compared to just 34 percent of Francophones. Residents of Manitoba, Saskatchewan and Vancouver are the most likely to strongly agree that there should be more information. When we analyze response to this question against smoking be-

haviour, it is the occasional smokers who are the most likely to strongly agree (57%), compared to 50 percent of non-smokers and 43 percent of those who smoke every day.

The attitudes of young people are similar to adults in the area of food products (45%), cleaning products (44%), and personal grooming products (43%). Teens are more likely than adults to strongly agree that there should be more information available about the contents of alcohol (57%) and cigarettes (58%). Teen girls, those who are very concerned with their personal health, those who come from higher socio-economic status homes, and Anglophone teens, are particularly likely to strongly agree that there should be more information about cigarettes.

Should be More Information About Product Ingredients

April 1996

	Adults				Youth			
	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
Food products	49	30	15	4	45	37	12	3
Cigarettes	48	25	15	7	58	25	10	5
Cleaning products	47	33	14	4	44	38	12	3
Alcohol	46	28	15	7	57	27	8	5
Personal grooming products	41	34	17	5	43	39	13	2

Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree that there should be more information available about what is in the following products...?

4.0 SMOKING BEHAVIOUR

4.1 PREVALENCE OF SMOKING

About one-third of adult Canadians (32%) report that they smoke on a daily basis. Another four percent smoke occasionally and 64 percent do not smoke at all. Smoking tends to be more prevalent among men (38%, smoke daily or occasionally), those under the age of 60 (39%), single people (44%), those who disagree that lifestyle choices affect personal health (42%), homemakers (43%), the unemployed (52%), skilled and semi-skilled workers (49%), unskilled workers (45%) and those with annual household incomes of less than \$15,000 (54%).

Smoking is less prevalent among women, (34%), those age 60 and over (22%), married people (32%), retired people (22%), professionals (29%), those with annual household incomes of over \$50,000 (30%), New Canadians of European origin (29%) and New Canadians of non-European origin (27%) and particularly university graduates (23%).

There is relatively little regional variation in the extent of smoking in Canada. Residents of the Atlantic provinces are the most likely to smoke every day or occasionally (45%) and residents of Saskatchewan are the least likely to (29%).

Twelve percent of young Canadians report that they smoke every day. Another eight percent smoke occasionally and 79 percent do not smoke at all. There is a marked difference in the incidence of smoking according to age: only three percent of those age 12 to 14 smoke every day, while 22 percent of those age 15 to 17 smoke. Rates of smoking (every day) are also high among those who rate their school grades as below average (35%), those living with a single parent (20%), and those with a personal weekly income in excess of \$100 (31%).

Incidence of Smoking

April 1996

	Adults	Youth
Every day	32	12
Occasionally	4	8
Not at all	64	79

At the present time, do you smoke cigarettes every day, occasionally, or not at all?

4.2 SMOKING 100 CIGARETTES IN A LIFETIME

Six in ten adult Canadians (58%) report that they have smoked at least 100 cigarettes in their life. Four in ten (39%) have not and two percent are unsure. It is notable that fully 64 percent of those age 60 and over have smoked 100 cigarettes in their lifetime, even though, as noted above, only 22 percent of people in this age group currently smoke. It should also be noted that fully 38 percent of Canadians who do not smoke at all have smoked at least 100 cigarettes in their lives.

Among young people, 17 percent report that they have smoked at least 100 cigarettes in their life. Incidence of smoking 100 or more cigarettes is higher than average among those who report having below average school grades (42%), those with a personal weekly income in excess of \$100 (40%), those not at all concerned with their personal health (31%), residents of Atlantic Canada (26%), those age 15 to 17 (27%), and girls (20%).

4.3 NUMBER OF CIGARETTES SMOKED PER DAY

On average, adult smokers in Canada smoke 18.3 cigarettes a day. One-quarter (23%) report that they smoke 10 cigarettes or less per day, another quarter (23%) smoke between 11 and 15 a day, one in five (19%) smoke between 16 and 20 a day, one-quarter (23%) smoke between 21 and 25 cigarettes a day and nine percent smoke more than 25 cigarettes a day. Some of the groups of smokers that tend to smoke more cigarettes a day include men, those age 45 and over, Francophones and those with lower levels of education. Smokers who are female, have higher levels of education and are younger tend to smoke fewer cigarettes a day.

Young smokers tend to smoke less per day than do adults, averaging 8.9 cigarettes per day. More than half (58%) report that they smoke 10 cigarettes or less, 17 percent smoke 11 to 15 per day, 14 percent smoke 16 to 20 per day, one percent smoke 21 to 25 per day, and two percent smoke 26 or more. Eight percent do not offer a response. Those age 15 to 17, those living with a single parent, and those with personal weekly incomes in excess of \$100 tend to smoke the most cigarettes per day.

4.4 SMOKING DURING PREVIOUS 30 DAYS

The vast majority of adult smokers (85%) report that they smoked on all of the previous 30 days. Just 13 percent report that they smoked on 21 to 29 of the past 30 days (4%), 11 to 20 days (3%), 6 to 10 days (3%), and 1 to 5 days (3%).

Only a bare majority of young smokers (53%) report that they smoked on all of the previous 30 days. More than three in ten report that they smoked on 21 to 29 of the past 30 days (13%), 11 to 20 days (9%), 6 to 10 days (3%), and 1 to 5 days (8%). Another eight percent say they have not smoked at all in the last 30 days.

4.5 QUITTING SMOKING

Three-quarters of adult smokers in Canada (76%) report that they have tried to quit smoking, compared to just 22 percent who have not. This proportion is consistently high among all demographic and regional groups. Those with children under the age of 18 living with them are most likely to have tried to quit smoking (84%).

Among those adult Canadians who have smoked 100 cigarettes in their life but do not smoke anymore, 75 percent quit smoking more than five years ago. Another 15 percent report quitting in the past one to five years and eight percent have quit in the past year.

Among young people who smoke, six in ten (60%) have tried to quit smoking. This proportion is higher among those who have smoked at least 100 cigarettes in their life (70%).

4.6 SMOKING HISTORY OF NON-SMOKERS

Consistent with these findings, 36 percent of adult non-smokers report that they smoked cigarettes daily in the past. This proportion is higher among non-smoking men (43%) and non-smokers age 60 and over (51%). Only 30 percent of women who do not smoke report that they smoked daily in the past.

Only six percent of young non-smokers have smoked daily in the past. Girls are more likely to have given smoking up than boys.

4.7 WHEN PEOPLE QUIT SMOKING

Most Canadians who do not smoke currently, but have smoked at least 100 cigarettes in their life, quit smoking more than five years ago (75%). Another 15 percent quit smoking one to five years ago and eight percent quit smoking in the past year.

The proportion of young people who do not currently smoke, but have smoked at least 100 cigarettes in their lives, is very small (only eight people), and it is not possible to draw conclusions from these data.

4.8 SMOKERS IN HOUSEHOLD

Four in ten (43%) adults who smoke daily report that they are the only person in their household who smokes. Another 36 percent say that there is one other smoker besides themselves, 16 percent say there are two other smokers and five percent say there are three or more other smokers. Over eight in ten adult non-smokers (82%) say that no one in their household smokes. Eighteen percent report that there are one (14%), two (3%) or three or more (1%) smokers in their household.

Among young people who smoke every day, only 28 percent report that they are the only smoker in their household. One-third (33%) say one other person smokes, another 33 percent say that two other people smoke, and six percent say three or more other people smoke. With regard to teen non-smokers, 55 percent say that no one else in their household smokes, 25 percent say that one person smokes, 16 percent say two people smoke, and three percent say three or more smoke.

