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An Assessment of Knowledge, Attitudes and Practices Concerning Environmental Tobacco Smoke

Final Report

March 31, 1995

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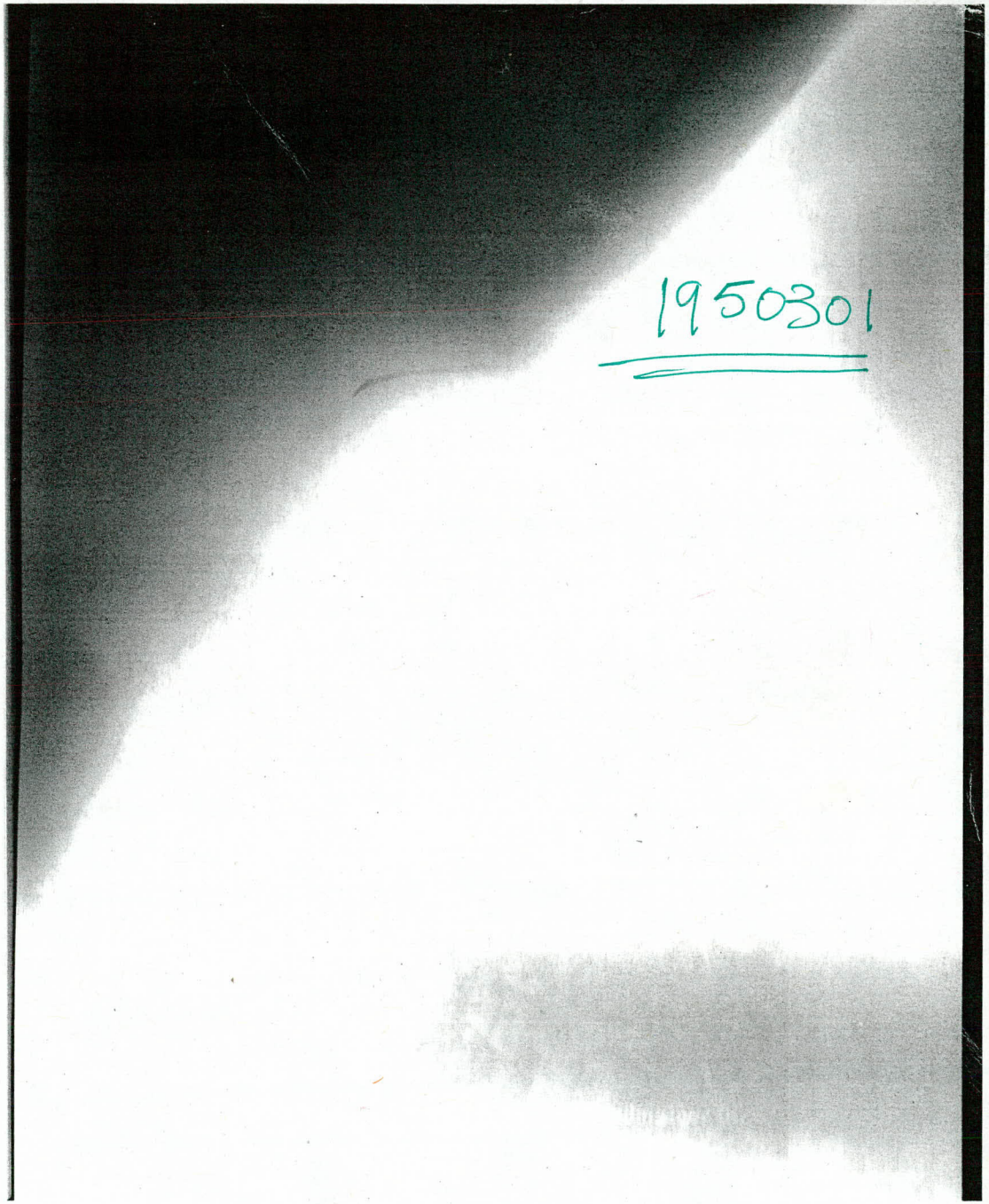
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TABLE OF CONTENTS

PROJECT TEAM AND ACKNOWLEDGEMENTS vii

EXECUTIVE SUMMARY ix

1. INTRODUCTION 1

   1.1 Background 1
   1.2 Study Objectives and Issues 3
   1.3 Methodology 6
   1.4 Organization of the Report 11

2. LITERATURE REVIEW 13

   2.1 The Health Effects of ETS 13
   2.2 Legislation and Policies 21
   2.3 Knowledge, Attitudes and Practices Concerning ETS 27

3. PROFILES 37

   3.1 General Sample Characteristics 37
   3.2 Smokers 39
   3.3 Former Smokers 41
   3.4 Non-Smokers 43

4. KNOWLEDGE, BELIEFS AND ATTITUDES 45

   4.1 Knowledge 45
   4.2 Beliefs and Perceptions 53
   4.3 Attitudes 57
   4.4 Legal Restrictions on Smoking 63

5. BEHAVIOUR 75

5.1 Intentions and Actual Behaviour Regarding Restrictions in the Home 75
5.2 Motives Behind Restrictive Practices 81
5.3 Types of Restrictive Practices in the Home 87
5.4 Consistency of Enforcement in the Home 92
5.5 Restrictions Outside the Home 96
5.6 Methods Influencing Compliance with Smoking Restrictions 103

6. BEHAVIOURS OF CHILDREN AND PARENTAL BELIEFS ABOUT CAREGIVERS 107

6.1 ETS and Caregivers 107
6.2 Behaviours of Children 111

7. FOCUS GROUPS 115

7.1 Introduction 115
7.2 Knowledge and Level of Exposure to ETS 116
7.3 Knowledge and Perception of the Long-Term Effects of ETS 119
7.4 Information Sources About ETS 121
7.5 Nature and Prevalence of ETS Avoidance Techniques 124
7.6 No-smoking Rules outside the Home 128
7.7 Attitudes Towards Smoking 129

8. DESCRIBING THE COMPLEXITY: A SEGMENTATION OF THE PUBLIC 131

8.1 Segmentation Approach 131
8.2 Segment Description 132
8.3 Preliminary Communication and Action Implications 148

9. EXPLAINING BEHAVIOUR: ANALYSIS OF THE CAUSAL LINKS 151

9.1 Explaining Knowledge 153
9.2 Explaining Beliefs 154
9.3 Explaining Attitudes 157
9.4 Explaining Behavioral Intentions 161
9.5 Explaining ETS Restrictions in the Home 163
9.6 Explaining ETS Avoidance Outside Home 163
9.7 Explaining Restriction of Own Smoking in Home 164
9.8 Explaining Restriction of Own Smoking Outside Home 164
9.9 Explaining Behaviour: Summary Model 165
9.10 Focus on Francophones 166
9.11 Focus on Income and Education 166

10. CONCLUSIONS AND RECOMMENDED COMMUNICATIONS STRATEGY 183

10.1 Conclusions 183
10.2 Elements Toward a Communications Strategy 196

APPENDIX A - STUDY ISSUES MATRIX
APPENDIX B - SURVEY INSTRUMENT
APPENDIX C - METHODOLOGY REPORT
APPENDIX D - FOCUS GROUP GUIDE
APPENDIX E - REFERENCES

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ACKNOWLEDGEMENTS

While Ekos Research Associates is responsible for any errors that may be contained in this report, we would like to acknowledge a number of individuals who contributed to the success of the project. **John Horvath and Silvana Luciani**, of the Health Promotion Directorate of Health Canada, initiated this project and provided invaluable assistance throughout the research. **Pat Bell, Danièle Brochu, Murray Kaiserman, William Rickert, Linda Sawchuck, Tom Stephens and Eleanor Swanson,** were the members of the ETS Working Group and assisted with this project by providing advice during the design and reviews of all reports. Finally, we would like to thank the individuals who provided vital information by responding to our surveys or participating in our focus groups. Without their cooperation this research would not have been possible.

EXECUTIVE SUMMARY

Background

There is accumulating scientific evidence confirming the deleterious effects of second-hand smoke, or environmental tobacco smoke (ETS), on people's health. Various research findings make a compelling case about the harmful effects of people's exposure to tobacco smoke in the environment, even when they themselves are not smoking.

In response to scientific information, governments have begun to take steps to increase people's awareness of these issues, to protect the rights of non-smokers and to reduce people's exposure to ETS and the associated health risks.

In Canada, the *National Strategy to Reduce Tobacco Use (NSTRTU)* was initiated in 1987 with three primary goals: (1) to help non-smokers stay smoke-free (prevention); (2) to encourage and help people who want to quit smoking to do so (cessation); and (3) to protect the rights and health of non-smokers (protection). A number of measures are being implemented to pursue the NSTRTU goals, including policy and legislation (e.g., the 1989 *Non-Smokers' Health Act* and the 1989 *Tobacco Products Control Act*), education, public awareness, research and taxation.

Study Objectives and Issues

The present research involved a survey of adults and discussion groups with children to provide information Health Canada can use to develop policies and programs which protect non-smokers and reduce exposure to ETS, particularly in children.

Based on a review of the literature, it is apparent that there are tremendous data gaps with respect to levels of general knowledge and awareness of the ill effects of ETS, especially for specific target groups. The present study was

required to fill the need for a better understanding of the current knowledge levels, attitudes and practices of parents and extended family members, as well as children, with respect to second-hand smoke.

Methodology

Two central lines of evidence in this research are telephone surveys: one with parents of children under 13 years of age; and one with extended family members of children the same age. The two surveys were conducted simultaneously. The third line of evidence was a series of 20 focus groups with children ages 8 through 12.

Survey of Parents and Extended Family

Eligible respondents in the sample were parents or extended family members of children 12 years old or younger. A total of 2,300 parents and 700 extended family members were interviewed. The survey samples reflect normal distributions across the country.

The sample of parents was selected at random using a computer listing of telephone numbers. Parents were asked to provide the name of an extended family member fitting the criteria for the survey. One in three respondents were typically able to provide one. This resulted in interviews with two-thirds of the extended family member sample (n=460). The remaining one-third of extended family members (n=240) were selected randomly.

Focus Groups With Children

In addition to the two surveys, the study consulted with children between the ages of 8 and 12 in 20 focus groups conducted across the country. Ten groups were held with 8 to 10 year olds and ten were held with 11 and 12 year olds. Groups were also evenly split between children of smoking parents and those of non-smoking parents.

KEY FINDINGS

Profile

Smokers are far more likely to be younger, less educated and have lower incomes than non-smokers. Francophones and residents of Quebec are also found in disproportionately high numbers among those currently smoking. Smokers also cluster together, in that several smokers can often be found in one household and it is more likely that many members of their social circle also smoke.

Knowledge

When asked to list the top-of-mind health impacts of ETS, survey respondents identified lung cancer and asthma most frequently, followed by respiratory illnesses, heart disease and allergies. Respondents' level of knowledge about specific health impacts was variable: while most were fairly certain that arthritis is not caused by ETS and that lung cancer, asthma and bronchial problems are, most were not aware that ear infections in children and SIDS are related to ETS.

Knowledge levels were more systematically assessed using an index which was closely examined to determine whether there are particular segments of the population which are more or less knowledgable. While there were no differences between parents and extended family members, females and allophones were more likely to score higher on the index. As well, there were close relations between smoking behaviour, exposure to ETS and reaction to this exposure and the index: smokers and people living in smoking households demonstrated lower levels of knowledge about the health impacts of second-hand smoke.

Sources of Information

Most respondents reported having heard about second-hand smoke through news reports, friends and family, doctors and paid advertisements. Not surprisingly, individuals who scored lower on the knowledge index reported having heard about ETS from fewer sources than those scoring higher. From a selection of possible sources of information, doctors and health groups were considered to be the most believable. News reports, warnings on cigarette packages and the government were the second most believable group of sources of information. The tobacco industry was found to be the least credible.

As might be expected, different groups of people believe different deliverers of messages. Rated credibility of sources were related to a variety of socio-demographic variables. For example, doctors were viewed as more believable by individuals in higher income groups, those with a university education and by anglophones and allophones. Francophones, on the other hand, gave higher believability ratings to news reports and the tobacco industry than did other language groups.

Smoking behaviour and exposure were also related to the credibility ratings given to these sources. By and large, all sources, with the exception of the tobacco industry, were viewed as less believable by smokers, individuals living in smoking households and by those who are not bothered by ETS, which presents a particular communications challenge as these may be the people who need most to receive messages about ETS.

The majority feel that too little information is available on the health impacts of ETS on children. This provides added weight to the finding that

respondents were not very knowledgeable about two specific health effects of ETS: ear infections in children and SIDS.

Beliefs about the Health Impacts of ETS and Smoking

There was very strong agreement that cigarette smoking causes disease among smokers, but somewhat less agreement (although still the predominant view) that ETS causes disease and death among non-smokers. On the other hand, respondents were fairly equally divided in terms of whether they believe that a person has to be heavily exposed to ETS for a number of years before it would have negative effects.

Stronger agreement with the belief statements about negative health effects of ETS were found among respondents in higher income brackets, those with higher levels of education and those with higher scores on the knowledge index. Those who expressed lower levels of agreement tended to be francophones, smokers, individuals living in smoking households and those who are not bothered by ETS. Whether this is truly disbelief about negative health effects or ETS, denial of scientific findings, or a basic lack of awareness, however, is not clear from the present study.

Beliefs which are more in line with accepted ETS research findings were more likely to be held by individuals whose close social circle contained none or few regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Ironically, this group was also more likely to feel that too little information was available about ETS.

Attitudes Toward ETS

Relative to a number of health issues including prevention of AIDS, improving nutrition and reducing tobacco use among youth, ETS was given a lower priority, along with improving nutrition and reducing tobacco use overall. Replicating the same patterns as earlier, smokers, people living in smoking households and those who are not bothered by ETS tended to give lower ratings of importance to these tobacco-related issues. These issues were viewed as increasingly more important with increasing age and income and by allophones.

In general, individuals who feel that the three tobacco-related issues are important also tended to agree with the various belief statements concerning negative health effects of ETS and to disagree that smoking is socially acceptable.

Attitudes Toward Smoking

Only half the sample disagreed that smoking is socially acceptable. At the same time, there was strong agreement that people should have a right to be free

from breathing other people's second-hand smoke. Individuals in higher income brackets and with higher levels of education were more likely to feel smoking is not socially acceptable and that people should be able to breathe ETS-free air.

Attitudes which are negatively disposed toward ETS and smoking were more likely to be held by people whose close social circle contained no or few regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Once again, smokers, individuals living in smoking households and people who are not bothered by ETS were more likely to agree that smoking is socially acceptable and less likely to agree that people should have a right to smoke-free air.

Attitudes Toward Restrictions

There was fairly strong agreement that smoking in all indoor public places should be banned and that it is appropriate for the government to be involved in raising public awareness about ETS. Agreement was lower among smokers, individuals from smoking households and those who are not bothered by ETS. Also in line with previous findings, stronger agreement was found among older respondents, those in higher income brackets and with higher education levels, and anglophones and allophones.

Legal Restrictions on Smoking

Awareness of legal restrictions on smoking is fairly high, although the perceived level of restrictions varies considerably across the country. Most were aware of restrictions in children's schools, restaurants and the workplace, while very few were aware of restrictions in bars and pubs. Awareness of legal restrictions on smoking varied significantly by community population, increasing with community size. The perceived level of restrictions was lowest in Quebec and among francophones.

Support for legal restrictions on smoking appears to be fairly strong. Most view the current level of legal restrictions as too lenient or appropriate, while just under a quarter consider the current level to be too strict. Opinions on legal restrictions varied significantly by a number of background variables, including income, education, region, knowledge levels, smoking behaviour and whether bothered by ETS. Respondents from Quebec were more likely to view current laws as appropriate, even though they were aware of fewer legal restrictions than respondents from other provinces.

Finally, respondents assigned greater responsibility for restrictions on smoking in public places to owners/managers and to individuals than to government. Respondents with higher family incomes, levels of education and knowledge about ETS

were most likely to assign a high level of responsibility to government, while smokers accorded a lower level of responsibility to all parties.

Restrictions in the Home

Just over one in six households are subjected to smoke on an ongoing basis, without the implementation of restrictions. That is, 18 per cent of all households include one or more smokers and no restrictions are currently in place to reduce exposure to ETS. Likelihood of the existence of restrictions increases according to the characteristics of the respondent. As with the smoker profile, those who restrict are more likely to be older, have higher levels of education and income, be a non-francophone, live in provinces other than Quebec, be a non-smoker, or be bothered by ETS. Although extended family are more likely to restrict than parents, this may simply be a reflection of the shorter period of time spent with the child. Mothers have thought more about restrictions, and generally express greater concern about exposure to ETS in other areas of the survey. On the other hand, they are less likely to impose restrictions than fathers.

People who restrict are likely to believe that smoking causes disease and death among non-smokers, people have the right to breathe smoke-free air, smoking should be banned from all indoor public places and exposure has a stronger effect on children than it does on adults. These concerned individuals who restrict also believe that the current laws are too lenient and health groups and the media are believable sources of information on the topic.

Impact on the health of a child is the strongest contributing factor in decisions to restrict smoking inside the home. The image created by someone who smokes in front of a child is also a key factor. While other motives are also important, these two stand out as a strong and common theme. Also of interest is the pattern where the younger the child, the more likely parents and extended family are to cite the child as the reason for restricting. In illustration of this, younger parents have throughout the findings shown themselves to be less concerned about exposure to ETS, however, they are more likely than other parents to cite the health of a child as a reason to restrict.

This same theme is also apparent in the consistency with which restrictions are placed on smoking inside the home in general, as compared to in the presence of children. A higher proportion of both parents and extended family restrict in front of children, even though they do not restrict in general. This is especially true in households with younger children where respondents are disproportionately concerned about restricting smoking all of the time regardless of who is smoking (e.g., a friend, acquaintance or household member) and are even more likely to impose restrictions in the presence of their children than at any other time.

Types of Restrictions and Effectiveness of Enforcement Methods

Four types of restrictions inside the home were explored in the study. Non-smokers were more likely than smokers to send people outdoors and remove ashtrays in an effort to reduce exposure to ETS. On the other hand, smokers were more likely than non-smokers to take the softer or easier way out. They tended to open windows and relegate smoking to one room or portion of the house. This would seem to point to the possibility that smokers still do not truly believe that exposure to ETS among (especially children) is bad for non-smokers' health. Alternatively, they may simply believe that opening a window or going to another room is an adequate defense against these effects.

Smokers reported that authority sells enforcement of restriction rules in public places. Signs indicating "no smoking" restrictions are very effective, according to most respondents. A request from a staff member or manager is rated as effective by the second largest proportion of smokers. Requests from individuals without authority, such as friends or strangers, hold far less weight.

Restrictions Outside the Home

As with restrictions inside the home, a wide range of factors appear to influence whether a parent has thought about restrictions outside the home. Whether or not a parent has thought about this issue increases with income and education. Whether a parent has considered this type of restriction also varies by region, language, gender and smoking behaviour. As with other issues, the prevalence of parents who have thought about restrictions outside the home is also lowest in Quebec.

Restrictions outside the home are somewhat more prevalent than in the home. While not quite three quarters of parents had *thought* about restrictions outside the home, almost all who have thought about it, do. It may be easier to restrict outside the home by simply taking measures to avoid it as opposed to restricting in the home, which requires enforcement and actually asking people not to smoke.

As with restrictions inside the home, parents are most likely to avoid ETS or to avoid smoking outside the home when their children are present. Many of those who do not restrict outside the home cited a spouse who smokes or not being bothered by ETS as reasons for not restricting.

Finally, avoidance of ETS outside the home, both in general and when children are present, is correlated with parental attitudes and beliefs. Parents who view smoking as unacceptable, who have positive attitudes towards restrictions on ETS, and who believe ETS to have harmful health impacts, are far more likely to take measures to avoid ETS outside the home.

Parental Attitudes and Behaviour About Caregivers

Very few households employ a caregiver who smokes (seven per cent) and half of these report that caregivers do not smoke in front of the child. Non-smokers were more likely to view caregivers smoking in front of the child as a serious problem than were smokers. As such, those viewing this issue as less important tended to fit the smokers' demographic profile (e.g., younger, francophone, etc.). Although fewer than one in four households in any one demographic group allow a caregiver to smoke in the presence of their child, those who smoke, have lower levels of education and income, live in Quebec and so on, were as much as three times more likely to have a caregiver that smokes in front of the child than other groups.

Behaviour of Children

While ETS has been discussed between parent and child in two thirds of the households surveyed, these discussions are typically instigated by the child rather than the parent. This suggests that children may exert some influence on their parents on the topic of restrictions.

However, there is also a correlation between parental attitudes and whether the issue of ETS has been discussed in a household, suggesting that the influence flows both ways. In households where there has been parent/child discussion on the subject of ETS, the parent is more likely to view smoking negatively, and to believe that ETS causes death and disease among non-smokers.

From what parents said in the survey, it appears that children are more likely to have mentioned being bothered by ETS than to have discussed its health effects. Over two thirds of the children of parents surveyed have said something about being bothered by ETS, while fewer than half the children of parents surveyed have said something about the health effects of ETS.

A significant number of children appear to take action and ask family members not to smoke. Two thirds of children who live in a household where one or more people smoke have asked a household member not to smoke in their presence. A much smaller proportion (half) have asked a relative not to smoke, suggesting that it is much easier for a child to ask those close to him/her not to smoke. Once again, the actions of the children appears to be linked to the attitudes and knowledge of parents, as children of parents bothered by ETS are most likely to have said something about ETS or to have asked someone not to smoke.

Focus Groups with Children

The focus groups with children revealed a number of interesting similarities and differences between the children of smokers and non-smokers and also between younger and older children. Among the key similarities were high levels of

knowledge and awareness of ETS. Many children, however, especially younger ones, had difficulty differentiating ETS from smoking when discussing long-term effects and information sources. Children also shared the view that ETS was dangerous to non-smokers, but their estimates of the amount of exposure to ETS needed to cause a long-term effect varied significantly. Children of smokers were more likely to feel that greater exposure was required. Children also had a common disdain for smoking based on high levels of knowledge about the negative health effects and highly addictive nature of cigarettes. Some of the older children, however, showed signs that peer pressure to try smoking was beginning to manifest itself. Indeed, a number of children indicated that they had trying smoking already.

Almost all children indicated that they were bothered (some a great deal) by ETS. Overall, children of smokers reported much higher exposure levels, with their home being the prime source of exposure. According to most children, their parents placed at least some restrictions on smoking in the home, but non-smoking parents were much more likely to ban smoking. Given their level of exposure, ETS was much less a concern for children of non-smokers.

Children also resorted to common avoidance techniques, with leaving the room being the most popular method used to get away from ETS. Avoidance techniques were seldom used by children of non-smokers, whereas they were a way of life for many children of smokers. Children were unanimous in their view that it was acceptable for children like them to ask someone to put out their cigarette if the smoke was bothering them. In discussing their own experiences, however, children expressed trepidation about asking someone that they did not know very well (i.e., not a member of their immediate family) to put out their cigarette. For children of smokers especially, this hesitance was reinforced by some past negative experiences.

Television was the main top of mind source of information on ETS. Specifically, children in all groups said they had seen the Health Canada advertisements on ETS and smoking. Their comments on these advertisements revealed a very good grasp of the advertisements' core messages. Parents and school were also noted as main sources of information on ETS. All of these sources, but especially television, were suggested as good ways of providing information about ETS to children.

Doctors were deemed to be the most credible source of information across all groups. Younger children, however, also indicated that role models, such as teachers, parents and "stars" had a high level of believability. Older children, in contrast, tended to be a little cynical about these sources. Many older children also indicate that advertising campaigns about ETS should eschew melodrama or histrionics in favour of providing factual information. Overall, children expressed fairly high levels of interest in knowing more about ETS. Older children, though, were more likely to indicated that the topic, especially if discussed in school, was not interesting, although many expressed interest in knowing about "new discoveries" on the topic of ETS.

Segmentation Analysis

A segmentation analysis using two dozen attitudinal variables indicated that the population can be categorized into seven groups according to orientations toward smoking and ETS as well as openness to information and influence. The segments are presented below.

Types	Population Share	Characteristics
Hard Core Unresponsive	7%	Closed minded pro-smokers; a lost cause for communications
Sceptics	16%	Moderate pro-smokers who tend to doubt sources of information; a difficult target
Saturated	11%	Middle of the road attitudinally, not receptive to more information; a fertile but informationally distant target
Unsold Indifferent	16%	Average attitudinally and behaviorally, moderately open to information and influence; a prime target
Open Uncommitted	14%	Average attitudinally and behaviorally, very open to information and influence; a prime target
Moderate Concerned	17%	Most knowledgeable and sold attitudinally and behaviorally, somewhat open to additional information; no need for more effort
True Believer	19%	Totally persuaded about ETS effects and have adopted preventive behaviour; no need for more effort

Causal Analysis of ETS Restrictive and Avoidant Behaviour

A series of stepwise multiple regressions was conducted to determine the impacts of the various indicators examined in the research on explaining ETS restrictive and avoidant behaviours. Essentially, much of the conceptual model was confirmed through this exercise. Beliefs were found to be influenced by smoking behaviour and exposure; attitudes were found to be related to these beliefs; behavioral intentions were a function of attitudes; and ETS restrictive and avoidant behaviours could be predicted by behavioral intentions.

Socio-demographic indicators, on the other hand, generally did not contribute significantly to the explanation of behaviour. As well, knowledge and information demonstrated patterns in the expected directions, but were not substantial contributors.

Interestingly, the explanation of ETS restrictive and avoidant behaviour was somewhat different for francophone respondents. While being least likely to intend to restrict smoking in the home or to actually follow through on ETS restrictive or avoidant behaviours, francophones had high levels of knowledge about the negative health impacts of ETS and they believe tobacco-related issues are important for society to address. They also feel they have a healthy lifestyle and hold anti-smoking and anti-ETS attitudes. However, francophone respondents were also less likely than other groups to believe that ETS can cause disease and death among non-smokers and more likely to feel that smokers should be left alone.

The relationship observed among francophones leads to the following conclusions: francophones are more knowledgeable about ETS and hold more ETS-avoidant attitudes, but the link between these prerequisites and ETS-avoidant behaviour (and intentions to behave) is caused by a disbelief about the negative effects of ETS and a more libertarian attitude toward smokers. These effects are strong enough to reverse the otherwise positive preconditions of francophones into imprudent behaviour.

Elements Toward a Communications Strategy

Based on the findings from the survey and the focus groups, the following should form part of an ETS communications strategy focusing on suggested messages, carriers of messages and targets.

Messages

The following messages have the strongest potential for exerting an impact, either because of current levels of attitudes or because of the causal linkages discovered between the attitudes and behaviour.

- "People should have a right to be free from breathing other people's second-hand smoke" (particularly with the target groups from the segmentation analysis).
- "Smoking is not socially acceptable" (associated with key indicators in the modelling exercise).
- "ETS has a negative effect on people of all ages, especially children" (but children of all ages, not just infants and small children).
- "ETS can affect the health of a child more than that of an adult" and "ETS causes death among non-smokers" (these beliefs are eventually associated with ETS restrictive and avoidant behaviours).

- "Tobacco-related issues are important for society to deal with" (associated with ETS restrictive and avoidant behaviour).
- Facts about the relation between ETS and SIDS and ear infections (few people are aware of these associations).
- Facts about exposure levels (neither adults nor children are sure about the level of exposure to ETS needed for it to have negative effects).
- "It is not enough to just open a window" (as the restrictions imposed by smokers were usually of the less effective sort).
- "It is "ok" to ask someone not to smoke around you, especially for children" (children find it difficult or unacceptable to ask extended family members and adults find it more difficult to impose restrictions oneself in the home, as opposed to simply avoiding ETS outside the home).
- In French communications material, the department needs to use terminology consistently and make connection between terminology and the subject (as francophone children were not as familiar with ETS terms as were anglophone children).

Carriers of Messages

The following carriers of messages are expected to be effective, either because they are perceived as credible sources of information or because they reach a large number of people.

- Partnerships with the medical professions and health groups are an effective way of communicating about ETS (viewed as the most credible sources of information).
- Use of a wide spectrum of message carriers is worthwhile (the higher the number of information sources cited by respondents, the more likely they were to hold appropriate beliefs about the negative effects of ETS, as well as to restrict their own smoking).
- Strategies that make use of partners and reinforce individual actions to restrict will have even greater success than government-imposed restrictions.
- Television works well with children but school is a good complement (children felt TV was accessible and provided messages which were easy to grasp. The positive aspect about school was the opportunity to ask questions).

- For younger children, role models, such as teachers, parents and "stars" have a high level of believability; older children, in contrast, tend to be a little cynical about these sources (older children indicate a preference for an advertising campaign that would eschew melodrama or histrionics in favour of providing them with factual information).

Targets

The research revealed key groups which are less aware of the negative health effects of ETS and less likely to hold beliefs which are consistent with research findings on health and ETS. These groups should comprise the primary targets of a communications strategy.

- The main targets from the segmentation analysis are the Open Uncommitted and the Unsold Indifferent. Secondary targets are the Sceptics and the Saturated.
- These target groups comprise middle class citizens. Lower socio-economic status citizens tend to hold pro-smokers' attitudes while more comfortable households have already accepted the idea that ETS is bad and that restrictive actions are required.
- The modelling exercise underlined the findings from other analyses that key targets should be smokers, people who live with smokers, those who are not bothered by ETS and those who have not had someone close become ill or die as a result of a smoking-related illness.
- Francophones exhibited a very particular causal dynamic. This observation emphasizes the need for specific communication to francophones, with a focus on non-smokers' rights and on the social desirability of a smoke-free environment.
- Those who have thought about restrictions but have not implemented them, and those with older children need to be targeted.
- Children and parents both play a role in influencing each other and ETS has been discussed between the majority of parents and children. The fact that children tend to instigate these discussions indicates the importance of communication strategies which reach children, as children then serve as message carriers to parents.

CHAPTER

1 INTRODUCTION

1.1 Background

There is accumulating scientific evidence confirming the deleterious effects of second-hand smoke, or environmental tobacco smoke (ETS), on people's health. Various research findings make a compelling case about the harmful effects of people's exposure to tobacco smoke in the environment, even when they themselves are not smoking. For example:

- the smoke from the burning end of a cigarette contains a higher concentration of hazardous substances than does the smoke inhaled directly by the smoker (Health Canada, 1993);
- a non-smoker in a smoke-filled environment can in one hour inhale as much dimethylnitrosamine (a carcinogenic agent) as a person smoking 35 filtered or 15 unfiltered cigarettes (Health Canada, not dated); and
- it is estimated that 330 Canadians die from lung cancer alone each year as a result of involuntary exposure to tobacco smoke (Wigle *et al.*, 1987).

As well, in the United States, it has been estimated that mothers who smoke 10 or more cigarettes per day can cause as many as 26,000 new cases of asthma among their children each year (Centres for Disease Control and Prevention, not dated). A recent article in *The Journal of the National Cancer Institute* (U.S.) documents the finding that children under the age of five whose mothers smoke only 10 cigarettes a day have positive blood tests for nicotine and cancer-causing compounds. Children of smokers have also been found to have increased respiratory symptoms such as coughs and wheezing, compared to children of non-smokers, and ETS exposure has also been found to double the risk of bronchitis, pneumonia and other respiratory tract illnesses in infants (National Cancer Institute and the Smoking Policy Institute, not dated). As well, second-hand smoke has recently been found to be related to sudden infant death syndrome (SIDS) (Klonoff-Cohen *et al.*, 1995).

In response to such scientific information, governments have begun to take steps to increase people's awareness of these issues, to protect the rights of non-smokers and to reduce people's exposure to ETS and the associated health risks. For instance, in 1992 the US Environmental Protection Agency declared ETS as a "Class A" or human carcinogen (i.e., cancer-causing agent).

In Canada, the *National Strategy to Reduce Tobacco Use (NSTRTU)* was initiated in 1987 with three primary goals: (1) to help non-smokers stay smoke-free (prevention); (2) to encourage and help people who want to quit smoking to do so (cessation); and (3) to protect the rights and health of non-smokers (protection). The National Strategy aims to foster a collaborative, comprehensive and coordinated approach to reducing tobacco use involving all levels of government as well as non-government agencies. A number of measures are being implemented to pursue the NSTRTU goals, including policy and legislation (e.g., the 1989 *Non-Smokers' Health Act* and the 1989 *Tobacco Products Control Act*), education, public awareness, research and taxation.

With respect to the goal of protection, it was estimated in a 1992 report, *A Guide for Tracking Progress on the Objectives of the National Strategy to Reduce Tobacco Use in Canada*, that the ETS exposure rate of Canadian adults was 63 per cent in shopping malls, 51 per cent in the home, and 45 per cent in the workplace. The NSTRTU has set an objective of reducing the proportion of Canadians exposed to ETS in the home, the workplace and other public places by one-third for 1996, and by a further 16 per cent for the year 2000.

1.2 Study Objectives and Issues

The present research involved a survey of adults and discussion groups with children to provide information Health Canada can use to develop policies and programs which protect non-smokers and reduce exposure to ETS, particularly in children.

The NSTRTU has established specific objectives with respect to levels of awareness about the effects of ETS. For example, it is intended that 80 per cent of all adults will know by 1996 that second-hand smoke causes death and disease in non-smokers. According to statistics presented in the Statement of Work for this study (prepared by the Health Promotion Branch), it appears there is a considerable distance to travel before this goal will be achieved: in 1991, 59 per cent of Ontario adults identified lung cancer and 50 per cent identified chest problems in children as health effects of ETS; and, in 1992, only eight per cent of Canadian adults identified disease in non-smokers as a top-of-mind health hazard of ETS. More encouraging statistics come from a 1990 study in Alberta, however, which found that 77 per cent of adults agreed that "the health of non-smokers can be significantly damaged by other people's cigarette smoke" (Krahn and van Roosmalen, 1990). This figure is very close to the target of 80 per cent acknowledging that second-hand smoke can cause death and disease in non-smokers. Finally, 90% of respondents to a 1994 national survey believed that smoking is harmful to both the smoker and the non-smoker (Health Canada, 1995).

On the other hand, respondents to a 1988 survey were no more knowledgeable about the health effects of ETS than were respondents to similar questions in 1983, despite the growth of information on this topic (as reported in Pederson, Bull, Ashley and Kozma, 1992). Similarly, a 1990 poll reported that only 1 in 10 Canadians asked to name a health hazard of tobacco mentioned the negative effects of second-hand smoke (Gray, 1992).

It is apparent that there are tremendous data gaps with respect to levels of general knowledge and awareness of the ill effects of ETS, especially for specific target groups. The present study was required to fill the need for a better understanding of the current knowledge levels, attitudes and practices of parents and extended family members, as well as children, with respect to second-hand smoke.

The key objectives of this study were as follow:

(1) To provide a context for the study and to guide the design of the research instruments, conduct a review of the literature on environmental tobacco smoke, going back over the last 10 years, and provide highlights of the documented dangers of ETS as well as any studies that have examined the awareness, knowledge and practices concerning the health effects of ETS;

(2) Gather and analyze information on the knowledge, attitudes and practices of parents and extended family members of children who are 12 years old or younger, as well as the knowledge, attitudes and practices of children aged 8 to 12 years old;

(3) Provide insight into the most effective means of disseminating information about the health risks of ETS; and

(4) Furnish Health Canada and the Health Promotion Directorate with information which can assist in the development of effective smoking policies and programs to address identified needs, which may include increasing awareness and debunking myths — measures which should ultimately help to protect the rights of non-smokers and minimize Canadians' exposure to environmental tobacco smoke.

The following presents a list of some of the key issues which were explored in the course of this research. Appendix A presents a detailed issue matrix used to design the survey instrument.

- ***Knowledge.*** Are parents aware of the negative effects of second-hand smoke? Are extended family members? Are children? How accurate are the various groups with respect to knowledge about the severity of these effects? Are people aware of non-smoking policies and legislation? From where have people obtained their information about second-hand smoke?

- ***Attitudes and Beliefs.*** Do parents believe that second-hand smoke is dangerous? Do extended family members? Do children? Do people believe that they are susceptible to the damaging effects of second-hand smoke? Do people feel that non-smoking policies and legislation should be stricter? Do people feel that second-hand smoke is an important issue?

- ***Practices.*** What kinds of policies have parents put in place with respect to smoking in their homes (e.g., no smoking at any time, no smoking when children are present, no restrictions on smoking)? Do these policies differ by whether one or both parents smoke? Are exceptions made for particular visitors (e.g., grandparents may smoke, but friends may not)? Do parents choose non-smoking sections when they are out

with their family? When they are out without their children? Do parents question caregivers about smoking behaviour? Are parents influenced by the smoking status of caregivers? What do children do when they are in the presence of an adult who is smoking (e.g., do they leave the room? do they ask that the cigarette be extinguished?)?

- *Perceptions.* What sources of information about the negative effects of second-hand smoke are considered to be credible (e.g., medical profession, government, health groups)?

In the analysis of the results of the survey of parents and extended family members and the focus groups with children, attention was paid not only to assessing each of these questions for the three groups of interest, but also to interrelations among the key variables. For example, how strong are the links between knowledge and attitudes? Are attitudes or knowledge more strongly associated with specific practices? How are children influenced? Where do children learn about the effects of second-hand smoke? Are extended family members an important influence? What plays a more important role in the formation of children's attitudes about ETS: what they hear at school or what they see at home? Finally, the findings contribute to an assessment of the best means by which Health Canada can exert an influence on children, as well as on adults who smoke around children.

1.3 Methodology

Two central lines of evidence in this research are telephone surveys: one with parents of children under 13 years of age; and one with extended family members of children the same age. The two surveys were conducted simultaneously. The third line of evidence was a series of 20 focus groups with children ages 8 through 12. A brief description of the methodology is outlined in the central body of the report. A more complete report of methods used to collect the data can be found in Appendix C.

(a) Survey of Parents and Extended Family

Eligible respondents in the sample were parents or extended family members of children 12 years old or younger. A total of 2,300 parents and 700 extended family members were interviewed, for an overall total of 3,000 respondants. The survey samples reflect normal distributions across the country.

The sample of parents was selected at random using a computer listing of telephone numbers. Parents were asked to provide the name of an extended family member fitting the criteria for the survey (i.e., regular and frequent contact with their child). One in three respondents were typically able to provide one. This resulted in interviews with two thirds of the extended family member sample (n=460). The remaining one third of extended family members (n=240) were selected randomly.

The survey instrument was designed on the basis of study issues distilled largely from a review of the literature, featured in Chapter Two. Instruments for both survey groups were very similar. Appendix B presents the survey instrument as it was implemented or both groups. The questionnaire was tested for clarity, length and flow prior to the start of the survey.

The survey spanned almost four weeks between January 8 and February 2, 1995. The interview required 22 minutes on average to complete for parents and 18 minutes for extended family. Up to seven call-backs (or eight total calls) were made to individuals in the sample for which initial attempts at contact were unsuccessful. Daily records were kept of all calls made, whether successful (i.e., interviews completed or appointments made) or not.

A total of 33,215 sample entries were brought to a final conclusion in the survey of which 82 per cent constituted sample attrition and 18 per cent fell into the

functional sample[1]. The incidence of parents in the general population of households contacted was 26 per cent. The remaining functional sample is comprised of completions, refusals and those for whom the field team made eight attempts to contact someone in the household without success. The response rate for the survey (considering all categories within the functional sample) is 50 per cent, while refusals make up 47 per cent and retired sample (i.e., those not reached after eight attempts and, therefore, dropped from the sample) accounts for 3 per cent.

Based on the screening required to reach only target members of the population (i.e., parents and extended family of children under 13), comparison of the sample characteristics (e.g., age, education, income, etc.) to the general population is not possible, since population figures based on only parents and extended family are not readily accessible. Assuming that households with parents or extended family members mirror the normal distribution of households in Canada, there is no reason to believe that the survey has over- or under-represented any given region or language. There, no weighting scheme was applied to the data set.

In many cases, survey items were categorical in nature (e.g., yes/no). Percentages of respondents who selected particular categories are reported in these cases. A large number of the survey items are seven-point scales. Often the average response between one and seven is the best way of representing the results for this type of survey question. Where results have been clearly one-sided, that is differences between groups only exist at one end of the scale, percentages are reported to show the differences in knowledge, attitudes or behaviour. Where results are not as clear cut, because ratings are different at various points on the scale for different groups, means have been used as a more efficient way of reporting the patterns. In these cases, mean differences of as low as 0.3 can be significant, therefore mean differences

1. The attrition rate includes invalid numbers which encompass those belonging to businesses and numbers not in service, ineligible respondents (only parents who live with children under the age of 13 years old or extended family members who regularly visit children of the same age were eligible), those falling into established quotas which had already been filled (provincial or language strata), and those deemed unable to complete the survey in either official language.

as large as 1.0 represent extremely divergent knowledge, views or behaviour between two or several groups.

Only findings which are significant at a probability level of .95 or greater are reported in the text. On the other hand, testing of results was exhaustive and produced a substantial number of significant relationships. For the purpose of reporting results in as consise a way as possible, only the most statistically and substantively striking results are described in the text. A full set of tabular results has been bound under separate cover as a companion technical reference document

"Extended family" is a term used in the survey to mean any adult who is close to a child under 13. In most cases this is in fact a relative, however, in some cases it may be a close friend of the family. It does not include adults who are involved with children in groups (e.g., music teacher, sports coach or social group leader), nor does it include adults who see the child because they are looking after the child in the parents' absence. Throughout the reporting, the terms extended family and relatives are used interchangeably.

When examining differences in the results based on smoking status of the respondent, a distinction was made, among non-smokers, between individuals who have smoked in the past and those who have never smoked. In areas of the text where differences are found, the group who have never smoked are referred to as non smokers, whereas the group who have smoked in the past are referred to as former smokers. In other areas of the text, where there are no differences between these two types of individuals who do not smoke, these are grouped together and simply termed non smokers.

(b) Focus Groups With Children

In addition to the two surveys, the study consulted with children between the ages of 8 and 12 in 20 focus groups conducted across the country. Ten

groups were held with 8 to 10 year olds and ten were held with 11 and 12 year olds. Groups were also evenly split between children of smoking parents and those of non-smoking parents. Exhibit 1.1 provides details on the composition and location of groups.

The focus group moderators used a guide which designed based on the study issues. A draft guide was pretested in the two Ottawa focus groups. Minor modifications were made based on the results of these discussions. The Ottawa focus groups also revealed that the same questions could be asked in all of the focus groups, regardless of the age of participants or of whether or not their parents were smoker. Appendix C presents the focus group guide used.

A small proportion of participants were children of parents who responded to the survey. Most were recruited through random calling, however, since criteria for each group were quite specific (i.e., based on city, age, and smoking status of parent or guardian). Many survey respondents did not live in the areas where groups were being held, or did not have children in the eligible age groups, for example. Recruitment was a large exercise which required the contact of over 30,000 households in seven cities.

Each group lasted approximately one hour and was attended by an average of seven children. Parents were sent information packages including information about the study, the agenda for the groups, as well as a consent form allowing children to take part. Children were given a $20 gift certificate from the bookstore SmithBooks as an incentive for participation.

EXHIBIT 1.1

Focus Group Composition

LOCATION NUMBER AND DATE OF GROUPS	SMOKING PARENT/GUARDIAN	NON-SMOKING PARENT/GUARDIAN
Ottawa (2) Saturday, February 11	8 to 10 yrs. (French)	11 to 12 yrs.
Toronto (2) Thursday, February 16	8 to 10 yrs. (6:00 pm) 11 & 12 yrs. (7:30 pm)	
Montreal (4) Saturday, February 18	8 to 10 yrs. (French) 11 & 12 yrs. (French)	8 to 10 yrs. (French) 11 & 12 yrs. (French)
Halifax (4) Saturday, February 18	8 to 10 yrs. 11 & 12 yrs.	8 to 10 yrs. 11 & 12 yrs.
Winnipeg (4) Saturday, February 18	8 to 10 yrs. 11 & 12 yrs.	8 to 10 yrs. (French) 11 & 12 yrs.
Calgary (2) Thursday, February 16		8 to 10 yrs (6:00 pm) 11 & 12 yrs.(7:30 pm)
Vancouver (2) Saturday, February 18	8 to 10 yrs.	11 & 12 yrs.
TOTAL	10 groups	10 groups

As a survey exercise, all information is based on the reports of respondents. While it is obvious that attitudes are a reflection of the perceptions of respondents (as opposed to known facts), it may not be as obvious that reports of behaviour are also a function of perceptions on the part of the respondent. Social desirability will undoubtedly have an influence and, although impossible to determine the extent of the impact, should be considered in the interpretation of the survey findings.

1.4 Organization of the Report

This report on the assessment of knowledge, attitudes and practices concerning environmental tobacco smoke consists of nine additional chapters. Chapter Two presents the results of the literature review. Chapter Three profiles the three

types of respondents: smokers; non-smokers; and former smokers. Chapter Four presents the findings related to knowledge, attitudes and beliefs while Chapter Five and Chapter Six concern behaviour. The focus group results are presented in Chapter Seven. Chapter Eight and Chapter Nine present the results of additional statistical analysis: a segmentation analysis; and causal modelling. Finally, a summary of the findings and recommended elements for a communications strategy are presented in Chapter Ten.

CHAPTER

2 LITERATURE REVIEW

Canadian and international literature in three related areas was reviewed: 1) health effects of environmental tobacco smoke (ETS) (also known as second-hand smoke, passive or involuntary smoking); 2) legislation and policies aimed at protecting people from ETS, and their effectiveness; and 3) public knowledge, attitudes and behaviour/practices regarding ETS.

2.1 The Health Effects of ETS

In the last decade, the evidence regarding the negative health effects of ETS, especially in children, has grown. Today, some of the major health consequences of exposure to ETS such as increased risks of lung cancer in adults and lower respiratory track infections in children, are well documented and have been accepted by the scientific community and governments. Yet, a close look at the literature reveals that more research is required in order to substantiate whether there are additional negative health effects associated with ETS, including heart disease and other cancers in adults, and the effects of ETS on the unborn. Also, researchers have yet to determine, except in fairly crude terms, unacceptable/harmful levels of exposure to ETS. Scientific rigour, coupled with the formidable power of the tobacco lobby

(Chapman *et al.*, 1990 and Gray, 1992), necessitates the marshalling of a great deal of evidence before probability is accepted as fact.

There are over 4,000 substances in tobacco smoke, 40 of which are known carcinogens (Working Group of U.S. Attorneys General, 1993). There are three types of second-hand smoke:

- Mainstream Smoke: is exhaled by the smoker. Exhaled smoke will have half the level of carbon monoxide and up to only 20 per cent of water soluble compounds and most particulate matter.

- Diffusional Smoke: passes through the paper of a lit cigarette.

- Sidestream Smoke: is produced from the burning tip of a cigarette. It contains a high concentration of many toxic constituents and is the most dangerous type of second-hand smoke. Most exposure to ETS comes from sidestream smoke.

During the last 10 years, three American reports have been considered milestones in shaping the way ETS has been understood by scientists, health care professionals, advocacy groups and legislators. In 1986, the American National Research Council and the U.S. Surgeon General concluded that ETS could cause lung cancer in adult non-smokers and that children of parents who smoke had an increased frequency of respiratory tract infections. The intervening years witnessed the publication of many other studies on ETS. In December 1992, the U.S. Environmental Protection Agency (EPA) published a major assessment of respiratory health risks of passive smoking (*Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*) based on a comprehensive review of all available data. This report built upon the Surgeon General and National Research Council reports by examining the hundreds of ETS related studies conducted since 1986. The EPA concluded that the

widespread exposure to environmental tobacco smoke "presents a serious and substantial public health risk" (U.S. EPA, 1992, p.1-1).

Below, we highlight the health effects of ETS on both adults and children.

(a) Adults

The EPA report described ETS as a "human lung carcinogen" and classified it as a Group A carcinogen under the EPA's carcinogen assessment guidelines (EPA, 1992, p.1-4). The EPA also concluded that "the widespread exposure to environmental tobacco smoke in the United States presents a serious and substantial public health impact" (EPA, 1992, p.1-4).

The authors of the EPA report examined the findings of "all available data", including over 30 epidemiological studies on lung cancer and passive smoking. Their conclusions were based on the "total weight of evidence" as opposed to relying on any one study or type of study. One of the studies considered by the EPA assessed the impact of ETS on non-smoking women whose husbands smoked (Fontham *et al.*, 1993). It concluded that the risk of lung cancer was elevated by approximately 30 per cent for these women and was up to 60 per cent higher when workplace and other exposures to ETS were taken into account. Similar results were obtained by Stockwell *et al.* in their 1992 study of non-smoking women exposed to ETS. Together with corroborating the association of ETS exposure with significantly increased risk of lung cancer in non-smokers, this study clearly illustrated the extent to which such results are based on intense exposure to ETS. The women in the study for whom the risk of lung cancer doubled had at least 40 "smoke-years" of exposure in adulthood or at least 22 "smoke-years" of exposure in childhood and adolescence). The calculation of smoke years was based on the total years of exposure from *each* smoker in the home (e.g., if a person lived in a household with two smokers for a period of 15 years, this would amount to 30 "smoke-years").

The salient critique of the type of research mentioned above is that factors other than exposure to ETS, such as poor health behaviours, may account for the increased incidence of cancer in the study population (Glantz *et al.*, 1991). A University of Hong Kong study of non-smoking women with smoking versus non-smoking husbands, for example, demonstrated that wives with never-smoked husbands had "healthier" lifestyles (e.g., better diets) than wives of smoking husbands. This result led the authors to conclude that some correlates of passive smoking can act as important confounders when evaluating health risks among families with smoking husbands (Koo *et al.*, 1988). Even when this criticism was taken into account, the EPA's consideration of the total weight of evidence left the agency with no doubt that there was a significant link between exposure to ETS and increased chances of developing lung cancer. The EPA remained unconvinced, however, with respect to two other possible negative health effects of ETS: heart disease; and other cancers.

The EPA report concluded that there were not enough studies on the association between exposure to second-hand smoke and heart disease in the scientific literature to conduct an assessment (EPA, 1992, p.1-1). This statement was made in spite of the fact that at least a dozen studies suggest a significant connection.

A review of available evidence published by the American Heart Association (AHA) in 1992 concluded that there was sufficient evidence to state that ETS increases the risk of heart disease by about 30 per cent among those exposed to it in the home, while risk from exposure in the workplace could be much higher depending on the setting (Taylor *et al.*, 1992). This study led the AHA to conclude that ETS is a major preventable cause of cardiovascular disease and death. Similar conclusions were reached by Glantz *et al.* (1991) who presented their findings in a background paper prepared for the U.S. EPA. Glantz's team examined 11 epidemiological studies conducted between 1984 and 1990 on the relation between exposure to environmental tobacco smoke and the risk of heart disease in a non-smoking spouse of a smoker. They concluded that the findings of these studies reflected an approximate increase of 30 per cent in risk of death from ischemic heart

disease or myocardial infarction among non-smokers living with smokers (Glantz *et al.*, p. 10).

The authors of the EPA report also found that there was not a sufficient body of research on the potential link between second-hand smoke and cancer at sites other than the lungs to warrant an assessment (EPA, 1992). An Australian study published in 1991 reached the same conclusion, stating that "there is no consistent evidence of associations [of passive smoking] with cancer at other sites" (Woodward & McMicheal, 1991). It is important to note, however, that these studies did not indicate that cancers other than lung cancer were not caused by ETS, only that the sum of research evidence was inconclusive.

One study which formed part of this evidence found a significant association between self-reported exposure to ETS within the previous 24 hours and nicotine levels in cervical lavages from 145 non-smoking women (Jones *et al.*, 1991) The study was inspired by another smaller study of the same subject (Hellberg *et al.*, 1988) which produced similar results. The Jones team stated that while the biological significance of cervical nicotine levels from exposure to ETS remains unknown, the results of their research "supports the idea that even low-level exposure to tobacco smoke in the environment may result in systemic effects, and suggests that passive smoking should be evaluated further as a risk factor for cervical cancer" (Jones *et al.*, 1991, p.379).

Exposure

Next to a home with a smoker, the workplace is likely to be where people are most exposed to ETS (Emons *et al.*, 1992). Some workplace environments, however, pose a greater threat to non-smokers than living in a home with a smoker. A University of California study (Siegel, 1993) compared the relative exposure of bar and restaurant employees to that of office workers and non-smokers exposed in the home. The study concluded that ETS is a "significant occupational health hazard for

food service workers". This was based on the findings that levels of ETS were approximately 1.6 to 2.0 times higher in restaurants than in offices and one and a half times higher than homes with at least one smoker. ETS levels measured in bars were much higher at between 3.9 and 6.1 times higher than in offices and 4.4 to 4.5 times higher than in homes with at least one smoker.

One report suggested that 63 per cent of the population was exposed to second-hand smoke for at least one hour per week and that 35 per cent was exposed for at least 10 hours per week (Sheppard, 1981); levels of exposure which are much lower than those recorded in most ETS studies. This begs the question: What physical harm comes from "average" levels of exposure to ETS? While the research shows that *heavy* exposure to ETS in the home and workplace significantly increases the risk of lung cancer and other negative health effects in non-smokers, additional research is required to determine the effect of more moderate exposure to ETS, as well as the development of more accurate biologic markers to quantify exposure-dose relationships in non-smokers (Byrd, 1992).

(b) Children

Children are at greater risk from ETS than adults. This is reflected in numerous studies, including the EPA report which concluded that exposure of children to ETS is linked to the following negative health effects (EPA 1992 p.1-1):

- ETS exposure increases the risk of lower respiratory tract infections such as bronchitis and pneumonia;
- ETS exposure increases the prevalence of fluid in the middle ear, a sign of chronic middle ear disease;
- ETS exposure in children irritates the upper respiratory tract and is associated with a small but significant reduction in lung function;

- ETS exposure increases the frequency of episodes and severity of symptoms in asthmatic children; and
- ETS exposure is a risk factor for new cases of asthma in children who have not previously displayed symptoms.

All of the above mentioned impacts were also associated with ETS in a recent study of Missouri children (Sharp *et al.*, 1993). A Health Canada study also concluded that there was a positive association between physician-diagnosed asthma and ETS. However, ETS was only one of the negative influences on indoor air quality which had a significant association with childhood asthma. In fact, living in a damp home (Odds Ratio (OR)= 1.5), the use of gas cooking (OR=2.0) and the use of a humidifier (OR=1.7), all had a higher odds-ratio than ETS which has an odds ratio of 1.4 which means that children in the survey who were exposed to ETS were 1.4 times as likely as children who were not exposed to be diagnosed with asthma (Dekker *et al.*, 1991).

Other potential health impacts of ETS on children are discussed in the literature, but a great deal more study is required before credible conclusions may be drawn. A University of Alberta Hospitals study, for example, concluded that passive exposure to tobacco smoke may adversely affect the growth and health of children with cystic fibrosis (Rubin, 1990). On the other hand, one researcher, who examined the evidence concerning ETS exposure and its effects on prenatal development and reproduction, concluded that the existing research was "inconsistent and inconclusive" (Hood, 1989, p.262).

Bergman and Wiesner (1976) reported a relationship between passive smoking among infants and sudden infant death syndrome (SIDS). The EPA's report reviewed data on the possible relationship of maternal smoking and SIDS. The report stated that while there is strong evidence that infants whose mothers smoke are at an increased risk of dying from SIDS, the state of the research did not allow a

differentiation to be made between the effects of in utero and postnatal exposure to ETS (EPA, 1992, p.1-6).

Exposure

Adults are most at risk from ETS when members of their household and co-workers smoke. Young children and infants are at risk from members of their household that smoke, but more specifically from care-givers that smoke. Two recent studies, one Australian and the other American, suggest that one of the places where children may be most at risk from ETS is daycares.

The Australian research revealed that 10 per cent of the care-givers included in their study smoked while caring for children. The authors of the report considered this a serious health threat and advised that a uniform and enforced no-smoking policy is likely to be the most successful way to eliminate the exposure of children to ETS in family daycares (Jorm *et al.*, 1993). The American study assessed the behaviour of care-givers in licensed daycares. Its authors cautioned that "despite the presence of strong smoking policies at the majority of licensed child daycare centres, more than 752,000 children in the United States are at risk for environmental tobacco smoke in these settings" (Nelson *et al.*, 1993).

What implications do these studies have for the Canadian context? In thinking about the Canadian situation, it is important to note that the American figure relates to *licensed* centres. One can safely assume that exposure to ETS is likely to be as high or higher in un-regulated settings. In Canada in 1988, 64 per cent of the 560,000 children aged five and under who received care from someone other than a parent or relative received this care from *unregulated* care givers (Statistics Canada, cat. No 89-523E). The importance of this issue was highlighted by of the National Cancer Institute who emphasized the fact that "smokers who care for children, whether in institutions or in private homes, may pose a real threat to the children" (Cullen, not dated).

Finally, an American study conducted in late 1993 sponsored by 16 state Attorneys General warned that fast food restaurants were another location which expose children and adolescents, both as customers and staff, to ETS (Working Group of U.S Attorneys General, 1993).

2.2 Legislation and Policies

Studies and publications produced on the topic of smoking legislation and policies explore both the existence or level of policies regulating smoking, and the impacts and effectiveness of various policies. A current study being undertaken by Health Canada will provide an update on the state of policy in Canada.

Smoking Legislation and Policies

The presence of laws restricting smoking passed by all levels of government have increased rapidly over the past decade in both Canada and the U.S.

A 1991 study by Health and Welfare Canada (Smoking By-laws in Canada) examined smoking legislation in Canada. The study included a survey of over 800 municipalities across the country. The number of municipalities with smoking by-laws more than doubled between 1988 and 1991, from 114 municipalities to 280 (out of 800). Most municipalities with a population over 10,000 had a by-law in place. While the number of municipalities with by-laws had increased substantially, the study revealed that the regulatory landscape relating to smoking remained a "patchwork" of legislation which varied significantly in terms of scope and depth. The survey obtained information on by-laws relating to a number of public facilities, including financial institutions and municipal offices, bars, elevators and stairways, hospitals, places of public assembly, reception areas, restaurants, retail stores, service counters, transportation and workplaces. In general, the study revealed that smoking legislation tends to be enacted at the municipal, rather than provincial, level. While

most provinces had not introduced wide-ranging legislation affecting smoking in public and private workplaces, most did allow municipalities to pass local by-laws addressing public health concerns. Quebec and Manitoba were the only two provinces with a provincial law at the time of the study.

At the federal level, Canadian smoking legislation includes the *Tobacco Products Control Act* (TPCA), the *Tobacco Sales to Young Persons Act* and the *Non-Smokers Health Act* (NSHA). The NSHA, which came into force on December 29, 1989, controls tobacco use in all areas under federal jurisdiction (i.e., civil servants across the country, employees of crown corporations, and employees of federally regulated industries). Under its provisions, smoking is banned or restricted to designated smoking rooms for the approximately 900,000 workers that fall under federal jurisdiction for health and safety matters. Under the NSHA, smoking is also banned on buses and airplanes and restricted in trains, train stations, and airports.

A 1990 study of workplace smoking policies by Health and Welfare Canada, indicated that six provincial governments (Ontario, Quebec, Newfoundland, New Brunswick, Prince Edward Island and Manitoba) as well as the Northwest Territories restrict smoking in government workplaces. In Alberta, smoking policies were optional within government workplaces. Two provinces, Ontario and Quebec, were found to have specific laws which restrict the use of tobacco in designated public and private sector workplaces.

In 1986, a series of questions was added to the Labour Force Survey smoking supplement to assess the prevalence of smoking at work (The Smoking Behaviour of Canadians, Health and Welfare Canada, 1986). A total of 53 per cent of respondents indicated that smoking was permitted in their immediate work area.

Studies of legislation have also been conducted in the United States. In a 1989 study (Institute for the Study of Smoking Behaviour and Policy, 1991), a survey was conducted of all cities with a population of 25,000 or greater (n=902). A total of

44 states and 500 cities (56 per cent) had adopted some type of smoking restriction, but the type of restrictions in place varied widely. While 42 per cent of cities limited smoking in government buildings, 27 per cent in public places, 24 per cent in restaurants and 18 per cent in private workplaces; only 17 per cent of cities and 20 per cent of states had comprehensive laws restricting smoking in all four of these sites. The number of non-smoking laws was found to have increased tenfold from 1980 to 1989. The existence of city by-laws was found to be independently associated with population size, state tobacco production and adult smoking prevalence.