5.0 HEALTH RISKS OF SMOKING

Almost all adult Canadians (98%) are able to name, top-of-mind, a number of health risks associated with smoking. Lung cancer is mentioned by 64 percent, followed by cancer in general (51%). Other health hazards commonly identified include emphysema (36%), heart disease (34%), asthma (30%), addiction (26%), heart attack (22%), second-hand smoke (20%), coughing (18%), bronchitis (18%), oral cancer (15%), effects on a fetus (13%), stroke (13%), high blood pressure (12%) and chest pains/problems (8%). Smaller proportions mention other health hazards such as respiratory problems in general (4%), poor health in general (3%), lung disease in general (3%), cosmetic effects such as stains, smells and bad breath, circulatory problems (2%), allergies (1%), skin damage and disease (1%), lethargy, depression and loss of appetite (1%), fire (1%) and other mentions (8%). Just one percent of Canadians cannot identify any health hazards and one percent have no opinion.

There are no significant demographic or regional differences in awareness of these health hazards. It is also notable that those who smoke regularly are just as aware of these health hazards as are non-smokers.

Virtually all young Canadians are also able to identify health risks associated with smoking. Like adults, they most frequently mention lung cancer (71%), and cancer in general (57%). Many also mention addiction (28%), heart disease (26%), asthma (25%), and second-hand smoke (22%). One area that young people are much less likely to mention is emphysema (18%).

Health Hazards of Tobacco Use

April 1996

	Adult	Youth
Lung cancer/lung disease	67	74
Cancer (general)	51	57
Emphysema	36	18
Heart disease	34	26
Asthma	30	25
Addiction	26	28
Heart attack	22	18
Second-hand smoke	20	22
Bronchitis	18	14
Coughing	18	17
Oral cancer (tongue, lips, mouth, throat)	15	20
Effect on the fetus	13	13
Stroke	13	11
High blood pressure	12	9
Chest pains/problems	8	7
Respiratory problems (general)	4	1
Poor health (general)	3	6
Cosmetic	2	7
None	1	1
Other	14	12

*To the best of your knowledge, what, if any, are the health hazards related to tobacco use?
(open-ended)*

4.7 WHEN PEOPLE QUIT SMOKING

Most Canadians who do not smoke currently, but have smoked at least 100 cigarettes in their life, quit smoking more than five years ago (75%). Another 15 percent quit smoking one to five years ago and eight percent quit smoking in the past year.

The proportion of young people who do not currently smoke, but have smoked at least 100 cigarettes in their lives, is very small (only eight people), and it is not possible to draw conclusions from these data.

4.8 SMOKERS IN HOUSEHOLD

Four in ten (43%) adults who smoke daily report that they are the only person in their household who smokes. Another 36 percent say that there is one other smoker besides themselves, 16 percent say there are two other smokers and five percent say there are three or more other smokers. Over eight in ten adult non-smokers (82%) say that no one in their household smokes. Eighteen percent report that there are one (14%), two (3%) or three or more (1%) smokers in their household.

Among young people who smoke every day, only 28 percent report that they are the only smoker in their household. One-third (33%) say one other person smokes, another 33 percent say that two other people smoke, and six percent say three or more other people smoke. With regard to teen non-smokers, 55 percent say that no one else in their household smokes, 25 percent say that one person smokes, 16 percent say two people smoke, and three percent say three or more smoke.

5.0 HEALTH RISKS OF SMOKING

Almost all adult Canadians (98%) are able to name, top-of-mind, a number of health risks associated with smoking. Lung cancer is mentioned by 64 percent, followed by cancer in general (51%). Other health hazards commonly identified include emphysema (36%), heart disease (34%), asthma (30%), addiction (26%), heart attack (22%), second-hand smoke (20%), coughing (18%), bronchitis (18%), oral cancer (15%), effects on a fetus (13%), stroke (13%), high blood pressure (12%) and chest pains/problems (8%). Smaller proportions mention other health hazards such as respiratory problems in general (4%), poor health in general (3%), lung disease in general (3%), cosmetic effects such as stains, smells and bad breath, circulatory problems (2%), allergies (1%), skin damage and disease (1%), lethargy, depression and loss of appetite (1%), fire (1%) and other mentions (8%). Just one percent of Canadians cannot identify any health hazards and one percent have no opinion.

There are no significant demographic or regional differences in awareness of these health hazards. It is also notable that those who smoke regularly are just as aware of these health hazards as are non-smokers.

Virtually all young Canadians are also able to identify health risks associated with smoking. Like adults, they most frequently mention lung cancer (71%), and cancer in general (57%). Many also mention addiction (28%), heart disease (26%), asthma (25%), and second-hand smoke (22%). One area that young people are much less likely to mention is emphysema (18%).

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Poor health (general)	3	6
Cosmetic	2	7
None	1	1
Other	14	12

*To the best of your knowledge, what, if any, are the health hazards related to tobacco use?
(open-ended)*

4.7 WHEN PEOPLE QUIT SMOKING

Most Canadians who do not smoke currently, but have smoked at least 100 cigarettes in their life, quit smoking more than five years ago (75%). Another 15 percent quit smoking one to five years ago and eight percent quit smoking in the past year.

The proportion of young people who do not currently smoke, but have smoked at least 100 cigarettes in their lives, is very small (only eight people), and it is not possible to draw conclusions from these data.

4.8 SMOKERS IN HOUSEHOLD

Four in ten (43%) adults who smoke daily report that they are the only person in their household who smokes. Another 36 percent say that there is one other smoker besides themselves, 16 percent say there are two other smokers and five percent say there are three or more other smokers. Over eight in ten adult non-smokers (82%) say that no one in their household smokes. Eighteen percent report that there are one (14%), two (3%) or three or more (1%) smokers in their household.

Among young people who smoke every day, only 28 percent report that they are the only smoker in their household. One-third (33%) say one other person smokes, another 33 percent say that two other people smoke, and six percent say three or more other people smoke. With regard to teen non-smokers, 55 percent say that no one else in their household smokes, 25 percent say that one person smokes, 16 percent say two people smoke, and three percent say three or more smoke.

5.0 HEALTH RISKS OF SMOKING

Almost all adult Canadians (98%) are able to name, top-of-mind, a number of health risks associated with smoking. Lung cancer is mentioned by 64 percent, followed by cancer in general (51%). Other health hazards commonly identified include emphysema (36%), heart disease (34%), asthma (30%), addiction (26%), heart attack (22%), second-hand smoke (20%), coughing (18%), bronchitis (18%), oral cancer (15%), effects on a fetus (13%), stroke (13%), high blood pressure (12%) and chest pains/problems (8%). Smaller proportions mention other health hazards such as respiratory problems in general (4%), poor health in general (3%), lung disease in general (3%), cosmetic effects such as stains, smells and bad breath, circulatory problems (2%), allergies (1%), skin damage and disease (1%), lethargy, depression and loss of appetite (1%), fire (1%) and other mentions (8%). Just one percent of Canadians cannot identify any health hazards and one percent have no opinion.

There are no significant demographic or regional differences in awareness of these health hazards. It is also notable that those who smoke regularly are just as aware of these health hazards as are non-smokers.

Virtually all young Canadians are also able to identify health risks associated with smoking. Like adults, they most frequently mention lung cancer (71%), and cancer in general (57%). Many also mention addiction (28%), heart disease (26%), asthma (25%), and second-hand smoke (22%). One area that young people are much less likely to mention is emphysema (18%).