In addition to formal legislation introduced by various levels of government, smoking policies can be implemented by organizations themselves. Policies often exist in individual workplaces, restaurants, daycare centres, hospitals, and health centres, for example.

A national survey of 2,003 directors of licensed daycare centres in the U.S. (Nelson *et al.*, 1993) indicated that nearly 55 per cent of centres were smoke-free indoors and outdoors, and 26 per cent were smoke-free indoors only. A total of forty states regulated employee smoking, but only three states required daycare centres to be smoke-free indoors. More than 99 per cent of licensed daycare centres had employee smoking policies that complied with appropriate state or local regulations.

In the U.S., a working group of sixteen state Attorneys General formed to study ETS and children produced a report recommending the implementation of smoke-free policies in fast food restaurants (Fast Food, Growing Children and Passive Smoke: A Dangerous Menu, 1993). The fast-food industry was selected as a focus by this group due to the fact that children frequent fast food restaurants in large numbers. By industry estimates, as many as 25 per cent of fast food customers are under the age of 18 (ibid). Furthermore, levels of second-hand smoke in restaurants are much higher than in most workplaces or in the average home. None of the fast food restaurant chains examined by this group prohibited smoking altogether, although some have introduced a limited number of smoke free outlets. In consulting with companies in

the industry, the working group found that most companies would like to go smoke-free, but were concerned they may lose business by implementing such a policy, and would wait until legislative smoking bans existed before mandating a smoke-free policy in their restaurants.

Health Canada has established short and long term objectives regarding exposure to ETS, knowledge of the health impacts of ETS and other factors relevant to ETS, in the *Guide for Tracking Progress on the Objectives of the National Strategy to Reduce Tobacco Use in Canada*. Objectives established for the goal of protecting the health and rights of non-smokers include the following.

- *Reducing the proportion of Canadians exposed to ETS:* By 1996, the objective is to reduce the proportion of Canadians exposed by one third, to 34 per cent at home, 30 per cent in the workplace and 42 per cent in shopping malls. By the year 2000, the proportion will be reduced by a further 16 per cent, to 26 per cent at home, 23 per cent in the workplace, and 32 per cent in shopping malls.

- *Knowledge, beliefs concerning ETS:* By 1996, 80 per cent of adults will know that second-hand smoke causes disease and death in non-smokers. By the year 2000, public knowledge will have increased 10 per cent over 1996 levels.

- *Message promotion/attitudes:* By 1996, 80 per cent of adults will believe in the benefits of a smoke-free home, 80 per cent will believe in the benefits of a smoke-free workplace and 80 per cent will believe in the benefits of smoke-free transportation.

- *Legislation:* Legislation to restrict or ban smoking in public places will be extended.

Impacts of Smoking Policy

A number of studies suggest that the enactment of policies has an impact on exposure to ETS in the workplace. In a 1992 study, the relationship between smoking policies, self-reported ETS exposure and salivary cotinine concentrations were examined (Marcus *et al.*, 1992). The findings revealed a link between restrictive workplace policies and a lower percentage of non-smoking workers with detectable salivary cotinine, thus suggesting that such policies may reduce exposure to ETS. Other empirical evaluations of workplace smoking policies have also indicated that policies contribute to a reduction in exposure to ETS (Stillman *et al.*, 1990; Gottlieb *et al.*, 1990).

A second potential impact of policies restricting smoking is a reduction in the level of smoking among affected smokers. Studies on this topic have produced contradictory evidence. In three successive surveys conducted of employees in a large decentralized state agency (Gottlieb *et al.*, 1990), no significant change was detected in smoking prevalence, the proportion of smokers attempting to quit, or the total daily consumption of cigarettes by smokers, although the daily consumption of cigarettes while at work did decrease. Conversely, an empirical evaluation of a policy ending smoking in a large urban medical centre found the opposite (Stillman *et al.*, 1990). In this study, the daily number of cigarettes reportedly smoked by employees and the total number smoked at work decreased across all occupational categories by an average of 25 per cent.

In addition to reducing exposure to ETS, it is thought that legislation and policies may have additional indirect impacts in reinforcing non-smoking as the normative behaviour in society (Byrd, 1992). Some believe that smoking restrictions increase public awareness and beliefs regarding the health risks of tobacco smoke. A 1988 survey of Ontario residents found that lack of knowledge of restrictions on tobacco use was related to lower knowledge scores regarding the health impacts of

smoking (Pederson *et al.*, 1989). A comparative analysis of the 1983 and 1988 Ontario surveys (Metro Toronto sub-sample) indicated that marked changes in attitudes (including support for restrictions and being bothered by ETS) had occurred even though knowledge scores regarding health impacts had not changed. One potential variable influencing the change may be experience with restrictive measures (Pederson *et al.*, 1992).

Some have suggested that the reaction of the tobacco industry to smoking legislation and policy offers further evidence as to the latter's potential impacts and effectiveness of such restrictive measures. The industry has sought to position the issue as one essentially concerned with civil liberties and smokers' rights, and to refute evidence of the negative health impacts of ETS (Chapman *et al.*, 1990). In Canada, three of the largest tobacco companies launched separate legal actions to have the TPCA struck down as being in violation of the 1982 Canadian Charter of Rights and Freedoms (Collishaw *et al.*, 1991).

The tobacco industry has recommended common courtesy as the solution to potential conflicts over smoking in public places as an alternative to policies that restrict or ban smoking (Davis *et al.*, 1990). However, in a 1987 National Health Interview Survey of Cancer Epidemiology and Control (n=22,000), almost half of smokers said they smoke in public places without asking if others mind (Davis *et al.*, 1990). Furthermore, in the same study, only 4 per cent of non-smokers indicated that they ask a person not to smoke despite the fact that most non-smokers consider ETS harmful and annoying. These findings suggest that the common courtesy approach is unlikely, by itself, to eliminate exposure to ETS.

2.3 Knowledge, Attitudes and Practices Concerning ETS

This section begins by highlighting the results of a dozen studies which examined public attitudes, knowledge and practices concerning ETS. The emphasis is placed on describing results. The second portion of this section assumes a more theoretical bent which seeks to distil from the same studies an understanding of how knowledge, attitudes and ultimately practices or behaviour are determined and interact. The end result is a conceptual model which formed the theoretical basis of our approach to the issues of the present study.

There have been relatively few studies which have focused on assessing and understanding knowledge, attitudes and practices of the public concerning ETS. Fortunately, however, some of the most relevant and largest studies are Canadian.

Most of the research focuses on measuring or predicting public reaction to or support for policy and legislation regarding ETS. In this sense, practices and behaviour are measured in terms of willingness to support controls on ETS, enhanced regulation of tobacco products or propensity to adhere to ETS policies. Some researchers have also been interested in measuring smokers' likelihood of compliance with measures that would further restrict their freedom to smoke. Some of the research goes further, discussing possible approaches to influencing public behaviour.

(a) Knowledge and Attitudes

Measuring knowledge has been achieved in only two of the studies under review. In contrast, most of the studies have explored perceptions or attitudes about the health effects of ETS. Thus, five studies asked respondents to answer a question such as the following: "In your opinion, can the health of non-smokers be damaged by other people's cigarette smoke, or not?" This specific question was

contained in two national Australian studies. In the first study, 73 per cent said that other people's health could be damaged. This figure climbed to 80 per cent two years later (Hill, 1988).

Very similar perceptual levels were obtained by Mainous in his 1989 study involving resident of the state of Kentucky. In response to the item "Do you think that being exposed to second-hand tobacco smoke from other people's cigarettes is harmful to your health?" 81 per cent indicated that it was (Mainous, 1991). Similar results were attained in Canada as briefly discussed in the introduction to this report. A 1990 study in Alberta found that 77 per cent of adults agreed that "the health of non-smokers can be significantly damaged by other people's cigarette smoke (Krahn & van Roosmalen, 1991).

The above figures do not indicate a high level of *knowledge* about the negative health effects of ETS, only high levels of belief which is considered to be at the surface level of consciousness as opposed to knowledge, which is thought to form the base of consciousness (opinion is the middle level) (Hagihara & Morimoto, 1991). Two Canadian studies have measured knowledge about the health effects of ETS among Ontario and Toronto residents (Pederson *et al.*, 1986 and Pederson *et al.*, 1989). Both studies asked questions about the specific adverse health effects of ETS. In the first study, which was conducted in 1983, the authors described respondents' level of knowledge as "high". For example, in response to an item which asked if passive smoking "is", "may be" or "is not" a cause of lung cancer, over 73 per cent responded that it was or may be. About the same proportion indicated that ETS was or may be a cause of chest problems in children (Pederson *et al.*, 1986, p.317). Knowledge in the 1983 survey was also measured in terms of knowledge of restrictions on smoking. The research team found that awareness of city and municipal restrictions was low at that time.

It is important to note that these levels were recorded three years before the release of the U.S. Surgeon General's watershed report on ETS. One would have

expected knowledge levels to grow with the increasing publication of studies and reports which solidified the link between ETS and a number of health problems. This was not the case in Toronto, however, as knowledge levels recorded for this city in the second study had not changed from 1983 to 1988: "no statistically significant changes were found in reported knowledge of health effects of either active smoking or ETS" (Pederson *et al.*, 1992, p.411).

One of the earliest studies of attitudes about second-hand smoke was published in 1972 by Paul Cameron. He conducted three surveys of children aged seven to 15 years to assess the psychological and symptomatic reactions of children to second-hand tobacco smoke. The results suggested that the effect of parental smoking on their children goes beyond health effects. A majority of the younger children (aged 7 to 12 years) surveyed in the study indicated that parental smoking reduced the love and respect accorded to the parent by the child. About one-third of the older children (aged 13 to 15 years) indicated the same (Cameron, 1972).

(b) Level of Public Support for Restrictions on Smoking

Most of the studies under review sought to gauge public support for legislative restrictions on smoking. Taken together, the results reveal significant public support for restrictive measures, especially in Canada. In their study of public reactions to workplace smoking policies, Krahn and van Roosmalen concluded that "as workplace smoking policies have become much more common, the strong support for them which was observed in earlier studies has remained" (Krahn & van Roosmalen, 1991, p.vii).

Pederson's 1983 survey of Ontario residents found that respondents "clearly supported" some degree of restriction in all of the areas (e.g., city buses, daycare, stores) which were examined in the study. By 1988, "marked changes" in attitudes towards smoking restrictions had occurred in the population (Pederson *et al.*,

1992, p.410) in that Toronto residents favoured a higher degree of restriction on smoking.

As mentioned previously, the significant positive change in the attitudes of Toronto residents occurred without an increase in knowledge levels from 1983 to 1988. Two significant differences, however, were noted in other areas, including higher levels of being bothered by ETS and a lower level of smoking among associates. This led the authors to surmise that "continuing efforts to increase knowledge may not be as important for attitude change as are other factors, such as social norms, perceived changes in smoking habits of associates, and personal experience with restrictive measures" (Pederson *et al.*, 1992, p. 410).

A similar conclusion was reached by Ferraro (1990) in his study of health beliefs and proscriptions on public smoking in two American states. The support for the legal control of smoking is "best predicted by the respondents' consideration of smoking as deviant. Environmental tobacco smoke effects, either being bothered by it or considering it health destructive, do not directly affect support for legal controls" (Ferraro, 1990, p.251). Ferraro and Pederson do not downplay the importance of knowledge in influencing beliefs, rather, they see it as a "necessary condition" to believing that smoking is "deviant" or anti-social.

Opinions and perceptions of the health effects of ETS and the level of support for policies and legislation to control smoking in public varies significantly according to a number of characteristics. Hill (1988), Ferraro (1990), Pederson *et al.* (1986, 1989 and 1992), Krahn and van Roosmalen (1991) and Mainous (1991) all found that non-smokers were much more likely to support proscriptive measures on smoking than smokers. Mainous explains this result as a product of self-interest. In his study, a significantly lower proportion of smokers perceived a health risk to others (64 per cent) from their second-hand smoke, than never smokers (88 per cent), successful quitters (82 per cent) and unsuccessful quitters (72 per cent). This, despite the fact that there were no differences in the perceived health risk of smoking to the smoker

between smokers and non-smokers. Mainous concludes that smokers "evaluate the costs and benefits to their self-interests of holding an attitude which could be antisocial". In the end, smokers justify smoking as harmful to themselves but not others (Mainous, 1991).

Other characteristics which have been shown to affect attitudes and beliefs include the following:

- sex — females are more likely to perceive health risk from ETS (Mainous, 1991), male smokers are less likely to comply with policies (Pederson *et al.*, 1989);
- age — younger adults are more likely to perceive health risk from ETS (Mainous, 1991, Hill, 1988), younger ages are related to non-compliance (Pederson *et al.*, 1989);
- education — years of schooling are positively correlated with perceiving ETS as a health risk (Mainous, 1991, Hill, 1988 and Pederson *et al.*, 1989);
- bothered by ETS — those who are more bothered by ETS are more likely to believe ETS is harmful to health (Ferraro, 1990); and
- urban versus rural residence — knowledge of the health risks of smoking and ETS, and support for restrictions, have been found to vary by rural versus urban residence (Mainous, 1991; Pederson *et al.*, 1991; 1986; Ferraro, 1990).

Income and occupational status (white vs. blue collar) may also be characteristics which significantly affect attitudes and beliefs, although much of the evidence is contradictory.

Hagihara and Morimoto (1991) studied the relationship between personal health practices and attitudes toward non-smokers' legal rights in Japan. Their results varied significantly among four sub-groups. A positive relationship between good personal health practices and favourable attitudes toward the rights of non-smokers was obtained only for male non-smokers. The opposite relationship was noted for females (both smokers and non-smokers).

(c) Behaviour and Practices

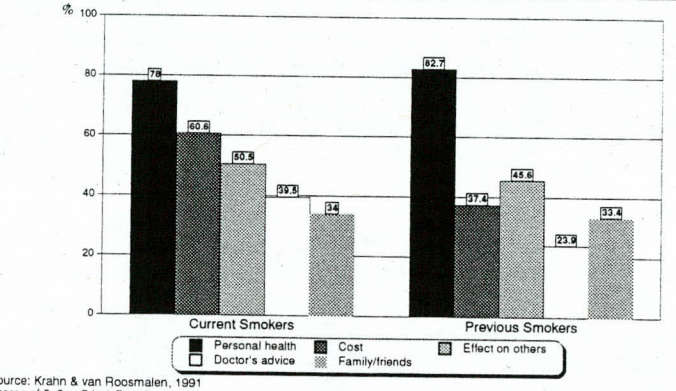
Fanslow *et al.* (1988) conducted a study which showed that the behaviour of smokers in public places is susceptible to change based on signs and thematic prompts. The research team found that the posting of signs and the relocation of ashtrays in a university cafeteria significantly increased the proportion of smokers restricting their activity to the designated area. The research of Krahn and van Roosmalen (1991) supports Fanslow with their finding that only 11 per cent of smokers included in their sample admitted to smoking in a restricted area within the previous month.

Krahn and van Roosmalen asked Alberta smokers and previous smokers in the sample to rate how important five different reasons might be in influencing them to quit smoking. Exhibit 2.1 presents the results.

Both current and previous smokers considered personal health risk an important reason for quitting. The effect of their smoking on others was deemed important by about half of respondents, while "pressure from family, children or friends" was an important reason for only about one third of respondents (Krahn & van Roosmalen, 1991, p.36).

Finally, the Krahn and van Roosmalen (1991) study suggests that most people will not take it upon themselves to ask someone to stop smoking in a non-smoking area, even if they are bothered by the smoke. This is based on two findings:

EXHIBIT 2.1
Importance of Reasons for Quitting Smoking, Current and Previous (regular) Smokers



Source: Krahn & van Roosmalen, 1991
Scores of 5, 6 or 7 in 1-7 scale
(not at all important-very important)

1) 56 per cent of those who had observed smoking policy violations said that they had been bothered by it; and 2) less than one in five employed people who participated in the survey indicated that they had asked a co-worker who violated a non-smoking policy to stop smoking. Conversely, a California study found that 59 per cent of sampled non-smokers and 44 per cent of smokers had asked someone (in the past 12 months) not to smoke in certain situations (Elder, 1992).

(d) Theory and Conceptual Model: Knowledge, Beliefs, Attitudes and Behaviour

Studies have examined a range of factors influencing attitudes and behaviour regarding ETS. Much of this research has focused on variables influencing an individual's support for restrictive policies, but provides findings which are more broadly applicable to attitudes and behaviours relating to ETS. Together with the characteristics mentioned in the previous section, factors found to play an important role in attitudes and beliefs, and support for legislative restrictions, include the following:

- Behaviour of Peer Group. Some evidence exists which suggests that the smoking behaviour of an individual's peers may also affect their attitudes and behaviour. The extent to which one's peers smoke is thought to influence attitudes and beliefs, and consequently behaviour (Pederson *et al.*, 1992, Ferraro, 1990).

- Experience with Restrictive Policies. Support for policies appears to grow stronger as individuals are exposed to restrictive policies and become experienced with them (Pederson *et al.*, 1989; 1992).

- Social Norms. Social norms regarding smoking, and the social perceptions of smoking behaviour, have also been shown to affect beliefs, attitudes and behaviours. A U.S. study undertaken in Illinois and North Carolina examined links between i) knowledge of the health impacts of smoking, ii) knowledge of health impacts of ETS, and iii) the deviant characterization of smoking, and support for restrictions (Ferraro, 1990). This study concluded that support for legal controls was best predicted by respondents' consideration of smoking as deviant.

- Economic Dependency on Tobacco Industry. Some research has suggested that individuals in areas where tobacco forms an important part of the local economy are less likely to support restrictions on smoking (Mainous, 1991; Ferraro, 1990).

Based on the review of the literature concerning knowledge, beliefs, attitudes and behaviour relating to ETS, a conceptual model was developed which graphically presents the factors influencing each and leading to the ultimate behaviour of smokers and non-smokers with regard to ETS. This conceptual model is presented as Exhibit 2.2.

The purpose of the conceptual model is to identify the relevant theoretical variables influencing behaviour with respect to ETS and to posit a hypothetical causal relationship among the variables.

The model is based upon the assumption that there are connections between knowledge of the health impacts of smoking and ETS, beliefs about health impacts, attitudes, behavioral intentions and behaviour. The conceptual model presents these as an essentially linear progression from knowledge to behaviour, although one can expect reciprocal causation among key variables in the model. For example, it is not necessary for behaviour to be grounded in knowledge. Beliefs and attitudes may result from other influencing factors in addition to knowledge.

One primary variable is presented as influencing knowledge levels: information (i.e., information received about ETS and smoking). Information may be obtained from a range of sources, including social marketing campaigns, schools (i.e., for children), the media, physicians, and others. Information may also be gleaned from personal experience such as the death of a friend or family member from a smoking-related illness.

Beliefs about smoking are influenced by a number of variables; in particular knowledge, education, legislation, family, peer group and social norms. *Belief* refers to the basic opinions an individual has about smoking and ETS, and is the cognitive component of behaviour. Beliefs are closely linked to *attitudes* about smoking, ETS and restrictions on smoking. *Attitude* refers to a general and enduring positive or negative feeling about an object or issue. An additional variable influencing attitudes to smoking and ETS is attitudes towards other issues, such as freedom of choice ("right to smoke") and social conformity (i.e., importance of "fitting in", or not).

Attitudes lead to behavioral intentions. Behavioral intentions do not necessarily translate into the intended behaviour. Variables such as legislation, smoking behaviour (extent of addiction), and other influences such as social norms, personality factors (such as assertiveness), family members and peers may intervene to inhibit the intended behaviour. Two types of behaviours are presented: the behaviour of the smoker and of the non-smoker. Possible behaviours of the smoker may be to accept or self-impose restrictions, avoid causing ETS around certain individuals, quitting smoking altogether, or no change in behaviour (smoking at will). The non-smoker behaviours may be those of a parent, extended family member or child. In terms of ETS-related behaviours, the non-smoker may impose restrictions, make verbal requests concerning smoking behaviour, avoid ETS or simply tolerate exposure to ETS.

Finally, one additional important variable which will affect each element in the model concerns the socio-demographic characteristics of the individual. Age, education, sex, economic dependence on the tobacco industry and or urban versus rural residence are all factors that have been demonstrated to affect attitudes, beliefs and behaviours relating to ETS.

CHAPTER

3

PROFILES

This chapter examines the characteristics of survey respondents in general and, more specifically, in three groupings: smokers; former smokers; and non-smokers. This profile is important for two reasons. First, it provides a detailed look at these three types of Canadian parents and extended family members. Second, it allows the reader to gain insight into the relevance of some of the findings outlined in later chapters. For example, the characteristics of smokers are substantially different along a number of parameters (e.g., age, education and income). As will be shown later in the report, many attitudes and behaviours explored are significantly different along these same parameters.

3.1 General Sample Characteristics

Among all respondents, very few were between the ages of 18 and 24 (six per cent overall, with eight per cent from extended family and five from parents). Almost all parents (and half of extended family) are between the ages of 25 and 44, split roughly between 25 to 34 and 35 to 44. While only seven per cent of parents are over this age, 40 per cent of extended family are 45 or older.

With respect to education, approximately half reported a high school level of education (45 per cent among parents and 56 per cent among extended family). Almost one in three parents (29 per cent) have a university education, while 21 per cent of extended family do.

Related to household income, one in ten parents (11 per cent) and one in six extended family members (17 per cent) report incomes below $20,000. Parents generally report higher incomes than extended family do. While 35 per cent of parents report a household income of $60,000 or more, 29 per cent of extended family members report the same income bracket.

One in three respondents are males (31 per cent), while two in three are females. This difference is even more marked among extended family, where only 27 per cent of respondents are males. This is not surprising, however, since respondents were screened on the basis of having primary responsibility for the child(ren).

Nine per cent of the sample is collected from among residents in the Atlantic (split evenly across the three major provinces), 25 per cent reside in Québec, 35 per cent in Ontario, 16 Prairies (half in Alberta, with the remaining split in two), and 14 per cent in British Columbia[2]. There are no major variations in this distribution by the two groups: parents and extended family.

Nine per cent of the sample live in communities with fewer than 1,000 residents. One quarter live in communities with 1,000 to 10,000 individuals, one third in communities with more than 10,000 and less than 100,000. The remaining 29 per cent are from the largest communities in the country (featuring populations of 100,000 or more). This distribution is similar for both parents and extended family.

Two in three respondents are anglophones, one quarter are francophones (26 per cent) and 11 per cent are non-French and non-English speaking respondents

2. This represents a slight oversampling (by two per cent) of BC cases.

(i.e., allophones). This represents 330 cases of allophones in the sample; a sufficient sample size to detect significant differences where they exist. The language profile of parents and extended family is the same.

Finally, 30 per cent of parents have children in the home who are under the age of six, while 57 per cent have 6 to 11 year olds and 55 per cent have teenagers, 12 years old or older[3] With respect to extended family, 23 per cent have young children (under 6), one quarter have 6-11 year olds and one quarter teenagers. Almost half (46 per cent) report no children living in the home.

3.2 Smokers

One in four respondents to the survey are smokers[4,5] Smokers are found in all communities, independent of their size. They are young; over fifty per cent are less than 39 years of age and a significant number are between the ages of 18-24. Most have an education that is below university level and only 25 per cent have a university degree. As would be expected among those with lower levels of education, smokers' household income levels are lower. As the level of income increases, the number of smokers at each level decreases. Fifty-three per cent of smokers have a household income of less than $39,000. Proportionately, more smokers are French speaking and are Quebecers. British Columbia, Manitoba, PEI and Nova Scotia have proportionately fewer smokers.

3. Percentages can add to more than 100 since many respondents reported children in different age groups within the same household.

4. Defined according to survey items asking if respondents currently smoke. This group of respondents includes those who smoke a few cigarettes per week to those who smoke large quantities per day. Almost all self-reported smokers indicated that they smoke daily.

5. It is important to remember that this group does not serve as a representative sample of all smokers in Canada. Instead, this group only represents smokers within the population of parents and extended family members of children under 13. As population figures for this sub-group do not exist, representativeness of the sample cannot be determined.

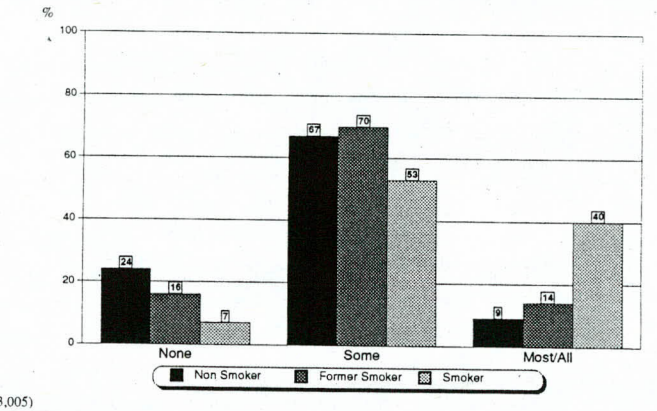
More than half of smokers (52 per cent) live with another smoker. Generally they live with only one other smoker, although six per cent of all smokers live with more than one person who smokes. An average of 18 cigarettes are smoked each day in the home or 13 per person. Slightly more cigarettes are smoked in an extended family members' home (26/day) than in a parents' home (17/day). In most homes the cigarettes are smoked regardless of the child's presence although cigarettes are never smoked in front of the child in 21 per cent of the homes.

Most or all of the close friends of 40 per cent of smokers are regular smokers. Only 7 per cent have no close friends who smoke (see Exhibit 3.1). Smokers are less likely to be bothered by second-hand smoke. Nonetheless, 40 per cent are bothered by cigarette smoke, and 65 per cent of this group experience physical irritation (26 per cent of all smokers). Despite having a large base of close friends who smoke, very few smokers have experienced the death or serious illness of someone close to them as a result of a smoking-related illness (31 per cent).

The number of Canadians that smoke was estimated to be much higher than the actual value of 31 per cent (Health Canada, 1994). Smokers estimated an even higher number (5.4 out of 10) than what was estimated by the sample overall (5.1 out of 10).

Children of smokers are in contact with their smoking parents' close friends and relatives more often than the children of non-smokers and former smokers. Generally, children are in contact with a parents' close friend or relative an average of three times a week. For a significant number of children (30 per cent), most or all of these people are smokers (see Exhibit 3.2). When they are in contact with the child, 48 per cent sometimes smoke and 32 per cent usually smoke. Only a very small proportion never do (19 per cent).

EXHIBIT 3.1
Number of Close Friends Who Smoke



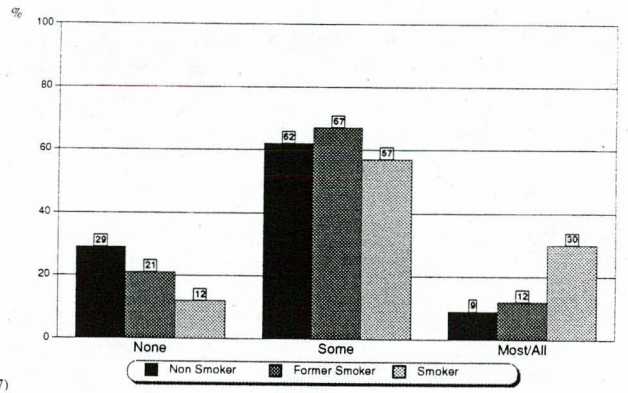
(n=3,005)

3.3 Former Smokers

Over one in three respondents are former smokers[6]. Most quit smoking in the last fifteen years; only twenty per cent quit more than fifteen years ago. Slightly more extended family members (26 per cent) quit more than 15 years ago than parents (19 per cent). Of the remaining 80 per cent: 12 per cent quit in the past year; 16 per cent more than a year ago but less than 5 years ago; and 48 per cent quit 5 to 15 years ago. The difference may be a result of age, since most extended family members are older than the parents. Former smokers are found in all communities, independent of size or location. Level of education and language have little or no influence over who is and is not a former smoker. They are found across all age and income groups, but

6. Defined according to survey item asking self-reported non-smokers if the have ever smoked in the past.

EXHIBIT 3.2
Number of Visitors who Smoke by the Smoking Habits of the Parent



(n=2,297)

there are significantly fewer who are aged 18-24 and whose household income is less than $20,000.

Former smokers generally do not live with another smoker (80 per cent). In homes where there is a smoker, the average number of cigarettes smoked per person, per day is the same as described earlier. However, unlike smokers' homes, the cigarettes are less likely to be smoked in the presence of a child. In 34 per cent of the homes of former smokers, cigarettes are never smoked in front of the child. On the other hand, half or more of these cigarettes are smoked in front of the child in 36 per cent of the homes.

For 70 per cent of former smokers, only some of their close friends are regular smokers. Only 16 per cent have no close friends who smoke (see Exhibit 3.1). Even though most former smokers have some friends who smoke, a significant number

are bothered by smoke (74 per cent). Most experience physical irritation as a result of smoke (79 per cent). Those who are not bothered by smoke have fewer friends who do not smoke and more who do. Former smokers are also more likely than non-smokers and smokers to have experienced the death or serious illness of someone close to them as a result of a smoking-related illness (47 per cent).

The number of Canadians that smoke was estimated to be much higher than the actual value of 25 per cent; however, former smokers estimated the number to be lower (4.9 out of 10) than the overall sample (5.1 out of 10).

The children of former smokers are less frequently in contact with their parents' close friends and relatives than non-smokers' and smokers' children. The child of a former smoker is in contact with parents' close friends or relatives an average of two times a week. For a significant number of children (67 per cent), some of these people are smokers (see Exhibit 3.2). When they are in contact with the child, 32 per cent will not smoke. Many (44 per cent) will sometimes smoke in front of the child.

3.4 Non-Smokers

One in three respondents are non-smokers[7]. Non-smokers are found in all communities, independent of size. Significantly more non-smokers live in Manitoba and significantly fewer live in Quebec. They are older; there are few who are aged 18-24 and proportionately more in the over 65 age group than smokers or former smokers. More non-smokers (32 per cent) have a university degree than former (22 per cent) or current smokers (9 per cent). Most have a household income that is above $39,000.

7. This group includes all respondents who indicated that they do not smoke currently, nor have they even been a smoker in the past.

Non-smokers generally do not live with another smoker (84 per cent). In homes where they do live with a smoker, the smoker is equally likely to smoke in the child's presence as not. Approximately one third of these smokers never smoke in front of the child. Of the remaining two thirds, one half smoke some of their cigarettes in front of the child while the remainder smoke most or all.

Most non-smokers have some close friends who are smokers (67 per cent), although a significant number (24 per cent) have no close friends who smoke (see Exhibit 3.1). Even though most have some friends who smoke, a significant number (83 per cent) are bothered by smoke. The majority who are bothered by smoke also experience physical irritation as a result (85 per cent). Over half have never experienced the death or serious illness of a close friend as a result of a smoking-related illness (55 per cent).

On average, the children of non-smokers are in contact with parents' close friends or relatives between two and three times a week. For most of these children (71 per cent), at least some of these people are smokers (see Exhibit 3.2). A significant number of children are in contact with people who do not smoke (29 per cent). When the parents' close friends and relatives who smoke are in contact with the child, many will not smoke (40 per cent).

CHAPTER

4 KNOWLEDGE, BELIEFS AND ATTITUDES

4.1 Knowledge

There are two key issues with respect to knowledge about ETS which were addressed by this research: level of knowledge about the health impacts of ETS; and sources of information about ETS and smoking as well as the perceived credibility of these sources.

(a) Knowledge about the Health Impacts of ETS

Survey respondents were asked whether they could name any health impacts of second-hand smoke unaided. Lung cancer and asthma were the most frequently mentioned health impacts (cited by 57 and 41 per cent of the sample respectively)[8]. These were followed by respiratory illnesses (23 per cent), heart disease (20 per cent), and allergies (16 per cent). Pregnancy problems, other cancers, ear, nose,

8. These findings are the combined results for parents and extended family. Throughout the report, where there were no significant differences between parents and extended family, only combined results for the two groups are presented. Otherwise, differences between the two groups are reported.

and throat problems, fatigue, eye problems and a cough were each named by two to four per cent of the respondents. Eleven per cent of the sample said they were unable to name any health impacts and two per cent stated that there are no health impacts of ETS[9].

Parents were slightly more likely than extended family members to cite heart disease (22 versus 16 per cent) and lung cancer (58 versus 53 per cent). Individuals in higher income brackets and those with higher levels of education were more likely to name lung cancer, asthma, allergies and respiratory illnesses and less likely to not be able to name any health impacts. A similar pattern was demonstrated by non- or former smokers, individuals from non-smoking or smoke-free households[10] (as illustrated in Exhibit 4.1) and by those who are bothered by ETS. Females were more likely to name asthma, allergies and respiratory illnesses than males. Not surprisingly, individuals who scored lowest on a knowledge index (described later in this section) were more likely to not be able to name any health impacts or to state that there are no health impacts of ETS[11].

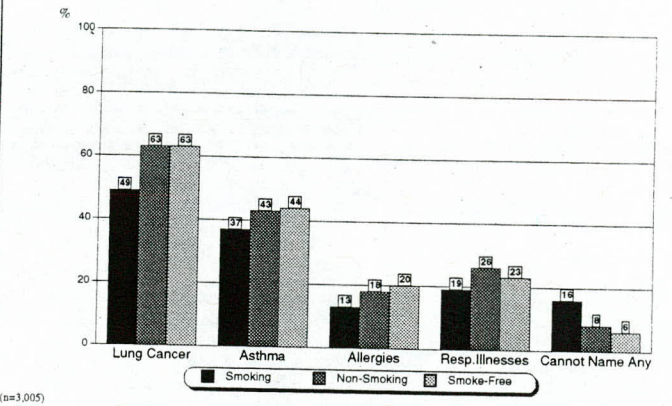
Following the unprompted recall of health impacts, respondents were asked to indicate to what degree they think several specific health impacts are or are not related to inhaling second-hand smoke. These health impacts were: arthritis; lung cancer; ear infections in children; asthma in children; bronchial problems or bronchitis; sudden infant death syndrome (SIDS); and emphysema. Responses were given on a 7-point scale ranging from definitely not caused by (1), through no evidence (4) to definitely caused by (7).

9. In the Survey on Smoking in Canada (Health Canada, 1995), the health problems for non-smokers most often cited were lung cancer (32 per cent), bronchitis (24 per cent) and respiratory diseases other than bronchitis (39 per cent). Nine per cent felt that there was no risk to the non-smoker from ETS.

10. Non-smoking households are those households where smoking is not permitted and smoke-free households are those where no smoking occurs not because of restrictions, but because no one in the household smokes and no smokers ever visit.

11. These findings are similar to those of Mainous (1991) who found females, individuals with higher levels of education and those who are bothered by ETS to be more likely to perceive health risks of ETS.

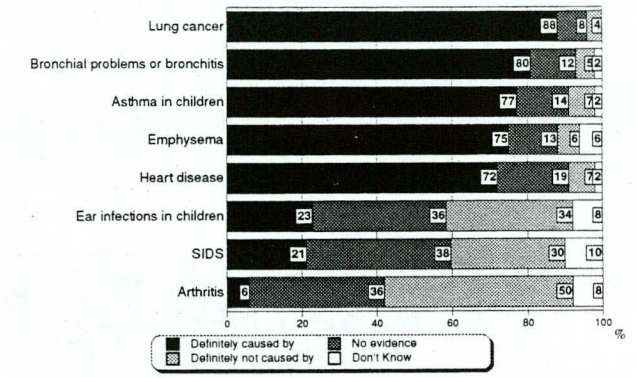
EXHIBIT 4.1
Selected Named Health Impacts by Household Type



Of the two health impacts which were listed in this series of questions but are not known to be caused by ETS, respondents were fairly certain that arthritis is not caused by ETS, but felt strongly that emphysema is. Respondents were fairly accurate in terms of agreeing that lung cancer, asthma in children and bronchial problems or bronchitis were related to ETS[11]. On the other hand, only 23 per cent felt ear infections in children were related to inhaling second-hand smoke (34 per cent said they were not related and 36 per cent indicated there was no evidence) and only 21 per cent felt SIDS was related to ETS (with 30 per cent indicating it was not related, 38 per cent stating there was no evidence, and 10 per cent saying they did not know). These findings are presented in Exhibit 4.2.

11. With 88 per cent agreeing that lung cancer is caused by ETS, this finding may indicate higher public awareness than in 1993 when 73 per cent thought lung cancer was related to ETS (Pederson *et al.*, 1986).

EXHIBIT 4.2
Health Effects of ETS



(n=3,005)

A knowledge index was created to provide a single measure indicative of knowledge levels about these particular health impacts of ETS. An average of positive scores (compiled where a known relation such as lung cancer is correctly identified or if a non-relation such as arthritis is correctly identified as such) and an average of negative scores (if known relations are not identified or non-relations are incorrectly identified as being a relation) were summed together.[12]

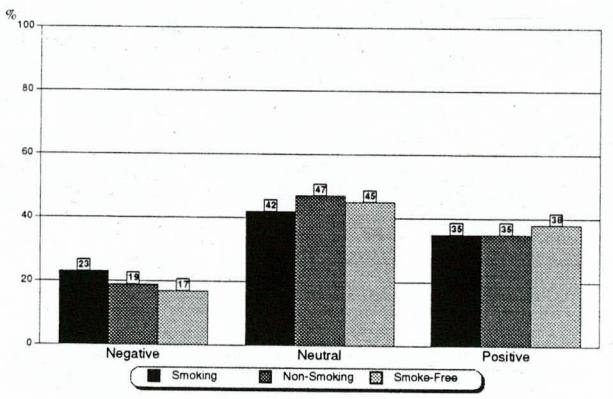
Scores on the knowledge index could range from -6 to +6. Twenty pe r cent of the sample had negative scores, meaning they had more incorrect responses than correct responses. The majority of respondents had scores which were neutral (0) (45 per cent) and positive scores (35 per cent) indicating that most people have at least

12. The 7-point scale used to assess knowledge about the health effects of ETS was transposed for the computation of the knowledge index as follows for known effects: 1=-3; 2=-2; 3=-1; 4=0; 5=1; 6=2; and 7=3. For non-relations, the scale was transposed as follows: 1=3, 2=2; 3=1; 4=0; 5=-1; 6=-2; and 7=-3.

a minimal level of knowledge about these health impacts of inhaling second-hand smoke.

Relations between the knowledge index and all socio-demographic indicators were examined to determine whether there are particular pockets of the population which are more or less knowledgable about the health effects of ETS. There were no differences between parents and extended family members. Scores on the knowledge index were also not related to income, region, community size, or family composition. Younger respondents, females and people whose mother tongue is other than English or French were more likely to score higher on the knowledge index. Finally, non-smokers and former smokers scored higher than smokers, and individuals from non-smoking and smoke-free households scored higher than smoking households (as shown in Exhibit 4.3).

EXHIBIT 4.3
Knowledge Index by Household Type



(n=3,005)

(b) Sources of Information about ETS

Respondents were asked to indicate from which sources they have heard about second-hand smoke. The vast majority of the sample indicated that they have heard about ETS through news reports in newspapers, on the radio or on television (81 per cent). Friends and family were the next most frequently mentioned source of information (24 per cent) followed by doctors (23 per cent) and paid advertisements (21 per cent). Health groups such as the Heart and Stroke Foundation were mentioned by 10 per cent of the sample. All other sources were mentioned by fewer than 10 per cent. These other sources included warnings on cigarette packages (six per cent), the government (five per cent), magazine articles or medical journals (four per cent), personal experience (three per cent), educational centres (three per cent), the workplace (two per cent), and non-smoking rights groups (two per cent). An additional two per cent of respondents stated that they have not heard anything about second-hand smoke.

Parents were slightly more likely than extended family members to state that they have heard about second-hand smoke from a doctor (24 versus 19 per cent) and less likely to mention friends and family (23 versus 27 per cent).

Individuals who scored lowest on the knowledge index had heard about second-hand smoke from a smaller number of sources of information. Of all the sources of information about second-hand smoke named, only two were mentioned by more than 20 per cent of individuals who received negative scores on the knowledge index (79 per cent of this group named news reports and 24 per cent named friends and family). Four sources were named by more than 20 per cent of those who received scores from 0 to 6 (81-82 per cent named news reports, 24 per cent named friends and family, 22-21 per cent named paid advertisements and 23-25 per cent cited a doctor).

Respondents from higher income brackets were more likely to indicate they have heard about ETS from news reports and health groups and less likely to cite friends and family. Respondents from Quebec were least likely to mention a doctor, news reports, health groups and paid advertisements than those from other regions. Finally, smokers were less likely to have heard about ETS from news reports than non- or former smokers.

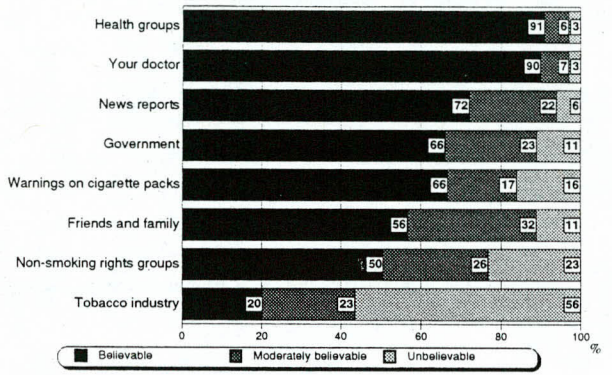
(c) Credibility of Sources

Individuals were also asked to rate the credibility of a number of specific sources of information including: your doctor; news reports (from newspaper or television); warnings on cigarette packages; friends and family; non-smoking rights groups; health groups (such as the Heart and Stroke Foundation, Canadian Cancer Society, Canadian Lung Association); the tobacco industry; and the government.

Doctors and health groups were evaluated as being the most believable sources of information about second-hand smoke (average scores of 6.4 for each on a 7-point scale where 7 represents 'very believable'). News reports, warnings on cigar ette packages and the government were the second most believable group of sources of information (with means ranging from 5.2 to 5.4). Friends and family and non-smoking rights groups had somewhat lower believability ratings (means of 4.9 and 4.6 respectively) and the tobacco industry was viewed as least believable (with a mean of 3.0). The percentages of respondents evaluating each source as believable or not are presented in Exhibit 4.4.

There were some interesting differences in terms of the rated believability of various sources of information as a function of socio-demographic indicators. Doctors were viewed as more believable by individuals in higher income brackets, individuals with university education, and by people whose mother tongue is not French. Francophones gave higher believability ratings to news reports (from newspaper, radio or television) and the tobacco industry and lower ratings to health

EXHIBIT 4.4
Credibility of Information Sources



(n=3,005)

groups than the other two language groups. Parents viewed news reports, warnings on cigarette packages and the government as more believable than did extended family members. Finally, females viewed all sources as more believable than did males with the exception of the government where the ratings were equal.

Ratings of believability were strongly influenced by smoking behaviour and exposure. With only one or two exceptions to the general pattern, all sources were rated as more believable by non- or former smokers, by non-smoking or smoke-free households and by individuals who are bothered by second-hand smoke than by smokers, individuals from smoking households and those who are not bothered by ETS. As well, higher ratings of believability of almost all sources were associated with higher knowledge index scores. The key exception to this finding, however, is that these patterns were reversed for the tobacco industry, where smokers, smoking

households, individuals who are not bothered by ETS, and individuals with lower scores on the knowledge index gave the highest scores for believability.

(d) Amount of Available Information

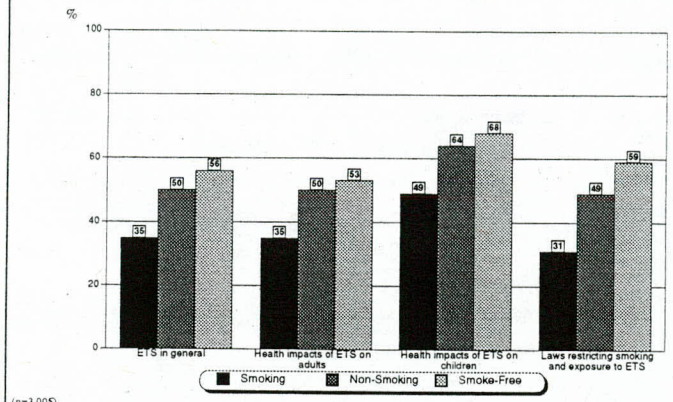
Respondents were asked to indicate whether they feel the level of information which is available to them on a variety of topics was too little, the right amount or too much. More than 40 per cent of the sample feel there is too little available information on the health impact of second-hand smoke on children (59 per cent), second-hand smoke in general (45 per cent), the health impact of second-hand smoke on adults (44 per cent), and laws restricting smoking and exposure to second-hand smoke (43 per cent). Approximately 20 per cent feel there is too much information on each of these topics with the remaining 40 per cent of the sample indicating the amount of available information is just right.

Individuals with higher scores on the knowledge index were generally more likely to feel that too little information was available on the second-hand smoke in general. Non- or former smokers, non-smoking or smoke-free households (as illustrated in Exhibit 4.5) and individuals who are bothered by ETS were more likel y to feel there was too little information available on these four topics. As well, those with a university education were more likely to feel there was too little information available

4.2 Beliefs and Perceptions

The key issue related to beliefs and perceptions about ETS and smoking covered in this research concerns beliefs about the health impacts of ETS and smoking.

EXHIBIT 4.5
Proportion Indicating there is Too Little Available Information by Household Type



(a) Beliefs about the Health Impacts of ETS and Smoking

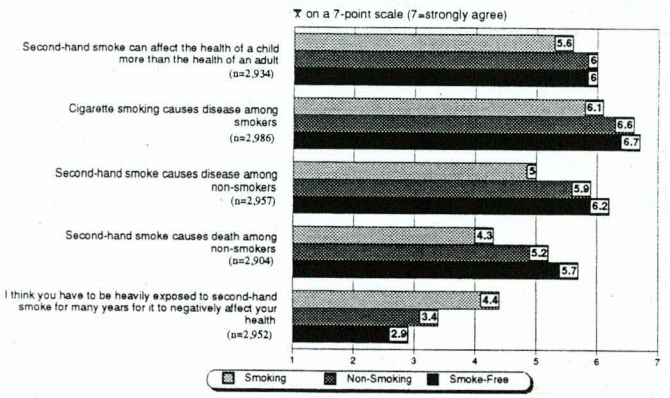
Respondents were asked to indicate agreement with several statements to assess beliefs about the health impacts of ETS. Agreement was measured on a 7-point scale where 1 represented strongly disagree and 7 represented strongly agree. The statements were as follow: "second-hand smoke can affect the health of a child more than the health of an adult"; "second-hand smoke causes disease amongst non-smokers"; "second-hand smoke causes death amongst non-smokers"; and "I think you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health". Adults were also asked to indicate agreement with the following statement to assess beliefs about the health impacts of smoking: "cigarette smoking causes disease amongst smokers".

The majority of the sample agreed that second-hand smoke can affect the health of a child more than the health of an adult (77 per cent agreed, mean = 5.8 on a 7-point scale where 1 represents 'strongly disagree' and 7 represents 'strongly agree'). There is very strong agreement that cigarette smoking causes disease among smokers (91 per cent agree, mean = 6.39), but somewhat less agreement that second-hand smoke causes disease among non-smokers (74 per cent agree, means = 5.6) and that second-hand smoke causes death among non-smokers (58 per cent agree, mean = 5.6)[14]. Respondents were less sure about the level of exposure necessary for negative effects (mean = 3.71): 40 per cent agreed that you have to be heavily exposed for many years for it to have negative effects; and 45 per cent disagreed. This group, however, is comprised of two quite different sub-sets; those who may feel even minimal exposure could cause negative effects, as well as the smaller group of those who feel that there are no health impacts of second-hand smoke (who make up one per cent of those who disagreed with the statement).

Beliefs about the effects of smoking and ETS were related to several of the socio-demographic variables. For example, individuals in higher income brackets, those with higher levels of education and those with higher scores on the knowledge index tended to express stronger agreement with the statements "second-hand smoke can affect the health of a child more than the health of an adult", and "second-hand smoke causes disease amongst non-smokers", and disagreement with "I think you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health". Francophones, smokers, individuals living in smoking households and those who are not bothered by ETS demonstrated an opposite pattern of beliefs. The relation between these beliefs and household type is presented in Exhibit 4.6 as an example of this pattern of beliefs.

14. The NSTRTV goal is for 80% of adults to know by 1996 that ETS causes death and disease among non-smokers. The present findings indicate that current awareness is fairly close to the goal for the relation of ETS and disease among non-smokers, but not as close concerning ETS and death among non-smokers.

EXHIBIT 4.6
Health Impacts Beliefs by Household Type



Beliefs which are in line with accepted research findings (e.g., agreement that ETS causes disease and death among non-smokers and disagreement with having to be heavily exposed to ETS for many years for there to be negative impacts) were more likely to be held by individuals whose close social circle contained none or only some regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Respondents with these beliefs were also more likely to feel that too little information was available about second-hand smoke than respondents whose beliefs were not as strongly aligned with the scientific evidence. Not surprisingly, individuals who did not hold this pattern of beliefs were more likely to not be able to name any health impacts of ETS or to state that there are no health impacts of ETS.

4.3 Attitudes

There are a number of key issues with respects to attitudes which were addressed by this research: attitudes toward ETS; attitudes toward smoking; and attitudes toward restrictions on smoking.

(a) Attitudes Toward ETS

Adults were asked to rate the importance to society of a number of health issues including tobacco use and ETS. The health issues assessed by respondents include: improving nutrition; decreasing drug/alcohol abuse; prevention of AIDS; reducing exposure to second-hand smoke; reducing tobacco use overall; and reducing tobacco use among youth.

All six issues were rated as being very important, with means ranging from 5.9 to 6.7 where a score of 4 represented 'moderately important' and a score of 7 'extremely important'. Relative to other issues, such as preventing AIDS, reducing alcohol and drug abuse, and reducing tobacco use among youth, ETS is given a lower priority, along with improving nutrition and reducing tobacco use overall.

The ratings of importance were not influenced by family composition (i.e., number and ages of children) and there were no differences between parents and extended family. While there were a variety of differences in importance placed on the range of issues as a function of other socio-demographic variables, this report will only focus on the issues of reducing exposure to second-hand smoke, reducing tobacco use overall and reducing tobacco use among youth. With respect to these three issues, higher importance ratings tended to be given by females. The three tobacco-related issues were also rated as more important by non- or former smokers, individuals in non-smoking or smoke-free households and by individuals who are bothered by

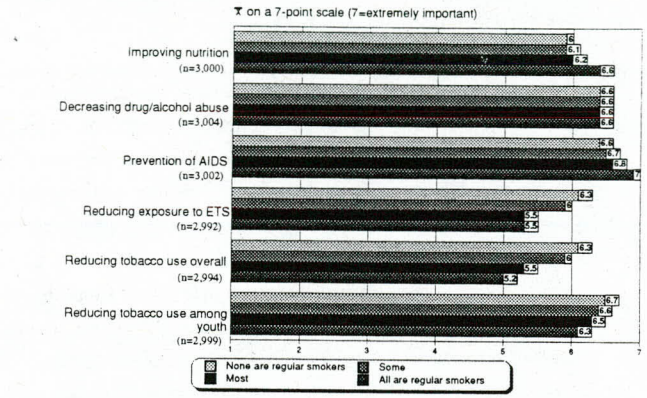
second-hand smoke. Ratings of importance on two of these three issues also increased as knowledge index scores increased. There is no difference in the ratings of importance on reducing tobacco use among children by score on the knowledge index.

The importance accorded to the issue of reducing tobacco use overall was also influenced by other socio-demographic variables: this issue was considered increasingly more important with increasing age and income brackets; it was also seen as more important by individuals whose mother tongue is other than English or French and by respondents in the Atlantic region.

The three tobacco-related issues were all influenced by the proportion of people close to the respondent who are regular smokers and whether the respondent has had anyone close to him or her who has become seriously ill or died as a result of a smoking-related illness. Reducing exposure to ETS and reducing tobacco use overall were viewed as more important by people with none or only some of the people closest to them who are regular smokers and by people who have had someone close to them become seriously ill or die as a result of a smoking-related illness. The importance of reducing tobacco use among youth was highest for people with no one close to them who smokes. Exhibit 4.7 presents the ratings of importance as a function of how many people close to the respondent are regular smokers.

The relation between the importance ratings given to the three tobacco-related issues and relevant attitudes was also assessed. A clear pattern emerged from this analysis. In general, individuals who feel that the three tobacco-related issues are important also tend to agree that second-hand smoke can affect the health of a child more than the health of an adult, that cigarette smoking causes disease among smokers and disease and death among non-smokers, and that most people could quit smoking if they really wanted to as well as to disagree that smoking is socially acceptable, that you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health and that smokers are overly persecuted by non-smokers.

EXHIBIT 4.7
Importance of Health Issues to Society by Smoking Status of Social Circle



(b) Attitudes Toward Smoking

The questionnaire included a number of measures of respondents' general attitudes towards smoking and ETS. Adults were asked to rate their agreement with the following statements: "smoking is socially acceptable"; "most people could quit smoking if they really wanted to"; and "I think that people should have a right to be free from breathing other people's second-hand smoke".

Surprisingly, only half the sample disagreed that smoking is socially acceptable (51 per cent disagreed, mean = 3.31). At the same time, there also was little sympathy for smokers who are unsuccessful at quitting smoking, as 60 per cent agreed that most people could quit smoking if they really wanted to (mean = 4.8). Finally,

there was very strong agreement that people should have a right to be free from breathing other people's second-hand smoke (87 per cent agreed, mean = 6.16).

There were no differences between parents and extended family members on agreement with any of these attitudinal statements.

Individuals in higher income brackets and with higher levels of education were more likely to disagree that smoking is socially acceptable and to agree that people should have a right to smoke-free air. Respondents from Quebec were more likely to exhibit an opposite pattern of attitudes and, perhaps surprisingly, to also agree that most people could quit smoking if they wanted to.

Non- or former smokers, individuals from non-smoking or smoke-free households, and those who are bothered by second-hand smoke were less likely to agree that smoking is socially acceptable and more likely to agree that most people could quit smoking if they really wanted to as well as that people should have a right to be free from breathing other people's second-hand smoke.

Attitudes which are negatively disposed toward ETS (e.g., agreement that non-smokers have the right to smoke-free air and disagreeing that smoking is socially acceptable) were more likely to be held by individuals whose close social circle contained no or only some regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Respondents with these attitudes were also more likely to feel that too little information was available about second-hand smoke than respondents whose attitudes were not as negative about ETS. Those respondents whose attitudes were not as negative were both more likely to be unable to name any health impacts of ETS and also to state that there are no health impacts.

(c) Attitudes Towards Restrictions

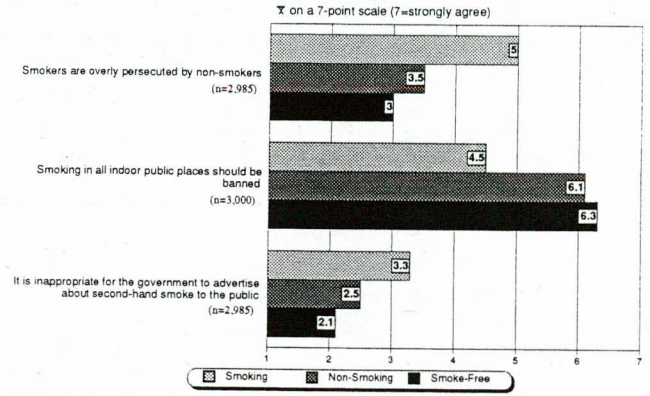
A number of questions measured attitudes toward restrictions on smoking: "I think that smokers are overly persecuted by non-smokers"; "It is inappropriate for government to advertise about second-hand smoke and its effects"; and "smoking in all indoor places should be banned".

Just under half the sample agree that smokers are overly persecuted by non-smokers (44 per cent agreed, mean = 4.02). On the other hand, there is fairly strong agreement that smoking in all indoor public places should be banned (72 per cent agreed, mean = 5.5). There is support for the government's involvement in raising public awareness about ETS as 65 per cent disagreed that it is inappropriate for the government to advertise to the public about second-hand smoke and its effects (mean = 2.8).

Specific groups of individuals were more likely to express stronger agreement that smoking in all public places should be banned and stronger disagreement that smokers are overly persecuted by non-smokers and that it is inappropriate for the government to advertise to the public about ETS and its effects. This pattern is presented in Exhibit 4.8. Respondents in agreement are more likely than those not in agreement to be each of the following:

- non- or former smokers;
- individuals from non-smoking or smoke-free households;
- those who are bothered by ETS;
- older individuals;
- those in higher income brackets;
- respondents with higher education levels;
- those whose mother tongue was English or another language (but not French);

EXHIBIT 4.8
Attitudes Towards Restrictions by Household Type



- individuals whose close social circle contained no or only some regular smokers; and
- those who have had someone close to them die or become seriously ill as a result of smoking.

These respondents were also more likely to feel that too little information was available about second-hand smoke than respondents whose attitudes toward ETS were not as negative.

(d) Beliefs and Attitudes

There were some interesting relations among the various attitudinal and belief measures. For example, respondents who disagree that smoking is socially acceptable also tend to disagree that smokers are overly persecuted by non-smokers and to agree that people should have a right to be free from breathing other people's second-hand smoke. People holding these attitudes are also more likely to agree that second-hand smoke can affect the health of a child more than the health of an adult, that second-hand smoke causes disease and death among non-smokers and to disagree that you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health.

People who feel that it is inappropriate for the government to advertise about second-hand smoke and its effects to the public are also more likely to disagree that smoking in all public places should be banned. People with these attitudes also tend to disagree that second-hand smoke causes disease and death among non-smokers and to agree that you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health.

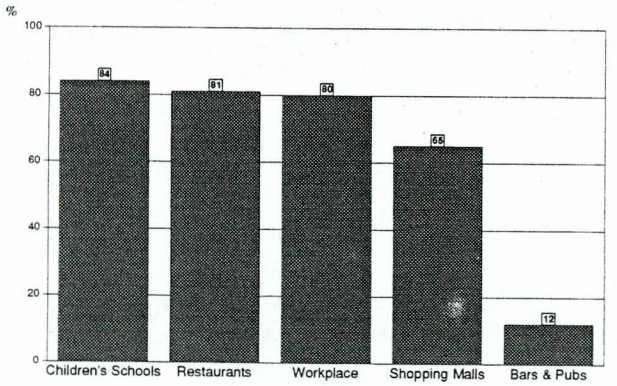
4.4 Legal Restrictions on Smoking

(a) Awareness of Legal Restrictions

Awareness of restrictions on smoking in restaurants, workplaces, shopping malls, bars and pubs, and schools was examined in the survey. Both parents and extended family members were asked to indicate whether restrictions exist in each location where they live. As no significant differences between extended family and parents were observed, combined results are presented.

Exhibit 4.9 presents the proportion of respondents aware of restrictions in these different locations. Most respondents indicated that smoking restrictions exist in children's schools and few indicated that smoking restrictions exist in bars and pubs.

EXHIBIT 4.9
Proportion Aware of Restrictions Per Location



(n=3,005)

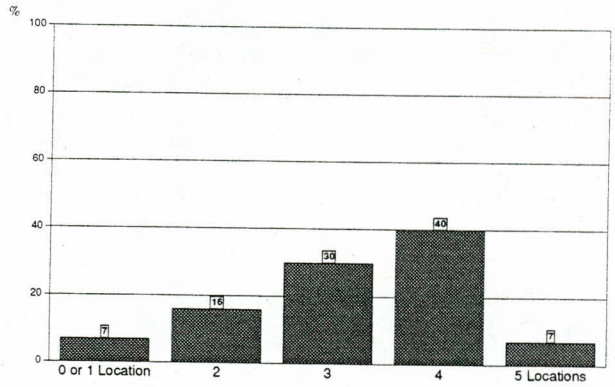
Awareness of restrictions varied by a number of variables. For all five types of locations (schools, restaurants, bars, workplace and shopping malls), awareness of restrictions varied by language and by region. Francophone respondents were consistently less aware of restrictions, and knowledge of restrictions was lowest within Quebec.

Awareness of restrictions in restaurants, pubs or bars, shopping malls and workplaces increases with community size. There is no difference in awareness of restrictions in children's schools based on community size.

Awareness of restrictions in the workplace varied by a number of variables, including income, education and sex. Awareness of restrictions in the workplace increases with income; from 74 per cent of respondents with a family income of less than $20,000 to 86 per cent of respondents with a family income of $60,000 or more. Awareness also increases with education; from 75 per cent of respondents with a high school education aware to 85 per cent of those with a university education. Finally, women were more aware than men of restrictions in the workplace (81 per cent of women versus 76 per cent of men).

Questions concerning awareness of restrictions in restaurants, workplaces, malls, schools, bars and pubs were combined to create an index indicating the overall level of awareness of restrictions faced by respondents. The index ranges from 0 (aware of no restrictions in any locations) to 5 (aware of restrictions on smoking in all locations). Exhibit 4.10 presents this index. The majority of respondents were aware of restrictions in 3 or 4 different locations. The mean or average number of restrictions reported by respondents was 3.2 out of 5.

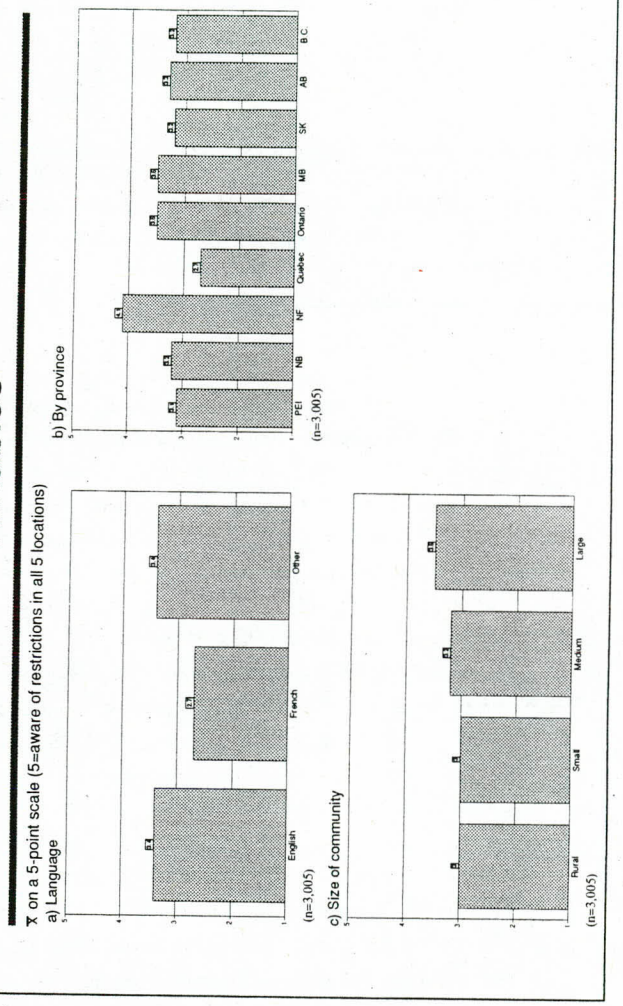
EXHIBIT 4.10
Awareness of Restricted Areas



(n=3,005)

The overall level or number of restrictions respondents were aware of varied by a number of variables. Exhibit 4.11 presents the average or mean number of restrictions respondents reported by language, province and size of community. The level of restrictions reported by francophones and by Quebec respondents was considerably lower. The level of restrictions reported was highest in Newfoundland, and slightly higher than the average in Ontario and Manitoba. The reported level of restrictions increases with the size of community. Smokers are aware of a greater number of restrictions than are non-smokers.

EXHIBIT 4.11
Mean Level of Restrictions by Background Variables



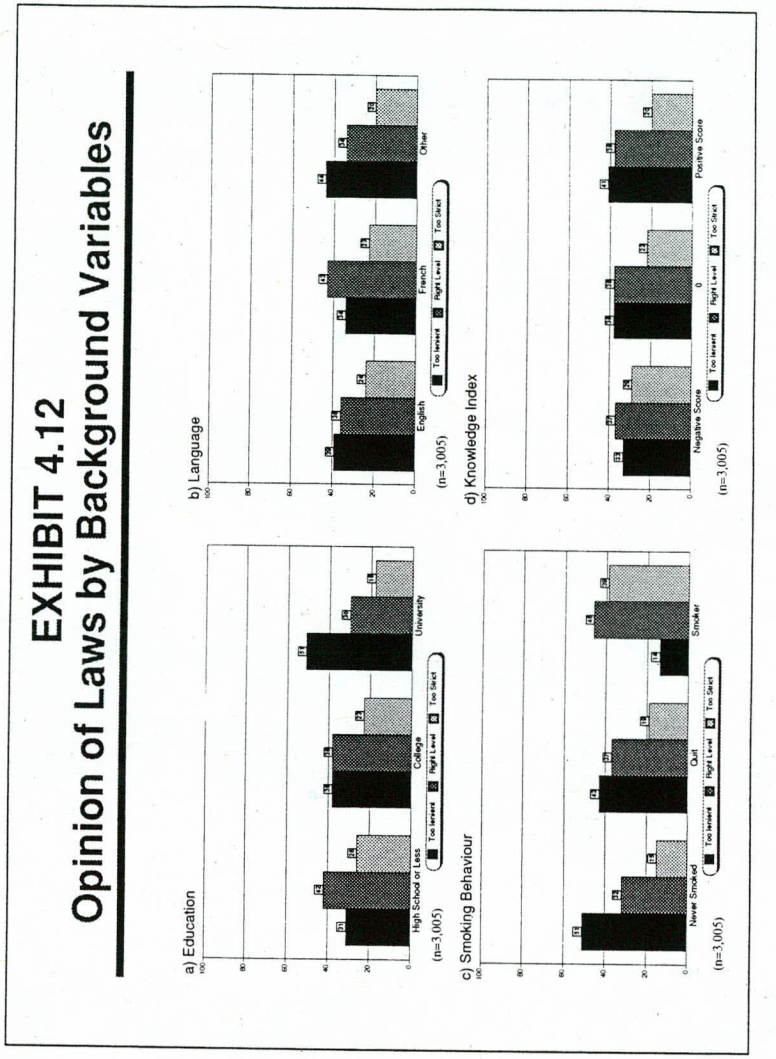
(b) Opinion of Current Level of Restrictions

Respondents were asked to rate their opinion of current laws to reduce second-hand smoke. Respondents were divided on this issue. A total of 38 per cent believed that restrictions were too lenient, an equal number (38 per cent) believed that current restrictions are at the right level, and less than a quarter viewed current restrictions as overly strict. There was no observable differences between parents and extended family members on this question.

Significant differences in opinion existed along a number of variables, including income, education, language, region, community size, smoking behaviour, scores on the knowledge index, and whether bothered by ETS. Exhibit 4.12 presents opinion of the current laws by education, language, smoking behaviour and the knowledge index. Respondents with university education are much more likely to perceive current laws as too lenient, while those with high school education only are more likely to perceive them as being too strict. Francophone respondents are more likely to perceive the current laws as being at the right level, despite the fact that they indicate aware of fewer restrictions. Not surprisingly, the majority of smokers perceive the current laws as just right or too strict. This finding is consistent with past research results, which also indicated that non-smokers were most likely to support restrictive measures (Hill, 1988; Ferraro, 1990; Pederson et al. 1986, 1989 and 1992; and Krahn and van Roosmalen, 1991). Finally, the opinion that current laws are too lenient increases with knowledge index score.

Opinion on current laws also varied by income, region and by whether bothered by ETS. Respondents with family incomes of $60,000 or greater were more likely to feel that current laws are too lenient. Respondents from British Columbia were also more likely to view current laws as too lenient, while Quebec respondents

EXHIBIT 4.12
Opinion of Laws by Background Variables



were more likely to view current laws as being at the right level. Finally, individuals bothered by ETS were far more likely to find current laws to be too lenient, and those not bothered were more likely to find current laws too strict.

The level or number of restrictions a respondent was aware of had little impact on their opinion of the current level of restrictions. However, attitudes and beliefs concerning ETS had a strong impact on opinions of current legal restrictions. Respondents who accorded reducing exposure to ETS a high level of importance as a societal health issue were far more likely to find the current laws too lenient. Opinions of current laws were also strongly linked to responses to attitude statements. The strongest correlations between respondent opinion of laws and attitudes towards ETS were observed for the following statements:

- "Smokers are overly persecuted" (positively correlated to opinion that laws are too strict);
- "Smoking in all indoor places should be banned" (negative correlation);
- ETS "causes disease amongst non-smokers" (negative correlation);
- ETS "causes death amongst non-smokers" (negative correlation); and
- "You have to be heavily exposed to ETS for many years for it to affect your health" (positive correlation).

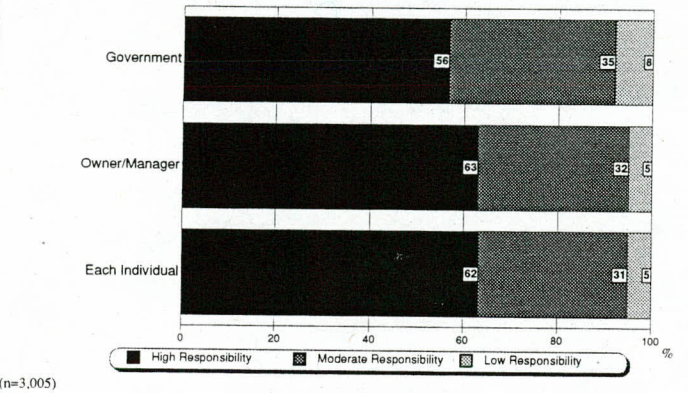
Respondents who were not closely associated with smokers were also much more likely to find current laws too lenient. Finally, respondents who indicated that someone close to them had become seriously ill or died as a result of a smoking-related illness were also more likely to find current laws too lenient.

(c) Responsibility for Restrictions

Respondents assigned greater responsibility for restrictions on smoking in public places to owners/managers and individuals than to government. Exhibit 4.13 presents the percentage of respondents (parents and extended family) who assigned

low, medium or high responsibility for placing restrictions on smoking to government, owner/managers and individuals, respectively.

EXHIBIT 4.13
Responsibility for Restrictions in Public Places

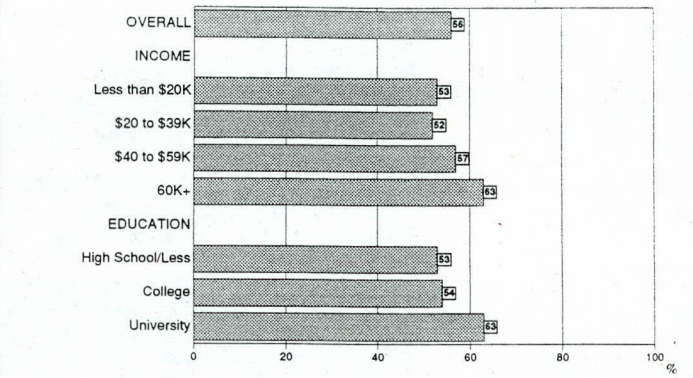


(n=3,005)

There are significant variations in the level of responsibility accorded to each group by background variables such as income and education, and by other variables such as smoking behaviour, and whether bothered by ETS.

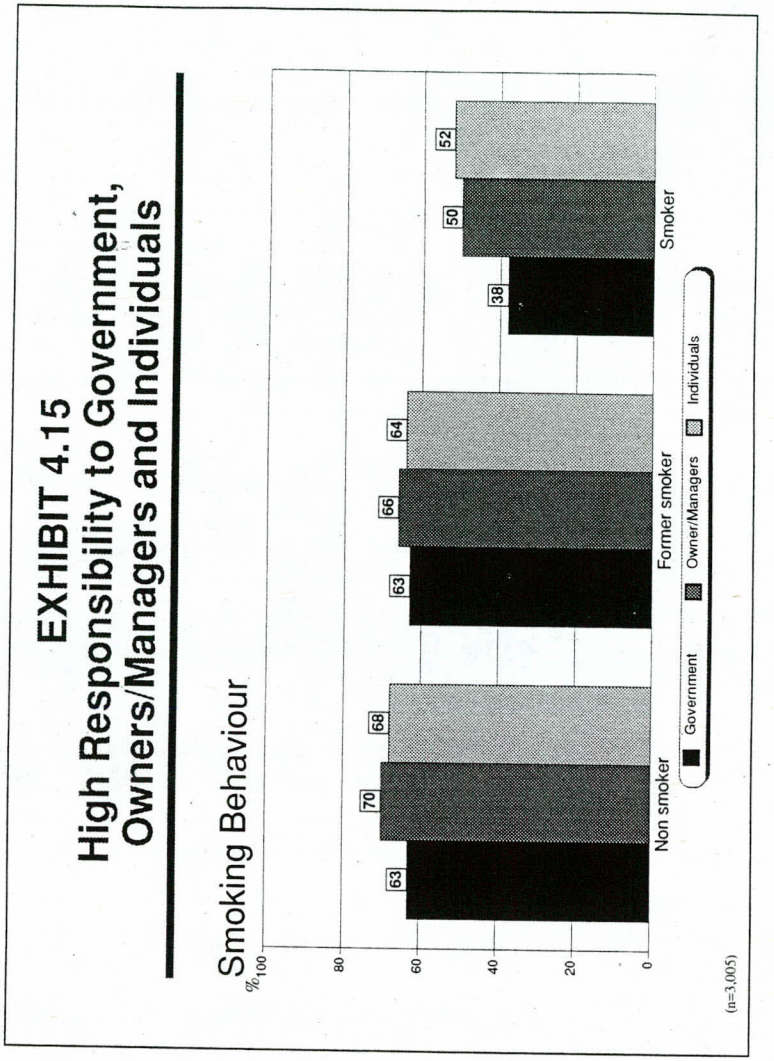
Variation in the proportion of respondents who assign government a high level of responsibility for placing restrictions in public places is particularly significant. Exhibit 4.14 presents the percentage of respondents who assign government a high level of responsibility by income and education. Respondents with family incomes of $60,000 or more, and respondents who are university-educated, accord the government a much higher level of responsibility for placing restrictions.

EXHIBIT 4.14
Assign High Responsibility to Government by Background Variables



The level of responsibility assigned to each of the three groups (government, owner/managers and individuals) was influenced significantly by smoking behaviour, as demonstrated by Exhibit 4.15. A greater proportion of non smokers and former smokers assigned all three groups (government, owners/managers and individuals) high responsibility for placing restrictions, as compared to smokers. Smokers, however, were much less likely to feel that government should have a high level of responsibility for placing restrictions.

EXHIBIT 4.15
High Responsibility to Government, Owners/Managers and Individuals



CHAPTER

5 BEHAVIOUR

This chapter examines the intentions of parents and extended family with respect to practices restricting smoking inside the home, as well as avoidance behaviour outside the home. Topics covered include: intentions to restrict smoking in the home, as well as actual behaviour; the application of practices aimed at reducing exposure to ETS in the home; consistency of the enforcement of restrictions with different individuals; and the influence of the presence of children on restrictive behaviour. Avoidance practices are profiled in a similar fashion. Finally, underlying motivations for implementing restrictive practices are explored, as well as smokers' perceptions of vehicles influencing compliance with restrictive practices.

5.1 Intentions and Actual Behaviour Regarding Restrictions in the Home

Parent Households

Parents were asked if they experience second-hand smoke in their own homes, either because they or someone else in the household are smokers, or because they entertain visitors who are smokers. As outlined previously, 27 per cent of parents who were interviewed are smokers, and 40 per cent of parent households include one or more smokers. Another 41 per cent of households do not include a smoker;

however, smokers do visit the home. The remaining 19 per cent of parent households are smoke-free.

Of the 81 per cent of parent households in the sample that experience second-hand smoke in the home, more than two-thirds (69 per cent) report having thought about restricting the smoking which takes place. Of these, three in four (78 per cent) actually do restrict smoking in the home. In other words, 52 per cent of parent households where second-hand smoke exists, have restrictive practices in place.

Of the 19 per cent of parent household which are smoke-free, 89 per cent said that they would restrict smoking if it were to take place in their home. Out of **all** parents households then, 19 per cent are smoke-free, 42 per cent restrict the smoking that takes place in the home, and 39 per cent do not restrict smoking in the home. More precisely, Table 5.1 presents a distribution of parental households with respect to smoking status in the households and restrictive practices.

Table 5.1
Distribution of Parent Households According to Exposure to ETS

Type of Household	% of Parent Households (n=2,297)
Smoke-Free	19
Non-Smoking with Restrictions	23
Non-Smoking Without Restrictions	19
Smoking With Restrictions	21
Smoking Without Restrictions	18

The main reasons given for not restricting smoking in the home were:

- restrictions are not tolerated (24 per cent);
- smoking is too infrequent in the home to have a policy (23 per cent);
- someone in the household smokes (16 per cent);
- second-hand smoke is not harmful (3 per cent).

Residents of Ontario were most likely than other residents of the country to have cited the infrequency of smoking as a reason. Quebecers were more likely to cite intolerance.

Patterns of differences can be seen in the proportion of parent households that restrict versus those that do not, based on demographic characteristics of the parent or household. Exhibit 5.1 presents the percentage of those who have thought about restricting by respondent/household characteristics. The darker area represents the proportion of these individuals who have actually implemented change. Parents with a university education, anglophones, and those living in Ontario, particularly in large communities are more likely to restrict. Also, those from non-smoking households, or who are bothered by smoke are more likely to restrict.

EXHIBIT 5.1a
Intentions and Behaviour of Parents to Restrict Smoking in the Home by Background Variables

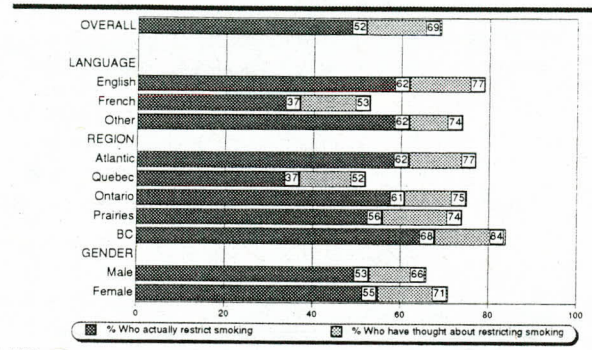
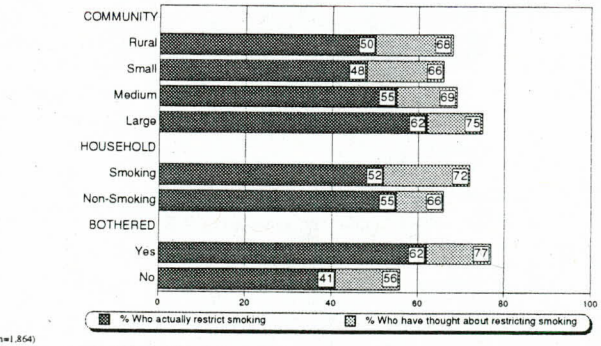


EXHIBIT 5.1b
Intentions and Behaviour of Parents to Restrict Smoking in the Home by Background Variables



Perhaps more interesting, however, is the proportion of those thinking about restrictions who have actually done something to implement it, in comparison to those who have only thought about it, but not done anything to change their environment. The best example is among mothers and fathers (see Exhibit 5.1a). While fewer fathers have thought about imposing restrictions than mothers (66 versus 71 per cent), the number of households with actual restrictions (reported by fathers) is the same as those reported by mothers. That is, a greater proportion of the men who have thought about it have also report that restrictions have been imposed. While the end result may be the same (53 to 55 per cent restricting smoke in their homes), it seems that men are more likely to report an implemented change once they have thought about it.

Likelihood of restrictive practices in the home is highly related to a number of attitudes and conditions experienced by the parent. These include:

- ratings of the importance of reducing exposure to ETS in society;
- views on smoking and its effects on non-smokers, particularly the beliefs that:
  - smoking causes disease and death among non-smokers;
  - people have the right to breathe smoke-free air;
  - smoking should be banned from all indoor places;
  - smoking has a stronger effect on children that it does on adults;
- views on the laws in place to reduce exposure (those who restrict think that the laws are too lenient); and
- the believability of sources of information (those who restrict are more likely to rate news reports, health groups, non-smokers' rights groups and government) as very believable.

The number of cigarettes smoked by a smoking respondent also negatively affects the likelihood of restrictions in the home which decreases with increasing amounts smoked. Perhaps surprisingly, the degree of agreement about the restrictions in the home **is not** a strong determinant of whether practices are actually implemented.

Extended Family

With respect to extended family, 28 per cent are smokers. Most of the these respondents see the child in the extended family member's home. Only 13 per cent visit the child in the child's home. Three out of four who have the child visit them in the extended family member's home have thought about restricting their smoking. Seventy per cent of those who have thought about it actually do restrict (53 per cent in total). Also, 69 per cent of those who visit the child in the child's home actually restrict their smoking. Most of the relatives who are restricted in the child's home place the restriction on themselves (89 per cent), as opposed to having restrictions placed by someone else in the home they are visiting.

Reasons given by relatives for not restricting smoking in the home are similar to those given by parents. No significant variations were found between the two groups.

The number of relatives who visit children in the children's homes is too small to allow for an accurate profile of who restricts and who does not. Among the relatives who visit the child in the extended family member's home, differences can be found in the proportion of those who restrict and those who do not according to region of the country, whether the relative lives in a smoking or non-smoking household, and whether they are bothered by smoke or not. Quebecers are least likely to restrict (56 per cent, as compared to 64 per cent in the Atlantic, 72 to 73 per cent in Ontario and the Prairies, and 88 per cent in BC). Smoking households are also less likely to restrict (65 per cent versus 76 per cent of non-smoking households). Similarly, those not

bothered by smoke are less likely to impose restrictions in their home (58 per cent, as compared to 77 per cent of those who are bothered by it).

Attitudes most strongly associated with restrictions among extended family show the same patterns as those described among parents, with a few exceptions. Both relatives and parents who restrict shared the following beliefs and attitudes, however parents are more likely to hold them:

- people have the right to breathe smoke-free air;
- smoking should be banned from indoor places; and
- news reports and non-smokers' rights groups are the most believable sources of information.

5.2 Motives Behind Restrictive Practices

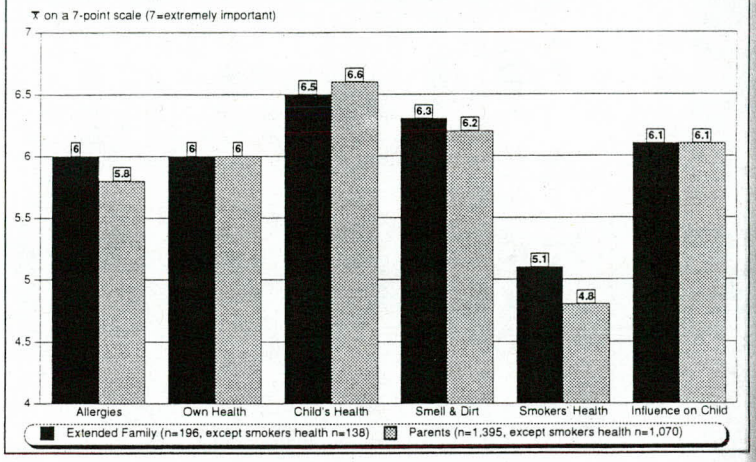
Parents and extended family members were asked to rate the importance of six reasons for reducing exposure to ETS, both inside and outside the home. The motives given to respondents for rating were:

- allergies among family members;
- the potential impacts of ETS on the respondent's health;
- the potential impacts of ETS on the health of the children;
- the smell and dirt caused by cigarette smoke;
- the potential impacts of ETS on the health of the smoker; and
- the potential influence of smoking in front of children (giving them the impression that smoking is acceptable.

Almost all respondents (94 per cent of parents and 91 per cent of relatives) feel that the health impacts of ETS on children is of primary importance in

making decisions about practices geared to reducing exposure to ETS (means of 6.6 and 6.5, respectively)(Exhibit 5.2).

EXHIBIT 5.2
Motives for Restricting



Perhaps surprisingly, the smell and dirt associated with smoking is also a key reason for such practices, according to 88 per cent of respondents (means of 6.2 and 6.3, respectively). The image of smoking in the eyes of children is the third most important factor in motivating restrictive or avoidance practices, with 84 per cent of parents and 83 per cent of extended family members rating it as very important (mean of 6.1 for both parents and extended family). The health of the respondent is rated as important for slightly fewer respondents (83 per cent of parents and 81 per cent of relatives), although this factor is still viewed as very important by a high proportion of respondents (mean of 6.0 for both groups). A similarly high number of relatives rated allergies as very important (82 per cent). Parents were less likely to do so (76 per

cent)[14], with a mean of 5.8, as compared to 6.0 for extended family). Finally, the implications of such practices on the health of the smoker are seen as an important motive for the smallest proportion of respondents (65 per cent among relatives and only 56 per cent among parents), with means of 5.1 among extended family and 4.8 among parents[15].

Additional motives cited by respondents for restricting smoking in the home included:

- that it is a fire hazard (88 per cent of parents and only 5 per cent of relatives); and
- to protect the health of the family in general (11 per cent of relatives and no parents).

With respect to allergies as a reason for reducing exposure to ETS, parents reporting the highest income brackets are least likely to view it as important. This is also true of parents with higher education levels. Conversely, it is perceived as important by more francophone parents and by parents living in Quebec, as well as mothers. Surprisingly, parents who are from non-smoking and smoke-free households also rated allergies as important more often that other parents. Exhibit 5.3 illustrate some of these examples.

The potential health impacts on respondents are seen as more important among older respondents and those with a university education. It is also seen as important by more allophone parents than other parents and by parents with higher knowledge index scores. While there are no major differences between the five

14. This is the only reason, of the six provided to respondents, which may not be applicable to every household. In addition, relatives may be less familiar with the daily living implication of allergies in households other than their own. For this reason, a higher proportion of extended family members may be rating allergies as a very important reason to reduce exposure to ETS, interpreting the question "in theory", as compared to parents who may be making practical references to their own households.

15. This question was only asked of non-smoking respondents.

EXHIBIT 5.3a
Motives for Restriction by Age, Income and Education (Parents Only)

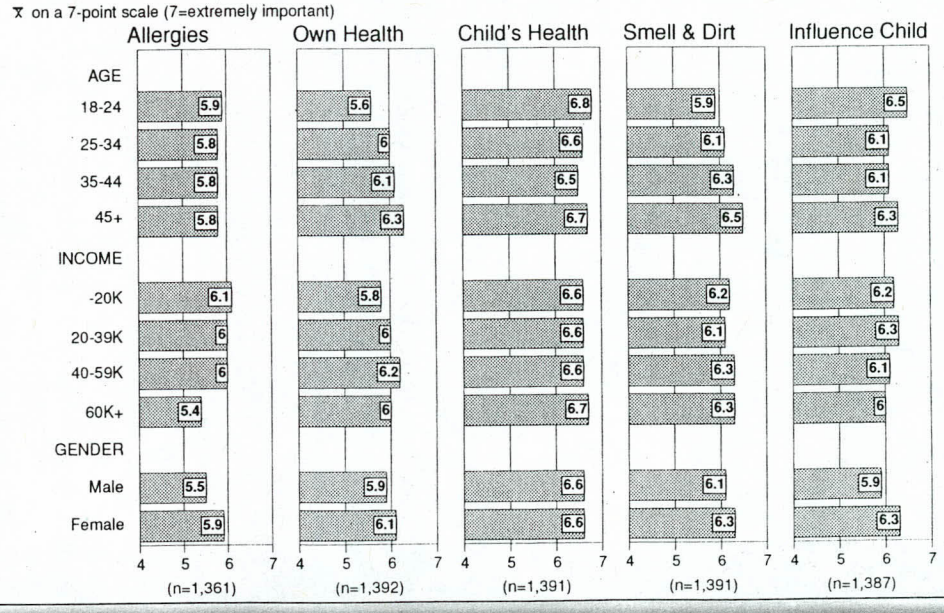
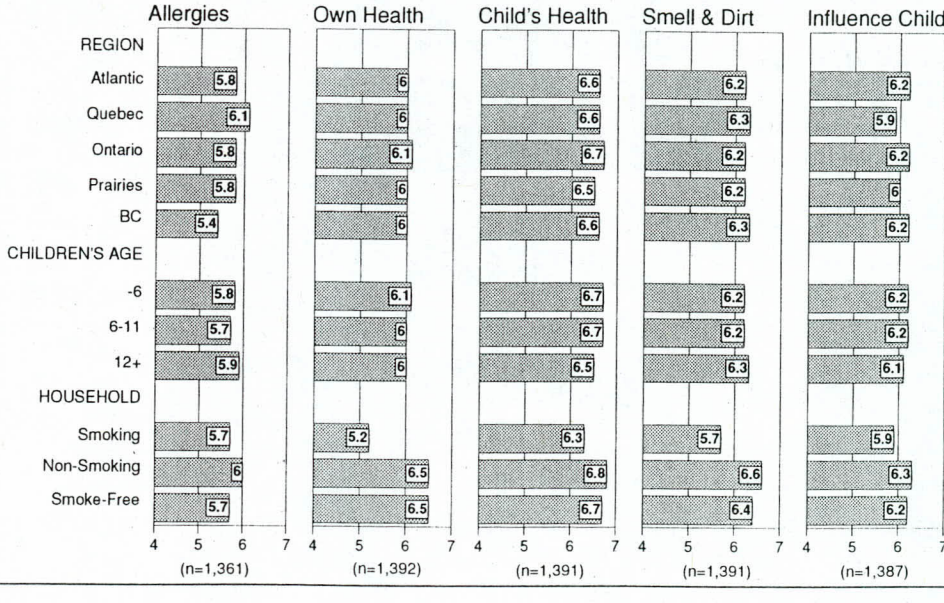


EXHIBIT 5.3b
Motives for Restriction by Age of Children, Knowledge and Household Type (Parents Only)



regions, residents of Saskatchewan are more likely than other residents to rate their own health as only moderately important (20 per cent versus 11 per cent overall).

The effect of ETS on children, while important to almost everyone, is rated the highest on the scale by younger parents, as well as by parents living in Ontario. On the other hand, it is less likely to be rated as important by parents in the Prairies and those with only teenagers in the home. Not surprisingly, this is also true in smoking households, as well as those with the lowest knowledge index scores.

The dirt and smell associated with smoking are more of a concern to older parents, as well as English households and mothers. Parents in smoke-free households also expressed the greatest concern for the dirt and smell. Residents of New Brunswick are most likely to rate this factor as only moderately important (19 per cent versus 8 per cent of the sample overall). Saskatchewan residents were most likely to rate it as low in importance (10 per cent versus 3 per cent on average).

Not surprisingly, parents who live with a smoker are more likely to have expressed concern over the health impacts on the smoker than parents who do not live with a smoker (67 per cent rated it as very important as compared to 56 per cent of the overall sample of parents).

Contrary to the pervasive pattern in these findings in general, younger parents, those with modest incomes ($20,000 to $39,000), and those with only high school educations are most likely to be concerned with the image that smoking creates for children. More predictably however, francophone parents and those from Quebec are still less concerned, as are fathers. Parents living with teenagers (as opposed to younger children), those coming from smoking households, also expressed somewhat less concern on this topic.

In general, the highest levels of importance of each of the motives for reducing exposure to ETS are most commonly found among respondents who also:

- rate as very important the reduction of tobacco use in society (in general and specifically by children);
- hold the beliefs that smoking causes both disease and death among non-smokers and that people have the right to breathe smoke-free air (respondents who feel that smokers are overly persecuted are more likely than others to rate these motives as less important);
- hold the attitude that current laws reducing exposure to ETS are too lenient;
- believe that ETS causes lung cancer, asthma in children and bronchial problems; and
- feel that health groups distribute the most believable information.

These attitudes and beliefs are held most strongly by respondents who rated their own health and the image in front of children as very important reasons for restrictive/avoidance policies. Respondents who are most likely to restrict are also those most likely to rate the health of the children, the smell and dirt and the image in front of children as important reasons for reducing exposure to ETS

5.3 Types of Restrictive Practices in the Home

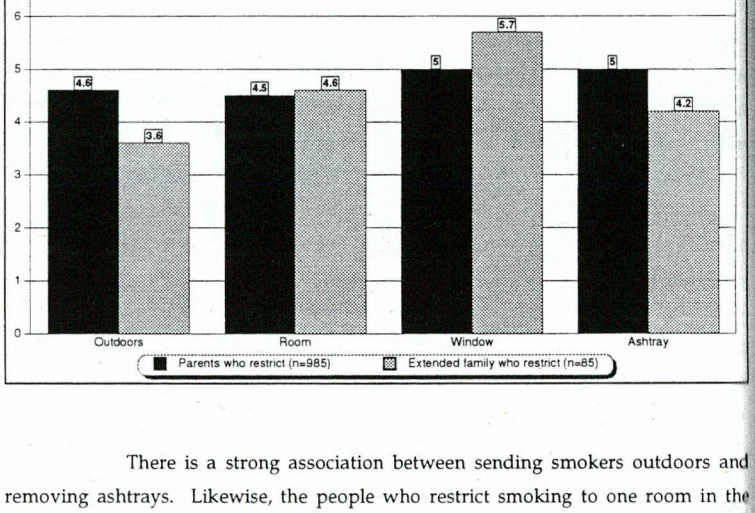
Both parents and extended family were asked to rate the frequency with which they use four methods to restrict smoking in the home to reduce exposure to ETS. These methods are:

- sending smokers outdoors;
- restricting smokers to one designated room or area of the house;

- opening windows, operating fans and other methods of ventilating the house; and
- removing ashtrays from sight.

Overall, parents tend to remove ashtrays and open windows more often that they restrict smoking to a room in the house or outdoors (see Exhibit 5.4). For extended family, opening windows is the most widely used method, followed by restricting to one room, and removing ashtrays. Relatives are least likely to send someone outdoors[16].

EXHIBIT 5.4
Methods Used to Restrict Smoking



There is a strong association between sending smokers outdoors and removing ashtrays. Likewise, the people who restrict smoking to one room in the house are also most likely to be the same respondents who open a window. The series of charts in Exhibit 5.5a shows that parents who restrict smoking to outdoors and remove ashtrays are more likely to be highly educated and come from non-smoking households. They are also more likely to be older and have higher incomes. As seen in Exhibit 5.5b, they are least likely to be francophones. They are also less likely to live in Quebec than other parts of the country and are more likely to be bothered by smoke. In short, parents who use these methods the most do not sympathize with smokers.

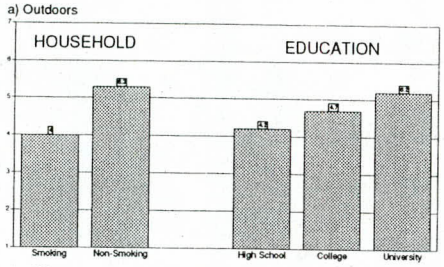
16. Note the small number of cases among extended family responding to this question (Exhibit 5.2).

On the other hand, parents who restrict smoking to one room and open windows to ventilate the house are more likely to have lower educations (Exhibit 5.5a). They also are younger, and have lower incomes. They are more likely to be women than men (see Exhibit 5.5b). They are more likely to be smokers or live with a smoker and are not as likely to be bothered by smoke. (Those who restrict to one room are still less likely, however, to be francophones or to be living in Quebec.) Those who open windows are more likely to be allophones and live in central or western Canada. Clearly, these methods are more widely used among smokers or those who sympathize with smokers. Extended family members tend to resemble this group more than the group that sends smokers outdoors and removes ashtrays, while parents are more equally split between the two groups.

EXHIBIT 5.5a
Methods Used by Parents to Restrict Smoking by Age, Income & Education

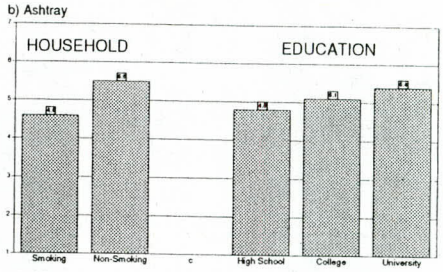
$\bar{x}$ on a 7 point scale (7=always)

a) Outdoors



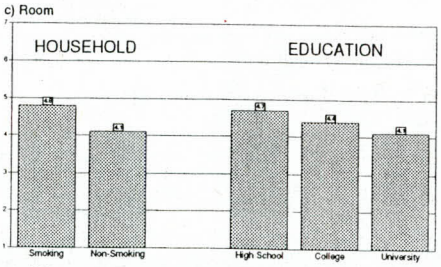
(n=999)

b) Ashtray



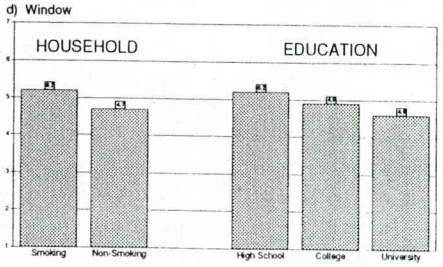
(n=969)

c) Room



(n=985)

d) Window

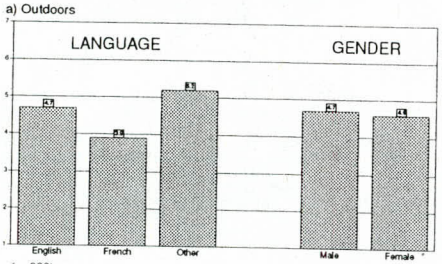


(n=975)

EXHIBIT 5.5b
Methods Used by Parents to Restrict Smoking by Language, Household Type & Gender

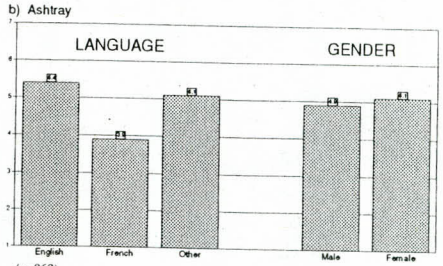
$\bar{x}$ on a 7-point scale (7=always)

a) Outdoors



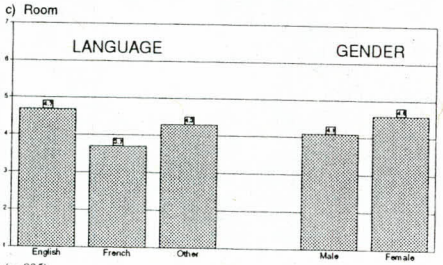
(n=999)

b) Ashtray



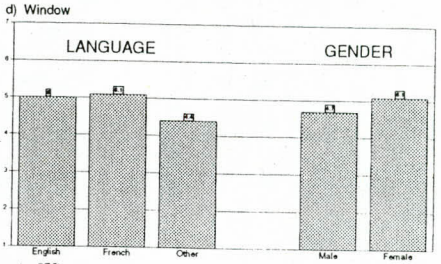
(n=969)

c) Room



(n=985)

d) Window

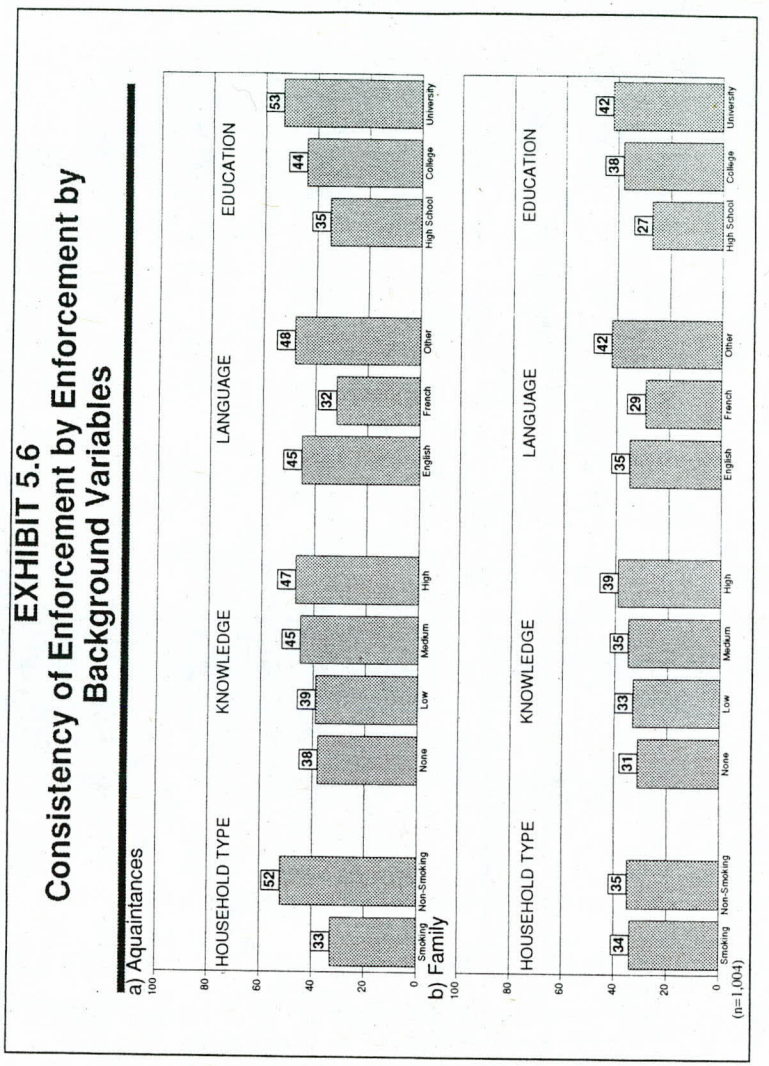


(n=975)

5.4 Consistency of Enforcement in the Home

Parents who restrict smoking in the home reported the consistency with which they do so, by rating the frequency of asking several types of people not to smoke in their home. These groups were: close friends; acquaintances; relatives; and other household members. Household members were asked not to smoke least frequently. Whereas 39 to 41 per cent of parents always ask the first three groups not to smoke, only 34 per cent always ask members of their own household to do the same. Perhaps this reflects the magnitude of the request for different groups. Asking friends, acquaintances or visiting relatives not to smoke involves a change in behaviour over relatively short periods of time, while other household members are being asked to alter their living conditions.

Consistency also varies according to the characteristics of the parent. That is, parents with older children (i.e., in their teens) are less concerned about imposing restrictions all of the time than parents with younger children. Parents with lower incomes and with lower levels of education are far less consistent. Francophones and residents of Quebec are less consistent, while residents of BC are the most consistent in the country. Predictably, smokers are less consistent, as are parents from smoking households, whereas non-smokers, and those bothered by ETS are the most consistent in their enforcement of strict restriction policies. Exhibit 5.6 presents the most illustrative examples of these patterns for acquaintances and family members.



Parents were asked to report the extent to which they restrict people in their home in general and when the children are present. Parents are more likely to restrict in front of the children than under other circumstances (61 per cent said always in the presence of children versus 49 per cent who said always in all circumstances). Smoking parents were also asked to indicate the extent to which they try not to smoke inside the home in general and when their children are present. Smoking parents are more likely to restrict their smoking when their children are present. A total of 57 per cent always restrict their smoking inside the home when their children are present versus 41 per cent who do so in general.

The extent to which respondents always restrict smoking inside the home, in general and when children are present, varied significantly by a number of parent characteristics. Parents with teens in the home are less likely to restrict in front of children than parents with younger children; however, there is no difference in restriction in general across groups. Parents with higher incomes and those with higher educations are more likely than parents with lower incomes and educations to restrict, both in general and in front of children specifically. Those bothered by smoke are also more likely to restrict in general and in the presence of children. On the other hand, francophones, as well as those living in Quebec and also smokers, are less likely to restrict under both circumstances. Exhibit 5.7 presents the most illustrative examples of these differences.

EXHIBIT 5.7a
Proportion of Parents who Always Restrict Smoking Inside the Home by Income and Mother Tongue

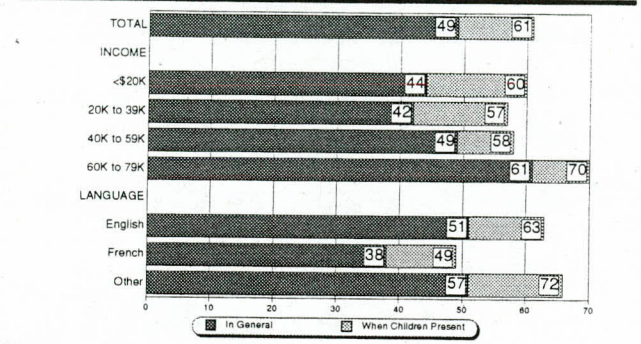
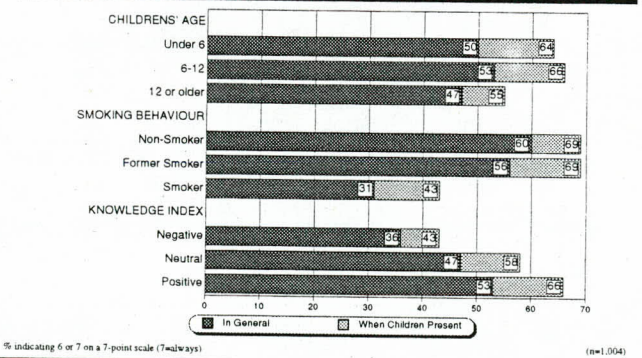


EXHIBIT 5.7b
Proportion of Parents who Always Restrict Smoking Inside Home by Children's Age, Smoking Behaviour and Knowledge Scores

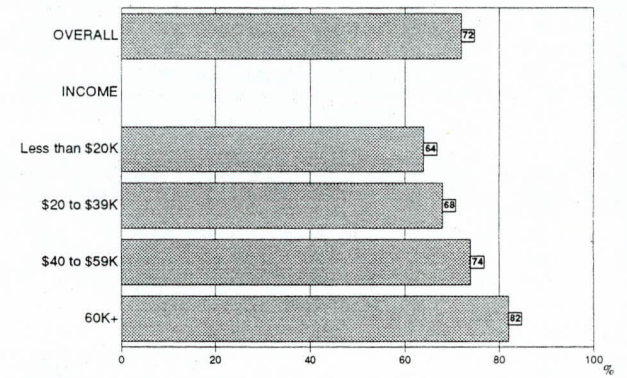


5.5 Restrictions Outside the Home

Parents were asked to respond to a series of questions concerning restrictive behaviour outside the home.

A total of 72 per cent of parents had thought about avoiding second-hand smoke in public places or other locations outside their home. Whether a parent had thought about avoiding ETS outside the home varied significantly by a wide range of factors. Exhibit 5.8 presents the percentage of parents who had thought about avoiding ETS outside the home by a number of respondent characteristics.

EXHIBIT 5.8a
Thought About Avoiding ETS Outside Home by Income (Parents Only)



Parents with higher family incomes and higher levels of education were more likely to have thought about avoiding ETS. Francophone respondents and

EXHIBIT 5.8b
Thought About Avoiding ETS Outside Home by Region and Gender (Parents Only)

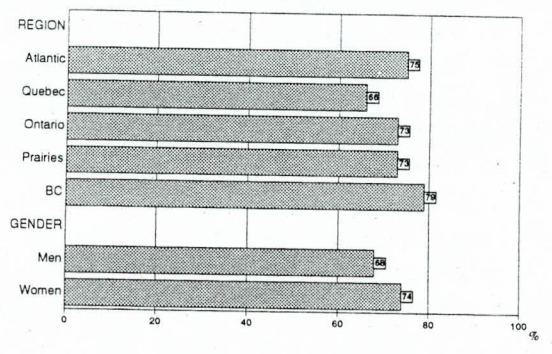
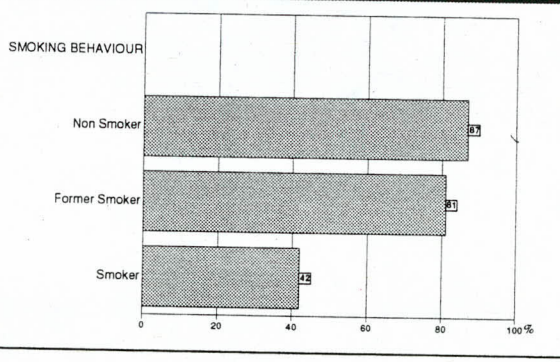


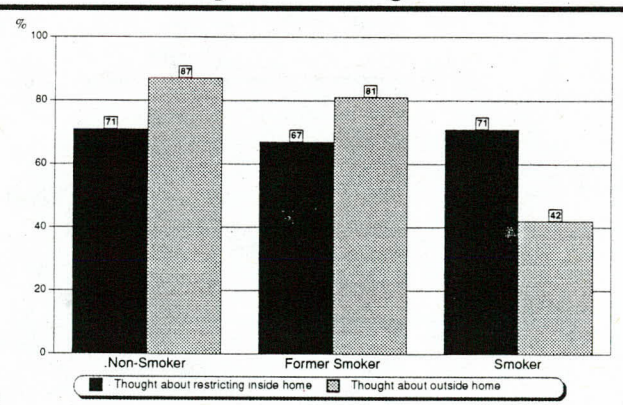
EXHIBIT 5.8c
Thought About Avoiding ETS Outside Home by Smoking Behaviour and Knowledge (Parents Only)



Quebec respondents were less likely to have thought about it. While respondents from BC were more likely to have thought about avoiding ETS outside the home, there were no other significant differences by province. Women, non-smokers and former smokers were also all more likely to have given it thought. Finally, respondents bothered by ETS were more likely to have thought about avoiding ETS outside the home.

Of the 72 per cent of parents who have thought about avoiding ETS outside the home, an overwhelming 94 per cent have actually done so. Parents in non-smoking households are even more likely to think about avoiding ETS outside the home and to actually do so. Exhibit 5.9 compares the proportion of parents who have thought about restrictions inside and outside the home by smoking behaviour.

EXHIBIT 5.9
Comparison of Those Who Have Thought About Restrictions Inside and Outside Home According to Smoking Behaviour



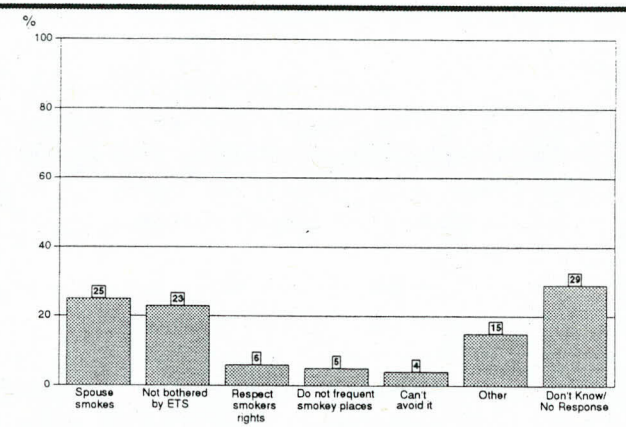
There is a strong correlation between restrictions inside and outside the home. Three quarters of parents who have thought about restricting inside the home have also thought about avoiding ETS outside the home, and 94 per cent of parents who restrict in the home also avoid ETS outside the home. The largest difference between behaviour inside and outside the home is among smokers.

Parents who have either not thought about avoiding ETS outside the home, or who have thought of it but have not done so, gave a number of reasons for this, as presented in Exhibit 5.10. Almost half of the respondents who have not thought of or did not avoid second-hand smoke either cited a spouse who smokes or not personally being bothered by ETS as the reason.

Smoking parents were asked to indicate the extent to which they try not to smoke outside the home in general and when their children are present. Exhibit 5.11 demonstrates that smoking parents are more likely to avoid smoking outside the home when their children are present. A total of 37 per cent of smoking parents always avoid smoking outside the home when their children are present, versus 24 per cent who avoid smoking outside the home in general. There may be some social desirability bias in the response of parents to this question, since only 42 per cent of smoking parents indicated that they had thought about avoiding ETS outside the home, yet over 60 per cent of smoking parents indicated that they try not to smoke either sometimes or always when outside the home.

Parents who try to avoid ETS outside the home were asked to report the extent they try to avoid it when their children are present, and in general. Exhibit 5.12 demonstrates that parents are more likely to avoid ETS when their children are present. A total of 83 per cent of parents who avoid ETS outside the home always do so when their children are present whereas 71 per cent always avoid ETS in general.

EXHIBIT 5.10
Reasons for Not Avoiding ETS Outside the Home



The extent to which parents always avoid ETS outside the home, in general and when children are present, varied significantly by a number of variables. Exhibit 5.13 presents the proportion of parents who always avoid ETS outside the home, by education, language, community size, and smoking behaviour. Whether parents avoid ETS outside the home also varied by income (in a manner similar to education), and by whether the individual is bothered by ETS.

EXHIBIT 5.11
Extent to Which Smoking Parents Avoid Smoking Outside Home

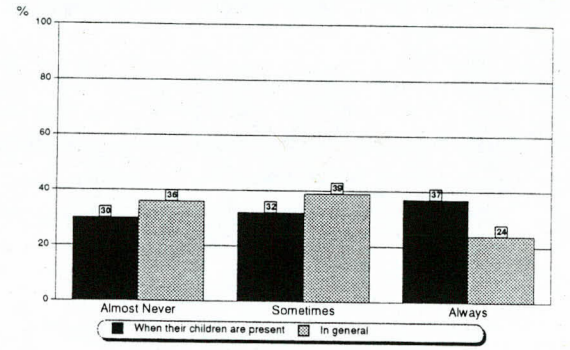


EXHIBIT 5.12
Extent to which Parents Avoid ETS Outside Home

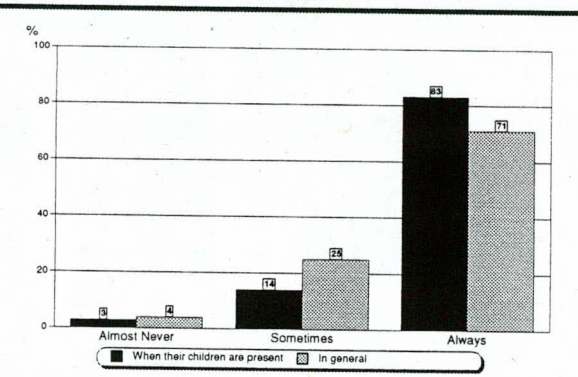


EXHIBIT 5.13a
Proportion of Parents who Always Avoid ETS Outside Home by Education and Mother Tongue

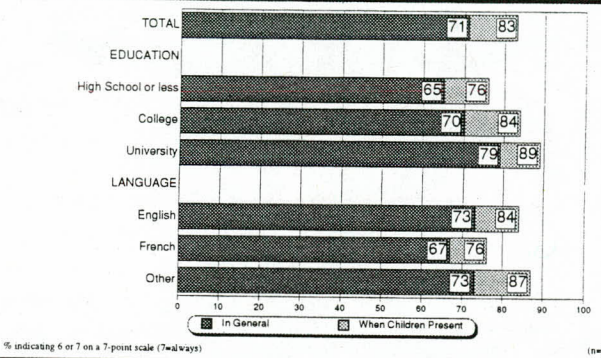
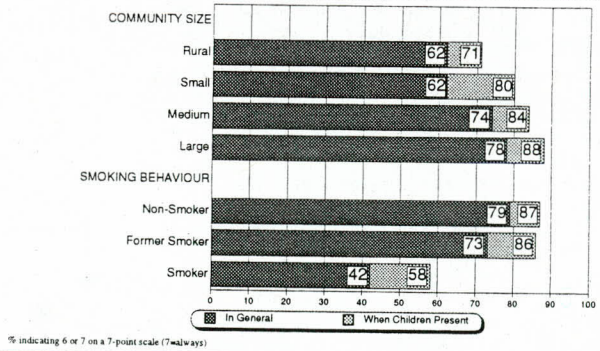


EXHIBIT 5.13b
Proportion of Parents who Always Avoid ETS Outside Home by Community Size and Smoking Behaviour



Beliefs and attitudes concerning ETS are strongly linked to the extent to which a parent avoids ETS outside the home and to the extent to which smoking parents try to avoid smoking outside the home. Strong correlations were observed between avoidance of ETS outside the home and the rated importance of the health issue of "reducing exposure to ETS". Strong associations were also found between avoidance of ETS outside the home, both in general and when children are present, and responses to the following attitudinal statements:

- "smoking is socially acceptable" (negative correlation);
- "ETS causes disease amongst non-smokers" (positive correlation);
- "I think that people should have a right to be free from breathing other people's second-hand smoke" (positive correlation);
- "smoking in all indoor places should be banned" (positive correlation); and
- "I think that smokers are overly persecuted by non-smokers" (negative correlation).

Personal experience also has an impact. For example, a total of 82 per cent of parents who indicated that someone close to them had become ill or died as a result of a smoking-related illness have thought about avoiding ETS outside the home, versus 66 per cent of those who have had no such personal experience.

5.6 Methods Influencing Compliance with Smoking Restrictions

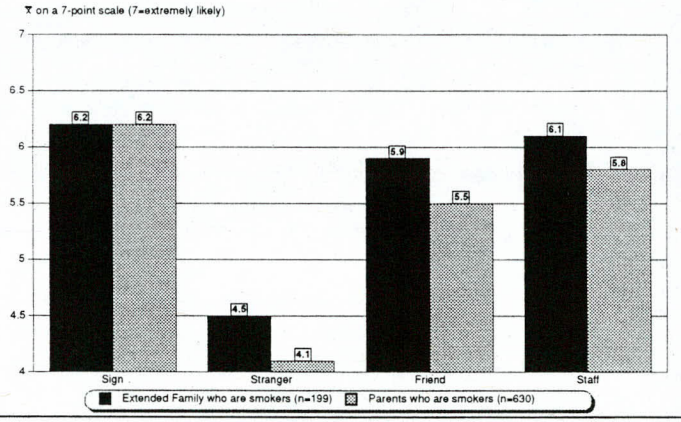
Both parents and extended family members who are smokers were asked to comment on the influence of four methods commonly used to reduce exposure to ETS. Respondents rated the extent to which a smoker would likely put a cigarette out or avoid smoking under four separate circumstances:

- in the presence of a "no smoking" sign;

- when a request is made by a stranger;
- when a request is made by a friend or relative; and
- when a request is made by a staff member or manager in a restaurant or shopping mall.

Responses from both parents and extended family members suggest that authority (and possibly the threat of consequences for not complying) hold the strongest weight. Exhibit 5.14 suggests that smokers are most likely to obey a "no smoking" sign, followed closely by a request from a staff member or manager of a public establishment (83 and 79 per cent, respectively, said that this would likely result in action by a smoker). A request from a friend or relative still holds quite a bit of weight (72 per cent rated this as likely to have a response). The impact drops dramatically, however, when the request is made by a stranger, since only 43 per cent said that this would likely result in action by the smoker.