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Cosmetic	2	7
None	1	1
Other	14	12

*To the best of your knowledge, what, if any, are the health hazards related to tobacco use?
(open-ended)*

6.0 GENERAL ATTITUDES TOWARD SMOKING

6.1 SMOKERS PUT THEIR HEALTH IN JEOPARDY

An overwhelming 92 percent of adult Canadians strongly (70%) or somewhat (22%) agree that “People who smoke put their personal health in serious jeopardy”. Just seven percent strongly (2%) or somewhat (5%) disagree with this assertion. It is notable that even among people who smoke regularly, 50 percent strongly agree that people who smoke are putting their personal health in serious jeopardy and another 33 percent somewhat agree. Just 16 percent of smokers strongly (6%) or somewhat (10%) disagree with this, indicating that most smokers acknowledge the health risks of their habit.

Women, Anglophones, university graduates and residents of the Prairie provinces are most likely to strongly agree with the statement. Men, Francophones and those with lower levels of education are somewhat less likely to agree.

Almost all young people (95%) also strongly (74%) or somewhat (21%) agree with this statement. Strong agreement with this statement is particularly high among those who are very concerned about their health (90%), non-smokers (81%), and those with above average school grades (81%).

6.2 SECOND-HAND SMOKE AFFECTS NON-SMOKERS

Over eight in ten adult Canadians (86%) strongly (58%) or somewhat (28%) agree that “The health of non-smokers is put in serious jeopardy when they are exposed to second-hand smoke”. Just 12 percent strongly (4%) or somewhat (8%) disagree.

Responses to this statement vary significantly between smokers and non-smokers. Among those who do not smoke at all, 69 percent strongly agree that second-hand smoke is a serious risk to non-smokers. Those who smoke regularly are less certain of this with 36 percent strongly agreeing, 36 percent somewhat agreeing and 25 percent strongly (9%) or somewhat (16%) disagreeing.

It is also notable that women, Anglophones, Allophones, those who are very concerned about their personal health and those with higher annual household incomes and higher levels of education are significantly more likely to agree that second-hand smoke is a

serious risk to non-smokers. Men and Francophones are less likely to agree that this is the case.

An even higher proportion of young people (93%) strongly (67%) or somewhat (26%) agree that second-hand smoke puts non-smokers at risk. Strong agreement is particularly high among those who are very concerned about their health (82%), non-smokers (74%), those with above average school grades (73%), and those age 12 to 14 (70%).

6.3 SMOKING COMPARED TO OTHER RISKS

Adult Canadians are quite divided and unsure as to whether or not “smoking is no worse than a lot of other things around us, like chemicals in food and car exhaust fumes”. A majority (56%) strongly (28%) or somewhat (28%) agree with this notion. Four in ten (42%) strongly (21%) or somewhat (21%) disagree.

One of the greatest distinctions between the views of smokers and non-smokers is in how they respond to this question. Three-quarters of smokers (77%) strongly (44%) or somewhat (33%) agree with this statement and just 21 percent strongly (8%) or somewhat (13%) disagree. Among non-smokers, the response is very different. Only 45 percent strongly (20%) or somewhat (25%) agree and over half (53%) strongly (28%) or somewhat (25%) disagree.

Agreement with this idea is also higher than average among homemakers, the unemployed, those with lower annual household incomes and those with high school education or less. Those with higher incomes and especially university graduates tend to disagree with this statement.

Young Canadians are also divided on this question: 52 percent strongly (18%) or somewhat (34%) agree. Smokers are particularly likely to strongly agree with this statement (41%).

6.4 UNDERSTANDING OF HEALTH RISKS OF SMOKING

Seven in ten (70%) adult Canadians strongly (48%) or somewhat (22%) agree that “people who are taking up smoking today don’t understand the true health risks associated with smoking” - suggesting a predisposition to the idea that more information on these health risks should be communicated. Just 27 percent strongly (12%) or somewhat (15%) disagree.

Effects of Smoking

April 1996

	Adults				Youth			
	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
People who smoke put their personal health in serious jeopardy	70	22	5	2	74	21	3	1
The health of non-smokers is put in serious jeopardy when they are exposed to second-hand smoke	58	28	8	4	67	26	5	1
Quitting smoking reduces health damage even after many years of smoking	48	34	8	6	43	33	10	10
People who are taking up smoking today don't understand the true health risks associated with smoking	48	22	15	12	46	29	15	9
Smoking is no worse than a lot of other things around us, like chemicals in food and car exhaust fumes	28	28	21	21	18	34	24	22
People have to smoke for many years before it will hurt their health	14	19	24	39	11	20	19	46

Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with each of the following statements about smoking and the effects of smoking...?

Even among adult smokers it is notable that there is a high level of agreement. Over six in ten smokers (65%) strongly (42%) or somewhat (23%) agree, compared to 32 percent who strongly (16%) or somewhat (16%) disagree. It is notable that among those age 60 and over, the level of strong agreement with this statement rises to 56 percent, compared to just 40 percent among 18 to 29 year olds. Agreement with this statement is also higher among those who are very concerned about their health and among Quebecers.

Three in four young people (75%) strongly (46%) or somewhat (29%) agree with this statement. Those who are most likely to strongly agree with this statement include those who are very concerned about their health (61%), and those who have not smoked 100 cigarettes in their lives (49%).

6.5 PEOPLE MUST SMOKE FOR YEARS TO AFFECT HEALTH

A large majority of adult Canadians (63%) strongly (39%) or somewhat (24%) disagree with the idea that "People have to smoke for many years before it will hurt their health". One-third of adult Canadians (33%) strongly (14%) or somewhat (19%) disagree and four percent have no opinion.

Adult Canadians in virtually all demographic groups reject the idea that one must smoke for many years to do serious damage to their health. Disagreement is only a bit weaker among those age 60 and over, those with very low incomes and less than a high school education. Even adult smokers are only marginally less likely than non-smokers to disagree with this.

A majority of young people (65%) also strongly (46%) or somewhat (19%) disagree with this statement. Strong disagreement is particularly high among those with above average school grades (54%), those who are very concerned about their health (53%), girls (52%), and those age 15 to 17 (52%).

6.6 EFFECT ON HEALTH OF QUITTING SMOKING

Over eight in ten (82%) adult Canadians strongly (48%) or somewhat (34%) agree that "Quitting smoking reduces health damage even after many years of smoking". Just 14 percent strongly (6%) or somewhat (8%) disagree. Four percent have no opinion.

Agreement is strongest among those with higher incomes, university graduates and residents of Western Canada. There is no significant difference between adult smokers and non-smokers on this issue, indicating that most smokers are well aware that if they quit smoking they can reduce the risks to their health, even after many years of smoking.

Three in four (76%) young people strongly (43%) or somewhat (33%) agree with this statement. Strong agreement is particularly high among those with above average school grades (50%), residents of Western Canada (50%) and those age 15 to 17 (48%). Interestingly, those who smoke everyday are more likely to strongly agree with this statement (50%) than those who smoke occasionally (42%) or never (42%).

7.0 CHEMICAL TOXINS IN CIGARETTES

7.1 TOP-OF-MIND AWARENESS OF TOXIC CHEMICALS IN CIGARETTES

Nicotine and tar are clearly the two chemicals or toxins in cigarettes that are most widely identified. When asked, top-of-mind, to name any chemicals or toxins in cigarettes or cigarette smoke, eight in ten adult Canadians (82%) mention nicotine and another 64 percent mention tar. Carbon monoxide, which is one of the three toxic chemicals currently listed on cigarette packages, is mentioned by only 21 percent of adults. Much smaller proportions mention various other chemicals such as arsenic (10%), lead (5%), benzene (5%), ammonia (4%), hydrogen cyanide (4%), formaldehyde (4%), nitrogen oxides (2%), phenols (2%), benzo[a]pyrene (1%), carbon dioxide (1%), cadmium (1%), nitrosamines (1%) and cyanide (1%). Four percent mention various other toxins. Less than one percent mention such toxins that are present in cigarettes as sulphur and 4-aminobiphenyl. Ten percent of Canadians say that there are no toxins in cigarettes (3%), or cannot name any (7%).

There are some demographic differences in levels of awareness. Younger people and university graduates are much more likely to mention carbon monoxide and arsenic. Awareness of carbon monoxide is also significantly higher among Anglophones. The one major difference between smokers and non-smokers is in the level of identification of carbon monoxide as a toxin present in cigarettes. Three in ten smokers (30%) mention carbon monoxide, compared to just 16 percent of non-smokers. This differential may be explained by the listing of carbon monoxide on cigarette labels, which are more likely to be read by smokers.

Among young people, nicotine (72%) and tar (63%) are also mentioned by the largest numbers. Carbon monoxide is mentioned by 23 percent. Similar proportions mention other toxins. Young everyday smokers are particularly likely to mention nicotine (80%) and tar (75%). They are also more likely than average to mention carbon monoxide (43%).

Chemicals and Toxins in Cigarettes

April 1996

	Adults	Youth
Nicotine	82	72
Tar	64	63
Carbon monoxide	21	23
Arsenic	10	12
Lead	5	9
Benzene	5	7
Ammonia	4	9
Hydrogen cyanide	4	4
Formaldehyde	4	3
Nitrogen oxides	2	2
Phenols	2	*
Benzo[a]pyrene	1	1
Cadmium	1	1
Nitrosamines	1	*
Carbon dioxide/carbon	1	1
Cyanide	1	1
Other	4	8
None/do not know of any	7	8
dk/na	3	4

Can you name any chemicals or toxins that are in cigarettes or cigarette smoke? Are there any others? (open-ended)

7.2 IDENTIFICATION OF TOXIC CONSTITUENTS ON CIGARETTE PACKAGES

In this question, respondents were asked, without looking, to name the toxic constituents listed on cigarette packages. Most adults mention nicotine (59%) and tar (52%). Just 15 percent mention carbon monoxide. One percent mention any other toxic constituents. Fourteen percent think that none are listed and 23 percent do not know.

Awareness is significantly higher among those who smoke regularly. Eight in ten smokers (79%) mention nicotine, 74 percent mention tar and 26 percent mention carbon monoxide. Just 18 percent think that none are listed (7%) or have no opinion (11%). In contrast, almost half (46%) of non-smokers think that no toxic constituents are listed (17%) or have no opinion (29%).

Awareness of the toxic constituents listed on cigarette packs is somewhat higher among those under the age of 45, Francophones and those with children under 18 at home.

Young Canadians are slightly less likely than adults to mention nicotine (47%), or tar (41%). However, they are as likely to mention carbon monoxide (16%). Young everyday smokers are more likely to mention each of nicotine (78%), tar (74%), and carbon monoxide (40%).

Toxins Currently Listed on Cigarette Package April 1996

	Adults	Youth
Nicotine	59	47
Tar	52	41
Carbon monoxide	15	16
Other	1	3
None	14	16
dk/na	23	30

Without looking, can you name the toxic constituents that are currently listed on a cigarette package? (open-ended)

7.3 AWARENESS OF TOXIC CONSTITUENTS

In this segment of the survey, respondents were presented with a list of chemicals and asked a series of questions about each.

Over half of adult Canadians say they have heard of each of the following chemicals: nicotine (94%), tar (91%), carbon monoxide (79%), lead (71%), arsenic (70%), ammonia (69%), formaldehyde (54%) and benzene (51%). Significant proportions are also aware of such chemicals as: nitrogen oxides (45%), hydrogen cyanide (38%), cadmium (26%) and phenols (25%). Much smaller proportions have ever heard of benzo [a] pyrene (12%), nitrosamines (10%) or 4-aminobiphenyl (7%). Just one percent have never heard of any of these chemicals, two percent have heard of all of them, and one percent do not know.

Awareness of almost all of these chemicals is much higher among Anglophones than among Francophones. Not surprisingly, those with higher levels of education, especially university graduates, are much more likely to be aware of most of these chemicals, although even among the most highly educated, very small proportions are already aware of such chemicals as benzo [a] pyrene (16%), nitrosamines (18%) or 4-aminobiphenyl (10%). Only in Alberta is there significant awareness of 4-aminobiphenyl (20%). There is no significant difference between smokers and non-smokers in terms of the extent to which they are aware of these chemicals.

The vast majority of young Canadians have also heard of nicotine (92%), tar (90%), and carbon monoxide (78%). Young people are less likely to be familiar with arsenic (51%), benzene (40%), formaldehyde (29%), hydrogen cyanide (28%), cadmium (16%), and phenols (10%).

Chemicals/Toxins in Cigarettes Heard of Before

April 1996

	Adults	Youth
Nicotine	94	92
Tar	91	90
Carbon monoxide	79	78
Lead	71	70
Arsenic	70	51
Ammonia	69	69
Formaldehyde	54	29
Benzene	51	40
Nitrogen oxides	45	42
Hydrogen cyanide	38	28
Cadmium	26	16
Phenols	25	10
Benzo[a]pyrene	12	5
Nitrosamines	10	7
4-Aminobiphenyl	7	6
None/do not know of any	1	3
Have heard of them all	2	*
dk/na	1	0

The following is a list of the chemicals and toxins in cigarettes. Please tell me which chemicals on this list you have heard of anywhere before. Are there any others?

7.4 AWARENESS OF CHEMICALS BEING PRESENT IN CIGARETTES

When adult Canadians are asked about their awareness of the presence of these chemicals in cigarettes and cigarette smoke, it is clear that most are only aware of the presence of nicotine (90%) and tar (86%). One-half of adult Canadians (48%) are also aware of the presence of carbon monoxide being in cigarettes and cigarette smoke. There is a lower level of awareness of the presence of lead (27%) and arsenic (26%). Much smaller proportions of Canadians are aware of the presence in cigarettes and cigarette smoke of chemicals including ammonia (19%), benzene (18%), formaldehyde (17%), nitrogen oxide (16%), hydrogen cyanide (14%) and phenols (11%). There is very little awareness of the presence of cadmium (8%), benzo[a]pyrene (6%), nitrosamines (6%) and 4-aminobiphenyl (5%).

There is little significant difference between smokers and non-smokers in terms of their levels of awareness of the presence of these chemicals in cigarettes. Smokers are somewhat more likely to be aware of the presence of carbon monoxide than are non-smokers. It is also notable that people who describe themselves as "occasional" smokers are much more likely to be aware of the presence of many of these chemicals than are either regular smokers or non-smokers. There is also evidence that university graduates are somewhat more likely to be aware of most of these toxins, though even among these people, most are not aware of the presence of anything other than nicotine, tar and carbon monoxide. Also, residents of Saskatchewan and Alberta are more likely to be aware of the presence of many of these chemicals, while residents of Toronto are somewhat less likely to be aware.

Among young people, a clear majority are aware that nicotine (84%) and tar (80%) are in cigarettes. Approximately half (48%) are aware that carbon monoxide is in cigarettes. As for other toxins, young people show similar levels of awareness as adults. However, there is a higher awareness that cigarettes contain ammonia (30%) among young people than among adults.

Aware of Chemicals/Toxins in Cigarettes

Aware April 1996

	Adults	Youth
Nicotine	90	84
Tar	86	80
Carbon monoxide	48	48
Lead	27	30
Arsenic	26	30
Ammonia	19	30
Benzene	18	18
Formaldehyde	17	11
Nitrogen oxides	16	17
Hydrogen cyanide	14	15
Phenols	11	4
Cadmium	8	5
Benzo[a]pyrene	6	3
Nitrosamines	6	3
4-Aminobiphenyl	5	5
dk/na	1	1

The following is a list of the chemicals and toxins in cigarettes. Please tell me whether or not you were aware that each of these chemicals was found in cigarettes or cigarette smoke...?