EXHIBIT 5.14
Perceived Vehicles for Compliance Among Smokers

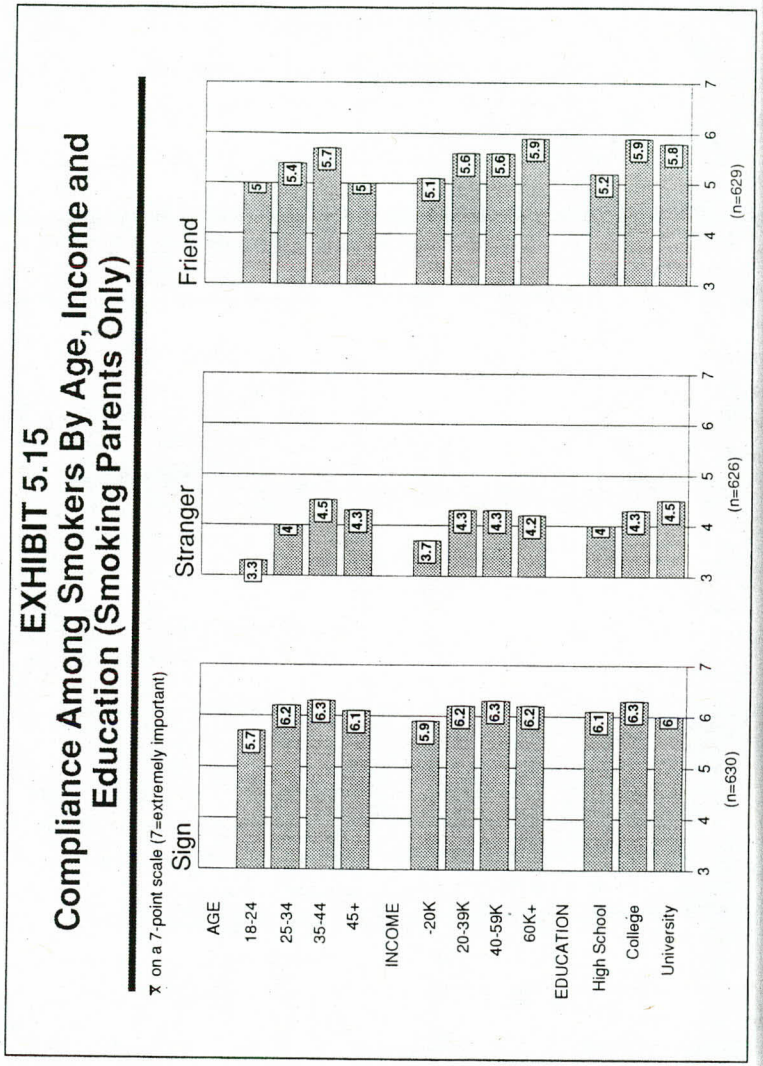


Views on the impact of these vehicles varies by respondent demographics. Younger smoking parents, as well as those parents reporting the lowest household incomes (under $20,000) and education assign less impact to a "no smoking" sign than do older smoking parents, or those with higher incomes or education (Exhibit 5.15). A sign is also less effective in the minds of men, as compared to women, as well as those registering the highest knowledge index scores. Interestingly, parents living in the largest communities are also less likely to see a sign as an effective method of getting a smoker to respond.

Both a request from a stranger or a friend or relative show a similar profile to the rating of signs in terms of age, income and education. That is, smoking parents who are younger, or have lower levels of income or education tend to view a request from a stranger as less effective than smoking parents who are older, or have high levels of income or education. It is also perceived as less effective by anglophone parents. Parents who are residents of Ontario rate the effectiveness the lowest, while those living in Quebec see it as more effective than respondents from the rest of the country.

A request from a staff member or manager, on the other hand, is seen as equally effective among all parents regardless of age group or income bracket. It is, however, rated higher among parents with a college education.

EXHIBIT 5.15
Compliance Among Smokers By Age, Income and Education (Smoking Parents Only)



CHAPTER

6 BEHAVIOURS OF CHILDREN AND PARENTAL BELIEFS ABOUT CAREGIVERS

This chapter outlines the behaviour of children themselves with respect to reducing their own exposure to ETS. It also details the attitudes and behaviour of parents related to the hiring of a caregiver.

6.1 ETS and Caregivers

Two out of five parents (38 per cent) employ a caregiver. Only a small proportion employ a caregiver who smokes (17 per cent). This means that seven per cent of children in the households sampled are looked after by caregivers who smoke. However, more than half (55 per cent) of this small subset of households believe their caregiver does not smoke in front of their child(ren). Overall, children are thought to be exposed to smoke by their caregiver in less than four per cent of cases.

The characteristics of parents who hire smokers as their children's caregiver differ from those who do not. Differences are also apparent among parents with respect to the importance they place on the smoking behaviour of the caregiver relative to other factors influencing the selection of the caregiver.

Ekos Research Associates Inc., 1995

The smoking behaviour of the caregiver is of high importance for 55 per cent of parents. On a scale from 1 to 7, where 1 is very low importance and 7 is very high importance, the overall mean score was 4.9. This varies depending on income, education, mother tongue, and location. As the level of income and education increases, the level of importance placed on the caregiver's smoking behaviour as compared to other factors also increases.

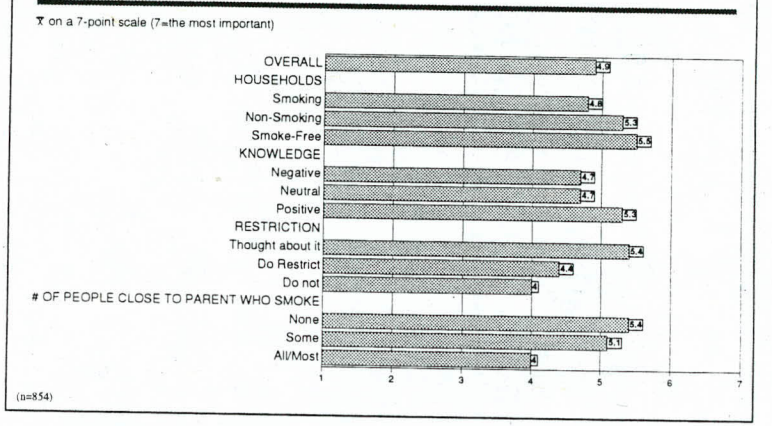
The smoking habits of the caregiver are less important to francophone parents (with a mean of 4.6). Fewer than half of these parents consider it a highly important factor. The smoking behaviour is of greatest importance to parents whose mother tongue is neither English nor French (with a mean of 5.8). For these parents, over three quarters of these parents consider it to be highly important and very few feel it is of low importance (3 per cent).

Residents of different provinces place different levels of importance on smoking behaviour in the selection of a caregiver. Parents who live in Quebec and the Prairies rank smoking behaviour at a lower level of importance compared to the sample as a whole (with means of 4.7 and 4.6, respectively). Saskatchewan, in particular, places only a moderate level of importance on the caregiver's smoking behaviour (with a mean of 4.2). Parents in the Maritimes place a greater importance on the smoking behaviour of the caregiver as over 70 per cent of parents in this region consider the smoking behaviour to be of high importance (with a mean of 5.6).

The greatest influences on the importance parents place on the caregiver's smoking behaviour are based on whether or not the parents' smoke (as illustrated in Exhibit 6.1). Parents who smoke, live in a smoking household or who are not bothered by smoke place only a moderate level of importance on their caregiver's smoking behaviour. Parents who do not smoke, live in non-smoking or smoke-free households or who are bothered by smoke consider it to be a more important factor. If a parent has had someone close to them die of a smoking-related illness, then they are more

likely to place high importance on the caregiver's smoking habits than parents who have not experienced this situation (means of 5.3 versus 4.8, respectively).

EXHIBIT 6.1
Importance of Smoking when Selecting a Caregiver by Respondent Background Characteristics



Parents are also influenced by their exposure to smoke. Parents whose social circles include many people who smoke are more tolerant of their caregiver's smoking behaviour. Parents who actively avoid second-hand smoke in public places accord a greater level of importance on the smoking behaviour of the caregiver than those who do not. Those who have never thought of avoiding second-hand smoke consider it to be of lower importance and parents who have thought of avoiding smoke, but do not actively try to avoid it consider it to be moderately important.

As could be expected, parents with a high score on the knowledge index consider the smoking behaviour of the caregiver to be of high importance. As the level of knowledge declines, so does the level of importance, as illustrated in Exhibit 6.1.

Parent attitudes toward second-hand smoke and smoking have a significant influence on the level of importance given to the smoking behaviour of the caregiver. Parents who do not agree with the statements "Second-hand smoke can affect the health of the child more than the health of an adult", "Second-hand smoke causes disease amongst non-smokers", "Cigarette smoking causes death amongst non-smokers" and "Second-hand smoke causes disease among smokers" are more likely to consider the smoking behaviour of the caregiver to be of lower importance (with means of less than 4.0). Parents who agree with the statement "I think you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health" place a much lower level of importance on the smoking behaviour of the caregiver, as compared to those who agree.

The position of parents with respect to the type of household also is related to the importance placed on smoking among caregivers. The level of importance increases as parents take a stand on restricting smoking (as illustrated in Exhibit 6.1). In smoking households that do not restrict, the smoking behaviour of the caregiver is of low importance (41 per cent). In non-smoking households that restrict, over 70 per cent of parents felt the caregivers smoking behaviour is of high importance. Finally, in smoke-free households, 64 per cent considered it to be of high importance. Other examples of differences on this attitudes according to groups are also shown in Exhibit 6.1.

Very few non-smoking and smoke-free households employ a caregiver who smokes (13 and 11 per cent, respectively). On the other hand, a full one-quarter of smoking households do. Smoking households that place no restrictions on smoking are more likely to employ a caregiver who smokes than one that does not smoke. The level of education and income as well as the size of the community are other

influencing factors. Caregivers who smoke are more frequently employed by parents with lower levels of education and/or income. The size of the community has an inverse relation to the proportion of parents who employ a smoking caregiver; as size decreases, the number of parents who employ a smoking caregiver increases. A majority of parents (84 per cent) who have thought about avoiding smoke outside of their home employ a caregiver who does not smoke. Finally, as the number of people who smoke within the close social circle of parents increases, so does the likelihood that the parents will employ a caregiver who smokes.

As previously illustrated, the attitudes of parents toward smoking influence the level of importance they place on the smoking behaviour of the caregiver. Parents who disagree with the statements "Cigarette smoking causes disease amongst smokers", "Second-hand smoke causes disease amongst non-smokers" and "Second-hand smoke causes death amongst non-smokers" are more likely than parents who agree to hire a caregiver who smokes.

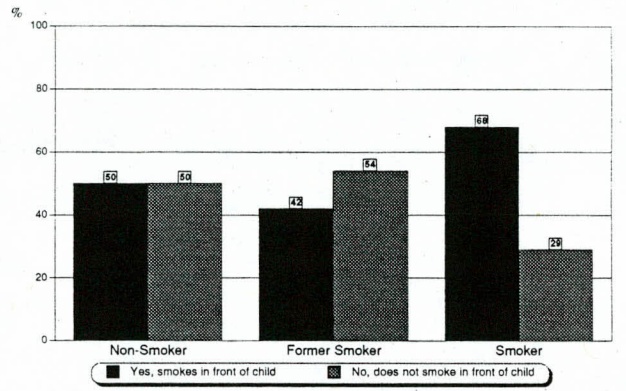
Smokers, as well as smoking households, are much more likely to believe their caregiver smokes in front of the child than non-smokers (Exhibit 6.2). Also, two thirds of parents who have not experienced the death or serious illness of someone close to them as a result of a smoking-related illness, report a caregiver who smokes in front of the child. Fewer than half of parents who have experienced this situation employ a caregiver who smokes in front of their child.

6.2 Behaviours of Children

A total of 77 per cent of parents have children aged 4 years old or older. These parents were asked whether ETS had been discussed in the home.

The majority of parents reported that the subject of second-hand smoke had come up in discussion with their child (67 per cent). A number of parent characteristics appear to influence whether ETS has been discussed, as demonstrated

EXHIBIT 6.2
Parents' Beliefs about the Smoking Habits of their "Smoker" Caregiver



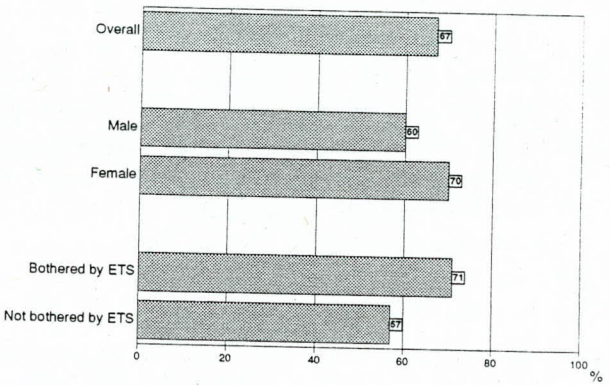
(n=148)

in Exhibit 6.3. Mothers are more likely than fathers to have discussed ETS with their child. Parents who are bothered by ETS are also more likely to have discussed ETS with their child.

The majority of parent-child discussions on the topic of ETS were initiated by the child (72 per cent). Only 28 per cent of parents said that they had initiated the discussion. In smoking households, the discussion was far more likely to have been initiated by the child rather than by the parent. Parents who are bothered by ETS are more likely to have initiated a discussion themselves than parents who are not.

The beliefs of the parent appear to be an important influence in parent-child discussions on the topic of ETS. In households where ETS has been discussed, parents are far more likely to feel that smoking is not socially acceptable and to believe

EXHIBIT 6.3
Discussed ETS with Child by Background Variables



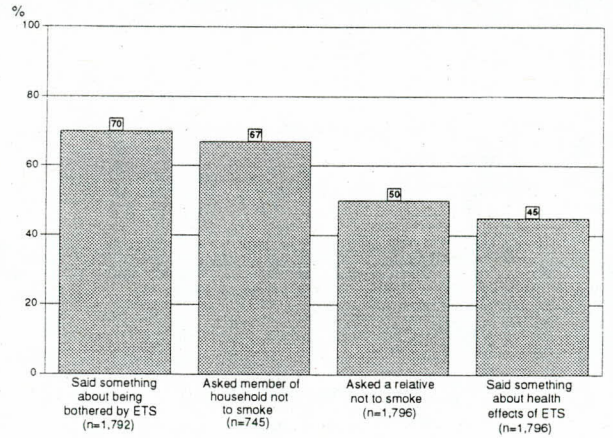
(n=1,797)

that ETS causes disease and death amongst non-smokers. For example, 70 per cent of parents who agree (6 or 7 on a 7-point scale) that ETS causes disease amongst non-smokers have discussed ETS with their children versus 58 per cent of parents who disagree (1 or 2 on a 7-point scale) with this statement. Similarly, parents with strong beliefs and attitudes related to other harm caused by ETS were also more likely to have initiated a discussion themselves.

Finally, parents were asked to indicate whether their children had engaged in a number of different behaviours, including requesting that a smoker (relative or member of the household) stop smoking in their presence, or speaking about the effects of ETS. Exhibit 6.4 presents these results. A large proportion of children have said something about being bothered by ETS. A much smaller proportion talked about the actual health impacts of ETS. Half of the children of parents surveyed have asked a relative not to smoke, while a much larger proportion

of children have asked a member of their household not to smoke, indicating that familiarity is a strong factor influencing propensity to make this request.

EXHIBIT 6.4
Behaviour of Children



Parents in non-smoking households and parents bothered by ETS were more likely to report that their child had asked a relative not to smoke in their presence. Similarly, children of parents bothered by ETS were more likely to have either said something about the health effects of ETS or about being bothered by ETS. Furthermore, children of parents with strong beliefs and attitudes towards ETS are more likely to have said something about ETS or to have requested that a smoker not smoke in their presence.

CHAPTER

7 FOCUS GROUPS

7.1 Introduction

The following pages present a summary of findings from 20 focus group discussions conducted with children aged 8 to 12 years from across Canada. A more detailed description of the demographic characteristics of the groups (locations of focus groups, numbers of participants, etc.) is found in the Methodology section of Chapter One (1.3b). The findings are organized according to the major study issues. Differences in knowledge, attitudes and behaviour among age groups and by type of household (i.e., parents who do not smoke *versus* parent(s) who do) are highlighted.

As a qualitative source of evidence, the approach to reporting focus group findings is quite different to that taken with survey findings. The account of focus group findings typically does not feature the fine detail used to describe survey results. Also intensities of reaction can only be provided using general descriptors, rather than actual percentages, given the small number of cases and the method in which the findings are analyzed.

7.2 Knowledge and Level of Exposure to ETS

(a) *Familiarity and Understanding of ETS*

A large majority of children who participated in the English focus groups knew that "second-hand smoke" included the smoke which is exhaled by a smoker. Younger children were less likely to indicate that it also included smoke which comes the tip of a burning cigarette. The term environmental tobacco smoke was completely foreign to the children.

The children who participated in the French focus groups in Montreal, Ottawa and Winnipeg had much more difficulty defining the terms *la fumée des autres* and *la fumée secondaire*. It was especially difficult for the younger participants. *La fumée ambiante*, a less descriptive term, was meaningless.

The children who were not familiar with the various terms used to describe ETS, or had not included the smoke from the tip of a burning cigarette as part of their initial definition of ETS, were all able to relate to the concept once it had been accurately described by some of the other children in their group or by the moderator. Indeed, the segment of the discussions on information sources revealed that almost all children had been exposed to some information on ETS.

For the children of smokers, there was no question that their home was the place where ETS was most often found, and in the largest concentration. Many of these participants also indicated that ETS was often present at their relatives' or their family friends' homes. Almost all of these children indicated that they were exposed to ETS daily, sometimes speaking of the amount of smoke in their homes with some

exasperation: "At home, my dad smokes, and he's trying to quit but he tells me it's hard... he can't stop it."

In contrast, the children of non-smoking parents took a little longer to identify places where one could find ETS. Focusing mainly on public places, such as restaurants and shopping centres, it was clear that ETS was not a top of mind issue for them compared to the children of smokers.

Other places where ETS was found which were most often mentioned included outdoors and at school (secondary school). Children of smokers also noted that ETS was found inside of cars.

(b) *Exposure to ETS*

As expected, there was a great deal of difference between the extent of ETS exposure suffered by children of smokers and children of non-smokers. For most of the children of smokers, ETS was a fact of life, with some indicating that most of the adults they knew, including both their parents, were smokers. The children of non-smokers did not view ETS as a significant issue in their lives. They talked of infrequent exposure which most often came when they visited relatives' homes or the homes of family friends. Children who had a physical condition which could be aggravated by ETS (e.g., asthma, bronchitis, ear infection) or had a sibling with this condition, tended to have a higher awareness of ETS and its negative effects.

There were also significant differences in exposure to ETS *among* the children of smokers. Some children of smokers were much less exposed to ETS than others because their parents restricted smoking in the home and, in some cases, outside of the home as well. Typically, such a situation included only one smoking parent who took measures to minimize the rest of the family's exposure to his/her ETS. Children painted a picture of a home in which the smoker acknowledges that he/she had a problem in the form of an addiction that could harm the health of other

members of the family if left unchecked: "I only smell it at restaurants and public places because my dad doesn't smoke around me." Awareness and knowledge of ETS was also very high among these children. It is important to note, however, that some of the measures taken by parents to limit their family's exposure to ETS vary a great deal in their efficacy (for example, smoking outside compared to smoking in the basement).

At the other end of the spectrum were the children of what might be called "unrepentant smokers". Their description of home usually included two parents who smoked. The relatives and family friends who visited their home also tended to be smokers. These children described growing up in a sort of smoking culture in which few, if any, restrictions on smoking exist, and in which the health impacts of smoking and of ETS appear not to be discussed: "My home is a smokehouse. Everybody comes over and they all smoke."

Almost all participants indicated that ETS bothered them significantly, with some children who had a respiratory condition, such as asthma, noting it had a very negative impact on their ability to breathe: "I have asthma so it makes me feel sick." The effects listed by the children ran the gamut of possibilities, with coughing or choking mentioned most often. Other effects included:

- nausea;
- irritation of the eyes;
- headache; and
- wheezing.

Many children made a point of noting how the smell of cigarette smoke bothered them. Some also indicated that their younger brother or sister seemed to be more affected by ETS then they were. A few children also indicated (un-prompted) that second hand smoke could have longer term effects such as brain damage, cancer,

bronchitis and heart disease, although some children were doubtlessly thinking about the effects of smoking as well.

There were two types of children who indicated that they were not bothered by ETS. The first were children of non-smoking parents who reported being very infrequently exposed to ETS. The second group, composed of only a few children, indicated that ETS did not bother them much, but for the opposite reason. They explained having been surrounded by ETS for so long, they have "grown used to it".

All of the children who reported being bothered by ETS had no doubt that the symptoms they were experiencing were caused by ETS: "I know it comes from the cigarette smoke because I feel the same way each time someone around me lights one up." Of note is the belief held by some children, especially younger ones, that if they could not see or smell cigarette smoke, then they were not being affected by ETS, even if someone was smoking in another part of their home.

7.3 Knowledge and Perception of the Long-Term Effects of ETS

ETS was generally understood to be either as dangerous or "almost" as dangerous to non-smokers as smoking was to smokers. Many children, especially the older participants, also tended to qualify their view by indicating that health impacts were directly related to levels of ETS exposure: "If you are not around it much, it's not that dangerous." Childrens' beliefs about the negative health impacts of ETS were overall quite similar to those of adults, as found in the survey results presented earlier.

The notion of long-term effects was difficult for some children to grasp. At times, they confounded the symptoms of ETS with its long-term effects. It was also a challenge to keep children focused on the effects of ETS rather than smoking. Essentially, however, children were divided as to whether or not they believed their

bodies had been affected by ETS. Curiously, there was not as much variation in the views of children of smokers compared to non-smokers as might have been expected. A few children of non-smokers indicated that they were affected because one of their parents *used* to smoke, while many children of smokers said that they were not sure if their bodies had been affected. The younger children of smokers, in particular, were unsure about the long-term effects of ETS. Quite a few felt that ETS could not have an effect on their bodies when it was not present: "It [the effects] goes away when I am not around it." Survey results indicate that (according to parents) children are more likely to mention being bothered by ETS, in discussions on this subject, than to mention health impacts.

The views of children varied a great deal concerning how much smoke one has to be exposed to for one's health to be significantly affected. Some felt that only minor exposure was needed (one or two cigarettes), while others suggested that one had to be exposed to high doses for years before any significant damage occurred. The children of smokers were more likely to hold the latter view: "A couple of years if you are around someone who smokes all the time." This may help to explain the relatively small difference between the opinions of children of smokers and those of non-smokers concerning whether or not their bodies had suffered any long-lasting impacts from ETS.

Children in all groups felt that the health of many people had been negatively affected by ETS. Again, however, there was occasional confusion between the immediate symptoms produced by ETS, the longer-term impacts of ETS and the long-term impacts of smoking. Thus, some children gave examples of people they knew who had died or suffered a serious illness due to smoking. This portion of the discussion clearly revealed that the children all knew the basics concerning the health risks associated with smoking.

7.4 Information Sources About ETS

It was perhaps most difficult for children to disentangle ETS from smoking when discussing information sources. This is not surprising, given that the two subjects are often discussed together.

Television commercials were identified first by about one-half of the children as a source of information on ETS. This is a higher proportion citing paid advertsiments than amoung the adult sample, where 21 per cent recalled hearing about ETS from this source. Indeed, many children had seen the Health Canada ETS advertisement featuring the newborn baby in a crib. Quite a few children also described the advertisement which features a man in a bar "squeezing juice" from a handful of cigarettes. The ETS advertisement seems to have been very effective since children were generally able to relate most of the intended core messages (i.e., ETS travels, ETS is especially bad for children, and "moderate" smoking levels can expose a child to a huge amount of ETS over time.) Of note is that children did not appear to misunderstand that ETS was only bad for infants, only that it was probably worse for them because they are more vulnerable ("smaller").

The other two leading sources of information on ETS and smoking mentioned by children were parents and school. Access to these sources was very inconsistent, however. About one half of the children had learned about smoking and ETS from either one of these sources. It also appeared that discussions with parents tended mainly to revolve around smoking, as opposed to ETS. This differs from adults, where over two-thirds of parents reported that ETS has been discussed in their household. While most parents indicated that the discussion has been initiated by the child, it is possible that children tend to have less recall of these events than parents.

Information obtained at school came in many forms. In some cases, information was disseminated by a guest speaker to the school or class, while in other

instances students learned about smoking as part of the curriculum. Children of smokers were less likely to mention school as a source of information. Other sources of information noted by the children included books and magazines, their friends, or a relative.

The view of many older children was that learning about smoking and ETS was a rather "boring" but necessary activity. This judgment was mainly based on what they experienced in school: "Its good to learn about [ETS], but sometimes its boring because they [teachers] can go on and on"; "I like knowing about it but it's not really interesting." Younger children, on the other hand, were more likely to find the topic interesting.

Participants seemed more or less evenly divided concerning whether or not they wanted to learn more about ETS, with older children more likely to say that they knew enough about ETS. Those who wanted to know more felt that one could never know enough about a topic that was relevant to their physical well-being. For example, some participants in Montreal indicated that they specifically wanted to know more about the health effects of ETS and how these effects vary according to age. In contrast, children who were not interested in learning more about ETS felt that any information beyond the bottom line messages that smoking cigarettes and exposure to ETS were unhealthy was essentially redundant: "I know all I need to know: It's bad for my body." A few children also qualified this view by stating that they would be interested in knowing about discoveries related to the effects of ETS.

(a) Best way to Communicate Information About ETS

Participants suggested the use of school and television as the best ways to communicate ETS information to children in their age group. Parents were also identified as the best source of information by a number of children.

Television was seen as a strong medium because information on TV is easy to digest, children watch a lot of TV and because drama could be used to make a point (although a few children indicated that commercials should not "exaggerate"). The most positive aspects of learning about ETS at school was the opportunity to ask questions of a teacher and the possibility of obtaining more in-depth information.

In terms of credibility, parents and "doctors" were the most popular unprompted suggestions. Teachers were also seen among the younger children as among the most credible people to speak about ETS. Doctors were assumed to have the most information about health effects, but parents were deemed by many children to be most trustworthy. Overall, children indicated that it was very important that the provider of information "know what they are talking about", thus reinforcing the notion of the doctor, medical researcher or "expert" as most credible. This replicates the survey finding that doctors are perceived as the most credible source of information about ETS.

It was apparent that children, particularly older ones, have grown cynical about "sports heros". For example, they seemed well aware of the role that promotions and endorsements played in the lives of athletes: "Athletes are paid to say what they say." Athletes or other types of "stars", such as singers, were nevertheless a first choice as communicators for a significant number of children, with some children arguing that a "star" would have greater success in holding children's attention.

A number of children showed interest in learning about ETS and/or the dangers of smoking from people who have suffered from the negative effects of cigarettes. Specific suggestions included former smokers or someone who has become very ill because of ETS or smoking.

Taken together, the comments of children suggest that older children would rather be exposed to an information or education campaign that is realistic and in which "experts" emphasize facts, as opposed to a glossy, star-focused campaign, or

one that attempts to captivate through "exaggeration" and histrionics. Younger children, though, revealed that they would be more captivated by the words of role models, such as athletes, singers or their teacher.

7.5 Nature and Prevalence of ETS Avoidance Techniques

Not surprisingly, the children of smokers implemented avoidance techniques much more regularly than the children of non-smokers. Most in the latter group, in fact, did not take action to limit their exposure to ETS very often since they were simply not exposed to cigarette smoke very much: "I don't need to do much to get away from smoke, I'm not around it very much."

When they were around ETS, most children of non-smokers indicated that they simply moved away from the cigarette(s), sometimes to another room. A few said that they tried to send a message to the smoker by coughing in an exaggerated manner. Some children said that they asked people to put out their cigarette, but reported mixed results. A few others simply indicated that they waved the smoke away with their hand. Overall, the children of non-smokers were rather vague and unemotional in describing how they coped with ETS.

The children of smokers tended to describe the same techniques used by the children of non-smokers to reduce their exposure to ETS (i.e., leave the room, cough to make a point, move away from an ashtray, pull their sweater over their nose and mouth). The main difference lay in the frequency and urgency with which these children resorted to these techniques, with most indicating that avoidance techniques were a regular part of their lives. This is somewhat different from the survey results, where smoking parents were more likely to open windows and restrict to one room, while non-smoking parents were more likely to restrict to outdoors and remove ashtrays.

A few children described some of the more drastic measures they used, such as hiding matches or putting someone's cigarette out when they were not looking: "Sometimes, if its really bothering me, I'll butt out my parent's cigarette." Others escaped to a friend's house or another location outside of the home, such as shopping mall, when the smoke became too much to bear. A couple of children said that they put blankets under their door to keep the smoke from seeping into their room: "If I'm inside, I try to go outside or go play games in my room."

(a) Asking Someone Not to Smoke

In every focus group there were some children who indicated that they have asked someone to stop smoking because ETS was bothering them. This technique, however, tended to be used more by older children and children of smokers. Overall, children reported mixed results, with some reporting quite negative experiences.

Children of smokers in particular, described scenarios in which their request had been ignored. For example, some were told to "go away" or mind their own business by relatives or parents: "I asked my dad to stop smoking because the smoke was bugging me. He said nothing"; "I asked my mom and dad to stop [smoking]. My mom said she can't because it's a habit. My dad said nothing." It is also important to note that children indicated that they were often asking people to stop smoking, not only because it bothered them, but because they were concerned about the health of the smoker: "I tell my father to stop smoking because it is bad for him."

Many children indicated that they were discouraged from asking people to put out their cigarette because they were "shy", "embarrassed" or were afraid to receive a very negative response. It was especially difficult for children to ask relatives they did not see very often, older children and strangers: "He was a stranger and he was bigger then me so I was afraid to ask"; "I would be too embarrassed to ask a

stranger"; "I always wanted to ask my aunts and grandma, but I don't because I don't see them as much". In short, children were most comfortable asking members of their immediate family not to smoke around them. In fact, adults smokers indicated in the survey results that authority (such as signs or a request from a staff member or manager) increases the likelihood of enforcement, validating childrens' perceptions that smokers' will not listen when asked, by children, not to smoke.

Children across all groups were unanimous and fairly adamant that it is appropriate for children to ask an adult *they know* to stop smoking: "It's not impolite because I have a right to breathe clean air and because it's also bad for their own health." Many children, however, expressed concern that their efforts would prove fruitless. Highly aware that smoking is an addiction, they felt that asking someone to put out their cigarette was asking a great deal: "I wouldn't ask anyone. For one thing, it's a drug and it's really hard to stop. My dad tried and he couldn't." This view has no doubt been reinforced in the minds of a number of children of smokers who have been ignored or chastised by their parents when they have asked them not to smoke: "I ask my mom all the time, but I wouldn't ask my grandmother or aunt, because I wouldn't want to be rude. My mom might think it was rude too."

(b) No-smoking Policies Inside and Outside of the Home

All children were aware that smoking was prohibited in many areas, including the following places:

- in school (sometimes on school property);
- in places where there are no smoking signs;
- in hospitals and clinics;
- in stores;
- some arenas;
- McDonalds;

- sports centres;
- government buildings;
- nursing homes;
- at some people's houses; and
- in the subway.

As could be expected, the extent of smoking rules in the home tended to vary according to whether one or both of the parents smoke. For the most part, some smoking was permitted in the homes of children of smokers, but was restricted, sometimes to a single room such as the basement, kitchen or bathroom. Many children were pleased to report that their rooms were a no-smoking area. A few children of smokers indicated that smoking was not allowed at all inside their home.

For the other children of smokers, smoking was allowed anywhere in the home, perhaps with the exception of one or more bedrooms: "Anybody can smoke anytime, anywhere." In some of these cases, though, children said their parents made an effort not to smoke around them or their siblings: "My parents sit where the smoke won't come to us. They encourage us to trade places to get away from the smoke."

About one-half of the children of non-smoking parents indicated that visitors who were smokers were allowed to smoke in their home. Tolerating ETS in this manner was rationalized on the basis that it was a rare occurrence: "They [visitors] only smoke in the living room or dining room when they visit." In other cases, parents enforced strict no-smoking rules: "We don't allow people to smoke at home; everybody has to go outside". Generally, there were no exceptions to the rules in homes where smoking was not allowed. In some of these homes, however, the no-smoking rule was sometimes lifted for grandparents, other relatives and "some visitors that don't come over very often". For a few children, no-smoking rules were a non-issue because smokers never visited their home.

Some non-smoking parents had a less direct approach to preventing people from smoking in their home. According to one child, his mother tells visitors who want to smoke that she is allergic to cigarette smoke, even though she is not. A few children also indicated that their parents deliberately did not keep ashtrays in their home as a way of discouraging people from lighting up.

7.6 No-smoking Rules outside the Home

Discussion of no-smoking rules outside the home centred around the family car and restaurants. All of the children were very conscious of the existence of smoking and non-smoking sections in restaurants, although some were quick to point out that their effectiveness may be dubious given that smoke travels: "My parents always take the non-smoking section. It doesn't help though because the smoke blows over from the smoking section."

The prevalence of no-smoking rules outside the home tended to mirror those found in the home. This is consistent with survey results, which indicated that there is a strong correlation between restrictions inside and outside the home. Smoking in the car or in restaurants was not an issue for children of non-smokers: no one smokes in their car and, with very few exceptions, they always sit in the non-smoking sections of restaurants.

Overall, children of smoking parents indicated that their parents were more likely to refrain from smoking in the car compared to the home. In fact, in about half the cases, smoking in the car was not allowed. For the other half, smoking in the car took place with a window rolled down.

The children of smokers were usually destined for the smoking sections of restaurants when they were accompanied by one parent (or both) who smoke(s). Otherwise, when they were with an adult non-smoker (usually their non-smoking

parent) they sat in the non-smoking section of restaurants. In general, it appears that parents of non-smokers are not inclined to curb their habit outside the home in order to accommodate their children or non-smoking spouse: "Dad always goes to the smoking section. I try to say 'non-smoking section', but my dad always says 'smoking section' first." In the case where both parents smoke, the views and needs of the children appear to be completely marginalized: "Usually if there's a non-smoking area I say 'non-smoking! non-smoking!' but they always pick the smoking area."

Almost all participants thought that no-smoking rules were a good idea because they not only protected the health of non-smokers, but also of smokers who find themselves with diminished opportunities: "I think rules are good. When we had our old car my parents smoked in it all the time and it stunk... the smoke stayed in... we got sick. Now we have a van and smoking is not allowed and it's good." Children shared a common hope that there would more rules restricting smoking and that these rules would be closely adhered to: "My dad says 'rules are made to be broken.' They don't work."

7.7 Attitudes Towards Smoking

The consensus view of smoking among the children was that it is was "bad" and "dangerous" and that people should not smoke, especially children. They also indicated that smoking was not "cool". There was general agreement, however, that adults had a right to choose whether or not they would take-up smoking: "I think smoking is wrong. I don't think people should smoke, but if they want to, that's their choice."

The children of smokers and non-smokers seemed to have very similar attitudes about the likelihood of their becoming smokers or of trying a cigarette. The difference in attitudes and intentions seemed to lie mainly with age. Almost all of the younger children said that they would neither smoke as adults, nor even experiment with it. The main reason for not trying "even once" was the highly addictive nature

of cigarettes: "If I try it and I like it, I'm going to want to smoke more and then I won't be able to stop."

The older children expressed the same opinions and reasoning, but a few did so with less conviction: "You never know what will happen in the future, I will probably try it, but I don't think I am going to turn into a smoker". It was apparent that peer pressure had started to have an impact on quite a few of the 11 and 12 year old participants: "It's hard not to smoke in high school because everybody does." Indeed, a few children admitted that they had experimented with tobacco (usually an unpleasant experience), while a smaller number of children said that they were current or even former smokers. For example, one 12 year old girl said she had stopped smoking a year ago. She told the rest of the group that she hopes never to start again, but was unsure how long her resolve would last.

Finally, children put forward a number of insightful comments on the reasons people smoke. They clearly differentiated between the older and younger generations of smokers. The older smokers, parents and grandparents for example, smoked because they were addicted and because they were under the false impression that cigarettes relieve stress: "It makes them feel good. It relieves stress. They get uptight without it." Some also noted that in the past, people of their grandparents' and their parents' age were not as aware of the dangers of smoking, so "they didn't know better". Overall, children demonstrated a very good understanding of the addictive nature of cigarettes and also exhibited much sympathy for older smokers.

Children's views on people of their generation who smoke, on the other hand, were very different. People their age who smoked did so to be "cool", out of curiosity and, most of all, because they succumb to peer pressure: "If you want to be in a circle of friends and they all smoke, you are probably going to smoke to not feel left out." Essentially, they felt that if young people smoked despite being aware of the addictive and dangerous nature of cigarettes, they were being foolish, and thus, merited little sympathy or understanding.

CHAPTER

8 DESCRIBING THE COMPLEXITY: A SEGMENTATION OF THE PUBLIC

Throughout this report, we have presented a plethora of topics. We analyzed their relationships with socio-demographic characteristics, beliefs, attitudes, knowledge, and experience with smoke. As informative as these analyses have been, it is difficult to extract from them a clear and synthetic picture of the state of knowledge, opinions and practices regarding environmental tobacco smoke in Canada today. In this chapter, we will present such a synthesis using a typology of the Canadian public on the issue of ETS.

8.1 Segmentation Approach

The approach used in this analysis is segmentation analysis. Its purpose is to identify groups of individuals which are relatively homogeneous in terms of their relationship to ETS. The first step in the analysis is to group all of the variables in the data set into a discriminant variable pool. This pool of variables is analyzed — using factor analysis — to locate underlying dimensions (or factors) and to limit the redundancy of the measurement variables. In this analysis, the result of this first stage was the identification of ten composite variables which were used in the second step:

- pro smokers' rights factor;
- "ETS is bad" factor;

- readiness to be influenced;
- information overload;
- importance of tobacco-related health problems;
- importance of non-tobacco-related health problems;
- responsibility of actors;
- credibility of the industry;
- health and social relationships orientation;
- exposure to smoking;

This second step included various attempts at cluster analyzing the data to identify mutually exclusive and meaningful groups of individuals defined by their relationship to ETS. In the course of these analyses, the last five variables listed above were dropped from the segmentation model, either because they proved to be of limited discriminant value, or because their measurement validity and/or reliability were questionable, or because they behaved better as profile variables than as discriminant variables.

At the third stage of analysis, various clustering solutions were empirically tested and assessed in terms of stability, interpretability and policy usefulness. A seven-cluster solution was chosen on this basis. The results are described in the following section.

8.2 Segment Description

Although, ultimately, five aggregate variables (and about 25 individual variables) were used in deriving the population typology, two main dimensions underlie the fundamental nature of the seven population segments presented in this chapter:

- the *Pro-smokers' rights—to—ETS is bad* dimension which is clearly a continuum of attitude and opinion positions regarding smoking and ETS, and therefore directly related to the policy matter of this research; and

- the *Open minded—to—Closed minded* dimension which fuses the aspects of thirst for information related to ETS and of openness toward various sources of information; this dimension is particularly important in the context of the development of an action strategy regarding ETS.

The combination of these two dimensions allows us to plot the position and to identify the nature of the seven segments of the Canadian population[18] as per Exhibit 8.1. Exhibits 8.2 to 8.8 graphically summarize the profile of each cluster along various themes. On each of these thematic graphs, segments are grouped into families sharing common attitudes or behaviours. Exhibit 8.9 synthesizes these family groupings on one chart. What follows is a description of the nature of each segment, their ETS-related behaviour, their attitudes regarding tobacco and ETS, their openness to information and sources of information, and their views regarding the government's role in the area of ETS. The next section will draw conclusions concerning the communication and action implication of this composition of the Canadian public while the following paragraphs draw a profile of the seven segments.

Hard Core Unresponsive. The Hard Core Unresponsive segment rates the lowest in terms of negative attitudes to ETS, the highest in terms of smokers' rights and the lowest in terms of receptivity to information and influence. This group of seven per cent of the Canadian population is totally unresponsive to the idea that ETS should be a health priority for government and to statements concerning the health impacts of ETS.

Hard Core Unresponsive individuals display the lowest level of knowledge of all segments presented here. They are less likely than other groups to be female and to be anglophone. They are recruited disproportionately among those of lower socio-economic status (by virtue of education and income) and they are more likely than other groups to reside in rural areas.

18. Even though this chapter refers to the "Canadian population", the reader should remember that this research focuses on parents of young children and on other adults having regular contacts with youth.

EXHIBIT 8.1
Typology of Canadians With Regards to Attitudes Toward Environmental Tobacco Smoke

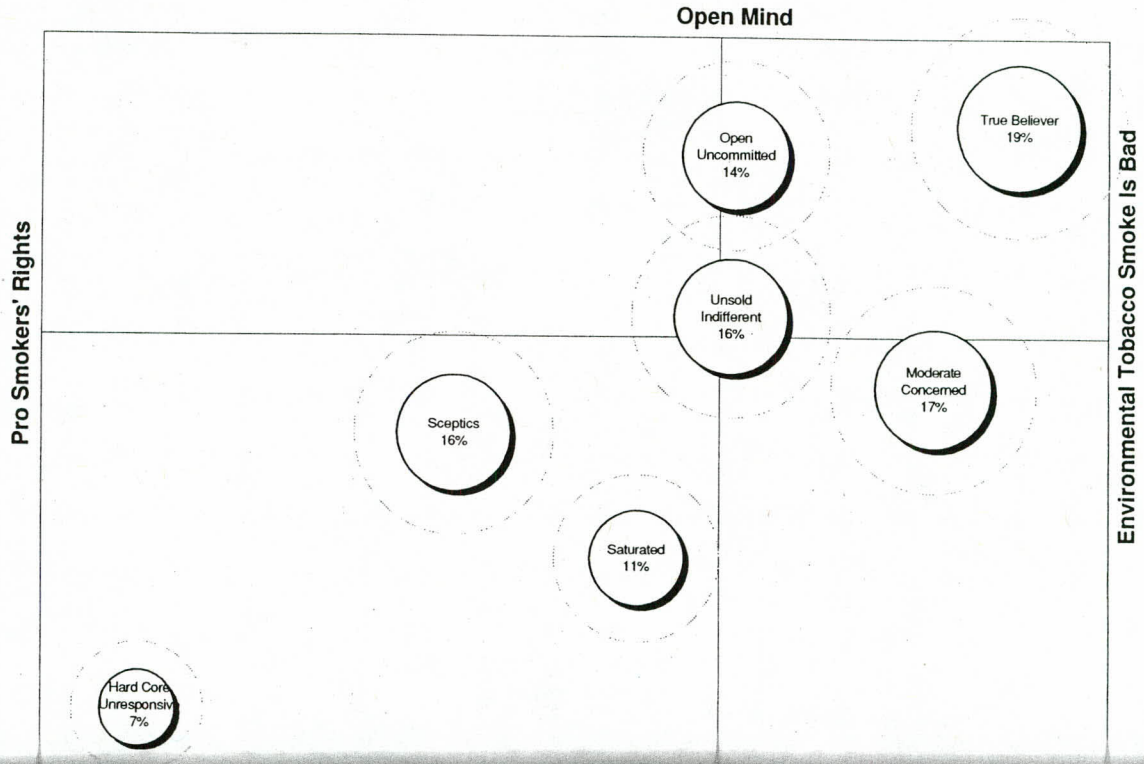


EXHIBIT 8.2
Socio-Demographic Profile of ETS Segments

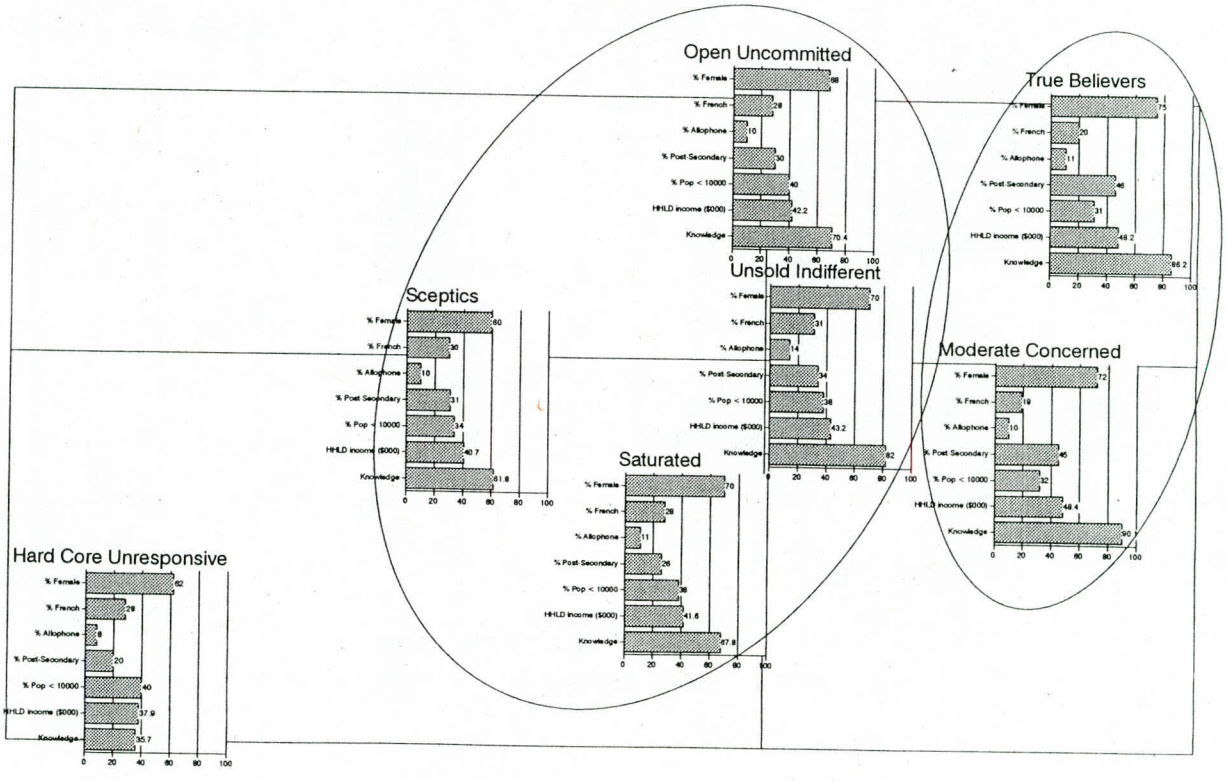


EXHIBIT 8.3
Behavioral Profile of ETS Segments

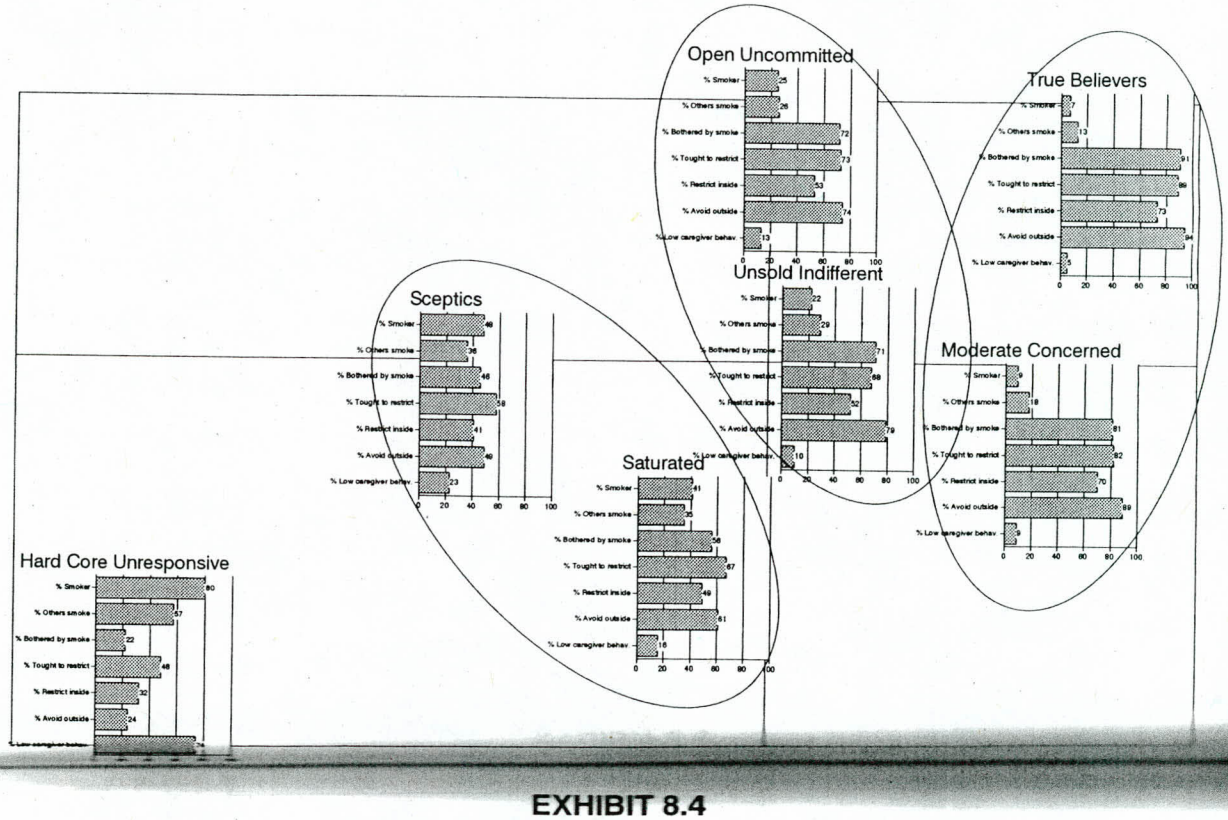


EXHIBIT 8.4
General Attitudes About Tobacco by ETS Segments
(% agree)

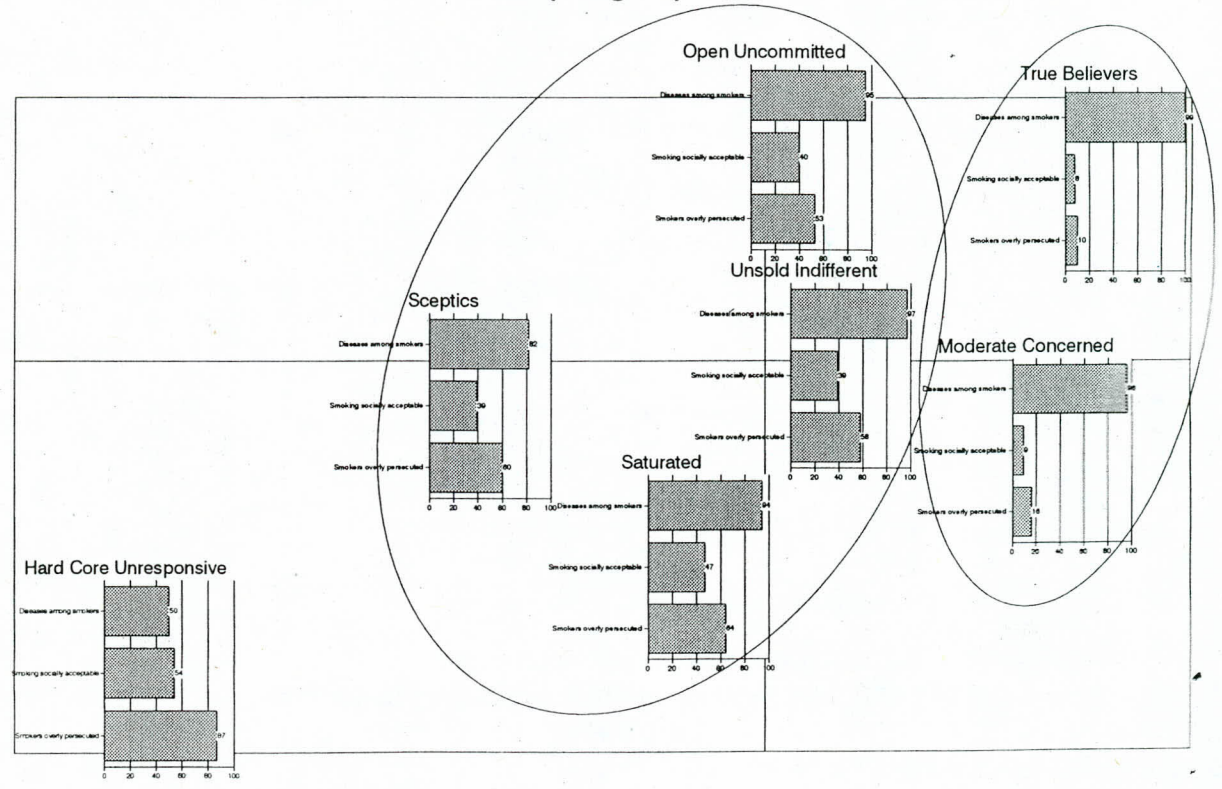


EXHIBIT 8.5
Attitudes to ETS by ETS Segments
(% agree)

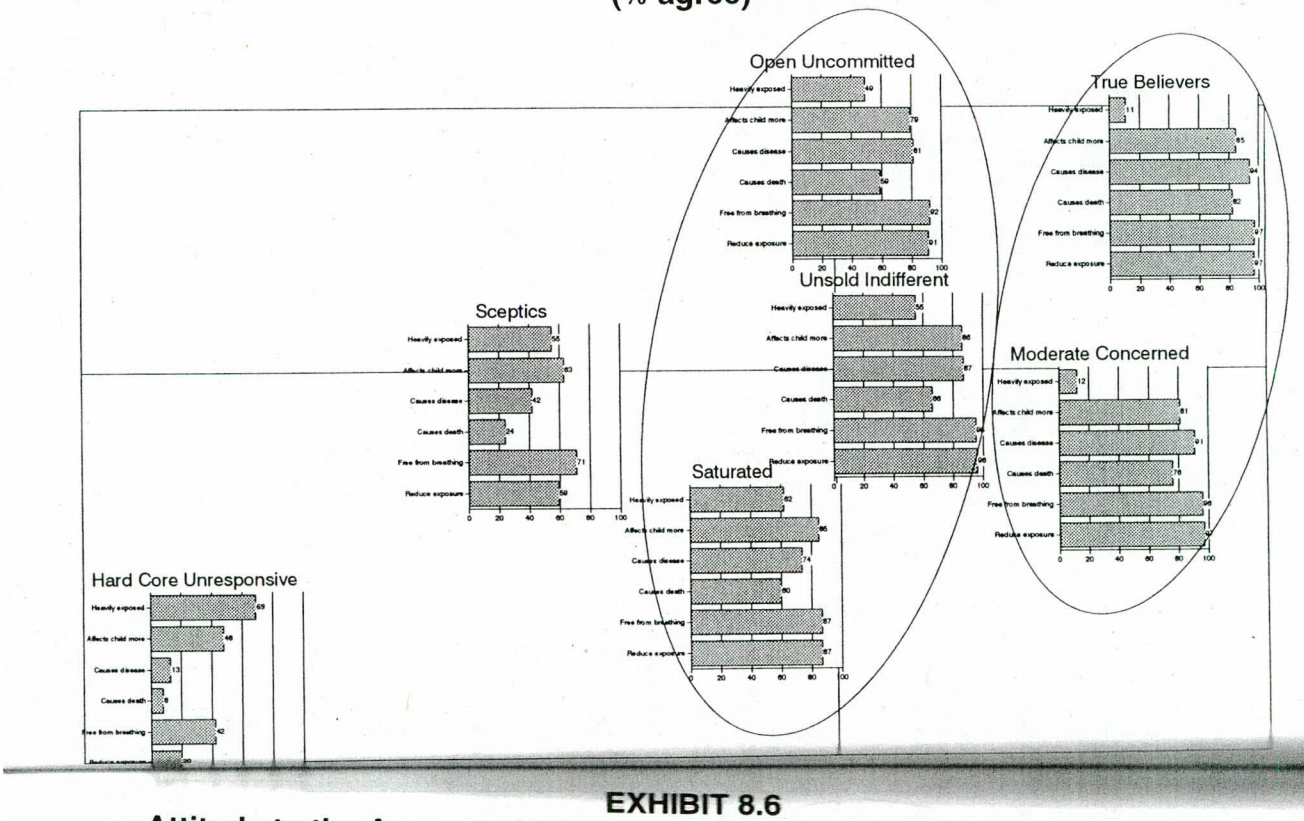


EXHIBIT 8.6
Attitude to the Amount of Information Available on ETS by ETS Segments
(% too little)

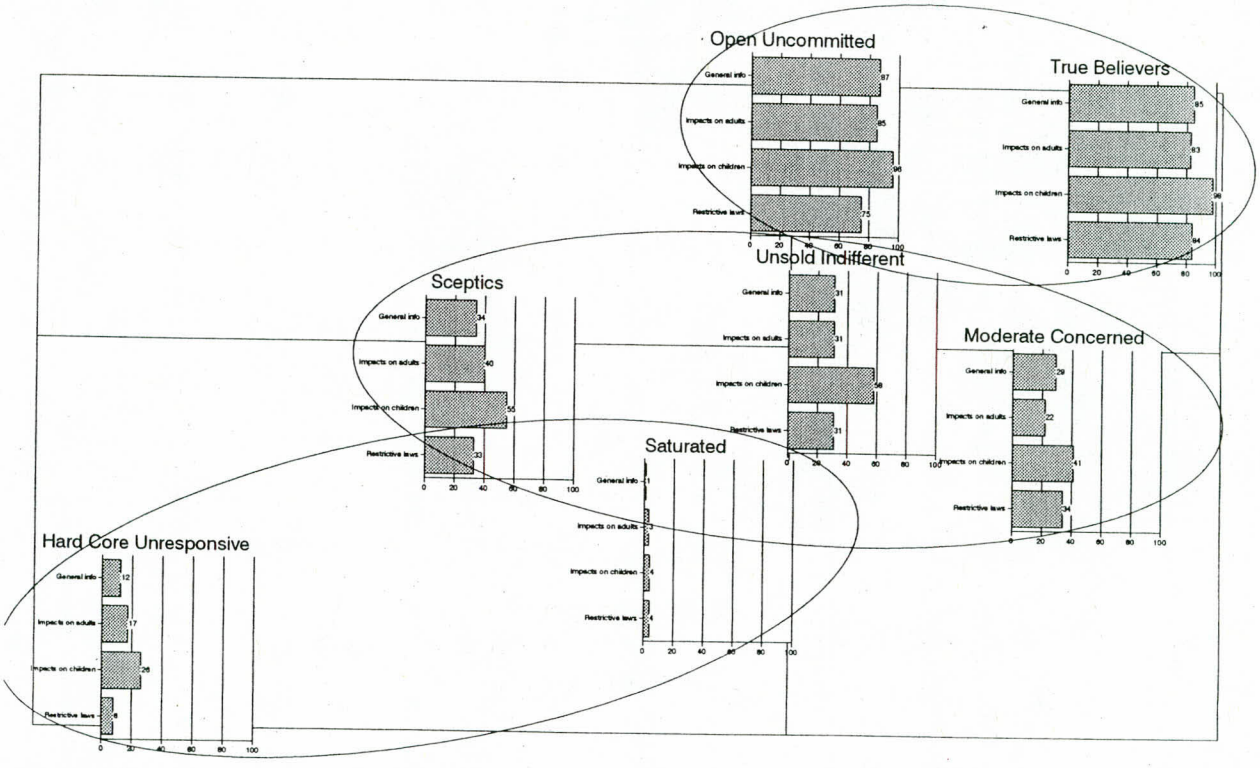


EXHIBIT 8.7
Believability of Various Sources for ETS Segments
(% believable)

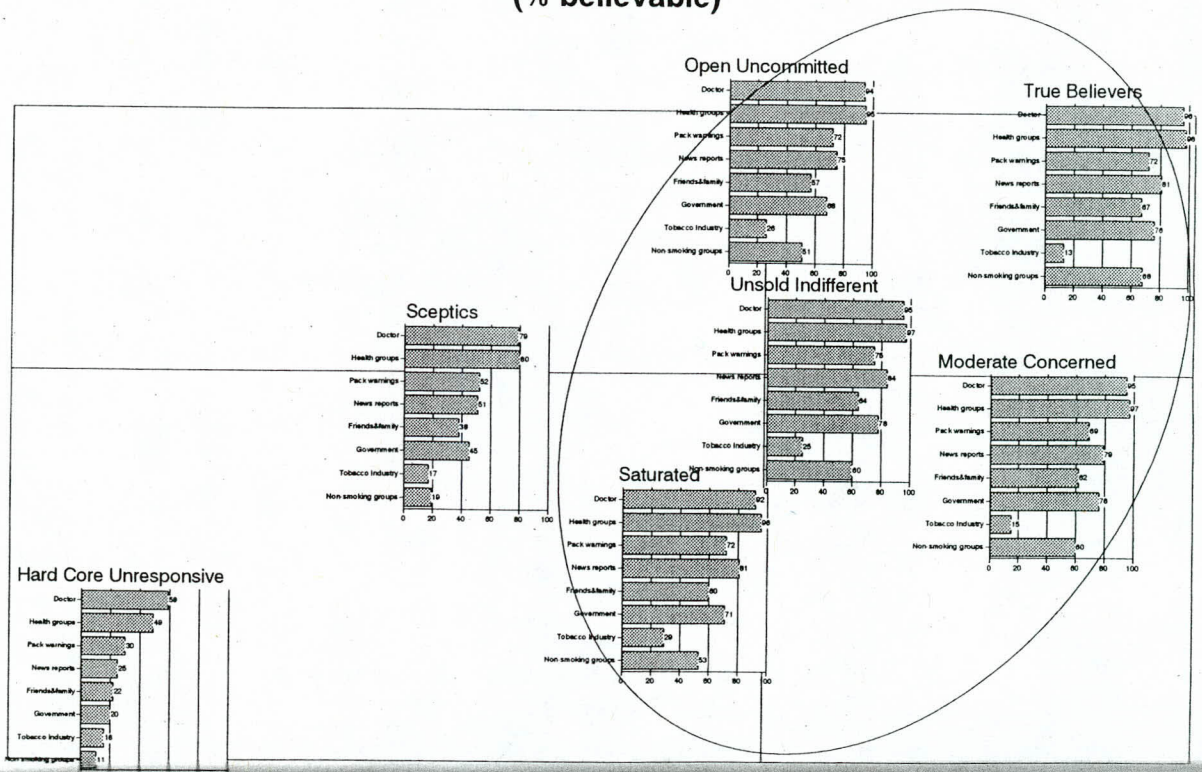
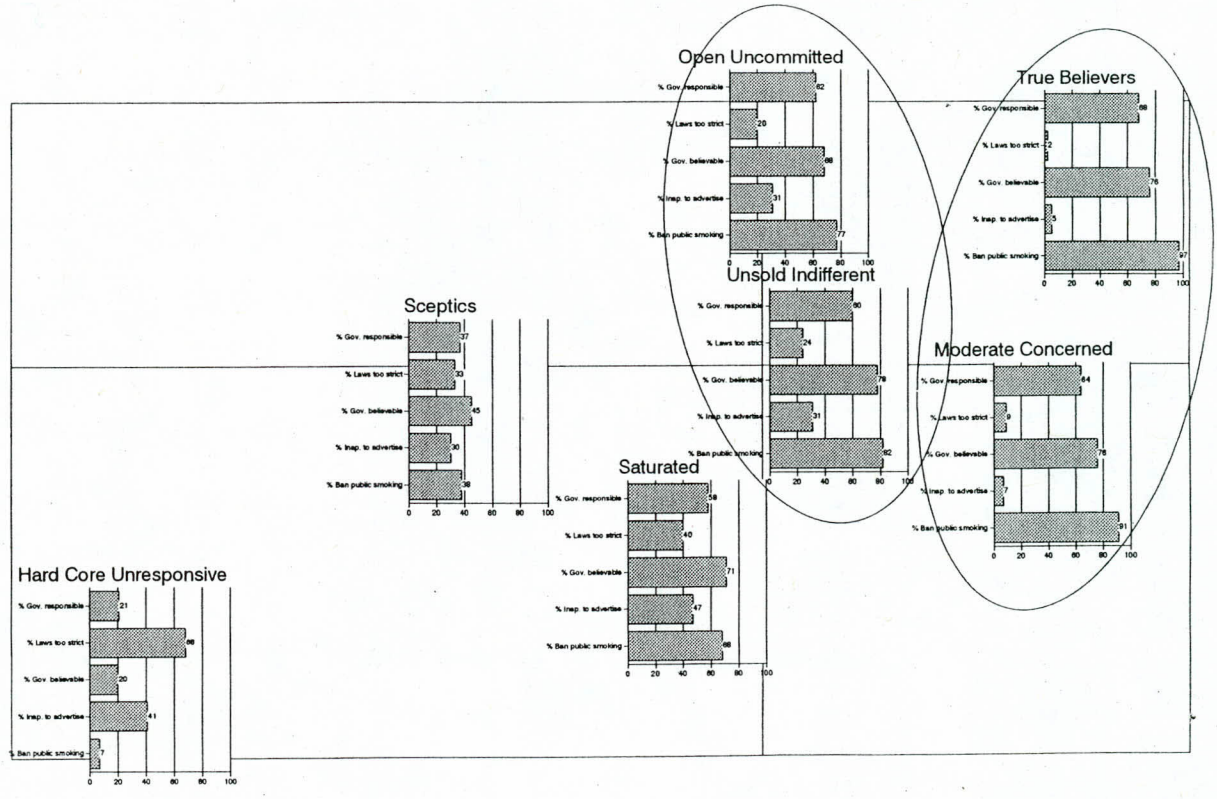


EXHIBIT 8.8
Government Involvement by ETS Segments



Eighty per cent of Hard Core Unresponsives currently smoke. A majority (more than in other groups) live with other smokers. They are not bothered by smoke; they are unlikely to restrict smoking in their residence and they do not tend to avoid smoke outside either. They do not consider the smoking behaviour of their child care provider to be an important criterion.

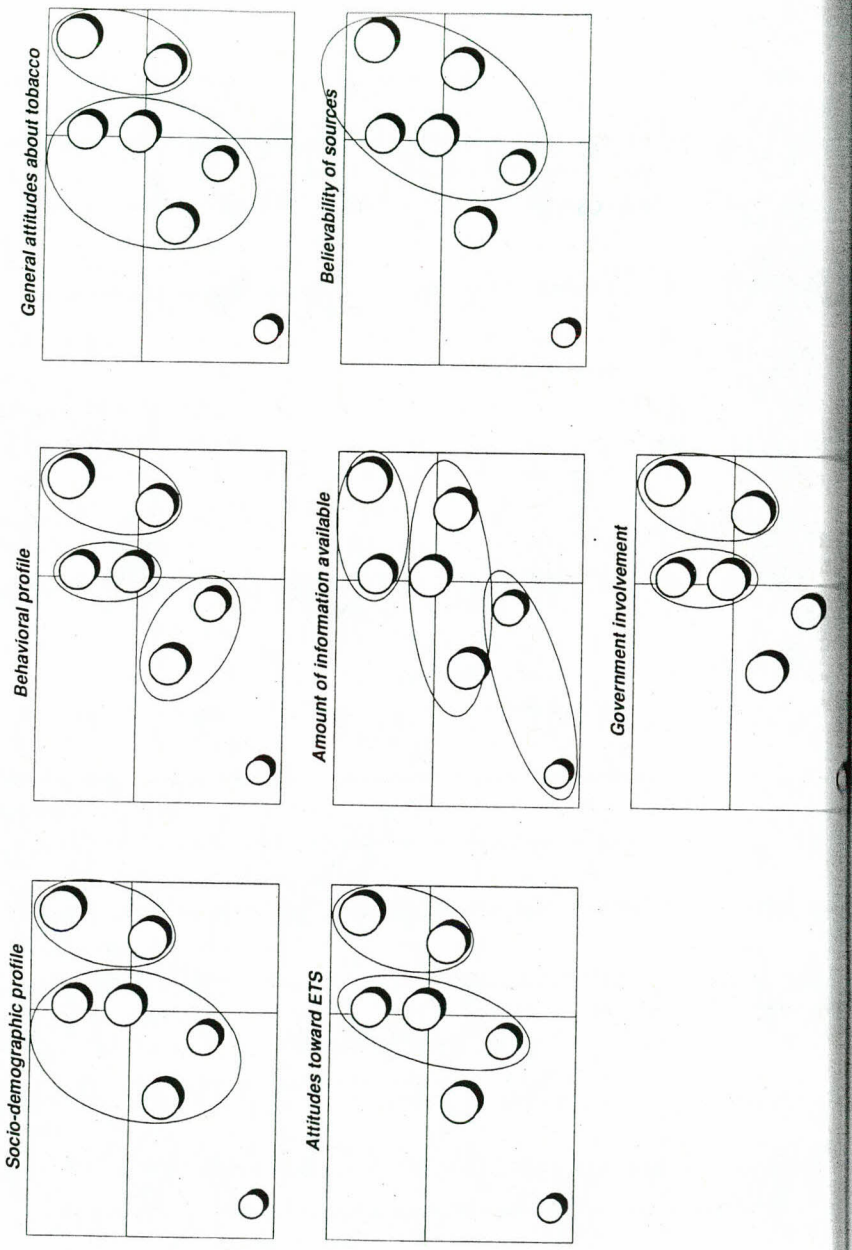
Hard Core Unresponsives are least likely of all groups to believe that smoking causes disease among smokers. They tend to consider smoking socially acceptable and a vast majority (87 per cent) are of the view that smokers are overly persecuted. According to this group, ETS is an overblown phenomenon which is, in fact, rather innocuous. They are uninterested in getting additional information about the health impacts of ETS; indeed, they feel that they already receive too much information. They state that they do not tend to believe statements about ETS made by most sources of information, with the possible exception of doctors. They want to see less government involvement in social regulation regarding smoking and ETS.

Hard Core Unresponsives are a lost cause with regard to ETS education and action, at least in the immediate. The only positive aspect of this group is that it is quite small, representing only seven per cent of the public.

Sceptics. Sceptics comprise 16 per cent of the Canadian population. They hold views that are closer than the average Canadian to the smokers' rights end of the continuum of attitudes about ETS. Overall, they have an average open-mindedness, but this attitude is made up of an above average thirst for information coupled with a below average receptivity to various sources of information. While this group presents a below average knowledge of ETS, they are otherwise socio-demographically average (albeit it is the group with the smaller proportion of women).

Half of Sceptics are current smokers. While being more inclined than Hard Core Unresponsives to restrict smoking in their residence and to adopt other ETS-conscious behaviour, their ETS behavioral profile indicates that there still is a long

EXHIBIT 8.9
Segment Families According to Various Dimensions of Behaviours and Attitudes



way to go with this group. They share a profile of general attitudes about tobacco with most other average Canadians, but their attitudinal orientation to ETS has not reached the level of the Canadian majority.

As mentioned earlier, they are somewhat interested in getting more information concerning the health impacts of ETS, particularly as it affects children. However, they give little credibility to the various sources of information we offered, with the exception of doctors and health groups which are believable for 80 per cent of Sceptics. This group is somewhat reluctant to give governments a significant responsibility in the area of ETS and smoking regulation. Only 37 per cent assign governments a responsibility in the area while only 38 per cent agree that smoking should be banned in public places.

Globally, by virtue of their ETS-related behaviour, Sceptics are an important target for health promotion efforts, but they will be quite difficult to reach because of their lack of availability for information and influence.

Saturated. An even more difficult to reach group will be the Saturated. Representing 11 per cent of the Canadian population, this group holds globally average attitudes about smoking and ETS, but they are the least open to information. By many aspects, the Saturated are very "average" individuals: while 41 per cent smoke, their knowledge is close to average and their socio-demographic profile is that of the average Canadian.

Their ETS-related behavioral profile resembles that of the Sceptics, i.e., they take more steps than Hard Core Unresponsives towards avoiding ETS for themselves and for children, but there is still a long way to go before they adopt all of the ETS-avoidant behaviours.

Their general attitudes about smoking are that of the majority, i.e., they believe that smoking causes disease among smokers, but they are ambivalent about the

social acceptability of smoking and a majority think that smokers are subjected to too much persecution. With regard to ETS, they are among a mid-course group where attitudes have clearly evolved in the expected direction, but where there is still some work to do to create coherence between information, attitudes and behaviour.

The saturated are more receptive than the previous two groups to the idea of government involvement in dealing with the ETS area, but they still present visible signs of resistance, for example, 47 per cent state that it is inappropriate for government to advertise on the issue of smoking and ETS — the highest proportion among all segments. The main characteristic of Saturated individuals is that they have *no* thirst for information about the health impacts of ETS — even less than Hard Core Unresponsives. Meanwhile, they show a high level of acceptability for the various sources of information offered (particularly news reports, considering the relative levels of other sources). The challenge in this group will be to find the right information for these otherwise credible sources to carry to them.

Unsold Indifferent. Unsold Indifferent constitute 16 per cent of the public. As it relates to ETS, they are the "average Canadians". They lie on the average of both segmentation dimensions: middle of the road attitudes concerning ETS and middle of the road openness to information. They are also very much average in their socio-demographic profile. They are above average in their level of knowledge about the health effects of ETS. They share the views of the majority about smoking and ETS. However, behaviorally, they are second to the top performers in terms of smoking, avoiding ETS, and restricting. They are moderately open to new information about ETS, with a firmer interest in the health impacts on children. Like all groups except Hard Core Unresponsives and Sceptics, Unsold Indifferent give credit to most sources of information offered in this study, but particularly to doctors and health groups. This is the group where government is considered the most believable (78 per cent). They agree with government involvement in ETS-related promotion.

Globally, Unsold Indifferent are a reachable target which presents good prospects for behavioral improvement coupled with particular receptivity to government messages.

Open Uncommitted. The best target for communication and promotion are the Open Uncommitted. While their positions concerning smoking and ETS are average — thus indicating that there is room for improvement — they rate very high in terms of openness. They constitute 14 per cent of the public. They have average knowledge of health impacts of ETS — lower than their cousins the Unsold Indifferent. Their socio-demographic profile places them among the average Canadian household. Their behavioral patterns also indicate a filiation with the Unsold Indifferent; for example, 53 per cent currently apply restrictions to smoking at home. Attitudinally, they are part of the average group again. Their most striking characteristic is their thirst for information: more than 85 per cent of Open Uncommitted indicated that they currently had too little information on the ETS-related topics proposed. They are receptive to most sources of information offered although this does not differentiate them from the majority — doctors and health groups rate above 90 per cent with Open Uncommitted. However, of the five groups who are most reachable, this group presents the lowest believability of government information.

Open Uncommitted should probably be the prime target of attention for behavioral change because they are open to influence and information. A certain resistance to government as a source of information on ETS has to be taken into consideration.

Moderate Concerned. The last two groups are already sold on the idea that "ETS is bad". Moderate Concerned rate high on this cluster of attitudes but are reserved in their openness to information and influence. They form 17 per cent of the population. Moderate Concerned are the most anglophone group; they present the highest average household income and the highest score on the knowledge index. They are clearly among the higher socio-economic status (SES) groups in Canadian

society. Moderate Concerned present the second best behavioral score card of all groups: 9 per cent smoke, 70 per cent restrict smoking at home, 89 per cent avoid ETS outside the home. With True Believers, they form the group of people most negative about smoking and about ETS; only 9 per cent state that "smoking is socially acceptable" and 12 per cent state that "I think you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health".

Perhaps because they are the best informed group, Moderate Concerned have only average thirst for information about ETS. Meanwhile, they are quite willing to accept information from most all sources tested, except the tobacco industry. While they assign a high level of responsibility to government in the area of ETS, they are not a prime target for government promotion since they have already acquired the behaviour which is expected by health authorities. Additionally, they are not particularly interested in further information about ETS.

True Believers. The final group is the largest one at 19 per cent of the population. They are the True Believers, so labelled because they have bought into the idea that ETS is an important health risk which must be managed and because they present an almost insatiable thirst for more information about ETS. True Believers are recruited among the upper echelon of the Canadian society. They are the most urban group and the group with the highest level of education. Their knowledge about ETS is next only to that of the Moderate Concerned. They are the group with the most restrictive practices concerning ETS: 73 per cent restrict at home and 94 per cent avoid ETS outside the home. True Believers present the most extreme views concerning smoking and ETS: 99 per cent state that "Smoking causes diseases among smokers" and 82 per cent agree that "Second-hand smoke causes death amongst non-smokers".

True Believers share the Open Uncommitted's thirst for information and rate sources of information as more believable than any other segment. They are the group which assigns the highest level of responsibility to government; their expectations are quite high.

True Believers have already adopted the attitudes and behaviour promoted by Health Canada. Therefore, they do not constitute a prime target for upcoming promotion and information.

8.3 Preliminary Communication and Action Implications

This segmentation analysis offers some useful insights into the communication and action strategies which would be most adequate at this point. These are only preliminary implications since other components of this study offer other view points which also have to be factored in to build a complete communication and action plan. The main preliminary implications follow.

- Three segments, representing 43 per cent of the public, should be discarded as targets for communication and action: Hard Core Unresponsive, Moderate Concerned and True Believers.

- The prime target for communication and action should be the two groups which present middle of the road behaviour and attitudes and are open-minded on the issue: the Unsold Indifferent and the Open Uncommitted, who regroup 30 per cent of the population.

- Secondary targets will be Sceptics (16 per cent) and Saturated (11 per cent). The challenge with the Sceptics is their apparent impermeability to various sources of information with the possible exception of doctors and health groups — but even these two types of carriers show limited effectiveness with the Sceptics. Saturated are open to sources but do not wish to be fed more information on ETS; the challenge is to find hooks.

- The primary and secondary targets are recruited from the middle socio-economic strata. They are mildly more rural than average. They share general attitudes to smoking but they are segmented in terms of their ETS-related behavioral profiles (primary vs. secondary targets), their attitudes to ETS (Sceptics vs. others) and their views on government involvement (Sceptics vs. Saturated vs. others).

- Many among the primary and secondary targets believe that smoking is socially acceptable and that smokers are overly persecuted.

- The statement "I think that people should have a right to be free from breathing other people's second-hand smoke" resonates with these target groups.

CHAPTER

9 EXPLAINING BEHAVIOUR: ANALYSIS OF THE CAUSAL LINKS

Previous chapters have examined the wide range of topics addressed in the survey by examining relationships between and among various measures and indices and exploring clusters of relationships as found in the segmentation analysis. This chapter presents the final piece of the puzzle: what combination of attributes, beliefs and attitudes results in the behaviours of interest to Health Canada in this context, namely behaviours focused on restricting the exposure of individuals to second-hand smoke?

To explore this issue, several series of stepwise multiple regression models were tested. The conceptual model presented in Chapter Two guided the development of the various regression models. This conceptual model postulated that behaviours targeted at restricting or avoiding exposure to ETS were a function of socio-demographic attributes, knowledge levels, sources of information, smoking behaviour, beliefs and attitudes toward ETS and smoking, and behavioral intentions.

Each block of variables in the model (for example, all the socio-demographic indicators, including sex, age, income, education, mother tongue and region, would be one block) was entered into the regression model separately. En route to testing the final step in the model, namely what predicts behaviour, each block

was first examined to determine what explains it. This way, a more thorough understanding of the final equation is possible.

This chapter briefly describes the findings from the range of models created and tested in the process of exploring whether restrictive practices can be accounted for by some combination of measures collected in this study. The models described below were tested on the whole survey sample unless specified differently in the text. Each final model is presented in a separate exhibit. Each block of indicators is presented within a large oval (e.g., socio-economic indicators). Each individual indicator which is included in a particular model appears within a smaller oval. Those individual indicators which were not included in a particular model (either because they were not relevant or because they appear at a later stage in the modelling exercise) appear without an oval around them in the exhibits. Significant relationships are portrayed with a solid arrow.

It should also be noted that in predicting behaviour, the final series of models, it was found that behavioral intentions, not surprisingly, accounted for a significant proportion of the explanation. It was felt that the inclusion of behavioral intentions as the last step before behaviour might be masking some other predictive relationships with variables entered previously. Therefore, separate tests were conducted to be able to demonstrate which variables would contribute to the prediction of behaviour if the effect of behavioral intention was not included. For these models, the relationships which disappear with the inclusion of behavioral intention are depicted with dotted arrows.

Exhibits 9.1 to 9.15 are referred to throughout the text of this chapter, but are presented together at the end.

9.1 Explaining Knowledge

The first block to be tested was the knowledge block of variables. Knowledge was assessed in two different ways: knowledge about the health effects of ETS (the knowledge index, called "knowledge of impacts"); and awareness of legislation or restrictions (called "knowledge of restrictions"). All socio-demographic measures (i.e., age, income, education, sex, region, community size, mother tongue) and information measures (i.e., the total number of sources of information about ETS mentioned, called "number of source" as well as whether or not each separate source was volunteered, listed under "identity of sources") were entered as potential predictors of knowledge. The model which resulted is presented in Exhibit 9.1.

Knowledge about the health effects of ETS were found to be explained by age (younger ages were more knowledgable), language (mother tongues other than English were more knowledgable) and by two of the information sources: people who had heard about ETS from their doctor were more knowledgable; and those who had heard about ETS from non-smokers' rights groups were less knowledgable.

Knowledge or awareness of restrictions was best predicted by location and information sources. Residents of all regions of Canada (i.e., Pacific, Prairies, Ontario and Atlantic) were more knowledgable about restrictions than those from Quebec and people from rural or small communities were less knowledgable than urban dwellers. The findings with respect to location, however, may be as much a reflection of the actual presence of restrictions as about individual awareness levels about these restrictions. People who were able to name more information sources were also more aware. Finally, those who had heard about ETS from personal experience were less aware of restrictions.

9.2 Explaining Beliefs

The next block of indicators to enter the model were those pertaining to beliefs: whether tobacco issues such as reducing tobacco use in general and among youth as well as reducing exposure to ETS are important issues for society to deal with (called "imp. tobacco issues"); whether individuals agree that ETS can cause disease and death among non-smokers and that you have to be heavily exposed for many years for negative effects to occur (called "ETS is bad"); and whether people feel that smoking causes disease among smokers (called "causes smoker disease").

In addition to the socio-demographic and information indicators, various measures of smoking behaviour and exposure were also included as potential predictors at this stage (i.e., whether the respondent was a smoker — "smoker", whether anyone else in the household smokes — "other smokers in household", whether any visitors to the household are smokers — "smoker visitors", the proportion of the respondent's social circle who smoke — "smoking social circle", whether the respondent is "bothered by ETS", and whether the respondent has ever have anyone close become ill or die as a result of a smoking-related illness — "knows ill or died"). As well, whether the respondent agrees that "smoking is socially acceptable" was also considered. The beliefs models are presented in Exhibit 9.2.

All three belief indicators were predicted by the following:

- knowledge of impacts (positive relation);
- number of information sources (positive relation);
- feeling that smoking is not socially acceptable;

- smoking behaviour and exposure, with negative relations found among smokers, those who are not bothered by ETS, those who have friends who are smokers and those who have not had someone close become seriously ill or die as a result of a smoking-related illness.

There also were unique relations for the three belief indicators which are presented in the following sub-sections.

(a) Importance of Tobacco-Related Issues

The importance accorded to tobacco issues was predicted by several constructs beyond those common to all belief indicators. From the socio-demographic block: males accorded higher importance than females; respondents from the Atlantic gave higher importance ratings than those from Quebec; those whose mother tongue is not English gave lower ratings; those in the lowest income block gave the lowest ratings; and those with a high school education gave higher importance ratings than those with a university education.

Those who had heard about ETS from cigarette packages tended to give tobacco issues lower importance ratings as did those who live with people who smoke.

(b) Negative Health Effects of ETS

A slightly different pattern of predictor variables resulted in the model developed to explain agreement with statements about whether ETS can cause disease and death among non-smokers and disagreement with the statement that one has to be heavily exposed for many years before experiencing negative effects.

In addition to the general set of predictors of beliefs presented above, ETS negative health beliefs were best predicted by:

- socio-demographic variables —
  - mother tongue, with francophones having lower agreement;
  - sex, with males showing less agreement;
  - region, with Pacific and Atlantic region respondents agreeing more than Quebec respondents;
  - age, with those in the 18 to 24 year old group agreeing more strongly than the oldest age category;
- having heard about ETS from non-smoking rights groups (negative relation); and
- smoking exposure, with lower levels of agreement found among those who live with smokers.

(c) Negative Health Effects of Smoking

The last beliefs model was created to examine the predictors of agreement with the statement that smoking causes disease among smokers. In addition to the common relations presented above, agreement with this statement was predicted by:

- socio-demographic variables —

  - education, with those with a high school education expressing weaker agreement than those with a university education;
  - age, with those in the 18 to 24 year old group agreeing more strongly than the oldest age category; and
- having heard about ETS from news reports (associated with stronger agreement).

9.3 Explaining Attitudes

Four different models were created to test various attitudinal patterns: whether people feel they have a healthy lifestyle ("healthy lifestyle"); anti-smoking attitudes — called "anti-smoking/anti-ETS" (agreeing that most people could quit smoking if they wanted to, that people should have a right to be free from breathing other people's second-hand smoke, and that smoking in all indoor public places should be banned); pro-smokers' rights — called "leave smokers alone" (agreeing that smokers are overly persecuted and that it is inappropriate for the government to advertise about ETS and its effects); and attitudes about existing legislation — called "laws too strict".

All variable blocks entered into the previous equations as well as the three belief indicators were also entered into these models.

Out of all variables entered, only two were present with the same pattern in all four equations: belief that tobacco-related issues are important to society (associated positively with "healthy" and "anti-smoking/anti-ETS" and negatively with "leave smokers alone" and "laws too strict"); and smoking status, with smokers demonstrating the opposite pattern to the above.

(a) Healthy Lifestyle

A relatively small number of unique predictor variables for whether people feel they have a healthy lifestyle was found, as presented in Exhibit 9.3. In addition to the two mentioned previously, those variables which were related to this belief were as follow:

- socio-demographic variables —
  - gender, with females having stronger agreement than males;
  - age, with younger respondents more likely to say they have a healthy lifestyle;
  - mother tongue, with francophones and allophones having the strongest agreement;
- smoking behaviour and exposure, with those who live with smokers and those who have not had anyone close become ill or die as a result of a smoking-related illness expressing weaker agreement; and
- surprisingly, those who believe that ETS causes negative health effects were less likely to agree that they have a healthy lifestyle.

(b) Anti-Smoking Attitudes

Anti-smoking attitudes were predicted by the following group of variables, on top of belief in the importance of tobacco-related issues to society and smoking status, as illustrated in Exhibit 9.4:

- socio-demographic variables —
  - mother tongue, with francophones and allophones having the strongest agreement with the anti-smoking attitude statements;
  - education, with those with a high school education having stronger agreement than those with a university education;
  - region, with Ontario and the Pacific regions having weaker agreement than Quebec;
- beliefs, with those believing that ETS can cause disease and death among non-smokers, and those who believe that smoking causes disease among smokers also having stronger anti-smoking attitudes; and
- smoking behaviour and exposure, with those who are not bothered by ETS and those who live with smokers having lower agreement with the anti-smoking attitudes.

(c) Pro-Smokers' Rights Attitudes

A second set of attitudes, referred to as the pro-smokers' rights attitudes (called "leave smokers alone" on the exhibits), produced a different set of unique predictor variables in addition to the two which were common to all the attitude measures, as demonstrated in Exhibit 9.5 and as follow:

- socio-demographic variables —
  - education, with those having a high school or a college education demonstrating stronger agreement with this attitude set than those with a university education;

- mother tongue, with francophones showing stronger agreement with these statements than anglophones;

- income, with those in the highest income bracket showing weaker agreement than those in the lower income brackets;

- sources of information, with those having heard about ETS from the highest numbers of sources having the weakest agreement and those having heard about ETS from non-smoking rights groups having strong agreement;

- awareness of restrictions (positive relation);

- believing that ETS can result in negative health effects among non-smokers (negative relation);

- smoking behaviour and exposure, with those who are not bothered by ETS and those who are live with a smoker having stronger agreement; and

- feeling that smoking is socially acceptable.

(d) Attitudes about Legislation

Finally, as presented in Exhibit 9.6, attitudes about whether existing legislation restricting smoking is too strict were also predicted by:

- socio-demographic variables —

  - education, with those with a high school education believing more that those with a university education that laws are too strict;

  - region, with those from Ontario and the Atlantic region feeling more than others that laws are too strict;

- knowledge, with those with more knowledge about the health effects of ETS feeling laws are not too strict and those with more awareness about restrictions being less likely to feel that existing laws are too strict;

- hearing about ETS from articles in magazines or journals or through personal experience (negative relation) as well as through non-smoking rights groups (positive relation);

- beliefs, with those who believe that ETS causes negative health effects in non-smokers and that smoking causes disease in smokers less likely to feel that laws are too strict;

- reaction to smoking exposure, with those who are not bothered by ETS feeling laws are too strict;

- feeling that smoking is socially acceptable.

9.4 Explaining Behavioral Intentions

(a) Intention to Restrict in the Home

Respondents were asked whether they have thought about restricting the amount of smoking which takes places in their home or, if they are in a situation where this never comes up (e.g., the smoke-free homes) whether they think they would restrict smoking. This model is presented in Exhibit 9.7.

This exhibit demonstrates that the intention to restrict smoking in the home is a function of most of the variables within the model, including indicators from most of the cognitive, behavioral and exposure blocks such as: knowledge of restrictions; number of information sources; belief that tobacco issues are important for society to address; beliefs that ETS causes disease and death among non-smokers; attitudes which are anti-smoking and anti-ETS; feeling laws which restrict smoking are too lenient; and believing that smoking is not socially acceptable. Socio-economic factors contributed somewhat, but not with strong patterns. Finally, intentions were higher for smokers, those who live with smokers, those who are bothered by ETS and those who have had someone close to them become ill or die as a result of a smoking-related illness.

(b) Intention to Avoid ETS Outside the Home

All parents were asked whether they try to avoid second-hand smoke in public places or other locations outside their own homes. Once again, indicators from most of the cognitive, behavioral and exposure blocks were found to enter into the equation, as depicted in Exhibit 9.8. Socio-economic indicators, however, were not found to contribute to explaining the intention to avoid ETS.

The intention to avoid ETS outside the home was related to knowledge of restrictions, learning about ETS from the tobacco industry, believing tobacco issues are important issues, believing ETS causes disease and death, feeling that one has a healthy lifestyles, and holding anti-smoking and anti-ETS attitudes as well as anti-smokers' rights attitudes. Smokers and people with many friends who smoke were less likely to avoid ETS whereas those who are bothered by ETS and those who have known someone who has become ill or dies as a result of a smoking-related illness were more likely to avoid second-hand smoke.

9.5 Explaining ETS Restrictions in the Home

Exhibit 9.9 presents the models predicting three measures of ETS restrictions in the home: intensity (i.e., frequency of application of four types of restrictive actions); frequency of restrictions when the child is present; and frequency of restrictions in general.

The only block of variables which did not enter into the equation for at least one of these three variables was the knowledge block. As well, anti-smoking, anti-ETS and smokers' rights attitudes also did not enter into any of the equations. In general, restrictions in the home tended to be explained by number of sources of information, beliefs that tobacco-related issues are important and that ETS causes disease and death among non-smokers, feeling one has a healthy lifestyle, and feeling laws are not too lenient. The contributions of smoking behaviour and exposure variables were rendered non-significant when behavioral intentions were included in the equation for predicting restrictions in the home. Finally, once again, socio-economic factors were helpful in predicting restrictive behaviours, but typically not in the same manner for each of the three restrictions measure, with the exception of French mother tongue, which was negatively associated for all three.

9.6 Explaining ETS Avoidance Outside Home

Parents were asked whether they try to avoid being exposed to second-hand smoke when they are outside their homes, both when they are with their child as well as in general, as presented in Exhibit 9.10.

Indicators which were related to avoidance behaviour, both with the child as well as in general, were from the beliefs, attitudes, and smoking behaviour and

exposure blocks. Avoiding ETS when with a child was distinguished from avoidance in general by being explained also by French as a mother tongue (negative relationship), high school education (i.e., lower likelihood than those with a university education) and having heard about ETS from a doctor (positive relationship) and from friends and family (negative relationship). Avoidance in general, on the other hand, was also explained by learning about ETS from personal experience, age (younger ages less likely), gender (males less likely) and community size (smaller communities less likely).

9.7 Explaining Restriction of Own Smoking in Home

Smoking parents were asked to what extent they restrict their own smoking in their homes when their child is present as well as in general. As presented in Exhibit 9.11, restricting one's own smoking was predicted by fewer indicators than the other types of restrictions which have been examined to this point. Once again, knowledge was not found to be a predictor variable. Parents whose mother tongue is French, who have a high school education or less, who hold anti-smoking and anti-ETS attitudes, and who feel that tobacco-related issues are important were more likely to report that they restrict their own smoking, both when their child is around as well as in general. Restriction in front of children was also related positively to the number of sources from which people have heard about ETS and whether anyone close to the respondent has become ill or died as a result of a smoking-related illness and related negatively to the presence of visitors to the household who are smokers.

9.8 Explaining Restriction of Own Smoking Outside Home

Finally, smoking parents were also asked to what extent they restrict their own smoking when they are outside their home, both when they are with their

child as well as in general. Again, restricting one's own smoking was predicted by fewer indicators than restriction of exposure, as presented in Exhibit 9.12. Restricting one's own smoking was related negatively to having smokers in one's social circle and related positively to feeling that one has a healthy lifestyle, holding anti-smoking and anti-ETS attitudes and being bothered by ETS. Restrictions when with a child were also related negatively to having French as a mother tongue, feeling laws are too strict, having visitors who are smokers, and positively to hearing about ETS from a doctor. Restricting own smoking in general was only uniquely related to hearing about ETS from non-smoking rights groups (positive relation).

9.9 Explaining Behaviour: Summary Model

The conceptual model developed early in the research process and presented in Chapter Two proved to be quite accurate in terms of describing the relations among the various indicators tested in this research, as presented in Exhibit 9.13. Beliefs were found to be strongly influenced, in the anticipated directions, by smoking behaviour and exposure; attitudes were found to be related to these beliefs, again as expected; behavioral intentions were a function of attitudes; and ETS restrictive and avoidant behaviours were predicted by behavioral intentions.

The only aspects of the model which did not produce significant predictive patterns as anticipated during the design of the conceptual model were the socio-demographic indicators in general, knowledge levels, and information (both in terms of the total number of sources as well as specific individual sources). For knowledge and information, the general patterns leading to beliefs were as expected, however they were not as striking as initially hypothesized.

The model does not exist in the same configuration for all sample sub-groups, however. It was found that the patterns for francophone respondents differed from that of anglophones and allophones, resulting in a lower propensity to restrict or

avoid exposure to ETS. The explanatory relations for francophone respondents (as well as the results for education and income) are presented in the following section.

9.10 Focus on Francophones

Francophone respondents were distinguished from anglophones and allophones on many of the models presented in this chapter. Given the prominence of this group in so many of the models, a separate exhibit illustrates the key causal patterns for the francophone sample only. These patterns are presented in Exhibit 9.14.

What is particularly interesting in this exhibit is the finding that, while being least likely to intend to restrict smoking in the home or to actually follow through on ETS restrictive or avoidant behaviours, francophones have high levels of knowledge about the negative health impacts of ETS and they believe tobacco-related issues are important for society to address. Further, they also feel they have a healthy lifestyle and hold anti-smoking and anti-ETS attitudes. However, francophone respondents were also less likely than other language groups to believe that ETS can cause disease and death in non-smokers and more likely to feel that smokers should be left alone.

It appears, then, that the low levels of ETS restrictive and avoidant behaviours among francophone respondents are due to two factors: disbelief that ETS can cause disease and death among non-smokers, despite high levels of knowledge about the negative health impacts; and, strong feelings that smokers are already overly-persecuted and should be left alone.

9.11 Focus on Income and Education

Given the higher levels of smoking behaviour documented in the literature among lower income and education groups, the specific patterns which exist

for these groups within the present research context were also examined. These patterns are presented in Exhibit 9.15.

The first striking finding may be the low number of relations between income and the other variables. It may be that more relations would present themselves if education were not also included in the model, given the naturally close relation between income and education levels.

Education, on the other hand, demonstrated many relations with the other indicators in the model, most in the anticipated direction. For example, higher levels of educational achievement were associated with stronger anti-smoking and anti-ETS attitudes, and weaker support for leaving smokers alone or feeling that laws are too strict. As well, higher levels of education led to higher levels of ETS restrictive and avoidant intentions and behaviours.

Interestingly, neither income nor education were found to be related to knowledge or information.

EXHIBIT 9.1
Causal Model of Knowledge Indicators

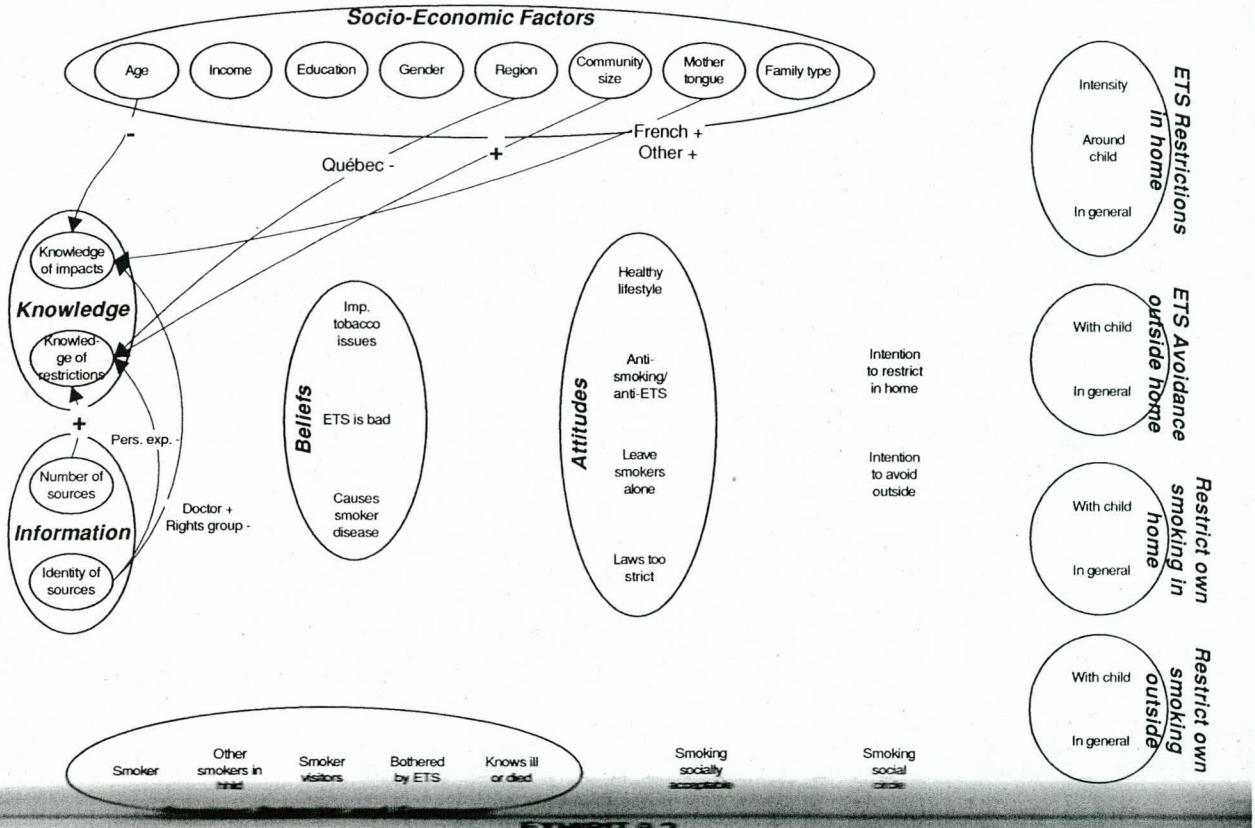
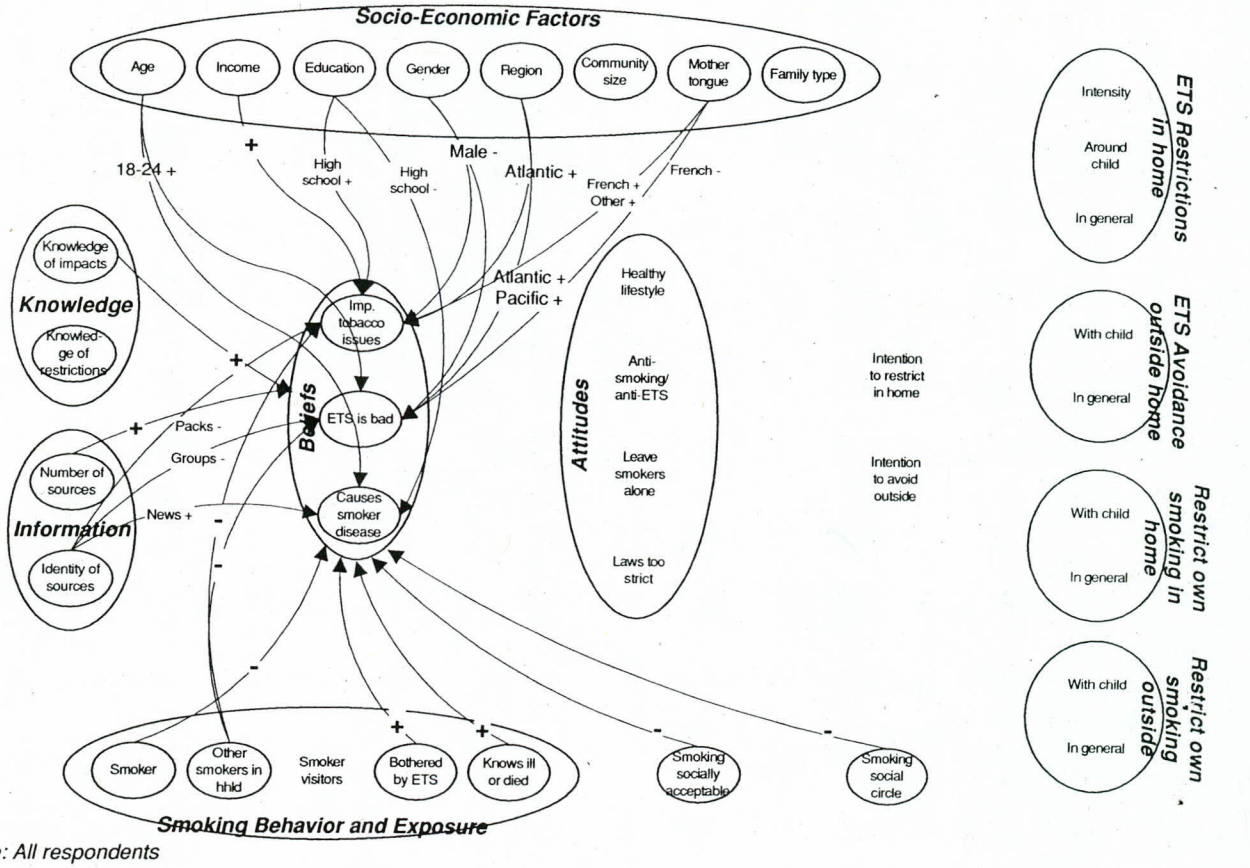


EXHIBIT 9.2
Causal Model of Belief Indicators



Note: All respondents

EXHIBIT 9.3
Causal Model of the Healthy Lifestyle Indicator

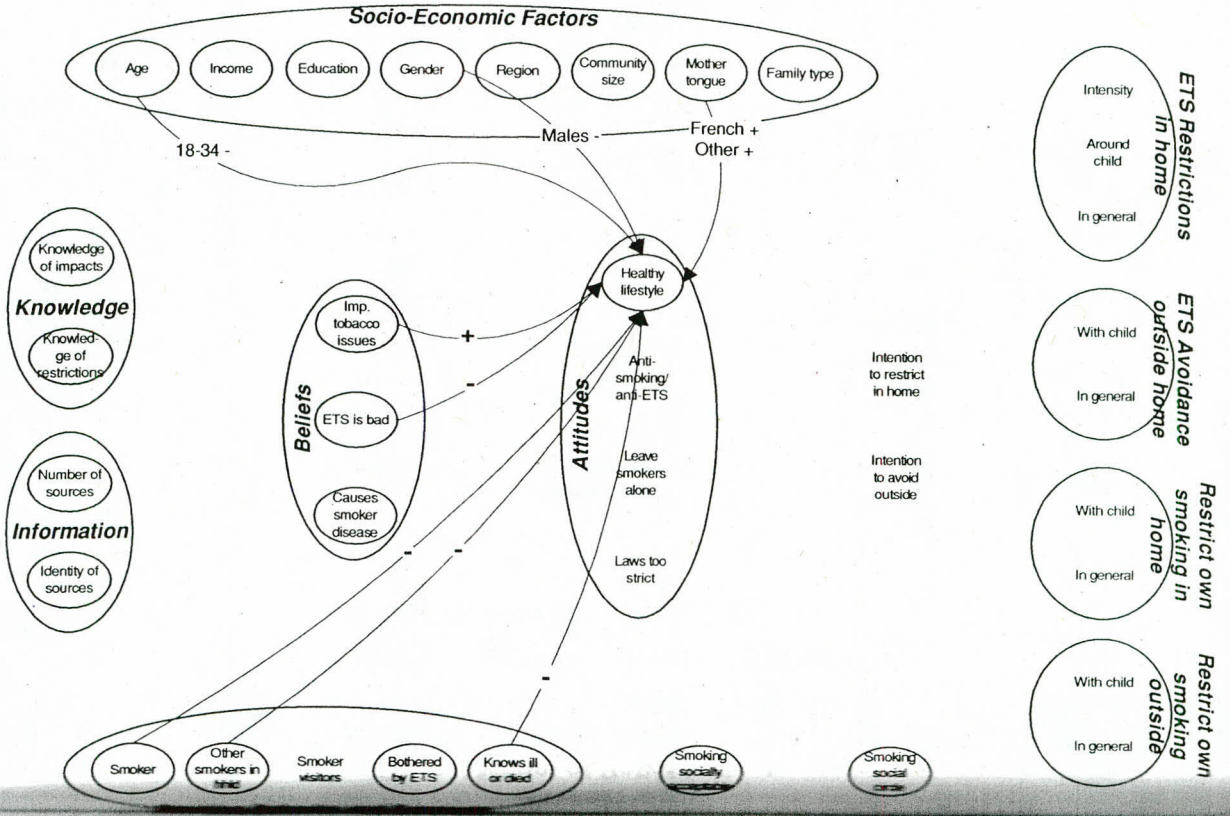
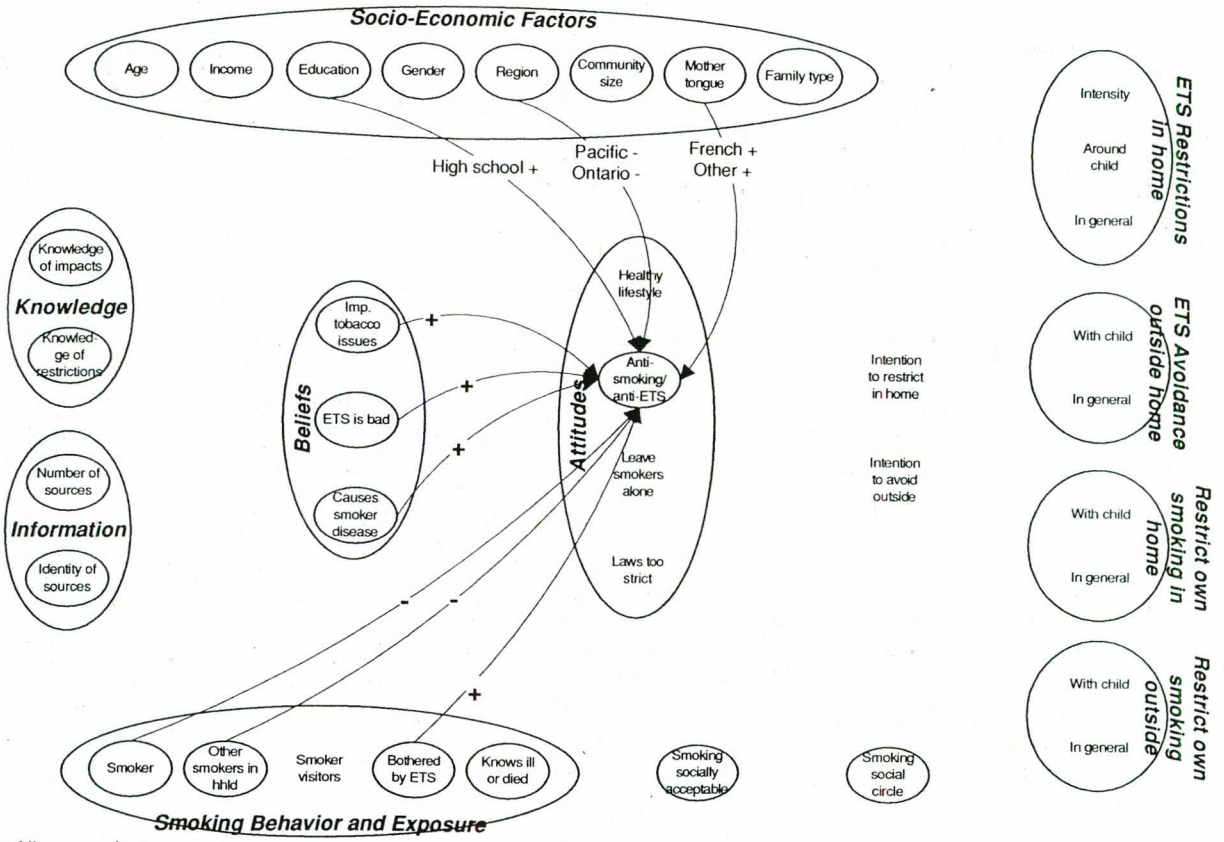


EXHIBIT 9.4
Causal Model of the Anti-Smoking Indicator



Note: All respondents

EXHIBIT 9.5
Causal Model of Pro-Smokers Attitudes

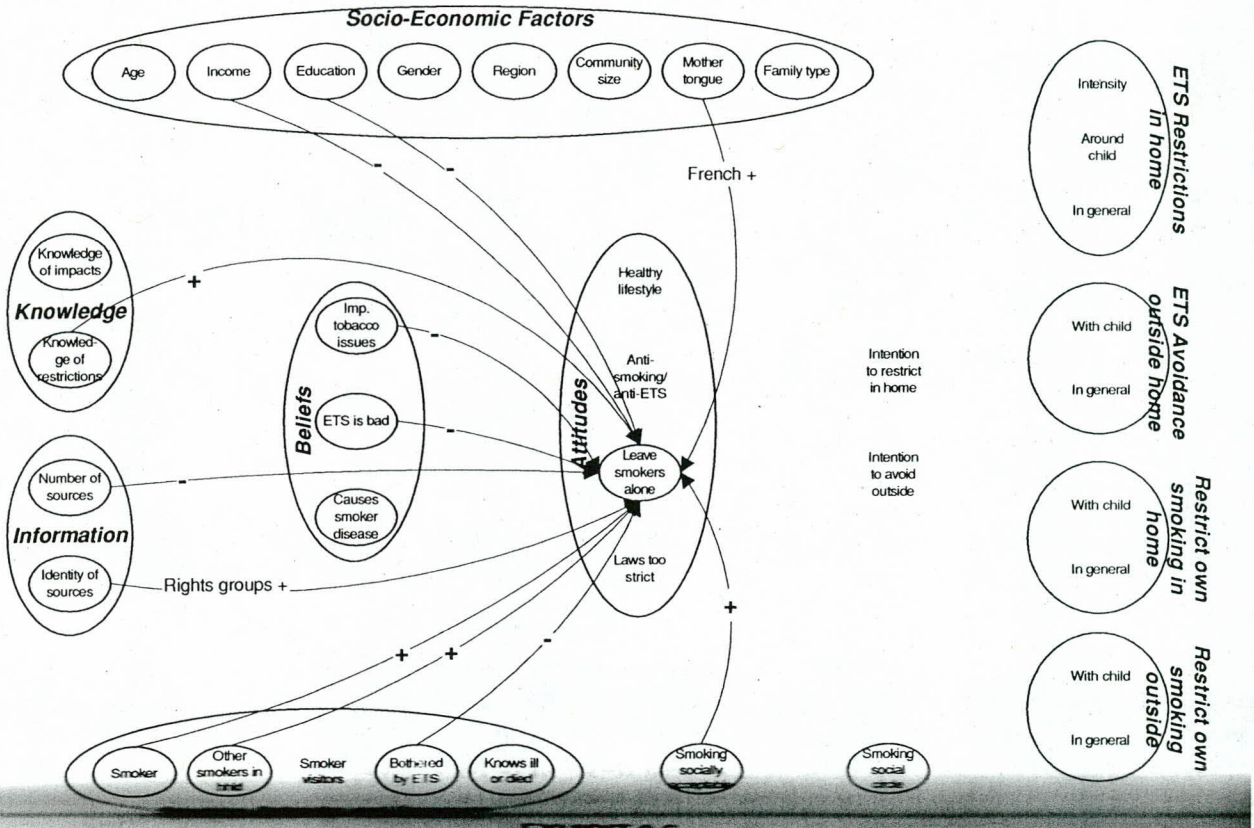
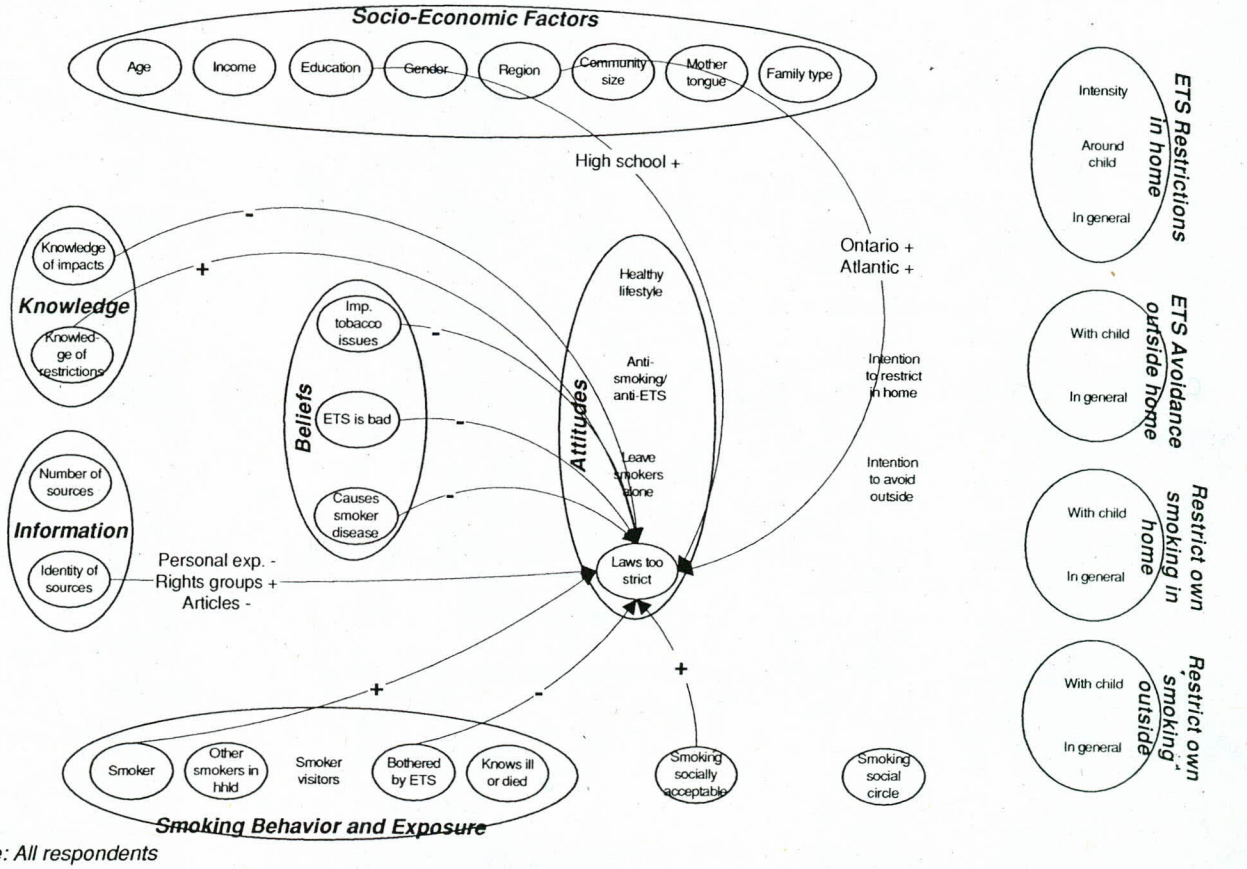


EXHIBIT 9.6
Causal Model of Attitudes to Existing Laws



Note: All respondents

EXHIBIT 9.7
Causal Model of Intentions to Restrict Smoking at Home

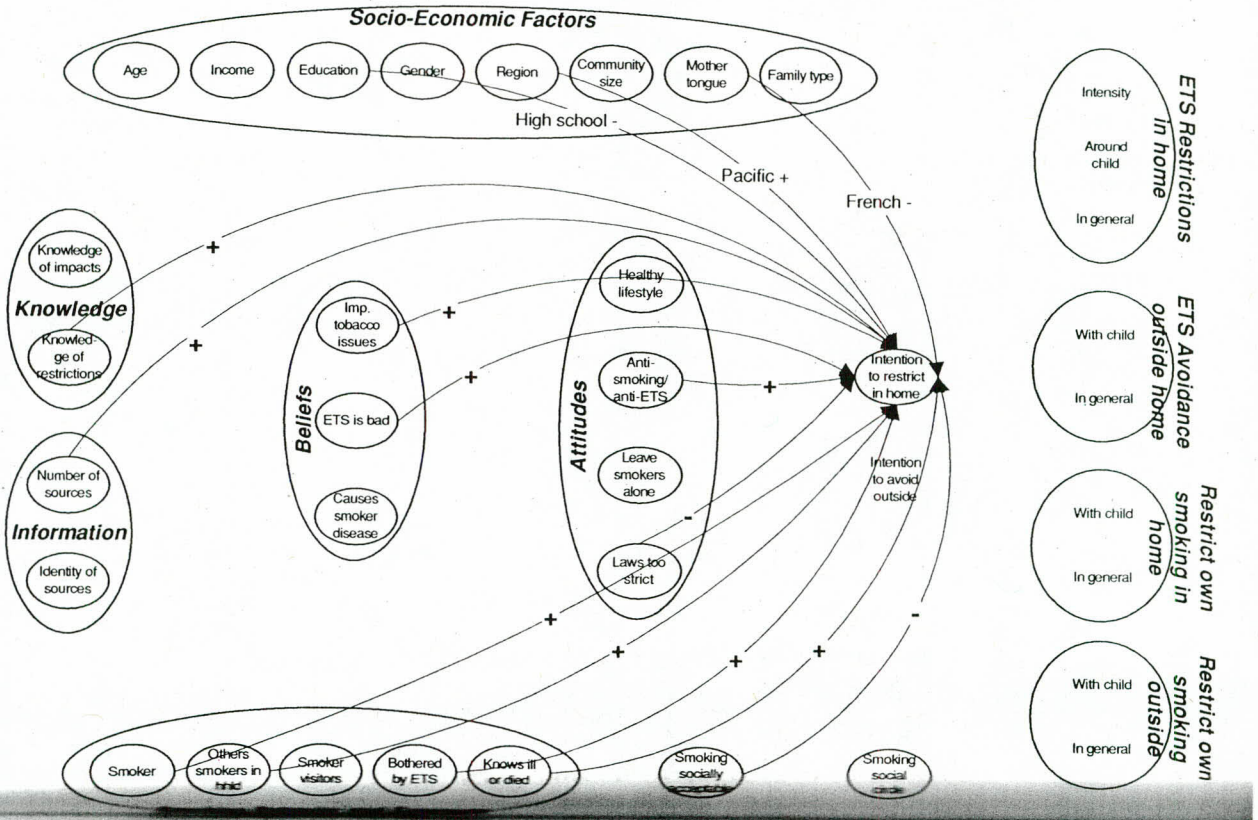
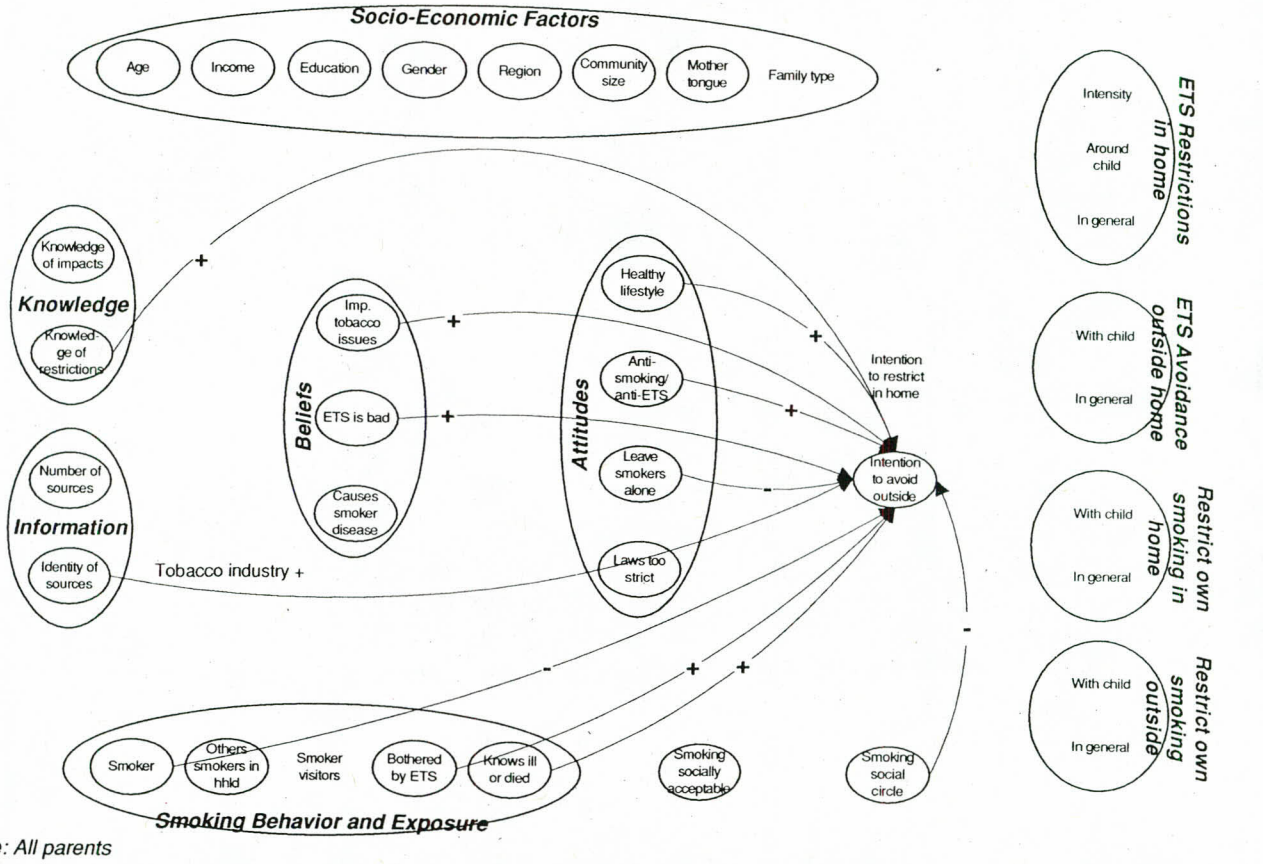