7.5 TOXINS CAUSING GREATEST CONCERN

Of all toxins listed, nicotine most concerns adult Canadians in terms of its impact on health: 38 percent name it as the toxin that concerns them the most. Another 26 percent are most concerned about tar, 22 percent are most concerned about arsenic, 18 percent are most concerned about carbon monoxide and 15 percent are most concerned about lead. Smaller proportions are most concerned about other toxins listed such as ammonia (10%), formaldehyde (10%), hydrogen cyanide (10%), nitrogen oxides (6%), benzene (6%), cadmium (4%), phenols (4%), nitrosamines (4%), benzo[a]pyrene (4%) and 4-aminobiphenyl (3%). Another 19 percent are equally concerned about all of these chemicals, seven percent are not concerned about any of them and four percent have no opinion.

There is no significant difference between smokers and non-smokers in terms of which of these chemicals and toxins are of greatest concern. There are some differences among demographic groups. Those age 60 and over and Francophones are more likely to name nicotine as the toxin in cigarettes which concerns them the most. Anglophones and younger people are more likely to be most concerned about a wide variety of other toxins listed.

Young people give similar responses as adults to this question, with nicotine (40%), followed by tar (34%) and carbon monoxide (27%) mentioned most often.

Chemicals/Toxins in Cigarettes that Cause Concern

April 1996

	Adults	Youth
Nicotine	38	40
Tar	26	34
Arsenic	22	18
Carbon monoxide	18	27
Lead	15	15
Ammonia	10	14
Formaldehyde	10	8
Hydrogen cyanide	10	7
Benzene	6	5
Nitrogen oxides	6	8
Phenols	4	2
Cadmium	4	2
Benzo[a]pyrene	4	2
Nitrosamines	4	2
4-Aminobiphenyl	3	3
Concerned about them all	19	12
Not concerned about any	7	10
dk/na	4	0

The following is a list of the chemicals and toxins in cigarettes. Which of these chemicals, if any, are you most concerned about with respect to health and cigarette smoking?

8.0 ATTITUDE TOWARDS THE LISTING OF INGREDIENTS

Adult Canadians express almost unanimous approval of requiring cigarette companies to display a list of toxic constituents on cigarette packages. Nine in ten (89%) strongly (71%) or somewhat (18%) approve of this. Just six percent strongly (3%) or somewhat (3%) disapprove and five percent have no opinion.

A strong majority of Canadians in every demographic and regional group express strong approval of this idea. Among those who smoke regularly 57 percent strongly approve and another 26 percent somewhat approve. Just 12 percent of smokers strongly (6%) or somewhat (6%) disapprove. Strong approval is particularly high among women, those with children under 18 living with them, Anglophones, those who are very concerned about their personal health, those with higher annual household incomes and university graduates. There is also very strong approval in the western provinces. There is slightly less enthusiasm for this measure among men, Francophones, those with lower incomes and lower levels of education, and among residents of the Atlantic provinces. It should be stressed, however, that even among these populations support for requiring cigarette companies to list toxic constituents on cigarette packages remains overwhelming.

Young Canadians also express high levels of support for requiring toxic constituents to be listed on cigarette packages. A total of 91 percent strongly (77%) or somewhat (14%) agree that cigarette companies should be required to show this information. Everyday smokers are less likely to agree with this (79%) than are non-smokers (93%). However, even among smokers a strong majority support this idea.

Approval of Requirement to Display Toxins on Cigarette Packages

April 1996

	Adults	Youth
Strongly approve	71	77
Somewhat approve	18	14
Somewhat disapprove	3	2
Strongly disapprove	3	2
dk/na	5	4

Please tell me whether you strongly approve, somewhat approve, somewhat disapprove or strongly disapprove of requiring cigarette companies to display a list of toxic constituents on cigarette packages?

9.0 STATEMENTS ABOUT TOXIC CONSTITUENTS

In this segment of the survey, respondents were asked to read a series of statements that provided information about five of the toxic chemicals discussed above. In each case, they were asked whether each statement provided them with information they were not previously aware of, the extent to which the information concerned them, and the extent to which they find the statement to be believable.

9.1 HYDROGEN CYANIDE

Two-thirds of adult Canadians (64%) were not previously aware that "Exposure to hydrogen cyanide can lead to headaches, dizziness, nausea, vomiting and death". One-third (33%) were previously aware of this.

Those with less than a high school education, those not born in Canada and residents of Toronto are most likely to say that they were not previously aware of this information. University graduates and Vancouverites are most likely to have been aware of this information. There is no difference between smokers and non-smokers in terms of the extent to which they were aware previously of the dangers of hydrogen cyanide.

Eight in ten Canadians (79%) say that the information provided about hydrogen cyanide concerns them a great deal (50%) or somewhat (29%). Just 18 percent say that this does not concern them very much (9%) or that it does not concern them at all (9%).

The information about hydrogen cyanide is of greatest concern to non-smokers, women, those with children under 18 living at home, those who are very concerned about their personal health, those with post-secondary education and those with annual household incomes of over \$50,000. Concern is also higher among residents of Ontario and the western provinces. Among Francophones the proportion saying that this information is of great concern declines to 38 percent. Among smokers, 36 percent say that this information concerns them a great deal and another 37 percent say it concerns them somewhat. This suggests that while concern about exposure to hydrogen cyanide may be somewhat lower among smokers, it is still very significant.

Among young people a similar proportion indicate this is new information for them (63%) and say that it concerns them a great deal (46%).

Statements that Provide New Information

Yes April 1996

	Adults	Youth
Nitrosamines are the most potent cancer-causing agent found in tobacco smoke	71	65
Exposure to hydrogen cyanide can lead to headaches, dizziness, nausea, vomiting and death	64	63
Formaldehyde is a colourless gas with a pungent odour. It may cause health problems and discomfort when present in high concentrations in indoor air	55	61
Carbon monoxide is a colourless, odourless, poisonous gas	33	39
Nicotine is the active drug in tobacco smoke and is addictive	30	33

The following is a list of statements that provide information about some of the chemicals on the previous card. For each one, please tell me whether or not each statement tells you something new that you were not aware of before...?

9.2 NITROSAMINES

Seven in ten adult Canadians (71%) say that the statement "Nitrosamines are the most potent cancer-causing agent found in tobacco smoke" contains new information for them. One-quarter (25%) say that this information is not new to them. There are no significant differences among demographic and regional groups in terms of the degree to which they were previously knowledgeable about the effects of nitrosamines.

Eight in ten adult Canadians (79%) say that the information provided about nitrosamines concerns them a great deal (52%) or somewhat (27%). Just 17 percent say that this does not concern them very much (8%) or that it does not concern them at all (9%).

Concern about this information is of greatest concern to non-smokers, women, those with children under 18 living at home, those who are very concerned about their personal health, those with post-secondary education and those with annual household incomes of over \$35,000. Concern is also higher among residents of Ontario and the western provinces. Among Francophones the proportion saying that this information is of great concern declines to 39 percent. Among smokers, 39 percent say that this information concerns them a great deal and another 34 percent say it concerns them somewhat.

A slightly lower proportion of young Canadians say this statement provides them with new information (65%) or say this concerns them a great deal (47%).