EXHIBIT 9.8
Causal Model of Intentions to Avoid ETS Outside the Home



Note: All parents

EXHIBIT 9.9 Causal Model of ETS Restrictions in the Home

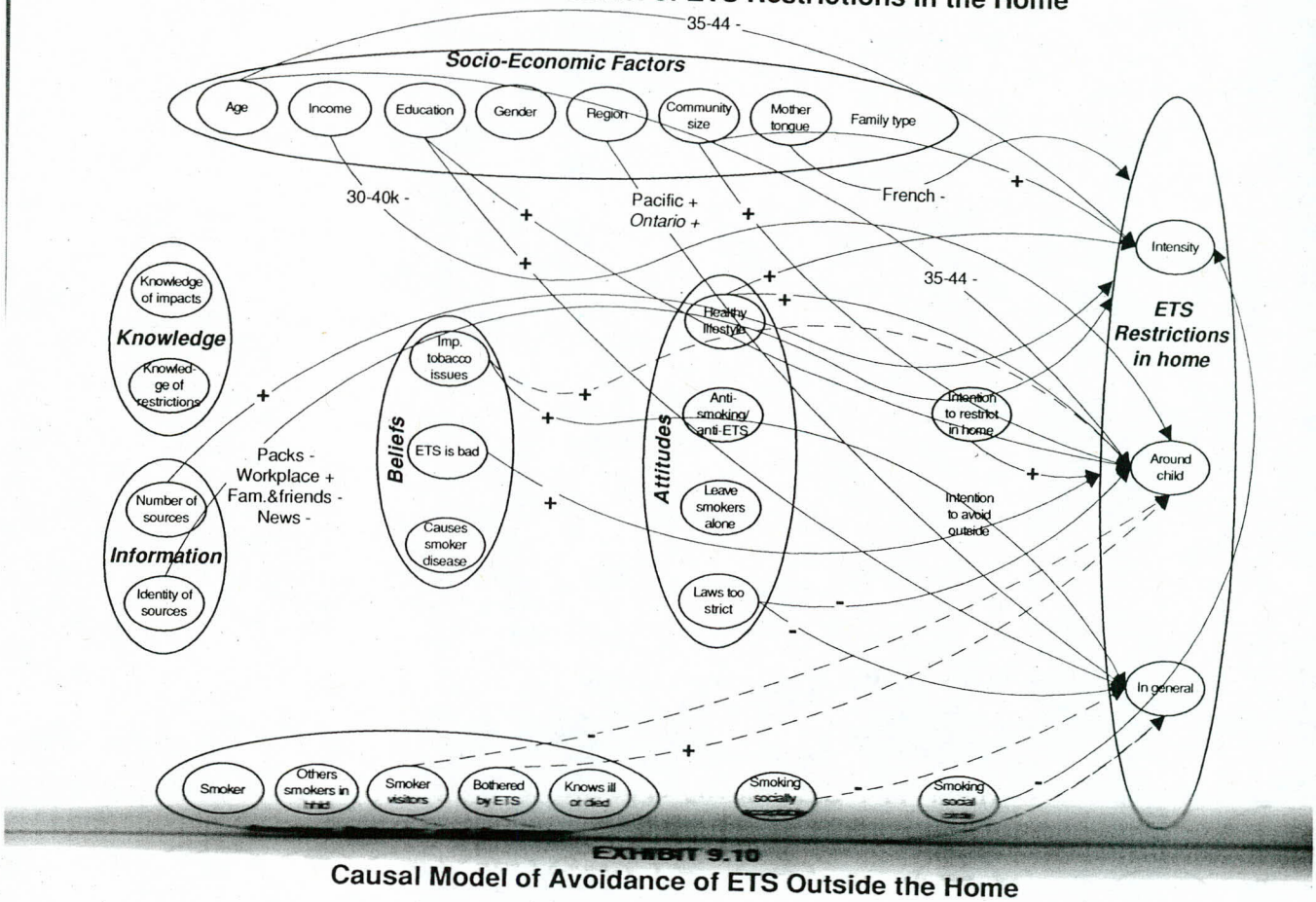
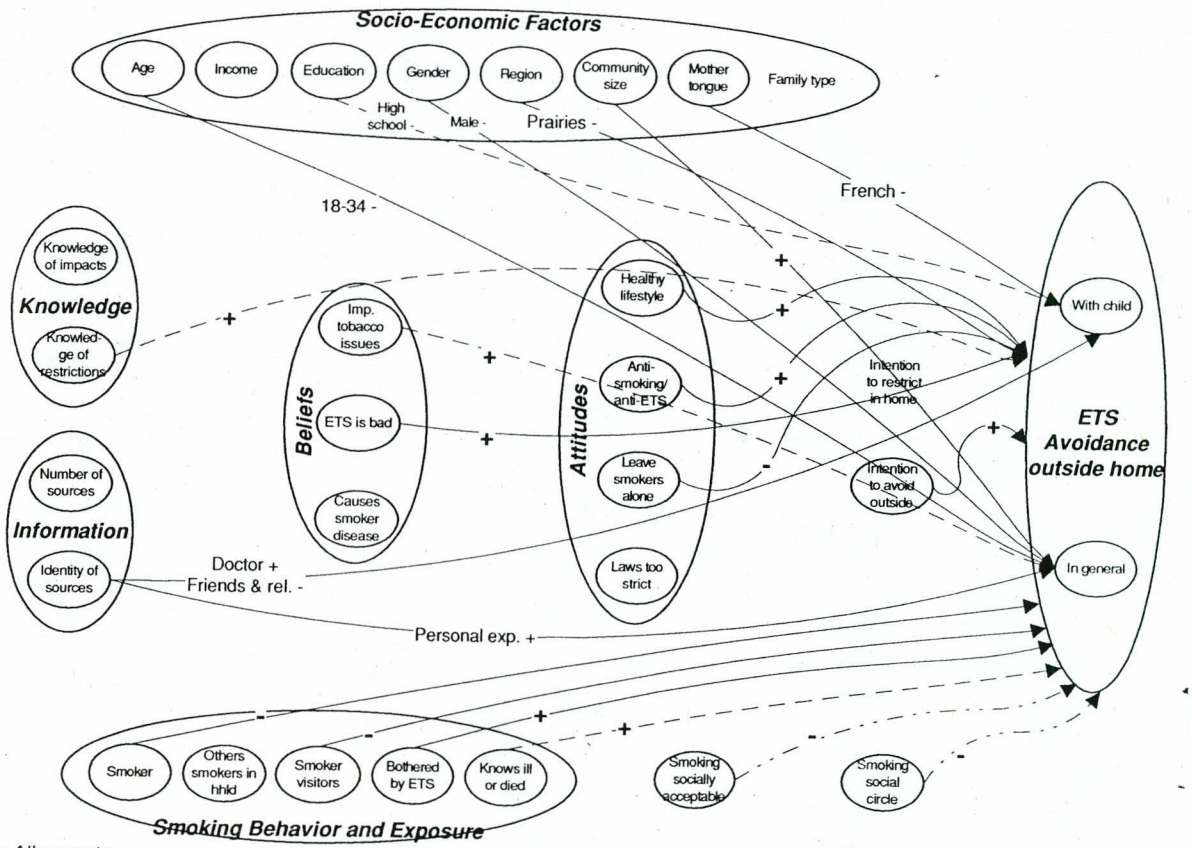


EXHIBIT 9.10

Causal Model of Avoidance of ETS Outside the Home



Note: All parents

EXHIBIT 9.11
Causal Model of Own Smoking Restrictions in the Home

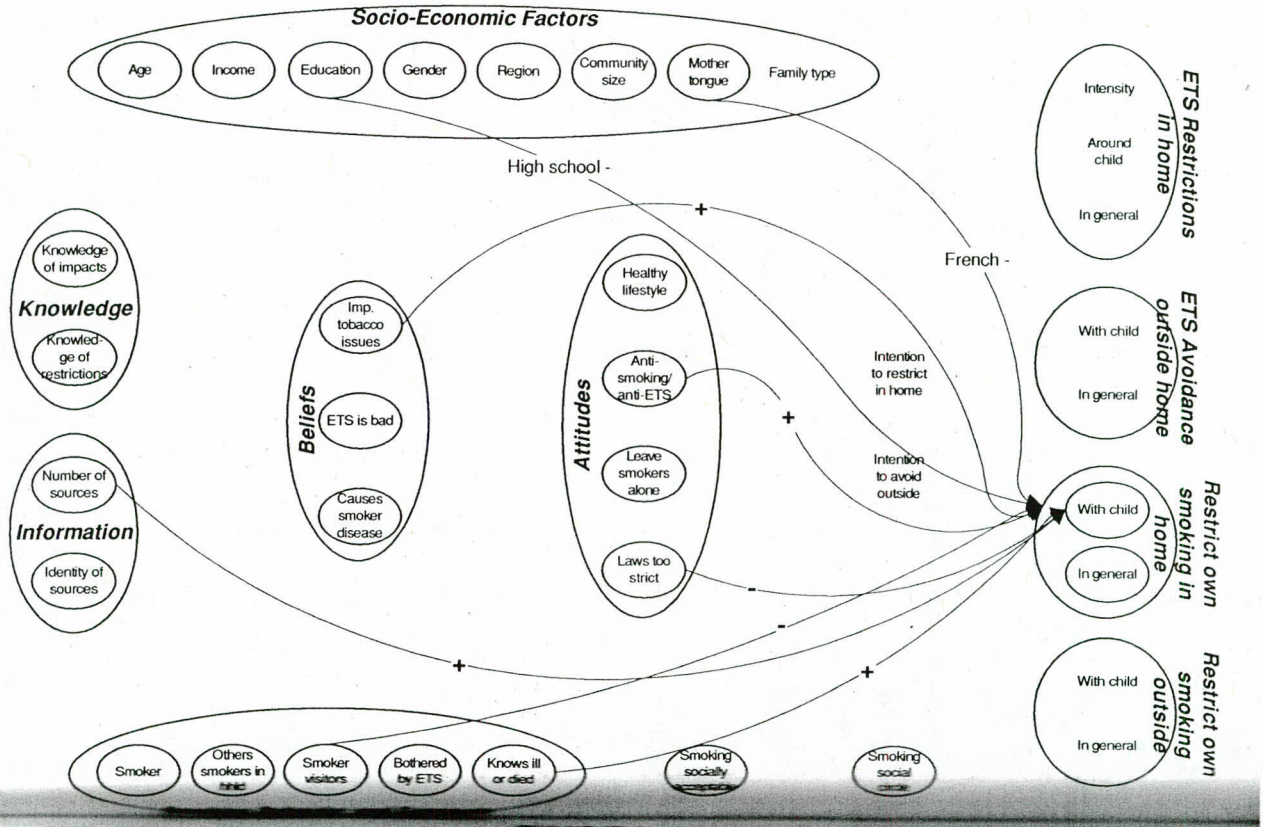
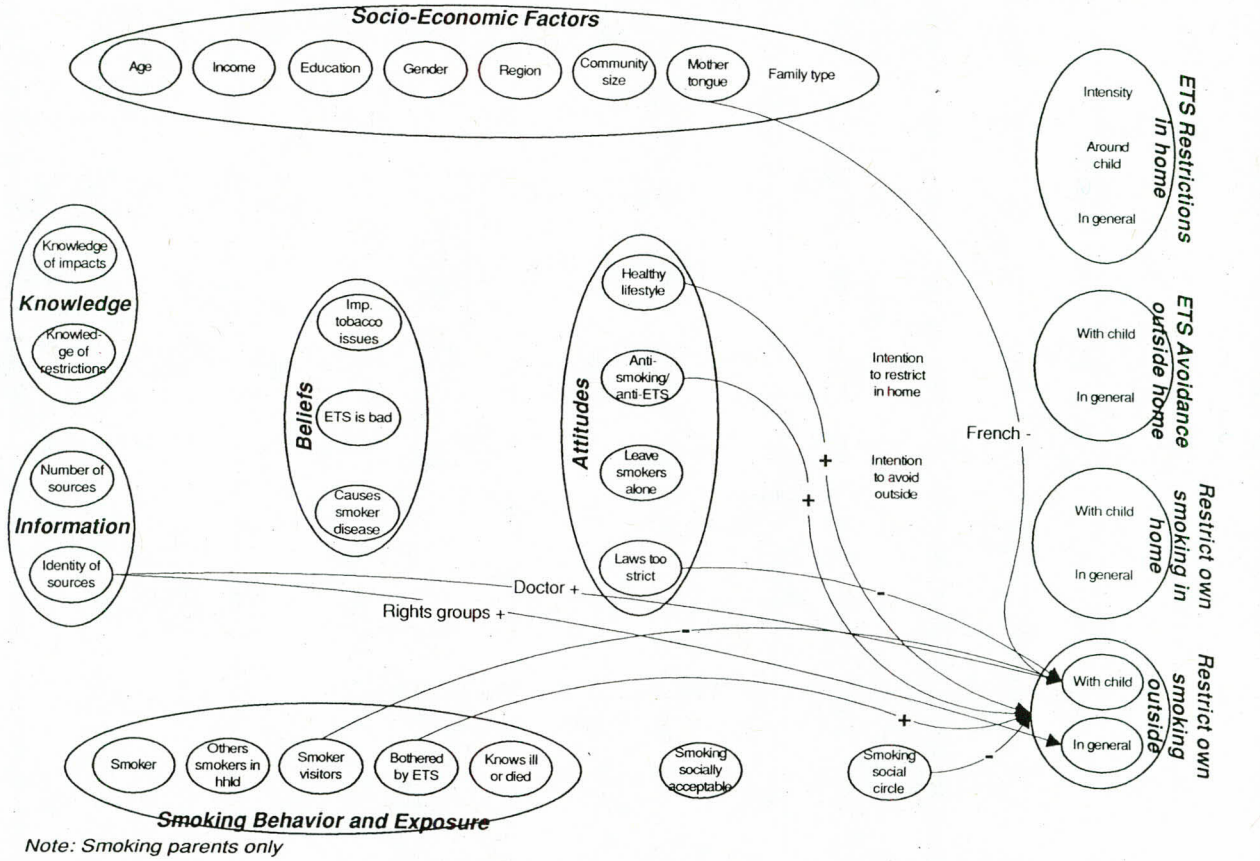


EXHIBIT 9.12
Causal Model of Own Smoking Restrictions Outside the Home



Note: Smoking parents only

EXHIBIT 9.13
Overall Summary Causal Model

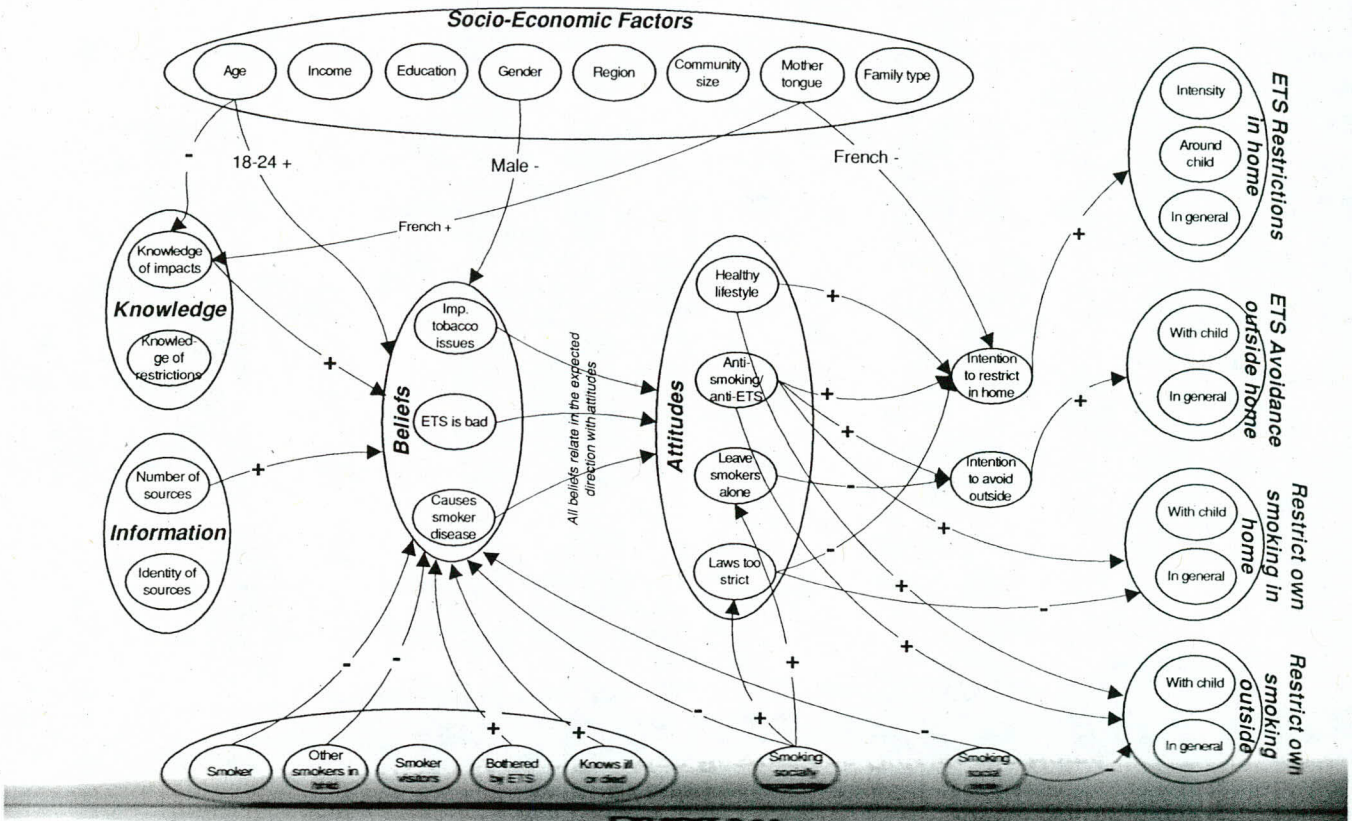


EXHIBIT 9.14
Causal Links Between the French Language Indicator and All Other Model Variables

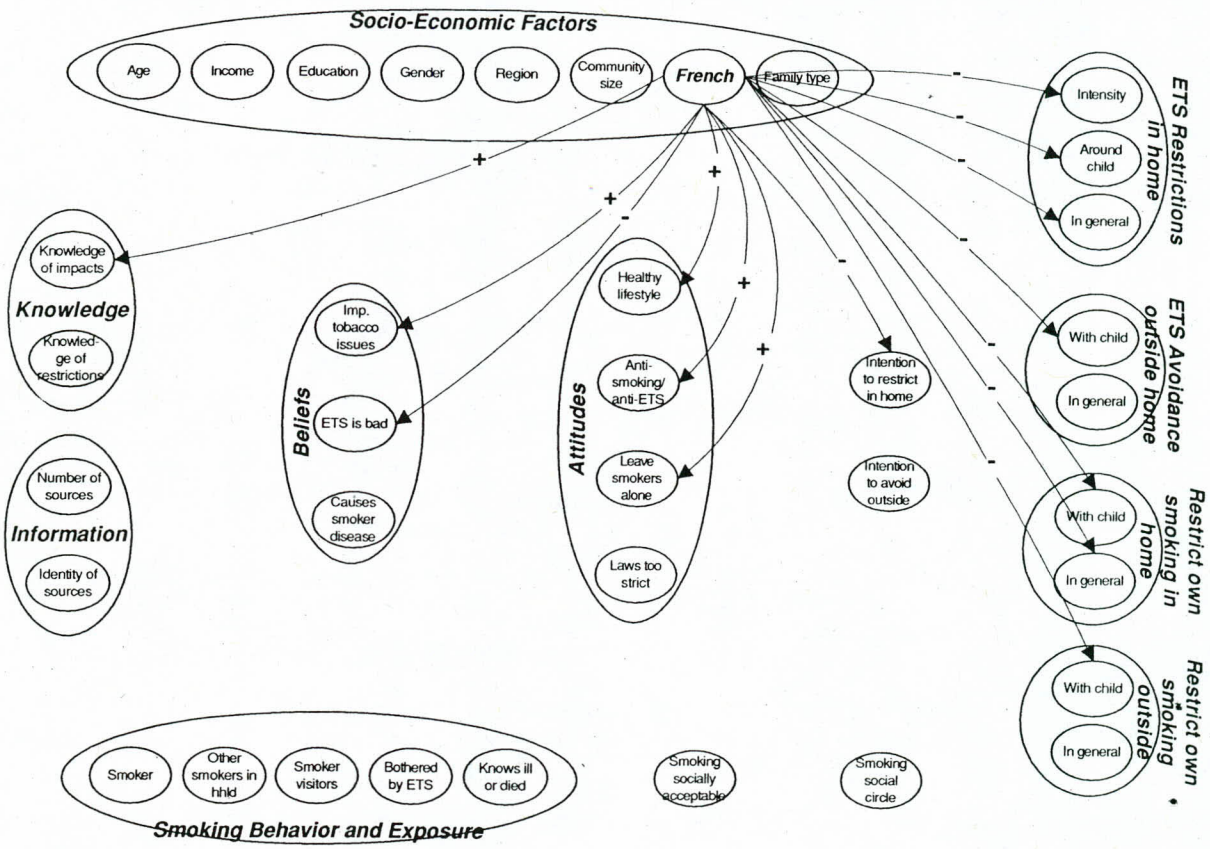
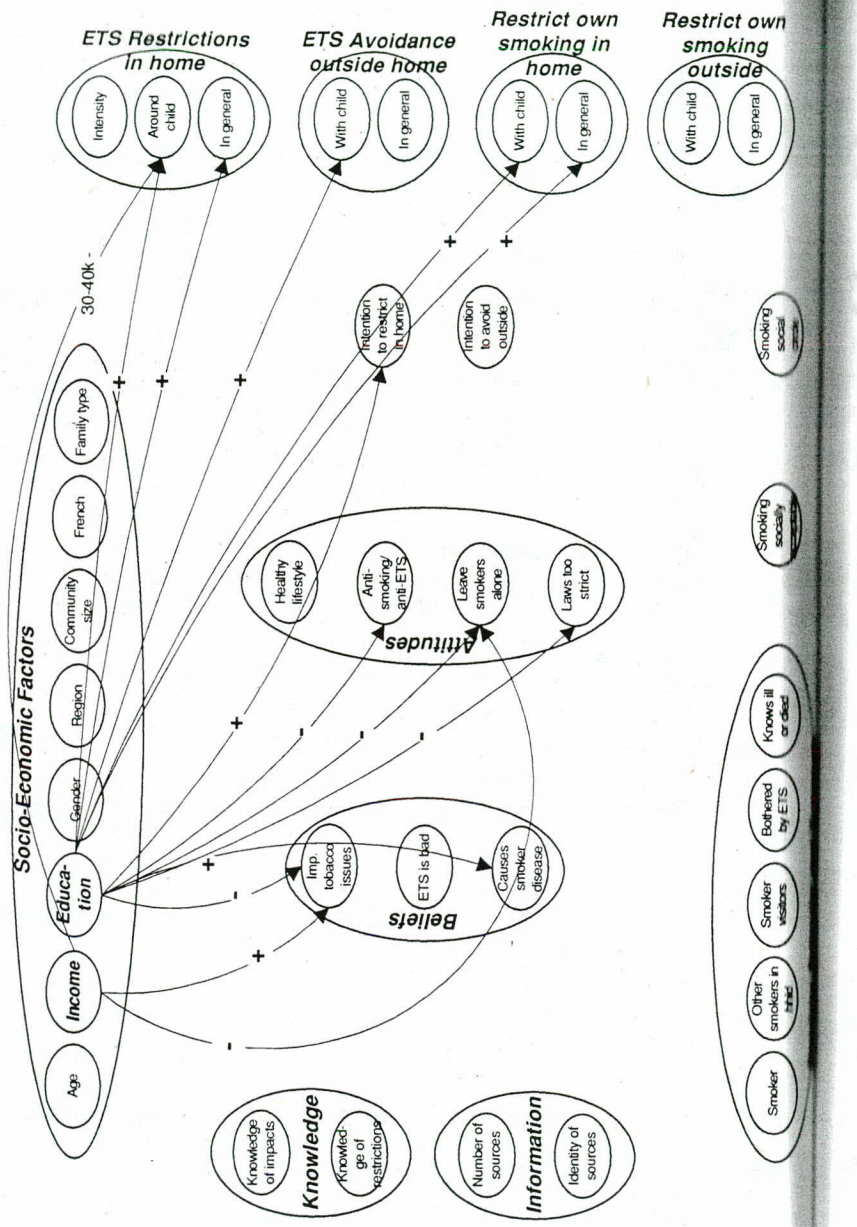


EXHIBIT 9.15
Causal Links Between Income and Education and All Other Variables in the Model



CHAPTER

10 CONCLUSIONS AND RECOMMENDED COMMUNICATIONS STRATEGY

10.1 Conclusions

This chapter begins by summarizing the key findings from the survey, by topic, as well as highlighting the results of the focus groups with children.

(a) Profile

Smokers are far more likely to be younger, less educated and have lower incomes than non-smokers. Francophones and residents of Quebec are also found in disproportionately high numbers among those currently smoking. Smokers also cluster together, in that several smokers can often be found in one household and it is more likely that many members of their social circle also smoke.

(b) Knowledge

When asked to list the top-of-mind health impacts of ETS, survey respondents identified lung cancer and asthma most frequently, followed by respiratory illnesses, heart disease and allergies. Respondents' level of knowledge

about specific health impacts was variable: while most were fairly certain that arthritis is not caused by ETS and that lung cancer, asthma and bronchial problems are, most were not aware that ear infections in children and SIDS are related to ETS.

Knowledge levels were more systematically assessed using an index which was closely examined to determine whether there are particular segments of the population which are more or less knowledgable. While there were no differences between parents and extended family members, females and allophones were more likely to score higher on the index. As well, there were close relations between smoking behaviour, exposure to ETS and reaction to this exposure and the index: smokers and people living in smoking households demonstrated lower levels of knowledge about the health impacts of second-hand smoke.

(c) Sources of Information

Most respondents reported having heard about second-hand smoke through news reports, friends and family, doctors and paid advertisements. Not surprisingly, individuals who scored lower on the knowledge index reported having heard about ETS from fewer sources than those scoring higher. From a selection of possible sources of information, doctors and health groups were considered to be the most believable. News reports, warnings on cigarette packages and the government were the second most believable group of sources of information. The tobacco industry was found to be the least credible.

As might be expected, different groups of people believe different deliverers of messages. Rated credibility of sources were related to a variety of socio-demographic variables. For example, doctors were viewed as more believable by individuals in higher income groups, those with a university education and by anglophones and allophones. Francophones, on the other hand, gave higher believability ratings to news reports and the tobacco industry than did other language groups.

Smoking behaviour and exposure were also related to the credibility ratings given to these sources. By and large, all sources, with the exception of the tobacco industry, were viewed as less believable by smokers, individuals living in smoking households and by those who are not bothered by ETS, which presents a particular communications challenge as these may be the people who need most to receive messages about ETS.

The majority feel that too little information is available on the health impacts of ETS on children. This provides added weight to the finding that respondents were not very knowledgeable about two specific health effects of ETS: ear infections in children and SIDS.

(d) Beliefs about the Health Impacts of ETS and Smoking

There was very strong agreement that cigarette smoking causes disease among smokers, but somewhat less agreement (although still the predominant view) that ETS causes disease and death among non-smokers. On the other hand, respondents were fairly equally divided in terms of whether they believe that a person has to be heavily exposed to ETS for a number of years before it would have negative effects.

Stronger agreement with the belief statements about negative health effects of ETS were found among respondents in higher income brackets, those with higher levels of education and those with higher scores on the knowledge index. Those who expressed lower levels of agreement tended to be francophones, smokers, individuals living in smoking households and those who are not bothered by ETS. Whether this is truly disbelief about negative health effects or ETS, denial of scientific findings, or a basic lack of awareness, however, is not clear from the present study.

Beliefs which are more in line with accepted ETS research findings were more likely to be held by individuals whose close social circle contained none or few regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Ironically, this group was also more likely to feel that too little information was available about ETS.

(e) Attitudes Toward ETS

Relative to a number of health issues including prevention of AIDS, improving nutrition and reducing tobacco use among youth, ETS was given a lower priority, along with improving nutrition and reducing tobacco use overall. Replicating the same patterns as earlier, smokers, people living in smoking households and those who are not bothered by ETS tended to give lower ratings of importance to these tobacco-related issues. These issues were viewed as increasingly more important with increasing age and income and by allophones.

In general, individuals who feel that the three tobacco-related issues are important also tended to agree with the various belief statements concerning negative health effects of ETS and to disagree that smoking is socially acceptable.

(f) Attitudes Toward Smoking

Only half the sample disagreed that smoking is socially acceptable. At the same time, there was strong agreement that people should have a right to be free from breathing other people's second-hand smoke. Individuals in higher income brackets and with higher levels of education were more likely to feel smoking is not socially acceptable and that people should be able to breathe ETS-free air.

Attitudes which are negatively disposed toward ETS and smoking were more likely to be held by people whose close social circle contained no or few regular

smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Once again, smokers, individuals living in smoking households and people who are not bothered by ETS were more likely to agree that smoking is socially acceptable and less likely to agree that people should have a right to smoke-free air.

(g) Attitudes Toward Restrictions

There was fairly strong agreement that smoking in all indoor public places should be banned and that it is appropriate for the government to be involved in raising public awareness about ETS. Agreement was lower among smokers, individuals from smoking households and those who are not bothered by ETS. Also in line with previous findings, stronger agreement was found among older respondents, those in higher income brackets and with higher education levels, and anglophones and allophones.

(h) Legal Restrictions on Smoking

Awareness of legal restrictions on smoking is fairly high, although the perceived level of restrictions varies considerably across the country. Most were aware of restrictions in children's schools, restaurants and the workplace, while very few were aware of restrictions in bars and pubs. Awareness of legal restrictions on smoking varied significantly by community population, increasing with community size. The perceived level of restrictions was lowest in Quebec and among francophones.

Support for legal restrictions on smoking appears to be fairly strong. Most view the current level of legal restrictions as too lenient or appropriate, while just under a quarter consider the current level to be too strict. Opinions on legal restrictions varied significantly by a number of background variables, including

income, education, region, knowledge levels, smoking behaviour and whether bothered by ETS. Respondents from Quebec were more likely to view current laws as appropriate, even though they were aware of fewer legal restrictions than respondents from other provinces.

Finally, respondents assigned greater responsibility for restrictions on smoking in public places to owners/managers and to individuals than to government. Respondents with higher family incomes, levels of education and knowledge about ETS were most likely to assign a high level of responsibility to government, while smokers accorded a lower level of responsibility to all parties.

(i) Restrictions in the Home

Just over one in six households are subjected to smoke on an ongoing basis, without the implementation of restrictions. That is, 18 per cent of all households include one or more smokers and no restrictions are currently in place to reduce exposure to ETS. Likelihood of the existence of restrictions increases according to the characteristics of the respondent. As with the smoker profile, those who restrict are more likely to be older, have higher levels of education and income, be a non-francophone, live in provinces other than Quebec, be a non-smoker, or be bothered by ETS. Although extended family are more likely to restrict than parents, this may simply be a reflection of the shorter period of time spent with the child. Mothers have thought more about restrictions, and generally express greater concern about exposure to ETS in other areas of the survey. On the other hand, they are less likely to impose restrictions than fathers.

People who restrict are likely to believe that smoking causes disease and death among non-smokers, people have the right to breathe smoke-free air, smoking should be banned from all indoor public places and exposure has a stronger effect on children than it does on adults. These concerned individuals who restrict also believe

that the current laws are too lenient and health groups and the media are believable sources of information on the topic.

Impact on the health of a child is the strongest contributing factor in decisions to restrict smoking inside the home. The image created by someone who smokes in front of a child is also a key factor. While other motives are also important, these two stand out as a strong and common theme. Also of interest is the pattern where the younger the child, the more likely parents and extended family are to cite the child as the reason for restricting. In illustration of this, younger parents have throughout the findings shown themselves to be less concerned about exposure to ETS, however, they are more likely than other parents to cite the health of a child as a reason to restrict.

This same theme is also apparent in the consistency with which restrictions are placed on smoking inside the home in general, as compared to in the presence of children. A higher proportion of both parents and extended family restrict in front of children, even though they do not restrict in general. This is especially true in households with younger children where respondents are disproportionately concerned about restricting smoking all of the time regardless of who is smoking (e.g., a friend, acquaintance or household member) and are even more likely to impose restrictions in the presence of their children than at any other time.

(j) Types of Restrictions and Effectiveness of Enforcement Methods

Four types of restrictions inside the home were explored in the study. Non-smokers were more likely than smokers to send people outdoors and remove ashtrays in an effort to reduce exposure to ETS. On the other hand, smokers were more likely than non-smokers to take the softer or easier way out. They tended to open windows and relegate smoking to one room or portion of the house. This would

seem to point to the possibility that smokers still do not truly believe that exposure to ETS among (especially children) is bad for non-smokers' health. Alternatively, they may simply believe that opening a window or going to another room is an adequate defense against these effects.

Smokers reported that authority sells enforcement of restriction rules in public places. Signs indicating "no smoking" restrictions are very effective, according to most respondents. A request from a staff member or manager is rated as effective by the second largest proportion of smokers. Requests from individuals without authority, such as friends or strangers, hold far less weight.

(k) Restrictions Outside the Home

As with restrictions inside the home, a wide range of factors appear to influence whether a parent has thought about restrictions outside the home. Whether or not a parent has thought about this issue increases with income and education. Whether a parent has considered this type of restriction also varies by region, language, gender and smoking behaviour. As with other issues, the prevalence of parents who have thought about restrictions outside the home is also lowest in Quebec.

Restrictions outside the home are somewhat more prevalent than in the home. While not quite three quarters of parents had *thought* about restrictions outside the home, almost all who have thought about it, do. It may be easier to restrict outside the home by simply taking measures to avoid it as opposed to restricting in the home, which requires enforcement and actually asking people not to smoke.

As with restrictions inside the home, parents are most likely to avoid ETS or to avoid smoking outside the home when their children are present. Many of those who do not restrict outside the home cited a spouse who smokes or not being bothered by ETS as reasons for not restricting.

Finally, avoidance of ETS outside the home, both in general and when children are present, is correlated with parental attitudes and beliefs. Parents who view smoking as unacceptable, who have positive attitudes towards restrictions on ETS, and who believe ETS to have harmful health impacts, are far more likely to take measures to avoid ETS outside the home.

(l) Parental Attitudes and Behaviour About Caregivers

Very few households employ a caregiver who smokes (seven per cent) and half of these report that caregivers do not smoke in front of the child. Non-smokers were more likely to view caregivers smoking in front of the child as a serious problem than were smokers. As such, those viewing this issue as less important tended to fit the smokers' demographic profile (e.g., younger, francophone, etc.). Although fewer than one in four households in any one demographic group allow a caregiver to smoke in the presence of their child, those who smoke, have lower levels of education and income, live in Quebec and so on, were as much as three times more likely to have a caregiver that smokes in front of the child than other groups.

(m) Behaviour of Children

While ETS has been discussed between parent and child in two thirds of the households surveyed, these discussions are typically instigated by the child rather than the parent. This suggests that children may exert some influence on their parents on the topic of restrictions.

However, there is also a correlation between parental attitudes and whether the issue of ETS has been discussed in a household, suggesting that the influence flows both ways. In households where there has been parent/child

discussion on the subject of ETS, the parent is more likely to view smoking negatively, and to believe that ETS causes death and disease among non-smokers.

From what parents said in the survey, it appears that children are more likely to have mentioned being bothered by ETS than to have discussed its health effects. Over two thirds of the children of parents surveyed have said something about being bothered by ETS, while fewer than half the children of parents surveyed have said something about the health effects of ETS.

A significant number of children appear to take action and ask family members not to smoke. Two thirds of children who live in a household where one or more people smoke have asked a household member not to smoke in their presence. A much smaller proportion (half) have asked a relative not to smoke, suggesting that it is much easier for a child to ask those close to him/her not to smoke. Once again, the actions of the children appears to be linked to the attitudes and knowledge of parents, as children of parents bothered by ETS are most likely to have said something about ETS or to have asked someone not to smoke.

(n) Focus Groups with Children

The focus groups with children revealed a number of interesting similarities and differences between the children of smokers and non-smokers and also between younger and older children. Among the key similarities were high levels of knowledge and awareness of ETS. Many children, however, especially younger ones, had difficulty differentiating ETS from smoking when discussing long-term effects and information sources. Children also shared the view that ETS was dangerous to non-smokers, but their estimates of the amount of exposure to ETS needed to cause a long-term effect varied significantly. Children of smokers were more likely to feel that greater exposure was required. Children also had a common disdain for smoking based on high levels of knowledge about the negative health effects and highly addictive nature of cigarettes. Some of the older children, however, showed signs that

peer pressure to try smoking was beginning to manifest itself. Indeed, a number of children indicated that they had tried smoking already.

Almost all children indicated that they were bothered (some a great deal) by ETS. Overall, children of smokers reported much higher exposure levels, with their home being the prime source of exposure. According to most children, their parents placed at least some restrictions on smoking in the home, but non-smoking parents were much more likely to ban smoking. Given their level of exposure, ETS was much less a concern for children of non-smokers.

Children also resorted to common avoidance techniques, with leaving the room being the most popular method used to get away from ETS. Avoidance techniques were seldom used by children of non-smokers, whereas they were a way of life for many children of smokers. Children were unanimous in their view that it was acceptable for children like them to ask someone to put out their cigarette if the smoke was bothering them. In discussing their own experiences, however, children expressed trepidation about asking someone that they did not know very well (i.e., not a member of their immediate family) to put out their cigarette. For children of smokers especially, this hesitance was reinforced by some past negative experiences.

Television was the main top of mind source of information on ETS. Specifically, children in all groups said they had seen the Health Canada advertisements on ETS and smoking. Their comments on these advertisements revealed a very good grasp of the advertisements' core messages. Parents and school were also noted as main sources of information on ETS. All of these sources, but especially television, were suggested as good ways of providing information about ETS to children.

Doctors were deemed to be the most credible source of information across all groups. Younger children, however, also indicated that role models, such as teachers, parents and "stars" had a high level of believability. Older children, in

contrast, tended to be a little cynical about these sources. Many older children also indicate that advertising campaigns about ETS should eschew melodrama or histrionics in favour of providing factual information. Overall, children expressed fairly high levels of interest in knowing more about ETS. Older children, though, were more likely to indicated that the topic, especially if discussed in school, was not interesting, although many expressed interest in knowing about "new discoveries" on the topic of ETS.

(o) Segmentation Analysis

A segmentation analysis using two dozen attitudinal variables indicated that the population can be categorized into seven groups according to orientations toward smoking and ETS as well as openness to information and influence. The segments are presented below.

Types	Population Share	Characteristics
Hard Core Unresponsive	7%	Closed minded pro-smokers; a lost cause for communications
Sceptics	16%	Moderate pro-smokers who tend to doubt sources of information; a difficult target
Saturated	11%	Middle of the road attitudinally, not receptive to more information; a fertile but informationally distant target
Unsold Indifferent	16%	Average attitudinally and behaviorally, moderately open to information and influence; a prime target
Open Uncommitted	14%	Average attitudinally and behaviorally, very open to information and influence; a prime target
Moderate Concerned	17%	Most knowledgeable and sold attitudinally and behaviorally, somewhat open to additional information; no need for more effort
True Believer	19%	Totally persuaded about ETS effects and have adopted preventive behaviour; no need for more effort

(p) Causal Analysis of ETS Restrictive and Avoidant Behaviour

A series of stepwise multiple regressions was conducted to determine the impacts of the various indicators examined in the research on explaining ETS restrictive and avoidant behaviours. Essentially, much of the conceptual model was confirmed through this exercise. Beliefs were found to be influenced by smoking behaviour and exposure; attitudes were found to be related to these beliefs; behavioral intentions were a function of attitudes; and ETS restrictive and avoidant behaviours could be predicted by behavioral intentions.

Socio-demographic indicators, on the other hand, generally did not contribute significantly to the explanation of behaviour. As well, knowledge and information demonstrated patterns in the expected directions, but were not substantial contributors.

Interestingly, the explanation of ETS restrictive and avoidant behaviour was somewhat different for francophone respondents. While being least likely to intend to restrict smoking in the home or to actually follow through on ETS restrictive or avoidant behaviours, francophones had high levels of knowledge about the negative health impacts of ETS and they believe tobacco-related issues are important for society to address. They also feel they have a healthy lifestyle and hold anti-smoking and anti-ETS attitudes. However, francophone respondents were also less likely than other groups to believe that ETS can cause disease and death among non-smokers and more likely to feel that smokers should be left alone.

The relationship observed among francophones leads to the following conclusions: francophones are more knowledgeable about ETS and hold more ETS-avoidant attitudes, but the link between these prerequisites and ETS-avoidant behaviour (and intentions to behave) is caused by a disbelief about the negative effects

of ETS and a more libertarian attitude toward smokers. These effects are strong enough to reverse the otherwise positive preconditions of francophones into imprudent behaviour.

10.2 Implications for Health Canada

The findings of this research have clear implications for Health Canada, primarily in the area of information and education. There also are implications in terms of legislation, although this is somewhat weaker given the focus of the survey itself.

With respect to information and education, several findings point to a role to be played by the Department in delivering particular messages to specific audiences. A key issue is the relatively low level of knowledge among parents and extended family members about the negative effects of ETS on children, including the relation between ETS and SIDS as well as with ear infections. Health Canada could serve a valuable role in providing information about the potential impacts of ETS on children who are exposed to it.

Support for an active role by Health Canada also comes from the finding that the majority of respondents felt that too little information is available on the health impacts of ETS on children. This indicates the need for the production and dissemination of material addressing this topic. Further, there also was fairly strong support for government involvement in raising public awareness about ETS, indicating that the Department is viewed as a legitimate source of this type of information. Essentially, there is clear support from the research findings for a communications strategy to educate Canadians about the harmful effects of ETS and effective ways to reduce exposure.

The second area of involvement for Health Canada indicated by the survey results concerns the issue of regulation and legislation. The low levels of

knowledge about the effects of ETS on children (e.g., relation to ear infections and to SIDS), indicate that there may be a role for the Department in terms of legislation which would restrict exposure to ETS among children in public places including day cares, indoor playgrounds, and sports facilities, for example. As legislation at this level is not within federal jurisdiction, Health Canada would instead be in the position of advising and guiding provinces and municipalities about the need for consistent and stringent regulation.

Support for increased legislated restriction of smoking also comes from the finding of strong agreement that people should have the right to be free from breathing other people's second-hand smoke. Similarly, there also was fairly strong agreement that smoking in all indoor public places should be banned. Finally, support for legal restrictions on smoking in general was fairly strong as most viewed the current level of legal restriction as too lenient or appropriate.

Overall, individuals assigned greater responsibility for restrictions on smoking in public places to owners and managers as well as to individuals than to government. When coupled with the reality that the government cannot impose restrictions on smoking in private homes, this research greatly supports the need for Health Canada to assist both the provinces as well as municipalities in fortifying existing legislation in this area and imposing new legislation where it does not already exist. The Department should, at the same time, engage in communications about the harmful effects of ETS so that the general public is educated and, thus, can make conscious decisions to take appropriate actions themselves.

10.3 Elements Toward a Communications Strategy

Based on the findings from the survey and the focus groups, the following should form part of an ETS communications strategy focusing on suggested messages, carriers of messages and targets.

(a) Messages

The following messages have the strongest potential for exerting an impact, either because of current levels of attitudes or because of the causal linkages discovered between the attitudes and behaviour.

- "People should have a right to be free from breathing other people's second-hand smoke" (particularly with the target groups from the segmentation analysis).
- "Smoking is not socially acceptable" (associated with key indicators in the modelling exercise).
- "ETS has a negative effect on people of all ages, especially children" (but children of all ages, not just infants and small children).
- "ETS can affect the health of a child more than that of an adult" and "ETS causes death among non-smokers" (these beliefs are eventually associated with ETS restrictive and avoidant behaviours).
- "Tobacco-related issues are important for society to deal with" (associated with ETS restrictive and avoidant behaviour).
- Facts about the relation between ETS and SIDS and ear infections (few people are aware of these associations).
- Facts about exposure levels (neither adults nor children are sure about the level of exposure to ETS needed for it to have negative effects).

- "It is not enough to just open a window" (as the restrictions imposed by smokers were usually of the less effective sort).
- "It is "ok" to ask someone not to smoke around you, especially for children" (children find it difficult or unacceptable to ask extended family members and adults find it more difficult to impose restrictions oneself in the home, as opposed to simply avoiding ETS outside the home).
- In French communications material, the department needs to use terminology consistently and make connection between terminology and the subject (as francophone children were not as familiar with ETS terms as were anglophone children).

(b) Carriers of Messages

The following carriers of messages are expected to be effective, either because they are perceived as credible sources of information or because they reach a large number of people.

- Partnerships with the medical professions and health groups are an effective way of communicating about ETS (viewed as the most credible sources of information).
- Use of a wide spectrum of message carriers is worthwhile (the higher the number of information sources cited by respondents, the more likely they were to hold appropriate beliefs about the negative effects of ETS, as well as to restrict their own smoking).

- Strategies that make use of partners and reinforce individual actions to restrict will have even greater success than government-imposed restrictions.

- Television works well with children but school is a good complement (children felt TV was accessible and provided messages which were easy to grasp. The positive aspect about school was the opportunity to ask questions).

- For younger children, role models, such as teachers, parents and "stars" have a high level of believability; older children, in contrast, tend to be a little cynical about these sources (older children indicate a preference for an advertising campaign that would eschew melodrama or histrionics in favour of providing them with factual information).

(c) Targets

The research revealed key groups which are less aware of the negative health effects of ETS and less likely to hold beliefs which are consistent with research findings on health and ETS. These groups should comprise the primary targets of a communications strategy.

- The main targets from the segmentation analysis are the Open Uncommitted and the Unsold Indifferent. Secondary targets are the Sceptics and the Saturated.

- These target groups comprise middle class citizens. Lower socio-economic status citizens tend to hold pro-smokers' attitudes while more comfortable households have already accepted the idea that ETS is bad and that restrictive actions are required.

- The modelling exercise underlined the findings from other analyses that key targets should be smokers, people who live with smokers, those who are not bothered by ETS and those who have not had someone close become ill or die as a result of a smoking-related illness.

- Francophones exhibited a very particular causal dynamic. This observation emphasizes the need for specific communication to francophones, with a focus on non-smokers' rights and on the social desirability of a smoke-free environment.

- Those who have thought about restrictions but have not implemented them, and those with older children need to be targeted.

- Children and parents both play a role in influencing each other and ETS has been discussed between the majority of parents and children. The fact that children tend to instigate these discussions indicates the importance of communication strategies which reach children, as children then serve as message carriers to parents.

APPENDIX A

STUDY ISSUES MATRIX

Ekos Research Associates Inc., 1995

Ekos Research Associates Inc., 1995

Matrix: Issues, Indicators and Data Sources
An Assessment of Knowledge, Attitudes and Behaviours Concerning ETS

Issues	Indicators	Data Sources	Corresponding Question Number
Knowledge			
What level of knowledge do people have concerning the health impacts of ETS?	❑ Knowledge of parents, children and extended family members regarding specific health impacts of ETS on children and adults, including: - respiratory illnesses - irritation of eyes - headaches - lung cancer - heart disease - SIDS - ear infections - asthma	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Q31, Q32 CATI #s 52-50
	❑ Knowledge of average exposure levels of population at large (average exposure to ETS equals X number of hours per week)		Not addressed (comparison data not available)
What level of knowledge do individuals hold of policies and legislation restricting smoking?	❑ Awareness of local by-laws, provincial by-laws and federal laws	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Not addressed
	❑ Knowledge of existence of a smoking policy at work or places frequented		Q28 CATI #s 30-34
What are the sources of information on ETS and smoking?	❑ Reported information sources on the topic of ETS, and on the topic of smoking	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Q33 CATI # 51
How credible are various sources?	❑ Credibility of information sources identified by respondents		Not addressed
	❑ Credibility of other sources, including physician, school, media, government, advocacy groups		Q34, Q36 CATI #s 52-60, 61-65

Beliefs and Perceptions			
What beliefs do people hold concerning the health impacts of ETS?	❑ Whether or not parents, children and extended family members believe that ETS can harm people's health ❑ Level of exposure to ETS required to have an impact ❑ Whether or not people think that children are at greater risk from ETS than adults	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Q26 CATI #s 17-29
What beliefs do people hold concerning the health impacts of smoking?	❑ Whether or not parents, children and extended family members believe that smoking can harm people's health ❑ Level of smoking required to have an impact on health	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Q26 CATI #s 17-29 Not addressed
Have people perceived changes in the smoking behaviour of others over time? (e.g., in general, family, friends)	❑ Proportion of close friends who smoke currently vs. previously ❑ Perceived proportion of Canadians who smoke currently vs. previously ❑ Whether people smoke more or less than 10 years ago ❑ Level of smoking among peer group (social class) currently vs. previously	❑ Survey of parents ❑ Survey of extended family members	Perceived change in smoking behaviour not measured Q42, Q43 CATI #s 9-15
Attitudes			
What level of importance do people accord to ETS as a health issue?	❑ Importance accorded to the issue of health impacts of ETS on children ❑ Importance accorded to the issue of health impacts of ETS on adults ❑ Relative importance of ETS as a health issue compared to other health-related issues (AIDS, nutrition, smoking, drug/alcohol abuse, high blood pressure, physical fitness)	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	To be assessed through analysis Q25 CATI #s 9-15

What attitudes do people hold towards ETS?	❑ Attitudes towards exposure to ETS, including: - acceptable levels of exposure; - importance of restricting exposure of children to ETS. - importance of restricting exposure of adults to ETS. ❑ Attitudes towards the benefits, importance of a smoke-free environment in the home, workplace, daycare and other public places	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	To be assessed through analysis of behaviours and attitudes
What attitudes do people hold towards smoking?	❑ Perceived social acceptability of smoking ❑ Perception of smoking as an addiction or an indulgence	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Q26 CATI #s 20, 26
What other attitudes have an influence on an individual's attitudes towards ETS and smoking?	❑ Personal attitudes concerning individual rights ("right to smoke" or right to be "smoke-free") ❑ Personal attitudes concerning social conformity and individualism (e.g., importance of "fitting in", or conversely to rebel against social norms)	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Not addressed
What attitudes do people hold towards restrictions on smoking (e.g., policies and legislation)?	❑ Agreement with policies and legislations currently in effect ❑ Perceptions about why non-smoking policies are in place (e.g., reduce ETS, reduce smoking, reduce fire hazard, pressure from non-smokers' rights groups) ❑ Support for stricter controls/leaner controls ❑ Perceived gaps in policies and legislation ❑ Support for government intervention/preferred method for addressing the problem - local, provincial, federal - education programs	❑ Survey of parents ❑ Survey of extended family members	Q29 CATI # 36 Not addressed Q29 CATI # 36 Not Addressed Q30 CATI # 37 to 40

Behavioral Intentions			
What practices do individuals engage in within their households regarding smoking?	❑ Practices of parents, extended family members and children with respect to smoking in the home (level of restrictions desired and introduced) ❑ Identification of individuals towards whom practices are directed (family members, friends, or all visitors to home), or for whom exceptions are made ❑ Acceptability of asking strangers and acquaintances not to smoke in their home	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Parents: Q2 to Q8 CATI #s 71 to 91 Extended Family: Q2_E to Q8_E CATI #s 135 to 149 Not addressed
What practices do individuals engage in outside the household? When with/without children? (e.g., in restaurants, public areas, etc.)	❑ Practices of parents, extended family members and children in different situations outside the home (e.g., restaurants, other public places) ❑ Extent to which exposure to ETS is a consideration in behaviour outside the home	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Parents: Q9 to Q13 CATI #s 92 to 100 Extended Family: Behaviour outside of own home or child's home not addressed
Behaviours			
How does actual behaviour differ from intended behaviour?	❑ Extent to which practices are enforced in the home with immediate and extended family members, acquaintances ❑ Incidence of intervention with/by acquaintances and strangers in places outside the home (including work and other public places)	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Parents: Q6 CATI#s 81-84 Not addressed
What are the behaviours of children when in the presence of a smoker?	❑ Extent to which restrictions are requested by children (directed towards parents and family members) ❑ Prevalence of other behaviours (in the home), including verbal expressions of concern regarding effects of smoking and ETS on family health ❑ Extent to which ETS has been discussed in the home ❑ Behaviours of children outside the home	❑ Survey of parents ❑ Focus groups with children	Q22, Q23, Q24 CATI #s 122-128 Not addressed
What variables intervene between intended behaviour and behaviour?	❑ Perceived factors influencing intervention, including relationship to smoker ❑ Variables influencing behaviour, including strength of addiction (for smoker)	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Q5, Q6 and Q6_E CATI #s 80-87, 143-145 Not addressed
What are the practices of parents with regards to the smoking of caregivers?	❑ Extent to which smoking behaviour is considered in the choice of caregiver, and relative importance of smoking behaviour ❑ Practices of parents with respect to caregivers (restrictive measures imposed, etc.)	❑ Survey of parents	Q19 to Q21 CATI #s 119 to 121
To what extent do smokers adhere to non-smoking policies? (e.g., In the workplace, home, other public places)	❑ Self-reported compliance levels by smokers ❑ Perceived compliance levels of the general public by smokers and non-smokers	❑ Survey of parents ❑ Survey of extended family members ❑ Focus groups with children	Not addressed
What other variables affect behaviour?	❑ Healthy lifestyle habits ❑ Relative influence of the primary effects of smoking on household members versus effects of ETS on household members in motivating non-smoking practices ❑ Relative influence of different factors on the behaviour of smokers: - legislation, policies - requests from strangers - requests from their children - concerns about role model influence on children - concerns about impact of ETS on children - concerns about impact of ETS on other family members - desire to quit smoking	❑ Survey of parents ❑ Survey of extended family members	To be assessed through analysis

Background Variables			
Background variables	❑ Age, country of origin, sex, education, occupation, income, province (region) ❑ Family composition ❑ Smoking behaviour (never smoked, smoker, former smoker) ❑ Extent to which individual is bothered by tobacco smoke (e.g., irritated by ETS) ❑ Current exposure to ETS (adults and children): in the workplace, in the home, in daycare etc. ❑ Personal experience (e.g., illness or death of an acquaintance or family member from smoking-related causes) ❑ Current health status (e.g. asthma, high blood pressure or other risk factors) ❑ Social desirability scale (Robinson and Shaver)	❑ Survey of parents ❑ Survey of extended family members ❑ Focus group with children	Q37 to Q48 Plus Socio-Demographic variables CATI #s 164 - 194 Not addressed Not included

APPENDIX B

SURVEY INSTRUMENT

Ekos Research Associates Inc., 1995

ETS Survey Questionnaire

AREA

(1/ 20)

01		902
02		506
03		709
04		418
05		514
06		819
07		613
08		416
09		905
10		519
11		705
12		807
13		204
14		306
15		403
16		604

INTRO

intro screen

(1/ 23)

01	Continue	1	
02	End	2	=> INT

INTR1

intr1 Do you have any children aged 12 or under residing in your household?

(1/ 24)

01	yes	1	
02	no	2	=> +2

INTR2

intr2 I would like to speak to the person or one of the people in the household who has primary responsibility for making decisions concerning this child or these children?

(1/ 25)

01	Speaking to that person	1	=> PRE9
02	Person not available - set call-back for another time	2	=> INT

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5: **INTR3**

intro3 Children can have a number of key people in their lives in addition to their parents. Do you have a child or children in your life, other than your own, who you see at least once a week? This may be a niece or nephew, grandchild, or the child of a good friend or neighbour. This does not include situations such as coaching or music lessons, where you see more than a few children at once or are paid for your time with the child.

(1/ 26)

01 Yes 1
02 No 2

6: **INT3B**

=> INT if INTR1=#2 AND INTR3=#2

calculate skip for non-parents, non-extended family

7: **INT3C**

=> +1 if NOT(INTR1=#1 AND INTR3=#1)

int3c We would like to focus your attention, not on your own children, in this survey, but on the child or children that you see regularly.

8: **PRE9**

PRE9 This survey is centred largely around the issue of second hand smoke. Second-hand smoke can be defined as the smoke that a smoker blows out of their mouth, and the smoke that comes from the end of a burning cigarette.

9: **PRE25**

PRE25 Society currently faces a number of health issues. I am going to read you a list of some of these issues and I would like you to tell me how important it is that society address each of them on a scale of 1 to 7, where 1 means not at all important, 7 means extremely important and the mid-point 4 means moderately important.

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10: **Q25A**

Rotation => Q25G

MESSAGE: How important is it for society to address..

Q25A Improving nutrition

(1/ 27)

01 Not at all important 1
02 2
03 3
04 Moderately Important 4
05 5
06 6
07 Extremely Important 7
08 DK/NR 9

11: **Q25B**

MESSAGE: How important is it for society to address..

Q25B Decreasing drug/alcohol abuse

(1/ 28)

01 Not at all important 1
02 2
03 3
04 Moderately Important 4
05 5
06 6
07 Extremely Important 7
08 DK/NR 9

12: **Q25C**

MESSAGE: How important is it for society to address..

Q25C Prevention of AIDs

(1/ 29)

01 Not at all important 1
02 2
03 3
04 Moderately Important 4
05 5
06 6
07 Extremely Important 7
08 DK/NR 9

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2d

13: **Q25D**

MESSAGE: How important is it for society to address..

Q25D Reducing exposure to second-hand smoke

(1/ 3

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

2e

14: **Q25E**

MESSAGE: How important is it for society to address..

Q25F Reducing tobacco use overall

(1/ 3

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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2f

Q25F

MESSAGE: How important is it for society to address..

Q25F Reducing tobacco use among youth

(1/ 32)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

PRE26

PRE26 I am going to read you a series of statements. Tell me whether you agreeor disagree with each using a 7-point scale where 1 means strongly disagree,7 means strongly agree and the mid-point 4 means neither agree nor disagree.

3a

Q26A

Rotation => Q26M

Q26A Second-hand smoke can affect the health of a child more than the health of an adult

(1/ 34)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3b

Q26B

Q26B Cigarette smoking causes disease amongst smokers

(1/ 35)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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20: **Q26C**

Q26C Smoking is socially acceptable

(1/ 36)

3c

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

21: **Q26D**

Q26D Second-hand smoke causes disease amongst non-smokers

(1/ 37)

3d

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

22: **Q26E**

Q26E Second-hand smoke causes death amongst non-smokers

3e

(1/ 38)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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3f

23: **Q26F**

Q26F I think that smokers are overly persecuted by non-smokers

(1/ 39)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3g

24: **Q26H**

Q26H I think I have a healthy lifestyle

(1/ 40)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3h

25: **Q26I**

Q26I It is inapropriate for the government to advertise about second-hand smoke and its effects to the public

(1/ 41)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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3c

26: **Q26J**

q26j Most people could quit smoking if they really wanted to

(1/ 42)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3j

27: **Q26K**

q26k I think that people should have a right to be free from breathing other people's second-hand smoke

(1/ 43)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3k

28: **Q26L**

q26l Smoking in all indoor public places should be banned

(1/ 44)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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3L

29: **Q26M**

q26m I think you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health.

(1/ 45)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

4 A → E = 5

30: **PRE28**

PRE28 I am going to read you a list of places which may or may not have restrictions on smoking. I would like to know whether there are any laws or policies restricting smoking in each type of place, in the city or area where you live.

31: **Q28A**

Rotation => Q28E

4a *MESSAGE: Are there any laws or policies restricting smoking in...*

Q28A Restaurants

(1/ 46)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

32: **Q28B**

MESSAGE: Are there any laws or policies restricting smoking in...

4b Q28B Workplace

(1/ 47)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

33: **Q28C**

MESSAGE: Are there any laws or policies restricting smoking in...

4c Q28C Shopping malls

(1/ 0)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

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34: **Q28D**

MESSAGE: Are there any laws or policies restricting smoking in...

Q28D Bars and pubs

(1/ 48)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

35: **Q28E**

MESSAGE: Are there any laws or policies restricting smoking in...

Q28E Children's schools

(1/ 49)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

36: **Q29**

Q29 What do you think of the laws to reduce second-hand smoke on a 7-point scale where 1 means current laws are too lenient and 7 means they are too strict in controlling second-hand smoke. The mid-point 4 means that current laws provide the right level of control.

(1/ 50)

01	Too Lenient	1
02		2
03		3
04	The right level	4
05		5
06		6
07	Too Strict	7
08	DK/NR	9

37: **PRE30**

PRE30 How responsible should each of the following be for placing restrictionson smoking in public places? Please rate your response using a 7-point scale where 1 means not at all responsible, 7 means completely responsible and the mid-point 4 means they should share responsibility equally with others.

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38: **Q30A**

Rotation => Q30C

MESSAGE: How responsible should....be for placing restrictions in public places

30A Government

(1/ 51)

01	Not at all responsible	1
02		2
03		3
04	Equally Shared Responsibility	4
05		5
06		6
07	Completely Responsible	7
08	DK/NR	9

39: **Q30B**

MESSAGE: How responsible should....be for placing restrictions in public places

30B Owner/manager public place (such as restaurant, bar or other)

(1/ 52)

01	Not at all responsible	1
02		2
03		3
04	Equally Shared Responsibility	4
05		5
06		6
07	Completely Responsible	7
08	DK/NR	9

40: **Q30C**

MESSAGE: How responsible should....be for placing restrictions in public places

30C Each individual

(1/ 53)

01	Not at all responsible	1
02		2
03		3
04	Equally Shared Responsibility	4
05		5
06		6
07	Completely Responsible	7
08	DK/NR	9

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41: **Q31**

MESSAGE: DO NOT READ LIST...Accept up to 5 responses

Q31 Can you name any health impacts of second-hand smoke?

(1/ 54 - 55 - 56 - 57 - 58)

01	Heart disease	1
02	Lung Cancer	2
03	Asthma	3
04	Allergies	4
05	Other	5 O
06	Cannot name any health impacts	6
07	There are no health impacts	7
08	DK/NR	9

42: **PRE32**

PRE32 I am going to read you a list of a number of health impacts which may or may not be related to inhaling second-hand smoke. For each one, please indicate the extent to which each is caused by second-hand smoke on a scale of 1 to 7, where 1 means it is definitely not caused by second-hand smoke, 7 means it is definitely caused, and the mid-point four means you don't think that there is any evidence of a link one way or the other.

43: **Q32A**

Rotation => Q32H

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32A arthritis

(1/ 59)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

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44: **Q32B**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32B lung cancer

(1/ 60)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

45: **Q32C**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32C heart disease

(1/ 61)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

46: **Q32D**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32D ear infections in children

(1/ 62)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

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47: **Q32E**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32E asthma in children

8e

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

48: **Q32F**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32F bronchial problems or bronchitis

8f

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

49: **Q32G**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32G sudden infant death syndrome (SIDS)

8g

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

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(1/ 63)

10: **Q32H**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32H emphysema

8h

(1/ 66)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

~~88~~

11: **Q33**

MESSAGE: DO NOT READ LIST.....NEED RESPONDENT'S OWN VIEW...ACCEPT UP TO FIVE

Q33 From which source(s) have you heard about second-hand smoke?

(1/ 64)

(1/ 67 - 69 - 71 - 73 - 75)

9

01	doctor	01	
02	news reports (from newspaper, radio or television)	02	
03	paid advertisements	03	
04	warnings on cigarette packs	04	
05	friends and family	05	
06	non-smoking rights groups	06	
07	health groups (such as the Heart and Stroke Foundation of Canada, Canadian Cancer Society, Canadian Lung Association)	07	
08	tobacco industry	08	
09	government	09	
10	Other	10	O
11	haven't heard anything about second-hand smoke	11	X
12	Don't remember	99	X

(1/ 65)

12: **PRE34**

PRE34 I am going to read you a list of sources from which people might learn something about second-hand smoke. Please tell me how believable you feel eachone is as a source of information, on a scale from 1 to 7, where 1 means not at all believable, 7 means very believable and the mid-point 4 means moderately believable.

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53: **Q34A**

Rotation => Q34I

MESSAGE: How believable is...a source of information about second-hand smoke
Q34A your doctor

(1/ 77)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

54: **Q34B**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34B news reports (from newspaper, radio or television)

(1/ 78)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

55: **Q34D**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34D warnings on cigarette packs

(1/ 79)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

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56: **Q34E**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34E friends and family

(1/ 80)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

57: **Q34F**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34F non-smokers' rights groups

(1/ 81)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

58: **Q34G**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34G health groups (such as the Heart and Stroke Foundation of Canada, Canadian Cancer Society, Canadian Lung Association)

(1/ 82)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

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59: **Q34H**

MESSAGE: How believable is...a source of information about second-hand smoke

q34h The tobacco industry

(1/ 83)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

60: **Q34I**

MESSAGE: How believable is...a source of information about second-hand smoke

Q34I government

(1/ 84)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

61: **PRE36**

PRE36 Now I would like you to rate the level of information available to you on each of the following specific aspects, on a 7 point scale where one means not enough informaiton is available, 7 means too much information, the midpoint 4 means that just the right amount of information is available to you

62: **Q36AA**

Rotation => Q36C

MESSAGE: Rate the level of information available to you on...

q36aa Second-hand smoke in general

(1/ 85)

01	Not enough information	1
02		2
03		3
04	The right amount of information	4
05		5
06		6
07	Too much information	7
08	DK/NR	9

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63: **Q36A**

MESSAGE: Rate the level of information available to you on...

Q36A the health impacts of second-hand smoke ON ADULTS

(1/ 86)

01	Not enough information	1
02		2
03		3
04	The right amount of information	4
05		5
06		6
07	Too much information	7
08	DK/NR	9

64: **Q36B**

MESSAGE: Rate the level of information available to you on...

Q36B the health impacts of second-hand smoke ON CHILDREN

(1/ 87)

01	Not enough information	1
02		2
03		3
04	The right amount of information	4
05		5
06		6
07	Too much information	7
08	DK/NR	9

65: **Q36C**

MESSAGE: Rate the level of information available to you on...

Q36C laws restricting smoking, and exposure to second-hand smoke

(1/ 88)

01	Not enough information	1
02		2
03		3
04	The right amount of information	4
05		5
06		6
07	Too much information	7
08	DK/NR	9

66: **PREQ1**

=> PR1E if INTR3=#1

preq1 The next section asks a series of questions related to household practices.

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67: **Q1**

q1 Do you currently smoke?

(1/ 89)

01	yes	1
02	no	2

68: **Q1B**

q1b Does anyone else in your household smoke?

(1/ 90)

01	yes	1
02	no	2

69: **Q1C**

q1c How often would you say you have visitors to your home who are smokers?

(1/ 91)
$E 1 30

01	Never	998
02	DK/NR	999

70: **UNIT**

time unit of visitors

(1/ 94)

01	week	1
02	month	2
03	year	3
04	DK/NR	9

71: **Q2**

=> +1 if NOT(Q1=#2 AND Q1B=#2 AND Q1C=#1)

Q2 If you did have visitors to your home who were smokers, do you think that you would restrict their smoking while in your home?

(1/ 95)

01	Yes	1	=> PRE4
02	No	2	
03	Don't know/not sure	3	

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72: **Q2B**

=> Q3B if Q1=#2 AND Q1B=#2 AND Q1C=#1

q2b Have you ever thought about restricting the amount of smoking which takes place in your home?

(1/ 96)

01	Yes	1
02	No	2

73: **Q3**

=> +1 if Q2B=#2

Q3 Do you or any other members of your household ever restrict the amount of smoking which takes place in your home, either by household members or visitors to the home?

(1/ 97)

01	yes	1	=> PRE4
02	no	2	

74: **Q3B**

=> +1 if Q3=#1

q3b Is there any particular reasons why not?

(1/ 98)

01	Response	1	O
02	DK/NR	2	

75: **PRE4**

=> Q8 if Q2=#2-#3 OR Q2B=#2 OR Q3=#2 OR (Q1=#2 AND Q1B=#2 AND Q1C=#1)

PRE4 On a scale of 1 to 7, where 1 means never, 7 means always and the mid- point 4 means sometimes, how often would you say you or other members of your household ...

76: **Q4A**

Rotation => Q4D

MESSAGE: How often do you or other household members...

Q4A Restrict smoking to outdoors only

(1/ 99)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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77: **Q4B**

MESSAGE: How often do you or other household members...

Q4B Restrict smoking to one room or area

(1/ 100)

18b

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

78: **Q4C**

MESSAGE: How often do you or other household members...

18c Q4C Open windows, or use fans or other ventilation systems to get rid of smoke

(1/ 101)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

79: **Q4D**

MESSAGE: How often do you or other household members...

18d Q4D Put ashtrays out of sight

(1/ 102)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

80: **PRE5**

1 PRE5 On a scale of 1 to 7, where 1 means never, 7 means always and the mid- point 4 means sometimes, how often would you say you or other members of your household ask the following people not to smoke in your home. For each category, think only of those people who smoke.

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19a→d = (4)

81: **Q5A** Rotation => Q5D

19a

MESSAGE: How often do you ask the following people not to smoke...

Q5A Your close friends

(1/ 103)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

82: **Q5B**

MESSAGE: How often do you ask the following people not to smoke...

19b Q5B Your acquaintances

(1/ 104)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

83: 19c **Q5C**

MESSAGE: How often do you ask the following people not to smoke...

Q5C Your other relatives that do not live in your home (brothers/sisters, parents, aunts and uncles)

(1/ 105)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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84: **Q5D**

MESSAGE: How often do you ask the following people not to smoke...

Q5D Other members of your household (such as your spouse)

(1/ 106)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

85: **PRE6**

PRE6 On a seven point scale where 1 means never, 7 means always and the mid- point 4 means sometimes, rate the extent to which you ask people NOT to smoke in your home....

86: **Q6A**

Rotation => Q6B

MESSAGE: How often do you ask people not to smoke in your home....

Q6A When your child(ren) is/are present

(1/ 107)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

87: **Q6B**

MESSAGE: How often do you ask people not to smoke in your home....

Q6B In general

(1/ 108)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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88: **PRE7**

=> Q8 if NOT(Q1=#1)

PRE7 On a 7 point scale, where 1 means never, 7 means always and the mid-point 4 means sometimes, rate the extent to which you try not to smoke in your home....

89: **Q7A**

Rotation => Q7B

MESSAGE: To what extent do you try not to smoke in your home...

Q7A When your child(ren) is/are present

(1/ 109)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

90: **Q7B**

MESSAGE: To what extent do you try not to smoke in your home...

Q7B In general

(1/ 110)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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91: **Q8**

=> +1 if Q1=#2 AND Q1B=#2 AND Q1C=#1

Q8 To what extent would you say that all members of your household agree on whether or not smoking should be restricted in your home. Please rate your answer on a 7 point scale, where 1 means members of your household strongly disagree, 7 means they strongly agree, and the mid-point 4 means that you neither agree nor disagree.

21

(1/ 111)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	Not Been Discussed	8
09	dk	9

92: **Q9**

Q9 Have you ever thought about avoiding second-hand smoke in public places or other locations outside of your own home?

22

(1/ 112)

01	Yes	1
02	No	2

93: **Q10**

=> +1 if Q9=#2

Q10 Do you try to avoid second-hand smoke in public places or other locations outside of your own home? 23a

23a b (2)

(1/ 113)

01	yes	1
02	no	2

94: **Q11**

=> +1 if Q9=#1 OR Q10=#1

Q11 Is there any particular reasons why not? 23b

(1/ 114 - 116 - 118 - 120)

01	Response	01	O
02	DK/NR	99	X

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95: **PRE12**

=> PRE13 if NOT(Q1=#1)

PRE12 On a 7 point scale where 1 means never, 7 means always, and the mid-point 4 means sometimes, to what extent do you try not to smoke OUTSIDE YOUR HOME....

24a b = (2)

96: **Q12A**

24a

Rotation => Q12B

MESSAGE: To what extent do you try not to smoke outside your home...

q12a When your children are present?

(1/ 122)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

24b

97: **Q12B**

MESSAGE: To what extent do you try not to smoke outside your home...

Q12B In general

(1/ 123)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

98: **PRE13**

=> PRE14 if Q9=#2 OR Q10=#2

PRE13 On a 7 point scale, where 1 means never, 7 means always and the mid- point 4 means sometimes, to what extent do you avoid second-hand smoke OUTSIDE YOUR HOME...

25a b = (2)

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99: Q13A

Rotation => Q13B

25a *MESSAGE: To what extent do you avoid second-hand smoke outside your home...*
Q13A When your child(ren) is/are present

(1/ 124)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

100: Q13B

25b *MESSAGE: To what extent do you avoid second-hand smoke outside your home...*
Q13B In general

(1/ 125)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

104: PRE15

=> PRE16 if Q2=#2-#3 OR Q2B=#2 OR Q3=#2

PRE15 People may restrict smoking in their home, or avoid second-hand smoke outside their home, for a number of reasons. On a 7 point scale, where 1 means not at all important, 7 means extremely important and the mid-point 4 means moderately important, can you tell me how important the following factors are in YOUR decision to restrict smoking or avoid second-hand smoke.

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26a → f (6)

105: Q15A

Rotation => Q15F

26a *MESSAGE: How important is...to your decision to restrict smoking or avoid...*
Q15A Allergies of a family member

(1/ 128)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

106: Q15B

26b *MESSAGE: How important is...to your decision to restrict smoking or avoid...*
Q15B The potential impacts of second-hand smoke on your health

(1/ 129)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

107: Q15C

26c *MESSAGE: How important is...to your decision to restrict smoking or avoid...*
Q15C The potential health impacts of second-hand smoke on your children

(1/ 130)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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108: **Q15D**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15D The smell and dirt caused by cigarette smoke

(1/ 131)

26d

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

109: **Q15E**

=> +1 if Q1=#1

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15E The health of the smoker

(1/ 132)

26e

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

110: **Q15F**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15F So that your children won't think it is ok to smoke when they see others smoking

(1/ 133)

26f

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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111: **Q15O**

q15o Are there any other reasons why you restrict smoking in your home or avoid second-hand smoke outside of your home?

27

(1/ 134 - 136 - 138)

01	Response	01	O
02	No other reason	02	
03	DK/NR	99	X

112: **PRE16**

=> Q17 if NOT(Q1=#1)

PRE16 On a 7 point scale, where 1 means not at all likely, 7 means extremely likely and the mid-point 4 means somewhat likely, rate the extent to which you think each of the following would likely influence a smoker to put out their cigarette or avoid smoking.

28a → d (A)

113: **Q16A**

Rotation => Q16D

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16A A sign indicating that smoking is not allowed in that location

28a

(1/ 140)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

114: **Q16B**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16B A request from a stranger

28b

(1/ 141)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

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115: **Q16C**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16C A request from a friend or relative

(1/ 142)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

116: **Q16D**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16D A request from staff or management in a restaurant or shopping mall

(1/ 143)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

117: **Q17**

Q17 Is/are your child(ren) cared for on a regular basis by someone other than a member of the household (such as a babysitter or caregiver, nanny, relative,daycare or after school program?)

(1/ 144)

01	yes	1
02	no	2 => PRE22

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119: **Q19**

Q19 Parents take a number of factors into consideration when choosing a caregiver for their child. How important is the smoking behaviour of a caregiver as compared to other factors (such as cost, quality of care, and trust in caregiver) in your choice of caregiver? Please rate the importance ofthe smoking behaviour of caregivers on a scale of 1 to 7, where 1 means not nearly as important as other factors, 7 means it is the most important factor

(1/ 146)

01	Not nearly as important	1
02		2
03		3
04	Equally Important	4
05		5
06		6
07	The most important	7
08	DK/NR	9

120: **Q20**

Q20 To your knowledge, does your child(ren)'s babysitter or caregiver(s) smoke?

(1/ 147)

01	yes	1
02	no	2
03	DK/NR	3

121: **Q21**

=> +1 if NOT(Q20=#1)

Q21 To your knowledge, does your child(ren)'s caregiver(s) or babysitter smokein front of your child(ren)?

(1/ 148)

01	yes	1
02	no	2
03	DK/NR	3

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122: PRE22

PRE22 Is your child, or any one of your children, 4 years old or older?

(1/ 149)

33

01	Yes	1
02	No	2 => +8

123: Q22

Q22 Thinking about your child, or any one of your children in particular, has the topic of second-hand smoke ever come up in discussion between yourself andyour child?

(1/ 150)

34

01	yes	1
02	no	2 => +2

124: Q23

Q23 Who initiated the discussion?

(1/ 151)

35

01	you	1
02	your child	2
03	DK/NR	9

125: PRE24

PRE24 To the best of your knowledge, has your child, or any one of your children in particular, ever.....

36a → d = (4)

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126: Q24A

Rotation => Q24D

=> +1 if Q1=#2 AND Q1B=#2

MESSAGE: Has your child ever...

Q24A Suggested that a member of your household stop smoking in their presence

(1/ 152)

36a

01	Yes	1
02	No	2
03	DK/NR	3

127: Q24B

MESSAGE: Has your child ever...

Q24B Suggested that a relative (such as a grandparent, uncle or aunt) stop smoking in their presence

(1/ 153)

36b

01	Yes	1
02	No	2
03	DK/NR	3

128: Q24C

MESSAGE: Has your child ever...

Q24C Said anything about the effects of second-hand smoke on their health

(1/ 154)

36c

01	Yes	1
02	No	2
03	DK/NR	3

129: Q24D

Q24d Said anything about being bothered by second-hand smoke PROBE: Bothered may mean having physical irritations or becoming annoyed by the presence of second-hand smoke

(1/ 155)

36d

01	Yes	1
02	No	2
03	DK/NR	3

130: PR1E

=> PRE37 if INTR1=#1

preq1 The next section asks a series of questions related to household practices.

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131: INT5E
MESSAGE: read categories
INTR5 Thinking about the child whom you see at least once a week, would you say you usually spend time with this child...

(1/ 156)
01 in your home 1
02 in the child's home 2

132: Q1_E
q1_e Do you currently smoke?

(1/ 157)
01 yes 1
02 no 2

133: Q1_E2
=> +2 if INT5E=#1 OR Q1_E=#2
q1_e2 When you visit the home of the child we are speaking of, would you say your smoking is restricted or limited in any way, either by yourself or by members of the child's household?

(1/ 158)
01 yes 1
02 no ..... 2 => +2

134: Q1_E3
MESSAGE: Read categories
q1_e3 Would you say that the restrictions on your smoking in the child's household are...

(1/ 159)
01 Imposed by yourself, without being asked 1
02 Requested by one or more members of the household 2
03 DK/NR 3

135: Q1B_E
=> PR6_E if INT5E=#2
q1b_e Does anyone else in your household smoke?

(1/ 160)
01 yes 1
02 no 2

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136: Q2B_E
=> +1 if Q1_E=#2 AND Q1B_E=#2
q2b Have you ever thought about restricting the amount of smoking which takes place in your home?

(1/ 161)
01 Yes 1
02 No 2

137: Q3_E
=> +1 if Q2B_E=#2
Q3 Do you or any other members of your household ever restrict the amount of smoking which takes place in your home, either by household members or visitors to the home?

(1/ 162)
01 yes 1
02 no 2

138: Q3B_E
=> +1 if Q3_E=#1
q3b Is there any particular reasons why not?

(1/ 163)
01 Response ..... 1 O
02 DK/NR 2

139: PR4_E
=> Q8_E if Q2B_E=#2 OR Q3_E=#2 OR (Q1_E=#2 AND Q1B_E=#2)
PRE4 On a 7 point scale, where 1 means never, 7 means always and the mid- point 4 means sometimes, how often would you say you or other members of your household ...

140: Q4A_E

Rotation => Q4D_E

MESSAGE: How often do you or other household members...
Q4A Restrict smoking to outdoors only

(1/ 164)
01 Never 1
02 2
03 3
04 Sometimes 4
05 5
06 6
07 Always 7
08 DK/NR 9

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141: Q4B_E

MESSAGE: How often do you or other household members...

Q4B Restrict smoking to one room or area

(1/ 165)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

142: Q4C_E

MESSAGE: How often do you or other household members...

Q4C Open windows, or use fans or other ventilation systems to get rid of smoke

(1/ 166)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

143: Q4D_E

MESSAGE: How often do you or other household members...

Q4D Put ashtrays out of sight

(1/ 167)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

144: PR6_E

PRE6 On a 7 point scale, where 1 means never, 7 means always, and the mid-point 4 means sometimes, rate the extent to which people are asked NOT to smoke <int5e >...

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145: Q6A_E

Rotation => Q6C_E

Q6A When the child is present PROMPT IS.....How often is smoking restricted in <int5e >...

(1/ 168)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

146: Q6C_E

Q6c In general PROMPT IS....How often is smoking restricted in <int5e >...

(1/ 169)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

147: PR7_E

=> Q8_E if NOT(Q1_E=#1)

PRE7 On a 7 point scale, where 1 means never, 7 means always and the mid-point 4 means sometimes, rate the extent to which you try NOT to smoke in <int5e >....

148: Q7A_E

Rotation => Q7C_E

Q7A When the child is present PROMPT IS...How often do you restrict your smoking in <int5e >..

(1/ 170)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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149: Q7C_E

Q7c In general PROMPT IS... How often do you restrict your smoking in <int5e >..

(1/ 171)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

150: Q8_E

=> +1 if INT5E=#2

Q8_e To what extent would you say that all members of your household agree on whether or not smoking should be restricted in your home. Please rate your answer on a 7 point scale, where 1 means members of your household strongly disagree, 7 means they strongly agree, and the mid-point 4 means that you neither agree nor disagree.

(1/ 172)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	Not Been Discussed	8

151: PR15E

=> PR16E if Q2B_E=#2 OR Q3_E=#2 OR INT5E=#2

PRE15 People may restrict smoking in their home, for a number of reasons. On a scale of 1 to 7, where 1 means not at all important, 7 means extremely important and the mid-point 4 means moderately important, can you tell me how important the following factors are in your decision to restrict smoking in your home.

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152: Q15_E

Rotation => Q15FE

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15A Allergies of a family member

(1/ 173)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

153: Q15BE

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15B The potential impacts of second-hand smoke on your health

(1/ 174)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

154: Q15CE

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15C The potential health impacts of second-hand smoke on children

(1/ 175)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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155: **Q15DE**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15D The smell and dirt caused by cigarette smoke

(1/ 176)

49d

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

156: **Q15EE**

=> +1 if Q1_E=#1

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15E The health of the smoker

(1/ 177)

49e

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

157: **Q15FE**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15F So that children present won't think it is ok to smoke when they see others smoking

(1/ 178)

49f

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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158: **Q15OE**

q15oe Are there any other reasons why you restrict smoking in your home?

(1/ 179 - 181 - 183)

50

01	Response	01	O
02	No other reason	02	
03	DK/NR	99	X

159: **PR16E**

=> PRE37 if NOT(Q1_E=#1)

PRE16e On a 7 point scale, where 1 means not at all likely, 7 means extremely likely and the mid-point 4 means somewhat likely, rate the extent to which you think the each of the following would be likely to influence a smoker to put out their cigarette or avoid smoking.

51a → d = (4)

160: **Q16AE**

Rotation => Q16DE

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16A A sign indicating that smoking is not allowed in that location

(1/ 185)

51a

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

161: **Q16BE**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16B A request from a stranger

(1/ 186)

51b

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

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162: Q16CE

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...
Q16C A request from a friend or relative

(1/ 187)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

163: Q16DE

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...
Q16D A request from staff or management in a restaurant or shopping mall

(1/ 188)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

164: PRE37

pre37 These last questions are for statistical purposes only and I remind you that all of the information you give me is completely confidential

165: Q37

=> Q39 if Q1=#1 OR Q1_E=#1
Q37 Have you ever smoked cigarettes?

(1/ 189)

01	yes	1
02	no	2

166: Q38A

=> +2 if Q37=#2
Q38a Amount of time (screen)

(1/ 190)
$E 1 50

01	DK/NR	99

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167: Q38B

q38b Unit

(1/ 192)

01	years	1
02	months	2
03	weeks	3
04	days	4

168: Q39

=> +2 if NOT(Q1=#1 OR Q1_E=#1)
Q39a Amount Smoke (screen)

(1/ 193)
$E

01	DK/NR	99

169: Q39B

q39b Unit

(1/ 195)

01	per day	1
02	per week	2
03	per month	3
04	DK/NR	9

170: Q40

=> +1 if NOT(Q1B=#1 OR (INT5E=#1 AND Q1B_E=#1))
Q40 How many members of your household smoke, including yourself?

(1/ 196)
$E 1 8

01	DK/NR	9

171: Q41A

=> +2 if NOT(Q1=#1 OR Q1B=#1 OR Q1_E=#1 OR Q1B_E=#1)
Q41A On average, how many cigarettes would you say are smoked in your home, byhousehold members, over the course of one day?

(1/ 197)
$E 0 200

01	DK/NR	999

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172: **Q41B**

=> +1 if INTR3=#1 OR NOT(Q41A>0) AND NOT(Q41A<999)

41B What proportion of these cigarettes are smoked when your child(ren) is(are) present, is it none, some, half, most or all of them.

(1/ 200)

57

01	None	1
02	Some	2
03	Half	3
04	Most	4
05	All	5

173: **Q42**

Q42 Thinking about the people who are closest to you, about how many would yousay are regular smokers. Would you say none, some, most or all of them?

(1/ 201)

58

01	None	1
02	Some	2
03	Most	3
04	All	4
05	DK/NR	5

174: **Q42B**

Q42b Has someone close to you become seriously ill or died as a result of a smoking-related illness

(1/ 202)

59

01	Yes	1
02	No	2
03	DK/NR	9

175: **Q43**

Q43 Out of an average group of 10 adult Canadians, 15 years old and over, how many would you say currently smoke?

(1/ 203)
$E 1 10

60

01	DK/NR	99

176: **Q44**

Q44 Are you bothered by smoke from cigarettes?

(1/ 205)

61

01	yes	1
02	no	2

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177: **Q45**

=> +1 if Q44=#2

Q45 Does smoke from cigarettes cause you any physical irritation (such as to your eyes, your breathing, your throat)

(1/ 206)

62

01	Yes	1
02	No	2

178: **Q46**

=> EDUC if INTR3=#1

Q46 How often does(do) your child(ren) have contact with relatives or close friends (e.g., aunts, uncles, grandparents, close friends), other than their caregiver (babysitter). Please provide your response in terms of the number of times per week. IF RESPONDENT GIVES ANSWER OTHER THAN IN PER WEEK BASE...TRANSLATE TO PER WEEK.

63

(1/ 207)
$R 0 25

01	DK/NR	99

179: **Q47**

=> +2 if Q46<1 OR Q46>25

Q47 Thinking about your previous response, about what proportion of these relatives and friends smoke? Would you say none, some, most or all of them?

(1/ 209)

64

01	None	1
02	Some	2
03	Most	3
04	All	4
05	DK/NR	5

180: **Q48**

=> +1 if INTR3=#1 OR Q47=#1 OR Q47=#5

Q48 To what extent do they smoke in front of your child(ren), on a scale of 1 to 7, where 1 means none of the time, 7 means all of the time, and the mid- point 4 means some of the time.

(1/ 210)

65

01	None of the time	1
02		2
03		3
04	Some of the time	4
05		5
06		6
07	All of the time	7
08	DK/NR	9

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182: EDUC

MESSAGE: CIRCLE ONLY ONE

EDUC What is the highest level of formal education that you have completed?

(1/ 212)

01	Elementary school or less	01	
02	Some high school	02	
03	Graduated high school	03	
04	Some community college/CEGEP	04	
05	Some university	05	
06	Graduated community college/CEGEP	06	
07	Graduated university	07	
08	Other (specify)	08	O
09	DK/NR	99	

183: MTONG

mtong What language did you first learn to speak and still understand?

(1/ 214)

01	English	01	
02	French	02	
03	Other	03	O
04	DK/NR	99	

184: Q72

=> Q74 if INT5E=#2

Q72 Including yourself, how many people live in your household?

(1/ 216)
$R 1 20

01 DK/NR 99

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185: Q73A

=> Q74 if Q72 < 2

Q73A Among these persons, how many are:
MORE THAN 18 YEARS OLD

(1/ 218)
$R 0 Q72

01 DK/NR 99

186: Q73B

=> Q74 if Q72 == Q73A

Q73B How many are:
12 - 18 YEARS OLD

(1/ 220)
$R 0 Q72-Q73A

01 DK/NR 99

187: Q73B2

=> +1 if (Q73A+Q73B)<=Q72 OR Q73A=#1 OR Q73B=#1

verification: You have told me that the total number in the household is <q72> but you have also told me that there are <q73a> adults and <q73b> 12 to 18 year olds. Can we clarify that.

(1/ 222)

01	Change number in household	1	=> Q72
02	Change number of adults	2	=> Q73A
03	Change number of 12-18 year olds	3	=> Q73B

188: Q73C

=> Q74 if Q72 == (Q73A + Q73B)

Q73c How many are:
6 TO 11 YEARS OLD

(1/ 223)
$R 0 Q72-(Q73A+Q73B)

01 DK/NR 99

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189: Q73C2

=> +1 if (Q73A+Q73B+Q73C)<=Q72 OR Q73A=#1 OR Q73B=#1 OR Q73C=#1

verification: You have told me that the total number in the household is <q72> but you have also told me that there are <q73a> adults and <q73b> 12 to 18 year olds and <q73c> 6-11 year olds. Can we clarify that.

(1/ 225)

01	Change number in household	1	=> Q72
02	Change number of adults	2	=> Q73A
03	Change number of 12-18 year olds	3	=> Q73B
04	Change number of 6-11 year olds	4	=> Q73C

190: Q73D

=> Q74 if Q72 == (Q73A + Q73B + Q73C)

Q73D How many are:

LESS THAN 6 YEARS OLD

(1/ 226)

$R 0 Q72-(Q73A+Q73B+Q73C)

01	DK/NR	99

190: Q73D2

=> +1 if NOT((Q73A+Q73B+Q73C+Q73D)>Q72)

verification: You have told me that the total number in the household is <q72> but you have also told me that there are <q73a> adults, <q73b> 12 to 18 year olds, <q73c> 6-11 year olds, and <q73d> 0-6 year olds. Can we clarify that.

01	Change number in household	1	=> Q72
02	Change number of adults	2	=> Q73A
03	Change number of 12-18 year olds	3	=> Q73B
04	Change number of 6-11 year olds	4	=> Q73C
05	Change number of 0-6 year olds	5	=> Q73D

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191: Q73E

=> +1 if NOT((Q73A + Q73B + Q73C + Q73D) < Q72) OR NOT((Q73A+Q73B+Q73C+Q73D)>Q72)

verification: Can we go back over those numbers again, I think we missed someone....RETURN TO Q72 NUMBER OF PEOPLE IN HOUSEHOLD AND REPEAT

192: Q74

Q74 Which of the following age groups do you fall into? *** READ OPTIONS ***

01	18 to 24 years old	1
02	25 to 34 years old	2
03	35 to 44 years old	3
04	45 to 54 years old	4
05	55 to 64 years old	5
06	65 years old or older	6
07	DK/NR	9

193: Q79

Q79 In 1993, what was your total household income before taxes?

01	Less than $20,000	1
02	$20,000 - $39,999	2
03	$40,000 - $59,999	3
04	$60,000 - $79,999	4
05	$80,000 or more	5
06	DK/NR	9

194: COMM

About how large is the community you live in. Would you say you live in a community that has...[READ CATEGORIES]

01	Under 1,000 people	01
02	From 1 to 10 thousand	02
03	From 10 to 100 thousand	03
04	100,000 or more	04
05	DK/NR	99

As part of this very large study we are talking to thousands of parents across the country. We are also talking to relatives and close friends of the family to gather information from all types of adults who have regular contact with children. Each parent who completes this interview is being asked to volunteer the name and telephone number of an adult who sees their child at least once a week. We are interested in family members such as aunts/uncles, grandparents or other family as well as close friends or neighbours. Please do not include anyone who sees your child in a group situation only, such as a teacher, or a sport/recreation instructor.

Parent Response:@exfam 1=Will give name 2=Refusal
Name of Relative:@exfm2
Relationship to Child:@exfm3
Telephone Number:@exfm4
Name of Parent:@exfm5

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195: EXFAM
screen
01 Agreed to provide name and number 1
02 No other key figures 2
03 Refused to provide name and number 3

196: EXFM2
screen - name

197: EXFM3
screen relationship to child

198: EXFM4
screen telephone number

199: EXFM5
screen - parents name

204: FG
fg Early next year, once the survey has been completed, we will be travelling across the country to speak to groups of 8-12 year old children on the same topics discussed with you today. These groups will be held after school in local libraries, community centres and other easily accessible locations. Do you think that your child(ren) would be interested in participating in something like this? We would call you back in late January to give you more
DETAILS
01 Yes child would tentatively be interested 1
02 No child would definitely NOT participate 2
03 DK/NR (Unsure would have to ask child) 9

205: SEX
*** DO NOT ASK *** BASED ON OBSERVATION The sex of the respondant is...
01 Male 1
02 Female 2

206: THNK
Thank you for your cooperation and time!
01 Completion ..... 1 D

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APPENDIX C

METHODOLOGY REPORT

A. Introduction

Two central lines of evidence in the Knowledge and Attitudes Concerning ETS Study are telephone surveys: one with parents of children under 13 years of age; and one with extended family members of children the same age. The two surveys were conducted simultaneously. The consultant study team was responsible for outlining the issues to be addressed, developing the survey instruments and approach to the sampling, collecting the survey data, and analyzing the survey results. This report describes the sampling, testing of the survey instrument, survey logistics for the study, as well as the survey response rates.

B. Sampling

The survey sample was to consist of 3,000 cases randomly selected from across private households in Canada. Eligible respondents were parents or extended family members of children 12 years old or younger. A total of 2,300 parents and 700 extended family members were to be interviewed. Respondents were reached at their place of residence and had to be able to conduct an interview in either of the two official languages. Exhibit 1 presents the sample distribution for each survey population with the associated margin of error at provincial levels.

The survey of parents allows for an overall margin of error of +/-2.0 per cent, with an error estimate of between +/-3.4 and 6.8 per cent in each region and between +/-7.3 and 13.0 per cent in each province with the Atlantic and Prairie regions. The margin of error within the overall extended family sample is +/-3.7 per cent. The sample of extended family members was not examined provincially because of the small number of cases in each province within the final survey sample.

EXHIBIT 1

Sample Distributions

Regions	Parents	
	Sample Size	% error per prov.
Atlantic	210	6.8
Quebec	575	4.1
Ontario	826	3.4
Prairies	367	5.1
British Columbia	319	5.5
Total	2,297	

In the initial design, respondents in both surveys were to be drawn randomly. This was altered at the design phase of the project, however, to collect as many linked interviews as possible. That is, once a randomly selected parent completed an interview, they were asked to provide the name of an extended family member who sees the child on a regular basis (i.e., at least once per week on average).

The sample of parents was selected at random using a computer listing of telephone numbers. Additional numbers were randomized numbers using a process known as Random Digit Dialling (RDD) which involves altering the last digit of the telephone number to create a new number. This procedure ensures that residents with unlisted numbers and more transient members of the population (eg., renters) have a chance of being interviewed.

No stratification was imposed in the sampling approach. The final sample reflects natural population proportions. The sample was monitored as the survey data was collected to ensure adequate representation by province and language.

A total of 460 extended family members were interviewed using the linked sampling approach. The remaining 240 cases were randomly screened from the general population using the same sample generation process described for parents.

C. Survey Instrument Pretest

The survey instrument was designed on the basis of study issues distilled largely from a review of the literature. Instruments for both survey groups were very similar. The CATI programming incorporated interviews for both groups using skip patterns and appropriate wording for either parents or extended family.

Once the survey instrument was approved by the client the pretest was conducted. In the first session, on December 6, 1994, 30 english cases were completed (20 with parents and 10 with extended family). The average length of these first cases was 25 minutes. Approximately ten items were removed from questionnaire to reduce the time somewhat, based on the original budget specifications for a 20 minute interview.

Following a review of the survey instrument based on the pretest results, a new version was submitted to the client. Minor wording changes had been made to clarify some items, several skip patterns were altered to accommodate all scenarios encountered. For example, one question was added to facilitate screening respondents for whom a section did not apply, to a new section of the interview.

The final version of the english instrument was then sent through a departmental approval process. Once approved interviewing began in english and the french survey instrument was pretested. A total of 30 cases were conducted in french. Small wording adjustments were made as a results of these first 30 interviews.

D. Survey Logistics

Our approach to contacting private residents ensures a minimum of hard-to-reach non-response bias through the use of sufficient call-backs over a reasonable time period. That is, once a telephone number is selected and included in the sample, every effort is made to contact that individual so as not to vary from the original

randomly selected (and therefore representative) sample. Up to seven call-backs (or eight total calls) were made to individuals in the sample for which initial attempts at contact were unsuccessful. Furthermore, each number was given a "rest" of a minimum of three hours before a second contact was attempted. Subsequent contacts were made on separate days. Calls which resulted in a 'No Answer' on more than two consecutive attempts were rotated to different time periods (i.e., if someone was contacted in the evening during the week, the next calls were made during the day and on the weekend in order to maximize the potential for reaching each sample member initially selected). If a respondent was unable to complete the interview when first contacted, an appointment was made to conduct the interview at another time.

The first evening of the surveys, January 8, involved a briefing and review of the questionnaire and sampling procedures for those who had not worked on the pretest. After about an hour of familiarizing themselves with the interview and the programming, interviewers began the survey. A total of 150 cases were completed in the first shift.

The survey spanned almost four weeks between January 8 and February 2, 1995. The interview required 22 minutes on average to complete for parents and 18 minutes for extended family.

All parents were asked for the name of an extended family member. One in three respondents were typically able to provide one. Lists of names and telephone numbers of extended family members were generated each day, as a result of the previous night's completed cases with parents. First contacts were attempted with extended family members within two to three days of receiving a referral from a parent. In the last week of the survey it became obvious that fewer that 500 cases would be completed with extended family members using the referral process. An additional round of interviews with extended family members, screened from the general public, was conducted.

Daily records were kept of all calls made, whether successful (i.e., interviews completed or appointments made), or not. A supervisor was on hand at

all times to monitor the progress of all work including interviewer performance, contact records and data quality. The supervisor was also available to any respondents to legitimize the survey, by providing telephone numbers where they could confirm the study. The supervisor reported directly to the survey manager on a daily basis.

Refusal rates were kept to a minimum by re-contacting sample members who initially refused. These re-contact calls were made by the most senior and experienced interviewers. They took the approach of verifying that someone in the household had declined the interview and ensuring that ample information was given about the study, its purpose and importance.

E. Response Rates

A total of 33,215 sample entries were brought to a final conclusion in the survey of which 82 per cent constituted sample attrition and 18 per cent fell into the functional sample. The attrition rate includes invalid numbers which encompass those not belonging to businesses and numbers not in service, ineligible respondents (those who were not parents -and lived with - children under the age of 13 years old or extended family members who regularly visit children of the same age, those falling into established quotas which had already been filled (provincial or language strata[1]), and those deemed unable to complete the survey in either official language. The incidence of parents in the general population of households contacted was 26 per cent.

The remaining functional sample is comprised of completions, refusals and those for whom the field team made eight attempts to contact someone in the household without success. Numbers cited as refusals and numbers "retired from the sample" are estimated. Since the survey target group (parents and extended family) requires significant screening, it is difficult to estimate the proportion of refusers and those not reached who would have been eligible for the survey. Since many of the

[1] This also includes parents contacted in the last days of the survey when only extended family members were still required.

refusers (60 per cent) are individuals who hung-up in the first 20 to 30 seconds, we know very little about them. Although we believe that they are more likely not to be eligible respondents, there is no concrete evidence of this since no information was obtained. Estimates for this portion of refusers are conservatively based on the proportion of the sample which we know to be ineligible[2]. Based on these estimates, the response rate for the survey (considering all categories within the functional sample) is 50 per cent, while refusals make up 47 per cent and retired sample accounts for 3 per cent. Exhibit 2 provides full details of these survey results.

EXHIBIT 2
Survey Results

Total Sample	33,215	100%
Attrition		
Number not in Service/ Business Numbers	11,139	
Language Barrier	753	
Screened Out	13,161	
Quota Filled	2,138	
Total Attrition	27,191	82%
Functional Sample	6,024	18%
Completed	3,020	
Refusal	2,809	
Not Reached (8 attempts)	194	
Response Rate		50%

[2] There is no information on approximately 60 per cent of the refusals incurred in the survey. In estimating the proportion of this sub-set of refusers who we believe to have been eligible to respond, the overall incidence of parents found within the contacts made (26 per cent eligible within the population at large) has been assigned as parents or extended family who would not have been screened out. The remaining refusers were not included in the sample disposition.

F. Data Base Management and Weighting

CATI simplifies data base management; the survey data is created in real time as the survey unfolds and each interview is added to the final data base as it is completed. Data editing for telephone surveys is thus relegated to minor coding for the few open-ended and semi-closed items.

Coding schemes were developed for open and semi-closed items based on responses to ten per cent of the cases. Trained coding staff reviewed and classified all responses as the interviewing progressed.

Based on the screening required to reach only target members of the population (parents and extended family of children under 13), comparison of the sample characteristics (e.g., age, education, income, etc.,) to the general population is not possible, since population figures based on only parents and extended family are not readily accessible. The cases were collected based on the population distribution of the country. Assuming that households with parents or extended family members mirror the normal distribution of households in Canada, there is no reason to believe that the survey has over or under-represented any given region or language. Therefore, no weighting scheme was applied to adjust the data to conform with population parametres.

The data file was thoroughly checked for invalid or suspect cases. A total of 18 cases were deleted from the final file. As parent cases they reported no children in the household under the age of 13 in the demographic section of the interview (even though at the start of the interview they said that there was a child under 13 in the household and that they (the respondent) have primary responsibility for a child in the household.

Of the variables in the data file, one is believed not to be completely reliable and has been used in a limited way in the analysis. This is a survey item

asking respondents how many cigarettes they smoke. Interviewers were required to code the number of cigarettes, as well as the unit (i.e., per day, per week, per month). A large proportion of the cases indicate a number based on a per month unit. We suspect that many of these should have been per day (e.g., 20 cigarettes smoked per day as opposed to per month). The distribution of cases in a similar item asked about amount smoked by other household members and does not look as deflated as the respondent figures. This has been used as a proxy in some analyses.

Thoroughly documented data files for the survey data were prepared, including sensible variable labels and exhaustive and accurate sets of value labels. Command files to create the survey system files included detailed statements specifying relationships between variables, and determining the proper non-response codes (i.e., "not applicable" or "missing" value codes). The program file includes all specifications for reading the data file in SPSS format.

APPENDIX D

FOCUS GROUP GUIDE

Ekos Research Associates Inc., 1995

ETS Focus Groups with Children

Core Moderator's Guide
(February 9, 1995)

Core Questions

INTRODUCTION

- ❑ With the arrival of the children, the moderator engages in conversation with them, attempting to help them feel relaxed and comfortable, and offers them refreshments.

- ❑ When all participants have arrived and are seated, the moderator introduces him/herself and explains his/her role in the discussion.

- ❑ The moderator briefly describes the purpose of the focus group and how the discussion should proceed.

- ❑ The moderator then establishes the ground rules for the discussion:

  - There are no "right or wrong" answers — participants are encouraged to express the way they feel about everything. We want to know what kids really think and not what kids is the "right" answer;
  - Participants should feel no pressure to agree with one another;
  - The discussion is being audio-tape recorded, but nobody but the participants and the moderator will ever know what individual participants have said.
  - Everyone should listen while someone else is talking. People should speak one at a time and let others finish what they have to say.

- ❑ The participants are asked to introduce themselves (first names only) and to say what grade they are in and how old they are.

I. Knowledge and Awareness

1. Has anybody ever heard of second-hand smoke or environmental tobacco smoke?

   ❑ Can anybody tell me what second-hand smoke is?

   ❑ What is the difference between smoking and second-hand smoke?

   ❑ Is second-hand smoke only the smoke that smokers blow out of their mouths, or does it also include the smoke that comes off the tip of a burning cigarette?

2. Where do you find second-hand smoke? Where can you smell it?

   ❑ At home?
   ❑ In stores?
   ❑ In restaurants?
   ❑ In the car?
   ❑ Outside?
   ❑ At other peoples' houses?
   ❑ In the arena
   ❑ At Bingo

   probe 2c

   ❑ How often are you in a place where you are around second-hand smoke?

   ❑ Where does it happen the most?

B. Attitudes and Belief

3. Do you personally mind if people smoke in these places?

   ❑ Why/Why not?

   ❑ Do you think it is OK for adults to smoke?

   ❑ Is smoking OK for kids of your age?

   ❑ What are some of the reasons people smoke?

   ❑ Do you think you will smoke in a few years?

   ❑ Do you think you will smoke as an adult?

4. Think about what it is like when you are in an area where someone is smoking. How does the smoke make you feel?

   ❑ Some people are bothered by other's cigarette smoke, others don't mind it, and a few even like it. How does breathing someone's cigarette smoke make you feel?

   ❑ coughing/difficulty breathing
   ❑ eyes hurt
   ❑ get a head ache
   ❑ like the smell
   ❑ makes you feel older

   probe 4c

   ❑ How do you know that it is the smoke that is causing you to feel like that?

5. Is second-hand smoke just a bother that goes away, like someone who is fooling around when you are trying to read, or do you think second-hand smoke can affect you for a long time?

   ❑ Is breathing second-hand smoke dangerous or are cigarettes only dangerous to people who smoke them?

6. How much second-hand smoke would you have to breathe before your bodies were affected in a serious way?

   ❑ Do you think a lot of people have been affected by second-hand smoke?

   ❑ How about you? Do you think your bodies have been affected?

7. Where have you found out about second hand smoke?

   ❑ school
   ❑ parents
   ❑ TV/video
   ❑ books/magazines

   7b probe

   ❑ Did you enjoy learning about this, or was it boring?

8. Do you think you know enough about second hand smoke, or would you like to know more? 8a

❑ If you could pick, what would be the best way for you to find-out more about second-hand smoke and other things about being healthy? 8b

8a → e (5)

- ❑ from a person (e.g. parent, teacher, coach)
- ❑ from a book or magazine
- ❑ on TV
- ❑ at school

} 8c probe

❑ Who do you think has the most believable information about things that can affect your body, like physical activity, eating right second-hand smoke, smoking, drugs, drinking alcohol? 8d

- ❑ parents
- ❑ teacher
- ❑ athletes/coach
- ❑ the government
- ❑ your friends
- ❑ your doctor or nurse
- ❑ Church groups
- ❑ Cubs, Brownies, Scout
- ❑ TV ad
- ❑ Colouring books

} 8e probe

III. Practices

9. What do you do when you are around someone who is smoking? 9a

9a → i (9)

❑ Do you do anything to stop from smelling the smoke? 9b

- ❑ move away
- ❑ ask them to stop smoking
- ❑ open a window

} 9c probe

❑ Have you ever asked anybody to stop smoking because the smoke was bothering you? 9d

❑ Are there times when you would have liked to ask somebody to stop, but didn't? 9e

❑ What are some of the reasons why you did not ask? 9f

❑ Do you think it's OK for kids to ask an adult not to smoke or is it rude? 9g

❑ Would you be nervous to ask certain types of people not to smoke? Who? 9h 9i

10. Are people allowed to smoke anywhere they want? Why not? 10a 10b

10a → d (4)

❑ Where are some places where the rules say that people are not allowed to smoke? 10c

- ❑ at school
- ❑ at your house
- ❑ in the car
- ❑ at your friend's place
- ❑ shopping mall
- ❑ hospital
- ❑ doctor's office

} 10d probe

11. Who smokes at your home? 11a

11a → i (9)

❑ What type of people smoke at your home? 11b

- ❑ parents, brothers, sisters
- ❑ relatives (e.g., grand-parents, uncles and ants, cousins)
- ❑ friends of the family
- ❑ anybody who wants to smoke

} 11c probe

❑ Is there a special room or place that people have to go if they want to smoke? 11d

❑ Do they have to go outside or in the garage or basement? 11e

❑ Are the rules the same for everyone, all the time? 11f

❑ Are there times when/people for whom the rules do not count? 11g

❑ What do you think of no smoking rules? 11h

❑ Are they dumb and useless or are you glad they are there? 11i

12. Does your family have any smoking rules when you are not in your house? 12a

- ❑ in the car? 12b
- ❑ in other people's houses (like your friends and your relatives houses)? 12c
- ❑ What about when your family goes to eat at a restaurant? 12d

12a→d (4)

13. Do your parents ever do things so they don't have to breathe other people's smoke? 13a

- ❑ Ask someone to stop smoking? 13b
- ❑ Sit in non-smoking sections in restaurants? 13c
- ❑ Change seats/move away from someone who is smoking? 13d

13a→d (4)

WRAP-UP

APPENDIX E

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42 3276

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Final Report

March 31, 1995

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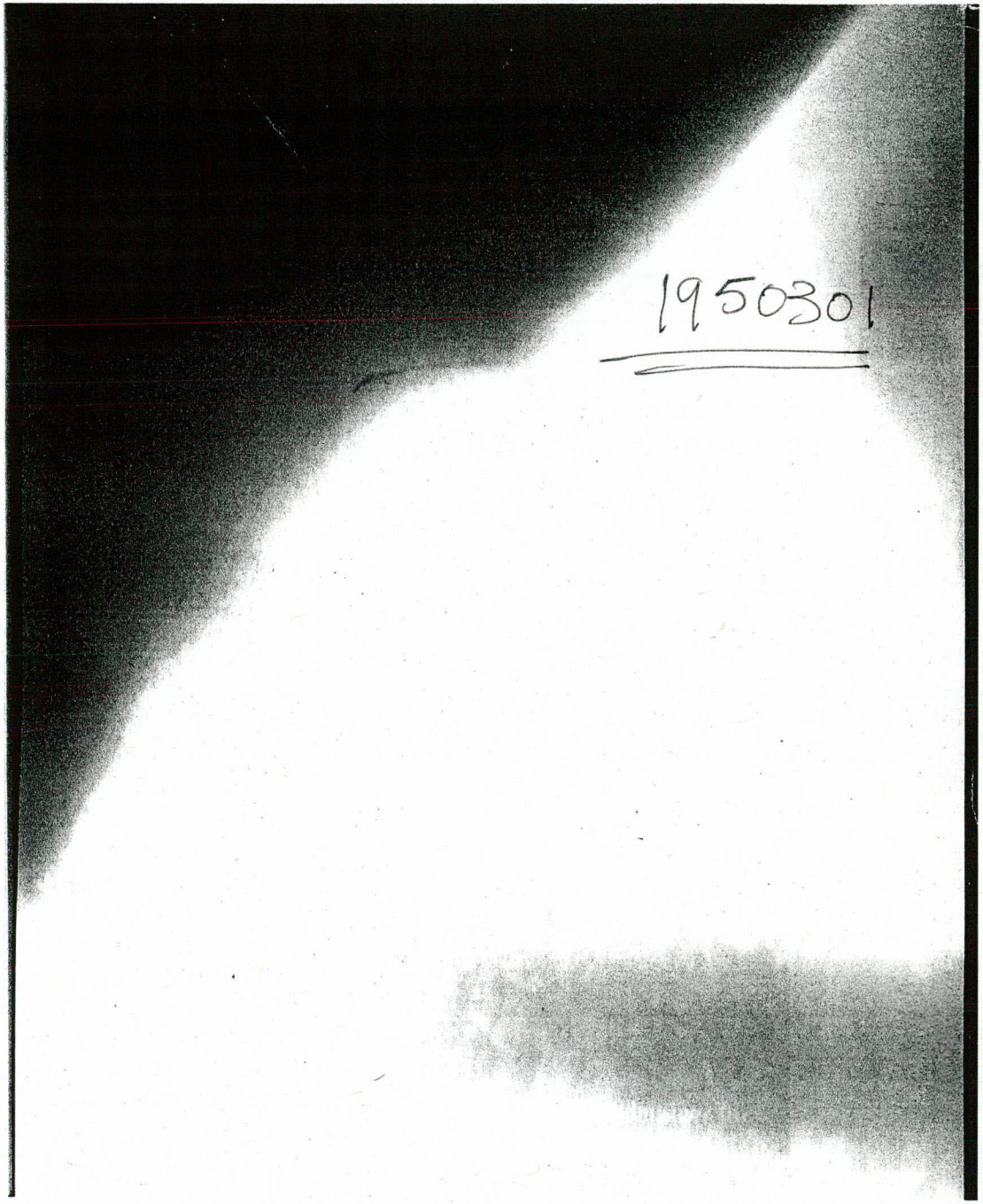
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12. Does your family have any smoking rules when you are not in your house? 12a

- ❑ in the car? 12b
- ❑ in other people's houses (like your friends and your relatives houses)? 12c
- ❑ What about when your family goes to eat at a restaurant? 12d

12a→2d (4)

13. Do your parents ever do things so they don't have to breathe other people's smoke? 13a

- ❑ Ask someone to stop smoking? 13b
- ❑ Sit in non-smoking sections in restaurants? 13c
- ❑ Change seats/move away from someone who is smoking? 13d

13a→2d (4)

WRAP-UP

APPENDIX E

REFERENCES

8. Do you think you know enough about second hand smoke, or would you like to know more? 8a

❑ If you could pick, what would be the best way for you to find-out more about second-hand smoke and other things about being healthy? 8b

8a → e (5)

- ❑ from a person (e.g. parent, teacher, coach)
- ❑ from a book or magazine
- ❑ on TV
- ❑ at school

} 8c pubs

❑ Who do you think has the most believable information about things that can affect your body, like physical activity, eating right second-hand smoke, smoking, drugs, drinking alcohol? 8d

- ❑ parents
- ❑ teacher
- ❑ athletes/coach
- ❑ the government
- ❑ your friends
- ❑ your doctor or nurse
- ❑ Church groups
- ❑ Cubs, Brownies, Scout
- ❑ TV ad
- ❑ Colouring books

} 8e pubs

III. Practices

9. What do you do when you are around someone who is smoking? 9a

9a → i (9)

❑ Do you do anything to stop from smelling the smoke? 9b

- ❑ move away
- ❑ ask them to stop smoking
- ❑ open a window

} 9c pubs

❑ Have you ever asked anybody to stop smoking because the smoke was bothering you? 9d

❑ Are there times when you would have liked to ask somebody to stop, but didn't? 9e

❑ What are some of the reasons why you did not ask? 9f

❑ Do you think it's OK for kids to ask an adult not to smoke or is it rude? 9g

❑ Would you be nervous to ask certain types of people not to smoke? Who? 9h

10. Are people allowed to smoke anywhere they want? Why not? 10a 10b

10a → d (4)

❑ Where are some places where the rules say that people are not allowed to smoke? 10c

- ❑ at school
- ❑ at your house
- ❑ in the car
- ❑ at your friend's place
- ❑ shopping mall
- ❑ hospital
- ❑ doctor's office

} 10d pubs

11. Who smokes at your home? 11a

11a → i (9)

❑ What type of people smoke at your home? 11b

- ❑ parents, brothers, sisters
- ❑ relatives (e.g., grand-parents, uncles and ants, cousins)
- ❑ friends of the family
- ❑ anybody who wants to smoke

} 11c pubs

❑ Is there a special room or place that people have to go if they want to smoke? 11d

❑ Do they have to go outside or in the garage or basement? 11e

❑ Are the rules the same for everyone, all the time? 11f

❑ Are there times when/people for whom the rules do not count? 11g

❑ What do you think of no smoking rules? 11h

❑ Are they dumb and useless or are you glad they are there? 11i

I. Knowledge and Awareness

1. Has anybody ever heard of second-hand smoke or environmental tobacco smoke? (a)

   ❑ Can anybody tell me what second-hand smoke is? (b)

   ❑ What is the difference between smoking and second-hand smoke? (c)

   ❑ Is second-hand smoke only the smoke that smokers blow out of their mouths, or does it also include the smoke that comes off the tip of a burning cigarette? d

2. Where do you find second-hand smoke? Where can you smell it? a b

   ❑ At home?
   ❑ In stores?
   ❑ In restaurants?
   ❑ In the car?
   ❑ Outside?
   ❑ At other peoples' houses?
   ❑ In the arena
   ❑ At Bingo

   probe 2c

   ❑ How often are you in a place where you are around second-hand smoke? 3a

   ❑ Where does it happen the most? 3b

B. Attitudes and Belief

3. Do you personally mind if people smoke in these places? 3a

   ❑ Why/Why not? 3b

   ❑ Do you think it is OK for adults to smoke? 3c

   ❑ Is smoking OK for kids of your age? 3d

   ❑ What are some of the reasons people smoke? 3e

   ❑ Do you think you will smoke in a few years? 3f

   ❑ Do you think you will smoke as an adult? 3g

4. Think about what it is like when you are in an area where someone is smoking. How does the smoke make you feel? 4a

   ❑ Some people are bothered by other's cigarette smoke, others don't mind it, and a few even like it. How does breathing someone's cigarette smoke make you feel? 4b

   ❑ coughing/difficulty breathing
   ❑ eyes hurt
   ❑ get a head ache
   ❑ like the smell
   ❑ makes you feel older

   probe 4c

   ❑ How do you know that it is the smoke that is causing you to feel like that? 4d

5. Is second-hand smoke just a bother that goes away, like someone who is fooling around when you are trying to read, or do you think second-hand smoke can affect you for a long time? 5a

   ❑ Is breathing second-hand smoke dangerous or are cigarettes only dangerous to people who smoke them? 5b

6. How much second-hand smoke would you have to breathe before your bodies were affected in a serious way? 6a

   ❑ Do you think a lot of people have been affected by second-hand smoke? 6b

      ❑ How about you? Do you think your bodies have been affected? 6c 6d

7. Where have you found out about second hand smoke? 7a

   ❑ school
   ❑ parents
   ❑ TV/video
   ❑ books/magazines

   probe 7b

   ❑ Did you enjoy learning about this, or was it boring? 7c

Ekos Research Associates Inc., 1995

ETS Focus Groups with Children

Core Moderator's Guide
(February 9, 1995)

Core Questions

INTRODUCTION

- ❑ With the arrival of the children, the moderator engages in conversation with them, attempting to help them feel relaxed and comfortable, and offers them refreshments.