9.3 FORMALDEHYDE

Over half of adult Canadians (55%) say that the statement "Formaldehyde is a colourless gas with a pungent odour. It may cause health problems and discomfort when present in high concentrations in indoor air" contains new information for them. Four in ten (41%) were previously aware of this information. Residents of Western Canada and university graduates are more likely to have been aware of the effects of formaldehyde. Those born outside of Canada and residents of Toronto are the most likely to say that they were not previously aware of this.

Eight in ten adult Canadians (78%) say that this information about formaldehyde concerns them a great deal (49%) or somewhat (29%). Just 18 percent say that this does not concern them very much (9%) or that it does not concern them at all (9%).

Statements that Cause Concern

A Great Deal/Somewhat Concerned April 1996

	Adults	Youth
Nicotine is the active drug in tobacco smoke and is addictive	82	81
Carbon monoxide is a colourless, odourless, poisonous gas	82	80
Exposure to hydrogen cyanide can lead to headaches, dizziness, nausea, vomiting and death	79	79
Nitrosamines are the most potent cancer-causing agent found in tobacco smoke	79	75
Formaldehyde is a colourless gas with a pungent odour. It may cause health problems and discomfort when present in high concentrations in indoor air	78	73

The following is a list of statements that provide information about some of the chemicals on the previous card. For each one, please tell me if this information concerns you a great deal, somewhat, not very much or not at all...?

Concern about this information is highest among non-smokers, women, those with children under 18 living at home, those who are very concerned about their personal health, those with post-secondary education and those with annual household incomes of over \$35,000. Concern is also higher among residents of Ontario and the western provinces. Among Francophones the proportion expressing concern declines to 38 percent. There is also less concern among residents of the Atlantic provinces. Among smokers, 35 percent say that this information concerns them a great deal and another 35 percent say it concerns them somewhat.

The proportion of young people who say this statement provides them with new information is slightly higher than for adults (61%) and a lower proportion of young people say this information concerns them a great deal (40%).

9.4 CARBON MONOXIDE

There is greater awareness of the information contained in the statement "Carbon monoxide is a colourless, odourless, poisonous gas". One-third of adult Canadians (33%) describe this as information they were not previously aware of, compared to 64 percent who knew this information before.

A majority in all demographic and regional groups were aware of the facts provided about carbon monoxide. Awareness is particularly high among those with post-secondary education occasional smokers and residents of the Prairie provinces. Those with lower levels of education and residents of Toronto, Montreal and Vancouver are most likely to say that this represents new information for them.

Eight in ten adult Canadians (82%) say that this information about carbon monoxide concerns them a great deal (57%) or somewhat (25%). Just 16 percent say that this does not concern them very much (8%) or that it does not concern them at all (8%).

Concern about the information is highest among non-smokers, women, those with children under 18 living at home, those born outside of Canada, those who are very concerned about their personal health and those with annual household incomes of over \$50,000. Concern is also higher among residents of Ontario and the western provinces. Among smokers, 45 percent say that this information concerns them a great deal and another 31 percent say it concerns them somewhat.

Among young people a slightly higher proportion say this statement provides them with new information (39%), and a slightly lower proportion say this concerns them a great deal (52%).

9.5 NICOTINE

There is also a high level of prior awareness of the statement that "Nicotine is the active drug in tobacco smoke and is addictive". Two-thirds of adult Canadians (68%) were previously aware of this, compared to 30 percent who say they were not. Awareness is particularly high among those with post-secondary education, those with higher incomes, occasional smokers and residents of the Prairie provinces. Residents of Vancouver are most likely to say that this represents new information for them.

Eight in ten adult Canadians (82%) say the information provided about nicotine concerns them a great deal (57%) or somewhat (25%). Just 16 percent say that this does not concern them very much (7%) or that it does not concern them at all (9%).

Concern about this information is highest among non-smokers, women, those with children under 18 living at home, those born outside of Canada, those who are very concerned about their personal health, university graduates and those with annual household incomes of over \$35,000. Concern is also higher among residents of Ontario, Quebec and the western provinces. Among smokers, 46 percent say that this information concerns them a great deal and another 30 percent say it concerns them somewhat.

A similarly low proportion of young people say this statement provides them with new information (33%). A slightly lower proportion (52%) say this concerns them a great deal.

9.6 BELIEVABILITY OF STATEMENTS

A large majority of Canadian adults find all of the above statements to be believable. In the case of the statement about nicotine, 79 percent say the information is very believable and another 16 percent say it is somewhat believable. Three-quarters of Canadians (77%) also find the statement on carbon monoxide to be very believable and another 18 percent consider it to be somewhat believable. Two-thirds (65%) consider the statement on formaldehyde to be very believable and another 27 percent consider it to be somewhat believable. Over six in ten (62%) find the statement on nitrosamines to be very believable and another 29 percent consider it to be somewhat believable. Similarly 62 percent consider the information in the statement on hydrogen cyanide to be very believable and 28 percent consider it to be somewhat believable.

A large majority in every demographic and regional group consider each of these statements to be very believable. The level of believability is marginally lower among Francophones, those who smoke every day and residents of the Atlantic provinces. University graduates, occasional smokers and non-smokers and Anglophones are most likely to consider these statements believable.

Majorities of young Canadians also found all of these statements to be believable. Specifically, the statement about nicotine was considered very believable by 78 percent and the statement about carbon monoxide by 72 percent. Fifty-seven percent found each of the statements about formaldehyde, nitrosamines and hydrogen cyanide to be very believable.

Statements that are Believable

Very/Somewhat Believable April 1996

	Adults	Youth
Nicotine is the active drug in tobacco smoke and is addictive	95	95
Carbon monoxide is a colourless, odourless, poisonous gas	95	93
Formaldehyde is a colourless gas with a pungent odour. It may cause health problems and discomfort when present in high concentrations in indoor air	92	87
Nitrosamines are the most potent cancer-causing agent found in tobacco smoke	91	88
Exposure to hydrogen cyanide can lead to headaches, dizziness, nausea, vomiting and death	90	88

The following is a list of statements that provide information about some of the chemicals on the previous card. For each one, please tell me whether you find each statement to be very believable, somewhat believable, not very believable, or not at all believable...?

10.0 LISTING OF STATEMENTS

10.1 REQUIRING CIGARETTE COMPANIES TO DISPLAY INFORMATIONAL STATEMENTS

Over two-thirds of adult Canadians (69%) strongly approve of requiring cigarette companies to display one of the above statements on cigarette packages and another 19 percent somewhat approve. Just eight percent strongly (4%) or somewhat (4%) disapprove. Four percent have no opinion.

Even among those who smoke regularly, eight in ten (78%) strongly (52%) or somewhat (26%) approve of this and only 18 percent strongly (9%) or somewhat (9%) disapprove. Approval is especially high among university graduates, women, those with children under 18 living with them, those who are very concerned about their personal health, those with annual household incomes of over \$50,000 and residents of Ontario and the western provinces.

Among young people, 73 percent strongly approve of requiring cigarette companies to display one of the above statements.

Approval of Requirement to Display Statements on Cigarette Packages April 1996

	Adults	Youth
Strongly approve	69	73
Somewhat approve	19	19
Somewhat disapprove	4	3
Strongly disapprove	4	2
dk/na	4	3

Please tell me whether you strongly approve, somewhat approve, somewhat disapprove, or strongly disapprove of requiring cigarette companies to display one of the above statements on cigarette packages?

10.2 PERCEIVED EFFECTIVENESS OF LISTING TOXIC CONSTITUENTS AND STATEMENTS

More than three in four adult Canadians (78%) believe that a list of chemicals, together with one of the warning statements, would be at least somewhat effective in providing information about the chemicals and toxins in cigarettes. A majority also feel that this would be at least somewhat effective in discouraging young people not currently smoking from starting (73%), discouraging themselves personally from smoking (57%), and discouraging smoking among young people who currently smoke (53%). Fewer than half (48%) think this will be effective at discouraging adults who currently smoke. Women, people concerned with their health, occasional smokers and non-smokers are more likely to think such labelling will be effective in all respects.

Most young people (80%) believe that a list of chemicals, together with one of the warning statements, would be at least somewhat effective in discouraging smoking among young people who do not currently smoke. A large proportion (79%) also say that this would be at least somewhat effective in providing information about chemicals and toxins in cigarettes and in discouraging themselves personally from smoking (77%). A slim majority also believe such labelling will be at least somewhat effective in discouraging smoking among young people who currently smoke (55%). Under half (45%) believe this will be at least somewhat effective in discouraging adults from smoking.

Effectiveness of Displaying Statements on Cigarette Packages

Very/Somewhat Effective April 1996

	Adults	Youth
Providing information about the chemicals and toxins in cigarettes	78	79
Discouraging young people who do not currently smoke from starting	73	80
Discouraging you from smoking	57	77
Discouraging smoking among young people who currently smoke	53	55
Discouraging smoking among adults who currently smoke	48	45

Do you think a list of chemicals, together with one of the warning statements, would be very effective, somewhat effective, not very effective, or not at all effective at doing each of the following...?

10.3 SPECIFIC DESIGN ELEMENTS

Three examples of labels were presented to adult smokers and young Canadians. These examples varied on three dimensions: the order in which chemicals were listed (alphabetical, by weight, random); the measurement of chemicals listed (milligrams, micrograms, or mixed); and the colour format (black on white, white on black, and alternating black and white stripes). Examples of these are appended to this report.

The greatest agreement among smokers was to list chemicals by weight (41%), list all chemicals as milligrams (42%), and have alternating black and white stripes (39%).

The same consensus was reached among young people with 53 percent preferring to see the chemicals listed by weight, 38 percent preferring all chemicals be listed in milligrams, and 45 percent preferring alternating black and white stripes.

How Chemicals Should Be Listed

April 1996

	Adults*	Youth
In order by weight	43	53
In alphabetical order	26	22
In random order	21	18
dk/na	10	7

* asked of adult smokers only.

I want to show you three different label designs. Looking at the various design elements of the label please tell me whether you prefer having the chemicals listed...?

How Amount of Chemicals Should Be Listed

April 1996

	Adults*	Youth
In milligrams	42	38
In micrograms	23	30
Mixed milligrams and micrograms	20	21
dk/na	15	10

* asked of adult smokers only.

I want to show you three different label designs. Looking at the various design elements of the label please tell me whether you prefer having the amount of the chemical listed...?

Appearance of the Label

April 1996

	Adults*	Youth
With black and white stripes	39	45
With a white background	27	24
With a black background	24	25
dk/na	10	6

* asked of adult smokers only.

I want to show you three different label designs. Looking at the various design elements of the label please tell me whether you prefer having the label...?

10.4 OTHER SUGGESTIONS FOR IMPROVEMENT

Most adult smokers (77%) have either no opinion (42%) as to what other changes should be made to these suggested labels to make them better, or feel that nothing more needs to be done (35%). Other suggestions which have been made include having brighter colours and making the labels more "eye-catching" (8%), listing effects of the chemicals (6%), having bigger writing and making the labels easier to read (6%) and using a skull and crossbones symbol (2%). Four percent had other suggestions.

Young people give similar responses. Over six in ten (63%) have no opinion (41%) or think that nothing else has to be done (22%). Their suggested changes include bigger writing and making the labels easier to read (14%), listing diseases and effects caused by each chemical (8%), using brighter colours and making the labels more eye-catching (8%) and using the skull and crossbones symbol (1%). Eight percent have various other suggestions.

Other Suggestions for Labels

April 1996

	Adults*	Youth
List of effects, diseases, etc.	6	8
Bigger writing/easier to read	6	14
Brighter colours/ more eye-catching	8	8
Skull and crossbones/ poison symbol	2	1
Other	4	8
Nothing/none	35	22
dk/na	42	41

* asked of adult smokers only.

What other changes, if any, would you make to these labels to make them better?

METHODOLOGY

The results of this survey are derived from 2,034 interviews carried out in the homes of the respondents between March 16, 1996 to April 11, 1996: 270 in the Atlantic Provinces, 500 in Quebec, 549 in Ontario and 715 in the Western Provinces.

Questionnaire

The pre-coded questionnaire was composed of 316 information units, including client questions which are not published in the report. The questionnaire was pre-tested in both English and French before being sent to interviewers.

Data Collection and Quality Control

The questionnaires are distributed, through regional supervisors, to approximately 150 experienced interviewers across the country. The supervisors are also responsible for training the interviewers and for briefing them on the specific instructions accompanying each survey.

Each interviewer also receives a map of his or her allocated area. On the map, the pre-selected block or blocks in which he or she must carry out his or her interviews are indicated. Starting with a pre-selected address, the interviewer must complete the number of interviews that he or she has been allocated, according to the age and sex quotas indicated on his or her route map. Only one respondent is interviewed per household. The questioning is carried out in the language chosen by the respondent.

In order to check the quality of work completed and the accuracy of the indicated responses, ten percent of each interviewer's respondents are re-contacted by the Field Director. In questionable cases, or when high standards have not been respected, the questionnaires are rejected.

Sample

The sample is drawn in such a way that it represents the Canadian population aged 18 or over with the exception of those Canadians living in the Yukon or Northwest Territories or in institutions (armed forces barracks, hospitals, prisons).

The sampling model relies on stratification of the population by 10 regions (Atlantic, Montreal CMA, the rest of Quebec, Toronto CMA, the rest of Ontario, Manitoba, Saskatchewan, Alberta, Vancouver CMA, and the rest of British Columbia) and by four community sizes (1,000,000 inhabitants or more, 100,000 to 1,000,000 inhabitants, 5,000 to 100,000 inhabitants, and under 5,000 inhabitants).

The sample also relies on a gender quota, an age quota, and a working women quota.

Approximately 191 sampling points are used.

The number of cases in each region may not necessarily reflect its actual weight. The samples for some regions have been augmented in order to attain a sufficient number of cases for analysis. The results are then weighted during data processing to give each sampling stratum its proper weight.

Data Processing

Following the data collection operations, all questionnaires are edited and prepared for computer processing. Call-backs are carried out in cases where data collected are not sufficiently specific. Responses to open-ended questions are analysed and coded. Following this preparation step, the data are entered into the computer and weighted according to the actual population of each of the regions. The weighted and unweighted sample sizes are listed on the following pages.

Margin of Error

The margin of error for a stratified probability sample of this size is estimated to be ± 2.2 percentage points, 19 times in 20. The margin of error increases in the case of a modified probability sample, such as the one used for this survey, and also for results pertaining to regional or socio-demographic sub-groups of the total sample.

Respondent Distribution by Analysis Criteria

	Approx Margin of Error ^①	Sample			
		N=2,034	Before Weighting %	After Weighting N= 2,034 %	1991 Census ^② 20,426,875 %
TOTAL SAMPLE					
SEX					
Men		969	48	48	49
Women		1,065	52	52	51
Working Women		631	31	31	31
AGE GROUP					
18 - 29		466	23	23	25
30 - 44		699	34	35	33
45 - 59		433	21	21	20
60 and over		429	21	21	21
REGIONS					
ATLANTIC PROVINCES	6.0	270	13	9	9
- Newfoundland	13.5	(61)	(3)	(2)	(2)
- Prince Edward Island	18.0	(25)	(1)	(1)	(1)
- New Brunswick	11.0	(75)	(4)	(3)	(3)
- Nova Scotia	10.0	(109)	(5)	(3)	(3)
QUEBEC	4.5	500	25	25	25
- Montreal Region	6.5	(200)	(10)	(11)	(12)
ONTARIO	4.0	549	27	37	37
- Toronto Region	6.5	(180)	(9)	(13)	(15)
WEST	3.7	715	35	29	29
- Manitoba	8.5	(130)	(6)	(4)	(4)
- Saskatchewan	8.5	(130)	(6)	(4)	(4)
- Alberta	6.5	(220)	(11)	(9)	(9)
- British Columbia	6.5	(235)	(12)	(12)	(12)

① For a strict probability sample of this size, 19 times in 20

② Canadians aged 18 or over in 1991, excluding those in the Yukon and Northwest Territories

Respondent Distribution by Analysis Criteria

	Sample			
	N=2,034	Before Weighting %	After Weighting N=2,034 %	1991 Census %
TOTAL SAMPLE				
NON-BRITISH IMMIGRANT				
Europe	89	5	5	6 ^①
Other	77	5	5	7 ^①
TENURE				
Own	1,332	65	65	63 ^①
Rent	679	33	34	37 ^①
COMMUNITY SIZE				
1,000,000 and over	490	24	29	29 ^①
100,000 to 999,999	506	25	25	25 ^①
5,000 to 99,999	490	24	18	18 ^①
Less than 5,000	548	27	28	28 ^①
EDUCATION				
0-8 years	218	11	11	②
9-13 years	1,040	51	51	②
14+ years	760	37	38	②
University degree	305	15	15	11 ^③
MARITAL STATUS				
Single	446	22	21	31 ^④
Married (or living as a couple)	1,252	62	62	54 ^④
Other (divorced, widowed, separated)	335	16	16	15 ^④

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- ① Canadians of all ages excluding Northwest Territories and Yukon
 ② Report/omnibus categories are not comparable to those of Statistics Canada
 ③ Population 15 years of age and older
 ④ Total dwellings in 1991

Respondent Distribution by Analysis Criteria

	Sample			1991 Census %
	N=2,034	Before Weighting %	After Weighting N=2,034 %	
TOTAL SAMPLE				
LANGUAGE				
(Most often spoken at home)				
French	444	22	22	23 ^①
English	1,510	74	73	67 ^①
RELIGION				
Protestant	703	35	34	36
Catholic	938	46	46	45
EMPLOYMENT STATUS				
In the work force	1,298	64	64	68 ^②
Homemaker	214	11	11	③
Other (student, retired)	521	26	25	③
OCCUPATION (of work force)				
Professionals, administrators, and owners of big business	271	21	22	③
Technicians, semi-professionals, administrators and owners of small business	206	16	16	③
Office workers (white collar), service, sales	323	25	25	③
Tradespeople, skilled and semi- skilled workers (blue collar)	304	23	23	③
Unskilled workers , farmers and fishermen	171	13	13	③

-
- ① Canadians of all ages excluding Northwest Territories and Yukon
 ② Report/omnibus categories are not comparable to those of Statistics Canada
 ③ Population 15 years of age and older

Respondent Distribution by Analysis Criteria

	Sample			
	N=2,034	Before Weighting %	After Weighting N=2,034 %	1991 Census %
TOTAL SAMPLE				
INCOME				
Under \$15,000	260	13	12	16
\$15,000 to \$24,999	340	17	16	14
\$25,000 to \$34,999	342	17	16	14
\$35,000 to \$49,999	449	22	23	19
\$50,000 to \$69,999	302	15	16	18
\$70,000 and over	273	13	14	18
UNION MEMBERSHIP				
Respondent	340	17	17	34 ^②
TYPE OF UNION				
Private sector	137	7	7	③
Public sector	178	9	9	③
FEDERAL POLITICAL ORIENTATION^①				
Liberal	729	49	51	NA
Progressive Conservative	177	12	11	NA
New Democratic Party	152	10	10	NA
Reform Party	227	15	14	NA
Bloc Québécois	208	14	14	NA

① Report/omnibus categories are not comparable to those of Statistics Canada

② Work force in 1991

③ Based on 1,499 decided voters (1,570 weighted)

The results of this survey are derived from 405 interviews carried out in the homes of the respondents between March 16, 1996 to April 11, 1996: 54 in the Atlantic Provinces, 100 in Quebec, 109 in Ontario and 142 in the Western Provinces.

Questionnaire

The pre-coded questionnaire was composed of 117 information units, including client questions which are not published in the report. The questionnaire was pre-tested in both English and French before being sent to interviewers.

Data Collection and Quality Control

The questionnaires are distributed, through regional supervisors, to approximately 150 experienced interviewers across the country. The supervisors are also responsible for training the interviewers and for briefing them on the specific instructions accompanying each survey.

Each interviewer also receives a map of his or her allocated area. On the map, the pre-selected block or blocks in which he or she must carry out his or her interviews are indicated. Starting with a pre-selected address, the interviewer must complete the number of interviews that he or she has been allocated, according to the age and sex quotas indicated on his or her route map. Only one respondent is interviewed per household. The questioning is carried out in the language chosen by the respondent.

In order to check the quality of work completed and the accuracy of the indicated responses, ten percent of each interviewer's respondents are re-contacted by the Field Director. In questionable cases, or when high standards have not been respected, the questionnaires are rejected.

Sample

The sample is drawn in such a way that it represents the Canadian population aged 12 to 17 or over with the exception of those Canadians living in the Yukon or Northwest Territories or in institutions (armed forces barracks, hospitals, prisons).

The sampling model relies on stratification of the population by 10 regions (Atlantic, Montreal CMA, the rest of Quebec, Toronto CMA, the rest of Ontario, Manitoba, Saskatchewan, Alberta, Vancouver CMA, and the rest of British Columbia) and by four community sizes (1,000,000 inhabitants or more, 100,000 to 1,000,000 inhabitants, 5,000 to 100,000 inhabitants, and under 5,000 inhabitants).

The sample also relies on a gender quota and an age quota.

Approximately 191 sampling points are used.

The number of cases in each region may not necessarily reflect its actual weight. The samples for some regions have been augmented in order to attain a sufficient number of cases for analysis. The results are then weighted during data processing to give each sampling stratum its proper weight.

Data Processing

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Respondent Distribution by Analysis Criteria

	Sample		
	N=405	Before Weighting %	After Weighting N= 405 %
TOTAL SAMPLE			
SEX			
Men	201	50	49
Women	204	50	51
AGE GROUP			
18 - 29	203	50	50
30 - 44	202	50	50
REGIONS			
ATLANTIC PROVINCES	54	13	9
- Newfoundland	(12)	(3)	(2)
- Prince Edward Island	(5)	(1)	(1)
- New Brunswick	(15)	(4)	(3)
- Nova Scotia	(22)	(5)	(3)
QUEBEC	100	25	25
- Montreal Region	(40)	(10)	(11)
ONTARIO	109	27	37
- Toronto Region	(36)	(9)	(13)
WEST	142	35	29
- Manitoba	(26)	(6)	(4)
- Saskatchewan	(25)	(6)	(4)
- Alberta	(44)	(11)	(9)
- British Columbia	(47)	(12)	(12)
COMMUNITY SIZE			
1,000,000 and over	98	24	29
100,000 to 999,999	103	25	25
5,000 to 99,999	96	24	18
Less than 5,000	108	27	28

Respondent Distribution by Analysis Criteria

		Sample	
		Before Weighting %	After Weighting N= 405 %
TOTAL SAMPLE	N=405		
LANGUAGE (Most often spoken at home)			
French	82	20	20
English	307	76	76

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