- ❑ When all participants have arrived and are seated, the moderator introduces him/herself and explains his/her role in the discussion.

- ❑ The moderator briefly describes the purpose of the focus group and how the discussion should proceed.

- ❑ The moderator then establishes the ground rules for the discussion:

  - There are no "right or wrong" answers — participants are encouraged to express the way they feel about everything. We want to know what kids really think and not what kids is the "right" answer;
  - Participants should feel no pressure to agree with one another;
  - The discussion is being audio-tape recorded, but nobody but the participants and the moderator will ever know what individual participants have said.
  - Everyone should listen while someone else is talking. People should speak one at a time and let others finish what they have to say.

- ❑ The participants are asked to introduce themselves (first names only) and to say what grade they are in and how old they are.

195: EXFAM
screen
01 Agreed to provide name and number 1
02 No other key figures 2
03 Refused to provide name and number 3

196: EXFM2
screen - name

197: EXFM3
screen relationship to child

198: EXFM4
screen telephone number

199: EXFM5
screen - parents name

204: FG
fg Early next year, once the survey has been completed, we will be travelling across the country to speak to groups of 8-12 year old children on the same topics discussed with you today. These groups will be held after school in local libraries, community centres and other easily accessible locations. Do you think that your child(ren) would be interested in participating in something like this? We would call you back in late January to give you more
DETAILS
01 Yes child would tentatively be interested 1
02 No child would definitely NOT participate 2
03 DK/NR (Unsure would have to ask child) 9

205: SEX
*** DO NOT ASK *** BASED ON OBSERVATION The sex of the respondant is...
01 Male 1
02 Female 2

206: THNK
Thank you for your cooperation and time!
01 Completion ..... 1 D

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APPENDIX C

METHODOLOGY REPORT

Ekos Research Associates Inc., 1995

189: Q73C2

=> +1 if (Q73A+Q73B+Q73C)<=Q72 OR Q73A=#1 OR Q73B=#1 OR Q73C=#1

verification: You have told me that the total number in the household is <q72> but you have also told me that there are <q73a> adults and <q73b> 12 to 18 year olds and <q73c> 6-11 year olds. Can we clarify that.

(1/ 225)

01	Change number in household	1	=> Q72
02	Change number of adults	2	=> Q73A
03	Change number of 12-18 year olds	3	=> Q73B
04	Change number of 6-11 year olds	4	=> Q73C

190: Q73D

=> Q74 if Q72 == (Q73A + Q73B + Q73C)

Q73D How many are:

LESS THAN 6 YEARS OLD

(1/ 226)

$R 0 Q72-(Q73A+Q73B+Q73C)

01	DK/NR	99

190: Q73D2

=> +1 if NOT((Q73A+Q73B+Q73C+Q73D)>Q72)

verification: You have told me that the total number in the household is <q72> but you have also told me that there are <q73a> adults, <q73b> 12 to 18 year olds, <q73c> 6-11 year olds, and <q73d> 0-6 year olds. Can we clarify that.

01	Change number in household	1	=> Q72
02	Change number of adults	2	=> Q73A
03	Change number of 12-18 year olds	3	=> Q73B
04	Change number of 6-11 year olds	4	=> Q73C
05	Change number of 0-6 year olds	5	=> Q73D

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191: Q73E

=> +1 if NOT((Q73A+Q73B+Q73C+Q73D)<Q72) OR NOT((Q73A+Q73B+Q73C+Q73D)>Q72)

verification: Can we go back over those numbers again, I think we missed someone....RETURN TO Q72 NUMBER OF PEOPLE IN HOUSEHOLD AND REPEAT

192: Q74

Q74 Which of the following age groups do you fall into? *** READ OPTIONS ***

01	18 to 24 years old	1
02	25 to 34 years old	2
03	35 to 44 years old	3
04	45 to 54 years old	4
05	55 to 64 years old	5
06	65 years old or older	6
07	DK/NR	9

193: Q79

Q79 In 1993, what was your total household income before taxes?

01	Less than $20,000	1
02	$20,000 - $39,999	2
03	$40,000 - $59,999	3
04	$60,000 - $79,999	4
05	$80,000 or more	5
06	DK/NR	9

194: COMM

About how large is the community you live in. Would you say you live in a community that has...[READ CATEGORIES]

01	Under 1,000 people	01
02	From 1 to 10 thousand	02
03	From 10 to 100 thousand	03
04	100,000 or more	04
05	DK/NR	99

As part of this very large study we are talking to thousands of parents across the country. We are also talking to relatives and close friends of the family to gather information from all types of adults who have regular contact with children. Each parent who completes this interview is being asked to volunteer the name and telephone number of an adult who sees their child at least once a week. We are interested in family members such as aunts/uncles, grandparents or other family as well as close friends or neighbours. Please do not include anyone who sees your child in a group situation only, such as a teacher, or a sport/recreation instructor.

Parent Response:@exfam 1=Will give name 2=Refusal
Name of Relative:@exfm2
Relationship to Child:@exfm3
Telephone Number:@exfm4
Name of Parent:@exfm5

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182: EDUC

MESSAGE: CIRCLE ONLY ONE

EDUC What is the highest level of formal education that you have completed?

(1/ 212)

01	Elementary school or less	01	
02	Some high school	02	
03	Graduated high school	03	
04	Some community college/CEGEP	04	
05	Some university	05	
06	Graduated community college/CEGEP	06	
07	Graduated university	07	
08	Other (specify)	08	O
09	DK/NR	99	

183: MTONG

mtong What language did you first learn to speak and still understand?

(1/ 214)

01	English	01	
02	French	02	
03	Other	03	O
04	DK/NR	99	

184: Q72

=> Q74 if INT5E=#2

Q72 Including yourself, how many people live in your household?

(1/ 216)
$R 1 20

01	DK/NR	99

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185: Q73A

=> Q74 if Q72 < 2

Q73A Among these persons, how many are:

MORE THAN 18 YEARS OLD

(1/ 218)
$R 0 Q72

01	DK/NR	99

186: Q73B

=> Q74 if Q72 == Q73A

Q73B How many are:

12 - 18 YEARS OLD

(1/ 220)
$R 0 Q72-Q73A

01	DK/NR	99

187: Q73B2

=> +1 if (Q73A+Q73B)<=Q72 OR Q73A=#1 OR Q73B=#1

verification: You have told me that the total number in the household is <q72> but you have also told me that there are <q73a> adults and <q73b> 12 to 18 year olds. Can we clarify that.

(1/ 222)

01	Change number in household	1	=> Q72
02	Change number of adults	2	=> Q73A
03	Change number of 12-18 year olds	3	=> Q73B

188: Q73C

=> Q74 if Q72 == (Q73A + Q73B)

Q73c How many are:

6 TO 11 YEARS OLD

(1/ 223)
$R 0 Q72-(Q73A+Q73B)

01	DK/NR	99

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172: Q41B

=> +1 if INTR3=#1 OR NOT(Q41A>0) AND NOT(Q41A<999)

41B What proportion of these cigarettes are smoked when your child(ren) is(are) present, is it none, some, half, most or all of them.

(1/ 200)

57

01	None	1
02	Some	2
03	Half	3
04	Most	4
05	All	5

173: Q42

Q42 Thinking about the people who are closest to you, about how many would yousay are regular smokers. Would you say none, some, most or all of them?

(1/ 201)

58

01	None	1
02	Some	2
03	Most	3
04	All	4
05	DK/NR	5

174: Q42B

Q42b Has someone close to you become seriously ill or died as a result of a smoking-related illness

(1/ 202)

59

01	Yes	1
02	No	2
03	DK/NR	9

175: Q43

Q43 Out of an average group of 10 adult Canadians, 15 years old and over, how many would you say currently smoke?

(1/ 203)
$E 1 10

60

01	DK/NR	99

176: Q44

Q44 Are you bothered by smoke from cigarettes?

(1/ 205)

61

01	yes	1
02	no	2

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177: Q45

=> +1 if Q44=#2

Q45 Does smoke from cigarettes cause you any physical irritation (such as to your eyes, your breathing, your throat)

(1/ 206)

62

01	Yes	1
02	No	2

178: Q46

=> EDUC if INTR3=#1

Q46 How often does(do) your child(ren) have contact with relatives or close friends (e.g., aunts, uncles, grandparents, close friends), other than their caregiver (babysitter). Please provide your response in terms of the number of times per week. IF RESPONDENT GIVES ANSWER OTHER THAN IN PER WEEK BASE...TRANSLATE TO PER WEEK.

63

(1/ 207)
$R 0 25

01	DK/NR	99

179: Q47

=> +2 if Q46<1 OR Q46>25

Q47 Thinking about your previous response, about what proportion of these relatives and friends smoke? Would you say none, some, most or all of them?

(1/ 209)

64

01	None	1
02	Some	2
03	Most	3
04	All	4
05	DK/NR	5

180: Q48

=> +1 if INTR3=#1 OR Q47=#1 OR Q47=#5

Q48 To what extent do they smoke in front of your child(ren), on a scale of 1 to 7, where 1 means none of the time, 7 means all of the time, and the mid- point 4 means some of the time.

(1/ 210)

65

01	None of the time	1
02		2
03		3
04	Some of the time	4
05		5
06		6
07	All of the time	7
08	DK/NR	9

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162: Q16CE

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16C A request from a friend or relative

(1/ 187)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

163: Q16DE

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16D A request from staff or management in a restaurant or shopping mall

(1/ 188)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

164: PRE37

pre37 These last questions are for statistical purposes only and I remind you that all of the information you give me is completely confidential

165: Q37

=> Q39 if Q1=#1 OR Q1_E=#1

Q37 Have you ever smoked cigarettes?

(1/ 189)

01	yes	1
02	no	2

166: Q38A

=> +2 if Q37=#2

Q38a Amount of time (screen)

(1/ 190)
$E 1 50

01	DK/NR	99

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167: Q38B

q38b Unit

(1/ 192)

01	years	1
02	months	2
03	weeks	3
04	days	4

168: Q39

=> +2 if NOT(Q1=#1 OR Q1_E=#1)

Q39a Amount Smoke (screen)

(1/ 193)
$E

01	DK/NR	99

169: Q39B

q39b Unit

(1/ 195)

01	per day	1
02	per week	2
03	per month	3
04	DK/NR	9

170: Q40

=> +1 if NOT(Q1B=#1 OR (INT5E=#1 AND Q1B_E=#1))

Q40 How many members of your household smoke, including yourself?

(1/ 196)
$E 1 8

01	DK/NR	9

171: Q41A

=> +2 if NOT(Q1=#1 OR Q1B=#1 OR Q1_E=#1 OR Q1B_E=#1)

Q41A On average, how many cigarettes would you say are smoked in your home, byhousehold members, over the course of one day?

(1/ 197)
$E 0 200

01	DK/NR	999

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155: **Q15DE**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15D The smell and dirt caused by cigarette smoke

(1/ 176)

49d

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

156: **Q15EE**

=> +1 if Q1_E=#1

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15E The health of the smoker

(1/ 177)

49e

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

157: **Q15FE**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15F So that children present won't think it is ok to smoke when they see others smoking

(1/ 178)

49f

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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158: **Q15OE**

q15oe Are there any other reasons why you restrict smoking in your home?

(1/ 179 - 181 - 183)

50

01	Response	01	O
02	No other reason	02	
03	DK/NR	99	X

159: **PR16E**

=> PRE37 if NOT(Q1_E=#1)

PRE16e On a 7 point scale, where 1 means not at all likely, 7 means extremely likely and the mid-point 4 means somewhat likely, rate the extent to which you think the each of the following would be likely to influence a smoker to put out their cigarette or avoid smoking.

51a → d = (4)

160: **Q16AE**

Rotation => Q16DE

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16A A sign indicating that smoking is not allowed in that location

(1/ 185)

51a

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

161: **Q16BE**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16B A request from a stranger

(1/ 186)

51b

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

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149: Q7C_E

Q7c In general PROMPT IS... How often do you restrict your smoking in <int5e >..

(1/ 171)

01	Never	
02		1
03		2
04	Sometimes	3
05		4
06		5
07	Always	6
08	DK/NR	7
		9

150: Q8_E

=> +1 if INT5E=#2

Q8_e To what extent would you say that all members of your household agree on whether or not smoking should be restricted in your home. Please rate your answer on a 7 point scale, where 1 means members of your household strongly disagree, 7 means they strongly agree, and the mid-point 4 means that you neither agree nor disagree.

(1/ 172)

01	Strongly Disagree	
02		1
03		2
04	Neither	3
05		4
06		5
07	Strongly Agree	6
08	Not Been Discussed	7
		8

151: PR15E

=> PR16E if Q2B_E=#2 OR Q3_E=#2 OR INT5E=#2

PRE15 People may restrict smoking in their home, for a number of reasons. On a scale of 1 to 7, where 1 means not at all important, 7 means extremely important and the mid-point 4 means moderately important, can you tell me how important the following factors are in your decision to restrict smoking in your home.

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152: Q15_E

Rotation => Q15FE

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15A Allergies of a family member

(1/ 173)

01	Not at all important	
02		1
03		2
04	Moderately Important	3
05		4
06		5
07	Extremely Important	6
08	DK/NR	7
		9

153: Q15BE

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15B The potential impacts of second-hand smoke on your health

(1/ 174)

01	Not at all important	
02		1
03		2
04	Moderately Important	3
05		4
06		5
07	Extremely Important	6
08	DK/NR	7
		9

154: Q15CE

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15C The potential health impacts of second-hand smoke on children

(1/ 175)

01	Not at all important	
02		1
03		2
04	Moderately Important	3
05		4
06		5
07	Extremely Important	6
08	DK/NR	7
		9

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141: Q4B_E

MESSAGE: How often do you or other household members...

Q4B Restrict smoking to one room or area

(1/ 165)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

142: Q4C_E

MESSAGE: How often do you or other household members...

Q4C Open windows, or use fans or other ventilation systems to get rid of smoke

(1/ 166)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

143: Q4D_E

MESSAGE: How often do you or other household members...

Q4D Put ashtrays out of sight

(1/ 167)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

144: PR6_E

PRE6 On a 7 point scale, where 1 means never, 7 means always, and the mid-point 4 means sometimes, rate the extent to which people are asked NOT to smoke <int5e >...

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145: Q6A_E

Rotation => Q6C_E

Q6A When the child is present PROMPT IS.....How often is smoking restricted in <int5e >...

(1/ 168)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

146: Q6C_E

Q6c In general PROMPT IS....How often is smoking restricted in <int5e >...

(1/ 169)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

147: PR7_E

=> Q8_E if NOT(Q1_E=#1)

PRE7 On a 7 point scale, where 1 means never, 7 means always and the mid-point 4 means sometimes, rate the extent to which you try NOT to smoke in <int5e >....

148: Q7A_E

Rotation => Q7C_E

Q7A When the child is present PROMPT IS...How often do you restrict your smoking in <int5e >..

(1/ 170)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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131: INT5E

MESSAGE: read categories

INTR5 Thinking about the child whom you see at least once a week, would you say you usually spend time with this child...

(1/ 156)

01 in your home 1
02 in the child's home 2

132: Q1_E

q1_e Do you currently smoke?

(1/ 157)

01 yes 1
02 no 2

133: Q1_E2

=> +2 *if* ***INT5E=#1 OR Q1_E=#2***

q1_e2 When you visit the home of the child we are speaking of, would you say your smoking is restricted or limited in any way, either by yourself or by members of the child's household?

(1/ 158)

01 yes 1
02 no ..... 2 => +2

134: Q1_E3

MESSAGE: Read categories

q1_e3 Would you say that the restrictions on your smoking in the child's household are...

(1/ 159)

01 Imposed by yourself, without being asked 1
02 Requested by one or more members of the household 2
03 DK/NR 3

135: Q1B_E

=> *PR6_E if* ***INT5E=#2***

q1b_e Does anyone else in your household smoke?

(1/ 160)

01 yes 1
02 no 2

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136: Q2B_E

=> +1 *if* ***Q1_E=#2 AND Q1B_E=#2***

q2b Have you ever thought about restricting the amount of smoking which takes place in your home?

(1/ 161)

01 Yes 1
02 No 2

137: Q3_E

=> +1 *if* ***Q2B_E=#2***

Q3 Do you or any other members of your household ever restrict the amount of smoking which takes place in your home, either by household members or visitors to the home?

(1/ 162)

01 yes 1
02 no 2

138: Q3B_E

=> +1 *if* ***Q3_E=#1***

q3b Is there any particular reasons why not?

(1/ 163)

01 Response ..... 1 O

02 DK/NR 2

139: PR4_E

=> *Q8_E if* ***Q2B_E=#2 OR Q3_E=#2 OR (Q1_E=#2 AND Q1B_E=#2)***

PRE4 On a 7 point scale, where 1 means never, 7 means always and the mid- point 4 means sometimes, how often would you say you or other members of your household ...

140: Q4A_E

Rotation => Q4D_E

MESSAGE: How often do you or other household members...

Q4A Restrict smoking to outdoors only

(1/ 164)

01 Never 1
02 2
03 3
04 Sometimes 4
05 5
06 6
07 Always 7
08 DK/NR 9

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122: PRE22

PRE22 Is your child, or any one of your children, 4 years old or older?

(1/ 149)

33

01	Yes	1
02	No	2 => +8

123: Q22

Q22 Thinking about your child, or any one of your children in particular, has the topic of second-hand smoke ever come up in discussion between yourself andyour child?

(1/ 150)

34

01	yes	1
02	no	2 => +2

124: Q23

Q23 Who initiated the discussion?

(1/ 151)

35

01	you	1
02	your child	2
03	DK/NR	9

125: PRE24

PRE24 To the best of your knowledge, has your child, or any one of your children in particular, ever.....

36a → d = (4)

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126: Q24A

Rotation => Q24D

=> +1 if Q1=#2 AND Q1B=#2

MESSAGE: Has your child ever...

Q24A Suggested that a member of your household stop smoking in their presence

(1/ 152)

36a

01	Yes	1
02	No	2
03	DK/NR	3

127: Q24B

MESSAGE: Has your child ever...

Q24B Suggested that a relative (such as a grandparent, uncle or aunt) stop smoking in their presence

(1/ 153)

36b

01	Yes	1
02	No	2
03	DK/NR	3

128: Q24C

MESSAGE: Has your child ever...

Q24C Said anything about the effects of second-hand smoke on their health

(1/ 154)

36c

01	Yes	1
02	No	2
03	DK/NR	3

129: Q24D

Q24d Said anything about being bothered by second-hand smoke PROBE: Bothered may mean having physical irritations or becoming annoyed by the presence of second-hand smoke

(1/ 155)

36d

01	Yes	1
02	No	2
03	DK/NR	3

130: PR1E

=> PRE37 if INTR1=#1

preq1 The next section asks a series of questions related to household practices.

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115: **Q16C**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16C A request from a friend or relative

(1/ 142)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

116: **Q16D**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16D A request from staff or management in a restaurant or shopping mall

(1/ 143)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

117: **Q17**

Q17 Is/are your child(ren) cared for on a regular basis by someone other than a member of the household (such as a babysitter or caregiver, nanny, relative,daycare or after school program?)

(1/ 144)

01	yes	1
02	no	2 => PRE22

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119: **Q19**

Q19 Parents take a number of factors into consideration when choosing a caregiver for their child. How important is the smoking behaviour of a caregiver as compared to other factors (such as cost, quality of care, and trust in caregiver) in your choice of caregiver? Please rate the importance ofthe smoking behaviour of caregivers on a scale of 1 to 7, where 1 means not nearly as important as other factors, 7 means it is the most important factor

(1/ 146)

01	Not nearly as important	1
02		2
03		3
04	Equally Important	4
05		5
06		6
07	The most important	7
08	DK/NR	9

120: **Q20**

Q20 To your knowledge, does your child(ren)'s babysitter or caregiver(s) smoke?

(1/ 147)

01	yes	1
02	no	2
03	DK/NR	3

121: **Q21**

=> +1 if NOT(Q20=#1)

Q21 To your knowledge, does your child(ren)'s caregiver(s) or babysitter smokein front of your child(ren)?

(1/ 148)

01	yes	1
02	no	2
03	DK/NR	3

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108: **Q15D**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15D The smell and dirt caused by cigarette smoke

(1/ 131)

26b

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

109: **Q15E**

=> +1 if Q1=#1

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15E The health of the smoker

(1/ 132)

26c

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

110: **Q15F**

MESSAGE: How important is...to your decision to restrict smoking or avoid...

Q15F So that your children won't think it is ok to smoke when they see others smoking

(1/ 133)

26f

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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111: **Q15O**

q15o Are there any other reasons why you restrict smoking in your home or avoid second-hand smoke outside of your home?

27

(1/ 134 - 136 - 138)

01	Response	01	O
02	No other reason	02	
03	DK/NR	99	X

112: **PRE16**

=> Q17 if NOT(Q1=#1)

PRE16 On a 7 point scale, where 1 means not at all likely, 7 means extremely likely and the mid-point 4 means somewhat likely, rate the extent to which you think each of the following would likely influence a smoker to put out their cigarette or avoid smoking.

28a → d (A)

113: **Q16A**

Rotation => Q16D

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

28a

Q16A A sign indicating that smoking is not allowed in that location

(1/ 140)

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

114: **Q16B**

MESSAGE: How likely would...be to influence a smoker to put out a cigarette...

Q16B A request from a stranger

(1/ 141)

28b

01	Not at all likely	1
02		2
03		3
04	Somewhat Likely	4
05		5
06		6
07	Extremely Likely	7
08	DK/NR	9

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99: Q13A

Rotation => Q13B

25a *MESSAGE: To what extent do you avoid second-hand smoke outside your home...*
Q13A When your child(ren) is/are present

(1/ 124)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

100: Q13B

25b *MESSAGE: To what extent do you avoid second-hand smoke outside your home...*
Q13B In general

(1/ 125)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

104: PRE15

=> PRE16 if Q2=#2-#3 OR Q2B=#2 OR Q3=#2

PRE15 People may restrict smoking in their home, or avoid second-hand smoke outside their home, for a number of reasons. On a 7 point scale, where 1 means not at all important, 7 means extremely important and the mid-point 4 means moderately important, can you tell me how important the following factors are in YOUR decision to restrict smoking or avoid second-hand smoke.

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26a → 7 (6)

105: Q15A

Rotation => Q15F

26a *MESSAGE: How important is...to your decision to restrict smoking or avoid...*
Q15A Allergies of a family member

(1/ 128)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

106: Q15B

MESSAGE: How important is...to your decision to restrict smoking or avoid...
26b Q15B The potential impacts of second-hand smoke on your health

(1/ 129)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

107: Q15C

MESSAGE: How important is...to your decision to restrict smoking or avoid...
26c Q15C The potential health impacts of second-hand smoke on your children

(1/ 130)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

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91: Q8

=> +1 if Q1=#2 AND Q1B=#2 AND Q1C=#1

Q8 To what extent would you say that all members of your household agree on whether or not smoking should be restricted in your home. Please rate your answer on a 7 point scale, where 1 means members of your household strongly disagree, 7 means they strongly agree, and the mid-point 4 means that you neither agree nor disagree.

21

(1/ 111)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	Not Been Discussed	7
09	dk	8
		9

92: Q9

Q9 Have you ever thought about avoiding second-hand smoke in public places or other locations outside of your own home?

22

(1/ 112)

01	Yes	1
02	No	2

93: Q10

=> +1 if Q9=#2

Q10 Do you try to avoid second-hand smoke in public places or other locations outside of your own home? 23a

23a or (2)

(1/ 113)

01	yes	1
02	no	2

94: Q11

=> +1 if Q9=#1 OR Q10=#1

Q11 Is there any particular reasons why not? 23b

(1/ 114 - 116 - 118 - 120)

01	Response	01	O
02	DK/NR	99	X

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95: PRE12

=> PRE13 if NOT(Q1=#1)

PRE12 On a 7 point scale where 1 means never, 7 means always, and the mid-point 4 means sometimes, to what extent do you try not to smoke OUTSIDE YOUR HOME....

24ab = (2)

96: Q12A

24a

Rotation => Q12B

MESSAGE: To what extent do you try not to smoke outside your home...

q12a When your children are present?

(1/ 122)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

24b

97: Q12B

MESSAGE: To what extent do you try not to smoke outside your home...

Q12B In general

(1/ 123)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

98: PRE13

=> PRE14 if Q9=#2 OR Q10=#2

PRE13 On a 7 point scale, where 1 means never, 7 means always and the mid- point 4 means sometimes, to what extent do you avoid second-hand smoke OUTSIDE YOUR HOME...

25ab = (2)

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84: **Q5D**

MESSAGE: How often do you ask the following people not to smoke...
Q5D Other members of your household (such as your spouse)

(1/ 106)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

85: **PRE6**

PRE6 On a seven point scale where 1 means never, 7 means always and the mid- point 4 means sometimes, rate the extent to which you ask people NOT to smoke in your home....

86: **Q6A**

Rotation => Q6B

MESSAGE: How often do you ask people not to smoke in your home....
Q6A When your child(ren) is/are present

(1/ 107)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

87: **Q6B**

MESSAGE: How often do you ask people not to smoke in your home....
Q6B In general

(1/ 108)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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88: **PRE7**

=> Q8 if NOT(Q1=#1)
PRE7 On a 7 point scale, where 1 means never, 7 means always and the mid-point 4 means sometimes, rate the extent to which you try not to smoke in your home....

89: **Q7A**

Rotation => Q7B

MESSAGE: To what extent do you try not to smoke in your home...
Q7A When your child(ren) is/are present

(1/ 109)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

90: **Q7B**

MESSAGE: To what extent do you try not to smoke in your home...
Q7B In general

(1/ 110)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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77: **Q4B**

MESSAGE: How often do you or other household members...

Q4B Restrict smoking to one room or area

(1/ 100)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

78: **Q4C**

MESSAGE: How often do you or other household members...

Q4C Open windows, or use fans or other ventilation systems to get rid of smoke

(1/ 101)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

79: **Q4D**

MESSAGE: How often do you or other household members...

Q4D Put ashtrays out of sight

(1/ 102)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

80: **PRE5**

PRE5 On a scale of 1 to 7, where 1 means never, 7 means always and the mid- point 4 means sometimes, how often would you say you or other members of your household ask the following people not to smoke in your home. For each category, think only of those people who smoke.

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81: **Q5A**

Rotation => Q5D

MESSAGE: How often do you ask the following people not to smoke...

Q5A Your close friends

(1/ 103)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

82: **Q5B**

MESSAGE: How often do you ask the following people not to smoke...

Q5B Your acquaintances

(1/ 104)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

83: **Q5C**

MESSAGE: How often do you ask the following people not to smoke...

Q5C Your other relatives that do not live in your home (brothers/sisters, parents, aunts and uncles)

(1/ 105)

01	Never	1
02		2
03		3
04	Sometimes	4
05		5
06		6
07	Always	7
08	DK/NR	9

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67: **Q1**
q1 Do you currently smoke?

(1/ 89)

01 yes 1
02 no 2

68: **Q1B**
q1b Does anyone else in your household smoke?

(1/ 90)

01 yes 1
02 no 2

69: **Q1C**
q1c How often would you say you have visitors to your home who are smokers?

(1/ 91)
$E 1 30

01 Never 998
02 DK/NR 999

70: **UNIT**
time unit of visitors

(1/ 94)

01 week 1
02 month 2
03 year 3
04 DK/NR 9

71: **Q2**
=> +1 if NOT(Q1=#2 AND Q1B=#2 AND Q1C=#1)
Q2 If you did have visitors to your home who were smokers, do you think that you would restrict their smoking while in your home?

(1/ 95)

01 Yes ..... 1 => PRE4
02 No 2
03 Don't know/not sure 3

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72: **Q2B**
=> Q3B if Q1=#2 AND Q1B=#2 AND Q1C=#1
q2b Have you ever thought about restricting the amount of smoking which takes place in your home?

(1/ 96)

01 Yes 1
02 No 2

73: **Q3**
=> +1 if Q2B=#2
Q3 Do you or any other members of your household ever restrict the amount of smoking which takes place in your home, either by household members or visitors to the home?

(1/ 97)

01 yes ..... 1 => PRE4
02 no 2

74: **Q3B**
=> +1 if Q3=#1
q3b Is there any particular reasons why not?

(1/ 98)

01 Response ..... 1 O

02 DK/NR 2

75: **PRE4**
=> Q8 if Q2=#2-#3 OR Q2B=#2 OR Q3=#2 OR (Q1=#2 AND Q1B=#2 AND Q1C=#1)
PRE4 On a scale of 1 to 7, where 1 means never, 7 means always and the mid- point 4 means sometimes, how often would you say you or other members of your household ...

76: **Q4A**

Rotation => Q4D

MESSAGE: How often do you or other household members...
Q4A Restrict smoking to outdoors only

(1/ 99)

01 Never 1
02 2
03 3
04 Sometimes 4
05 5
06 6
07 Always 7
08 DK/NR 9

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59: Q34H

MESSAGE: How believable is...a source of information about second-hand smoke
q34h The tobacco industry

(1/ 83)

01	Not at all believable	
02		1
03		2
04	Moderately Believable	3
05		4
06		5
07	Very Believable	6
08	DK/NR	7
		9

60: Q34I

MESSAGE: How believable is...a source of information about second-hand smoke
Q34I government

(1/ 84)

01	Not at all believable	
02		1
03		2
04	Moderately Believable	3
05		4
06		5
07	Very Believable	6
08	DK/NR	7
		9

61: PRE36

PRE36 Now I would like you to rate the level of information available to you on each of the following specific aspects, on a 7 point scale where one means not enough informaiton is available, 7 means too much information, the midpoint 4 means that just the right amount of information is available to you

62: Q36AA

Rotation => Q36C

MESSAGE: Rate the level of information available to you on...
q36aa Second-hand smoke in general

(1/ 85)

01	Not enough information	
02		1
03		2
04	The right amount of information	3
05		4
06		5
07	Too much information	6
08	DK/NR	7
		9

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63: Q36A

MESSAGE: Rate the level of information available to you on...
Q36A the health impacts of second-hand smoke ON ADULTS

(1/ 86)

01	Not enough information	
02		1
03		2
04	The right amount of information	3
05		4
06		5
07	Too much information	6
08	DK/NR	7
		9

64: Q36B

MESSAGE: Rate the level of information available to you on...
Q36B the health impacts of second-hand smoke ON CHILDREN

(1/ 87)

01	Not enough information	
02		1
03		2
04	The right amount of information	3
05		4
06		5
07	Too much information	6
08	DK/NR	7
		9

65: Q36C

MESSAGE: Rate the level of information available to you on...
Q36C laws restricting smoking, and exposure to second-hand smoke

(1/ 88)

01	Not enough information	
02		1
03		2
04	The right amount of information	3
05		4
06		5
07	Too much information	6
08	DK/NR	7
		9

66: PREQ1

=> PR1E if INTR3=#1
preq1 The next section asks a series of questions related to household practices.

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53: **Q34A**

Rotation => Q34I

MESSAGE: How believable is...a source of information about second-hand smoke
Q34A your doctor

(1/ 77)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

54: **Q34B**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34B news reports (from newspaper, radio or television)

(1/ 78)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

55: **Q34D**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34D warnings on cigarette packs

(1/ 79)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

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56: **Q34E**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34E friends and family

(1/ 80)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

57: **Q34F**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34F non-smokers' rights groups

(1/ 81)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

58: **Q34G**

MESSAGE: How believable is...a source of information about second-hand smoke
Q34G health groups (such as the Heart and Stroke Foundation of Canada, Canadian Cancer Society, Canadian Lung Association)

(1/ 82)

01	Not at all believable	1
02		2
03		3
04	Moderately Believable	4
05		5
06		6
07	Very Believable	7
08	DK/NR	9

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47; **Q32E**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32E asthma in children

(1/ 61)

8e

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

48: **Q32F**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32F bronchial problems or bronchitis

(1/ 64)

8f

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

49: **Q32G**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32G sudden infant death syndrome (SIDS)

(1/ 65)

8g

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

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Q32H

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32H emphysema

(1/ 66)

8h

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

Q33

MESSAGE: DO NOT READ LIST.....NEED RESPONDENT'S OWN VIEW...ACCEPT UP TO FIVE

Q33 From which source(s) have you heard about second-hand smoke?

(1/ 67 - 69 - 71 - 73 - 75)

9

01	doctor	01	
02	news reports (from newspaper, radio or television)	02	
03	paid advertisements	03	
04	warnings on cigarette packs	04	
05	friends and family	05	
06	non-smoking rights groups	06	
07	health groups (such as the Heart and Stroke Foundation of Canada, Canadian Cancer Society, Canadian Lung Association)	07	
08	tobacco industry	08	
09	government	09	
10	Other	10	O
11	haven't heard anything about second-hand smoke	11	X
12	Don't remember	99	X

PRE34

PRE34 I am going to read you a list of sources from which people might learn something about second-hand smoke. Please tell me how believable you feel eachone is as a source of information, on a scale from 1 to 7, where 1 means not at all believable, 7 means very believable and the mid-point 4 means moderately believable.

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41: **Q31**

MESSAGE: DO NOT READ LIST...Accept up to 5 responses

Q31 Can you name any health impacts of second-hand smoke?

(1/ 54 - 55 - 56 - 57 - 58)

01	Heart disease	1	
02	Lung Cancer	2	
03	Asthma	3	
04	Allergies	4	
05	Other	5	O
06	Cannot name any health impacts	6	
07	There are no health impacts	7	
08	DK/NR	9	

42: **PRE32**

PRE32 I am going to read you a list of a number of health impacts which may or may not be related to inhaling second-hand smoke. For each one, please indicate the extent to which each is caused by second-hand smoke on a scale of 1 to 7, where 1 means it is definitely not caused by second-hand smoke, 7 means it is definitely caused, and the mid-point four means you don't think that there is any evidence of a link one way or the other.

43: **Q32A**

Rotation => Q32H

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32A arthritis

(1/ 59)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

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44: **Q32B**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32B lung cancer

(1/ 60)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

45: **Q32C**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32C heart disease

(1/ 61)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

46: **Q32D**

MESSAGE: Is ....caused by exposure to second-hand smoke

Q32D ear infections in children

(1/ 62)

01	Definitely Not Caused by	1
02		2
03		3
04	No evidence	4
05		5
06		6
07	Definitely Caused by	7
08	DK/NR	9

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34: **Q28D**

MESSAGE: Are there any laws or policies restricting smoking in...

Q28D Bars and pubs

(1/ 48)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

35: **Q28E**

MESSAGE: Are there any laws or policies restricting smoking in...

Q28E Children's schools

(1/ 49)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

36: **Q29**

Q29 What do you think of the laws to reduce second-hand smoke on a 7-point scale where 1 means current laws are too lenient and 7 means they are too strict in controlling second-hand smoke. The mid-point 4 means that current laws provide the right level of control.

(1/ 50)

01	Too Lenient	1
02		2
03		3
04	The right level	4
05		5
06		6
07	Too Strict	7
08	DK/NR	9

37: **PRE30**

PRE30 How responsible should each of the following be for placing restrictionson smoking in public places? Please rate your response using a 7-point scale where 1 means not at all responsible, 7 means completely responsible and the mid-point 4 means they should share responsibility equally with others.

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38: **Q30A**

MESSAGE: How responsible should ...be for placing restrictions in public places

30A Government

(1/ 51)

01	Not at all responsible	1
02		2
03		3
04	Equally Shared Responsibility	4
05		5
06		6
07	Completely Responsible	7
08	DK/NR	9

39: **Q30B**

MESSAGE: How responsible should....be for placing restrictions in public places

30B Owner/manager public place (such as restaurant, bar or other)

(1/ 52)

01	Not at all responsible	1
02		2
03		3
04	Equally Shared Responsibility	4
05		5
06		6
07	Completely Responsible	7
08	DK/NR	9

40: **Q30C**

MESSAGE: How responsible should....be for placing restrictions in public places

30C Each individual

(1/ 53)

01	Not at all responsible	1
02		2
03		3
04	Equally Shared Responsibility	4
05		5
06		6
07	Completely Responsible	7
08	DK/NR	9

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3C

26: Q26J

q26j Most people could quit smoking if they really wanted to

(1/ 42)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3D

27: Q26K

q26k I think that people should have a right to be free from breathing other people's second-hand smoke

(1/ 43)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3K

28: Q26L

q26l Smoking in all indoor public places should be banned

(1/ 44)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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3L

29: Q26M

q26m I think you have to be heavily exposed to second-hand smoke for many years for it to negatively affect your health.

(1/ 45)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

2A A → E = (5)

30: PRE28

PRE28 I am going to read you a list of places which may or may not have restrictions on smoking. I would like to know whether there are any laws or policies restricting smoking in each type of place, in the city or area where you live.

31: Q28A Rotation => Q28E

4a *MESSAGE: Are there any laws or policies restricting smoking in...*

Q28A Restaurants

(1/ 46)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

32: Q28B

MESSAGE: Are there any laws or policies restricting smoking in...

4b Q28B Workplace

(1/ 47)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

33: Q28C

MESSAGE: Are there any laws or policies restricting smoking in...

4c Q28C Shopping malls

(1/ 0)

01	Yes	1
02	No	2
03	Dont know/Not sure	3

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...0: **Q26C**
Q26C Smoking is socially acceptable

(1/ 36)

3c

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

21: **Q26D**
Q26D Second-hand smoke causes disease amongst non-smokers

(1/ 37)

3d

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

22: **Q26E**
Q26E Second-hand smoke causes death amongst non-smokers

(1/ 38)

3e

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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3f

...1: **Q26F**
Q26F I think that smokers are overly persecuted by non-smokers

(1/ 39)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3g

...4: **Q26H**
Q26H I think I have a healthy lifestyle

(1/ 40)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

3h

...5: **Q26I**
Q26I It is inapropriate for the government to advertise about second-hand smoke and its effects to the public

(1/ 41)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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13: **Q25D**

MESSAGE: How important is it for society to address..

Q25D Reducing exposure to second-hand smoke

(1/ 31)

01	Not at all important	1
02		2
03		2
04	Moderately Important	3
05		4
06		5
07	Extremely Important	6
08	DK/NR	7
		9

14: **Q25E**

MESSAGE: How important is it for society to address..

Q25F Reducing tobacco use overall

(1/ 32)

01	Not at all important	1
02		2
03		2
04	Moderately Important	3
05		4
06		5
07	Extremely Important	6
08	DK/NR	7
		9

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Q25F

MESSAGE: How important is it for society to address..

Q25F Reducing tobacco use among youth

(1/ 32)

01	Not at all important	1
02		2
03		3
04	Moderately Important	4
05		5
06		6
07	Extremely Important	7
08	DK/NR	9

PRE26

PRE26 I am going to read you a series of statements. Tell me whether you agreeor disagree with each using a 7-point scale where 1 means strongly disagree,7 means strongly agree and the mid-point 4 means neither agree nor disagree.

Q26A

Rotation => Q26M

Q26A Second-hand smoke can affect the health of a child more than the health of an adult

(1/ 34)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

Q26B

Q26B Cigarette smoking causes disease amongst smokers

(1/ 35)

01	Strongly Disagree	1
02		2
03		3
04	Neither	4
05		5
06		6
07	Strongly Agree	7
08	DK/NR	9

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5: **INTR3**

intro3 Children can have a number of key people in their lives in addition to their parents. Do you have a child or children in your life, other than your own, who you see at least once a week? This may be a niece or nephew, grandchild, or the child of a good friend or neighbour. This does not include situations such as coaching or music lessons, where you see more than a few children at once or are paid for your time with the child.

(1/ 26)

01 Yes 1
02 No 2

6: **INT3B**

=> INT if INTR1=#2 AND INTR3=#2

calculate skip for non-parents, non-extended family

7: **INT3C**

=> +1 if NOT(INTR1=#1 AND INTR3=#1)

int3c We would like to focus your attention, not on your own children, in this survey, but on the child or children that you see regularly.

8: **PRE9**

PRE9 This survey is centred largely around the issue of second hand smoke. Second-hand smoke can be defined as the smoke that a smoker blows out of their mouth, and the smoke that comes from the end of a burning cigarette.

9: **PRE25**

preamble

PRE25 Society currently faces a number of health issues. I am going to read you a list of some of these issues and I would like you to tell me how important it is that society address each of them on a scale of 1 to 7, where 1 means not at all important, 7 means extremely important and the mid-point 4 means moderately important.

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2a → f ≠ 6

Q25A

Rotation => Q25G

MESSAGE: How important is it for society to address..

Q25A Improving nutrition

(1/ 27)

01 Not at all important 1
02 2
03 3
04 Moderately Important 4
05 5
06 6
07 Extremely Important 7
08 DK/NR 9

2b

Q25B

MESSAGE: How important is it for society to address..

Q25B Decreasing drug/alcohol abuse

(1/ 28)

01 Not at all important 1
02 2
03 3
04 Moderately Important 4
05 5
06 6
07 Extremely Important 7
08 DK/NR 9

2c

Q25C

MESSAGE: How important is it for society to address..

Q25C Prevention of AIDs

(1/ 29)

01 Not at all important 1
02 2
03 3
04 Moderately Important 4
05 5
06 6
07 Extremely Important 7
08 DK/NR 9

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ETS Survey Questionnaire

AREA

(1/ 20)

01		902
02		506
03		709
04		418
05		514
06		819
07		613
08		416
09		905
10		519
11		705
12		807
13		204
14		306
15		403
16		604

INTRO

intro screen

(1/ 23)

01	Continue	1	
02	End	2	=> INT

INTR1

intr1 Do you have any children aged 12 or under residing in your household?

(1/ 24)

01	yes	1	
02	no	2	=> +2

INTR2

intr2 I would like to speak to the person or one of the people in the household who has primary responsibility for making decisions concerning this child or these children?

(1/ 25)

01	Speaking to that person	1	=> PRE9
02	Person not available - set call-back for another time	2	=> INT

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- "Tobacco-related issues are important for society to deal with" (associated with ETS restrictive and avoidant behaviour).
- Facts about the relation between ETS and SIDS and ear infections (few people are aware of these associations).
- Facts about exposure levels (neither adults nor children are sure about the level of exposure to ETS needed for it to have negative effects).
- "It is not enough to just open a window" (as the restrictions imposed by smokers were usually of the less effective sort).
- "It is "ok" to ask someone not to smoke around you, especially for children" (children find it difficult or unacceptable to ask extended family members and adults find it more difficult to impose restrictions oneself in the home, as opposed to simply avoiding ETS outside the home).
- In French communications material, the department needs to use terminology consistently and make connection between terminology and the subject (as francophone children were not as familiar with ETS terms as were anglophone children).

Carriers of Messages

The following carriers of messages are expected to be effective, either because they are perceived as credible sources of information or because they reach a large number of people.

- Partnerships with the medical professions and health groups are an effective way of communicating about ETS (viewed as the most credible sources of information).
- Use of a wide spectrum of message carriers is worthwhile (the higher the number of information sources cited by respondents, the more likely they were to hold appropriate beliefs about the negative effects of ETS, as well as to restrict their own smoking).
- Strategies that make use of partners and reinforce individual actions to restrict will have even greater success than government-imposed restrictions.
- Television works well with children but school is a good complement (children felt TV was accessible and provided messages which were easy to grasp. The positive aspect about school was the opportunity to ask questions).

- For younger children, role models, such as teachers, parents and "stars" have a high level of believability; older children, in contrast, tend to be a little cynical about these sources (older children indicate a preference for an advertising campaign that would eschew melodrama or histrionics in favour of providing them with factual information).

Targets

The research revealed key groups which are less aware of the negative health effects of ETS and less likely to hold beliefs which are consistent with research findings on health and ETS. These groups should comprise the primary targets of a communications strategy.

- The main targets from the segmentation analysis are the Open Uncommitted and the Unsold Indifferent. Secondary targets are the Sceptics and the Saturated.
- These target groups comprise middle class citizens. Lower socio-economic status citizens tend to hold pro-smokers' attitudes while more comfortable households have already accepted the idea that ETS is bad and that restrictive actions are required.
- The modelling exercise underlined the findings from other analyses that key targets should be smokers, people who live with smokers, those who are not bothered by ETS and those who have not had someone close become ill or die as a result of a smoking-related illness.
- Francophones exhibited a very particular causal dynamic. This observation emphasizes the need for specific communication to francophones, with a focus on non-smokers' rights and on the social desirability of a smoke-free environment.
- Those who have thought about restrictions but have not implemented them, and those with older children need to be targeted.
- Children and parents both play a role in influencing each other and ETS has been discussed between the majority of parents and children. The fact that children tend to instigate these discussions indicates the importance of communication strategies which reach children, as children then serve as message carriers to parents.

Segmentation Analysis

A segmentation analysis using two dozen attitudinal variables indicated that the population can be categorized into seven groups according to orientations toward smoking and ETS as well as openness to information and influence. The segments are presented below.

Types	Population Share	Characteristics
Hard Core Unresponsive	7%	Closed minded pro-smokers; a lost cause for communications
Sceptics	16%	Moderate pro-smokers who tend to doubt sources of information; a difficult target
Saturated	11%	Middle of the road attitudinally, not receptive to more information; a fertile but informationally distant target
Unsold Indifferent	16%	Average attitudinally and behaviorally, moderately open to information and influence; a prime target
Open Uncommitted	14%	Average attitudinally and behaviorally, very open to information and influence; a prime target
Moderate Concerned	17%	Most knowledgeable and sold attitudinally and behaviorally, somewhat open to additional information; no need for more effort
True Believer	19%	Totally persuaded about ETS effects and have adopted preventive behaviour; no need for more effort

Causal Analysis of ETS Restrictive and Avoidant Behaviour

A series of stepwise multiple regressions was conducted to determine the impacts of the various indicators examined in the research on explaining ETS restrictive and avoidant behaviours. Essentially, much of the conceptual model was confirmed through this exercise. Beliefs were found to be influenced by smoking behaviour and exposure; attitudes were found to be related to these beliefs; behavioral intentions were a function of attitudes; and ETS restrictive and avoidant behaviours could be predicted by behavioral intentions.

Socio-demographic indicators, on the other hand, generally did not contribute significantly to the explanation of behaviour. As well, knowledge and information demonstrated patterns in the expected directions, but were not substantial contributors.

Interestingly, the explanation of ETS restrictive and avoidant behaviour was somewhat different for francophone respondents. While being least likely to intend to restrict smoking in the home or to actually follow through on ETS restrictive or avoidant behaviours, francophones had high levels of knowledge about the negative health impacts of ETS and they believe tobacco-related issues are important for society to address. They also feel they have a healthy lifestyle and hold anti-smoking and anti-ETS attitudes. However, francophone respondents were also less likely than other groups to believe that ETS can cause disease and death among non-smokers and more likely to feel that smokers should be left alone.

The relationship observed among francophones leads to the following conclusions: francophones are more knowledgeable about ETS and hold more ETS-avoidant attitudes, but the link between these prerequisites and ETS-avoidant behaviour (and intentions to behave) is caused by a disbelief about the negative effects of ETS and a more libertarian attitude toward smokers. These effects are strong enough to reverse the otherwise positive preconditions of francophones into imprudent behaviour.

Elements Toward a Communications Strategy

Based on the findings from the survey and the focus groups, the following should form part of an ETS communications strategy focusing on suggested messages, carriers of messages and targets.

Messages

The following messages have the strongest potential for exerting an impact, either because of current levels of attitudes or because of the causal linkages discovered between the attitudes and behaviour.

- "People should have a right to be free from breathing other people's second-hand smoke" (particularly with the target groups from the segmentation analysis).
- "Smoking is not socially acceptable" (associated with key indicators in the modelling exercise).
- "ETS has a negative effect on people of all ages, especially children" (but children of all ages, not just infants and small children).
- "ETS can affect the health of a child more than that of an adult" and "ETS causes death among non-smokers" (these beliefs are eventually associated with ETS restrictive and avoidant behaviours).

Parental Attitudes and Behaviour About Caregivers

Very few households employ a caregiver who smokes (seven per cent) and half of these report that caregivers do not smoke in front of the child. Non-smokers were more likely to view caregivers smoking in front of the child as a serious problem than were smokers. As such, those viewing this issue as less important tended to fit the smokers' demographic profile (e.g., younger, francophone, etc.). Although fewer than one in four households in any one demographic group allow a caregiver to smoke in the presence of their child, those who smoke, have lower levels of education and income, live in Quebec and so on, were as much as three times more likely to have a caregiver that smokes in front of the child than other groups.

Behaviour of Children

While ETS has been discussed between parent and child in two thirds of the households surveyed, these discussions are typically instigated by the child rather than the parent. This suggests that children may exert some influence on their parents on the topic of restrictions.

However, there is also a correlation between parental attitudes and whether the issue of ETS has been discussed in a household, suggesting that the influence flows both ways. In households where there has been parent/child discussion on the subject of ETS, the parent is more likely to view smoking negatively, and to believe that ETS causes death and disease among non-smokers.

From what parents said in the survey, it appears that children are more likely to have mentioned being bothered by ETS than to have discussed its health effects. Over two thirds of the children of parents surveyed have said something about being bothered by ETS, while fewer than half the children of parents surveyed have said something about the health effects of ETS.

A significant number of children appear to take action and ask family members not to smoke. Two thirds of children who live in a household where one or more people smoke have asked a household member not to smoke in their presence. A much smaller proportion (half) have asked a relative not to smoke, suggesting that it is much easier for a child to ask those close to him/her not to smoke. Once again, the actions of the children appears to be linked to the attitudes and knowledge of parents, as children of parents bothered by ETS are most likely to have said something about ETS or to have asked someone not to smoke.

Focus Groups with Children

The focus groups with children revealed a number of interesting similarities and differences between the children of smokers and non-smokers and also between younger and older children. Among the key similarities were high levels of

knowledge and awareness of ETS. Many children, however, especially younger ones, had difficulty differentiating ETS from smoking when discussing long-term effects and information sources. Children also shared the view that ETS was dangerous to non-smokers, but their estimates of the amount of exposure to ETS needed to cause a long-term effect varied significantly. Children of smokers were more likely to feel that greater exposure was required. Children also had a common disdain for smoking based on high levels of knowledge about the negative health effects and highly addictive nature of cigarettes. Some of the older children, however, showed signs that peer pressure to try smoking was beginning to manifest itself. Indeed, a number of children indicated that they had trying smoking already.

Almost all children indicated that they were bothered (some a great deal) by ETS. Overall, children of smokers reported much higher exposure levels, with their home being the prime source of exposure. According to most children, their parents placed at least some restrictions on smoking in the home, but non-smoking parents were much more likely to ban smoking. Given their level of exposure, ETS was much less a concern for children of non-smokers.

Children also resorted to common avoidance techniques, with leaving the room being the most popular method used to get away from ETS. Avoidance techniques were seldom used by children of non-smokers, whereas they were a way of life for many children of smokers. Children were unanimous in their view that it was acceptable for children like them to ask someone to put out their cigarette if the smoke was bothering them. In discussing their own experiences, however, children expressed trepidation about asking someone that they did not know very well (i.e., not a member of their immediate family) to put out their cigarette. For children of smokers especially, this hesitance was reinforced by some past negative experiences.

Television was the main top of mind source of information on ETS. Specifically, children in all groups said they had seen the Health Canada advertisements on ETS and smoking. Their comments on these advertisements revealed a very good grasp of the advertisements' core messages. Parents and school were also noted as main sources of information on ETS. All of these sources, but especially television, were suggested as good ways of providing information about ETS to children.

Doctors were deemed to be the most credible source of information across all groups. Younger children, however, also indicated that role models, such as teachers, parents and "stars" had a high level of believability. Older children, in contrast, tended to be a little cynical about these sources. Many older children also indicate that advertising campaigns about ETS should eschew melodrama or histrionics in favour of providing factual information. Overall, children expressed fairly high levels of interest in knowing more about ETS. Older children, though, were more likely to indicated that the topic, especially if discussed in school, was not interesting, although many expressed interest in knowing about "new discoveries" on the topic of ETS.

were most likely to assign a high level of responsibility to government, while smokers accorded a lower level of responsibility to all parties.

Restrictions in the Home

Just over one in six households are subjected to smoke on an ongoing basis, without the implementation of restrictions. That is, 18 per cent of all households include one or more smokers and no restrictions are currently in place to reduce exposure to ETS. Likelihood of the existence of restrictions increases according to the characteristics of the respondent. As with the smoker profile, those who restrict are more likely to be older, have higher levels of education and income, be a non-francophone, live in provinces other than Quebec, be a non-smoker, or be bothered by ETS. Although extended family are more likely to restrict than parents, this may simply be a reflection of the shorter period of time spent with the child. Mothers have thought more about restrictions, and generally express greater concern about exposure to ETS in other areas of the survey. On the other hand, they are less likely to impose restrictions than fathers.

People who restrict are likely to believe that smoking causes disease and death among non-smokers, people have the right to breathe smoke-free air, smoking should be banned from all indoor public places and exposure has a stronger effect on children than it does on adults. These concerned individuals who restrict also believe that the current laws are too lenient and health groups and the media are believable sources of information on the topic.

Impact on the health of a child is the strongest contributing factor in decisions to restrict smoking inside the home. The image created by someone who smokes in front of a child is also a key factor. While other motives are also important, these two stand out as a strong and common theme. Also of interest is the pattern where the younger the child, the more likely parents and extended family are to cite the child as the reason for restricting. In illustration of this, younger parents have throughout the findings shown themselves to be less concerned about exposure to ETS, however, they are more likely than other parents to cite the health of a child as a reason to restrict.

This same theme is also apparent in the consistency with which restrictions are placed on smoking inside the home in general, as compared to in the presence of children. A higher proportion of both parents and extended family restrict in front of children, even though they do not restrict in general. This is especially true in households with younger children where respondents are disproportionately concerned about restricting smoking all of the time regardless of who is smoking (e.g., a friend, acquaintance or household member) and are even more likely to impose restrictions in the presence of their children than at any other time.

Types of Restrictions and Effectiveness of Enforcement Methods

Four types of restrictions inside the home were explored in the study. Non-smokers were more likely than smokers to send people outdoors and remove ashtrays in an effort to reduce exposure to ETS. On the other hand, smokers were more likely than non-smokers to take the softer or easier way out. They tended to open windows and relegate smoking to one room or portion of the house. This would seem to point to the possibility that smokers still do not truly believe that exposure to ETS among (especially children) is bad for non-smokers' health. Alternatively, they may simply believe that opening a window or going to another room is an adequate defense against these effects.

Smokers reported that authority sells enforcement of restriction rules in public places. Signs indicating "no smoking" restrictions are very effective, according to most respondents. A request from a staff member or manager is rated as effective by the second largest proportion of smokers. Requests from individuals without authority, such as friends or strangers, hold far less weight.

Restrictions Outside the Home

As with restrictions inside the home, a wide range of factors appear to influence whether a parent has thought about restrictions outside the home. Whether or not a parent has thought about this issue increases with income and education. Whether a parent has considered this type of restriction also varies by region, language, gender and smoking behaviour. As with other issues, the prevalence of parents who have thought about restrictions outside the home is also lowest in Quebec.

Restrictions outside the home are somewhat more prevalent than in the home. While not quite three quarters of parents had *thought* about restrictions outside the home, almost all who have thought about it, do. It may be easier to restrict outside the home by simply taking measures to avoid it as opposed to restricting in the home, which requires enforcement and actually asking people not to smoke.

As with restrictions inside the home, parents are most likely to avoid ETS or to avoid smoking outside the home when their children are present. Many of those who do not restrict outside the home cited a spouse who smokes or not being bothered by ETS as reasons for not restricting.

Finally, avoidance of ETS outside the home, both in general and when children are present, is correlated with parental attitudes and beliefs. Parents who view smoking as unacceptable, who have positive attitudes towards restrictions on ETS, and who believe ETS to have harmful health impacts, are far more likely to take measures to avoid ETS outside the home.

respondents were not very knowledgeable about two specific health effects of ETS: ear infections in children and SIDS.

Beliefs about the Health Impacts of ETS and Smoking

There was very strong agreement that cigarette smoking causes disease among smokers, but somewhat less agreement (although still the predominant view) that ETS causes disease and death among non-smokers. On the other hand, respondents were fairly equally divided in terms of whether they believe that a person has to be heavily exposed to ETS for a number of years before it would have negative effects.

Stronger agreement with the belief statements about negative health effects of ETS were found among respondents in higher income brackets, those with higher levels of education and those with higher scores on the knowledge index. Those who expressed lower levels of agreement tended to be francophones, smokers, individuals living in smoking households and those who are not bothered by ETS. Whether this is truly disbelief about negative health effects or ETS, denial of scientific findings, or a basic lack of awareness, however, is not clear from the present study.

Beliefs which are more in line with accepted ETS research findings were more likely to be held by individuals whose close social circle contained none or few regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Ironically, this group was also more likely to feel that too little information was available about ETS.

Attitudes Toward ETS

Relative to a number of health issues including prevention of AIDS, improving nutrition and reducing tobacco use among youth, ETS was given a lower priority, along with improving nutrition and reducing tobacco use overall. Replicating the same patterns as earlier, smokers, people living in smoking households and those who are not bothered by ETS tended to give lower ratings of importance to these tobacco-related issues. These issues were viewed as increasingly more important with increasing age and income and by allophones.

In general, individuals who feel that the three tobacco-related issues are important also tended to agree with the various belief statements concerning negative health effects of ETS and to disagree that smoking is socially acceptable.

Attitudes Toward Smoking

Only half the sample disagreed that smoking is socially acceptable. At the same time, there was strong agreement that people should have a right to be free

from breathing other people's second-hand smoke. Individuals in higher income brackets and with higher levels of education were more likely to feel smoking is not socially acceptable and that people should be able to breathe ETS-free air.

Attitudes which are negatively disposed toward ETS and smoking were more likely to be held by people whose close social circle contained no or few regular smokers and those who have had someone close to them die or become seriously ill as a result of a smoking-related illness. Once again, smokers, individuals living in smoking households and people who are not bothered by ETS were more likely to agree that smoking is socially acceptable and less likely to agree that people should have a right to smoke-free air.

Attitudes Toward Restrictions

There was fairly strong agreement that smoking in all indoor public places should be banned and that it is appropriate for the government to be involved in raising public awareness about ETS. Agreement was lower among smokers, individuals from smoking households and those who are not bothered by ETS. Also in line with previous findings, stronger agreement was found among older respondents, those in higher income brackets and with higher education levels, and anglophones and allophones.

Legal Restrictions on Smoking

Awareness of legal restrictions on smoking is fairly high, although the perceived level of restrictions varies considerably across the country. Most were aware of restrictions in children's schools, restaurants and the workplace, while very few were aware of restrictions in bars and pubs. Awareness of legal restrictions on smoking varied significantly by community population, increasing with community size. The perceived level of restrictions was lowest in Quebec and among francophones.

Support for legal restrictions on smoking appears to be fairly strong. Most view the current level of legal restrictions as too lenient or appropriate, while just under a quarter consider the current level to be too strict. Opinions on legal restrictions varied significantly by a number of background variables, including income, education, region, knowledge levels, smoking behaviour and whether bothered by ETS. Respondents from Quebec were more likely to view current laws as appropriate, even though they were aware of fewer legal restrictions than respondents from other provinces.

Finally, respondents assigned greater responsibility for restrictions on smoking in public places to owners/managers and to individuals than to government. Respondents with higher family incomes, levels of education and knowledge about ETS

required to fill the need for a better understanding of the current knowledge levels, attitudes and practices of parents and extended family members, as well as children, with respect to second-hand smoke.

Methodology

Two central lines of evidence in this research are telephone surveys: one with parents of children under 13 years of age; and one with extended family members of children the same age. The two surveys were conducted simultaneously. The third line of evidence was a series of 20 focus groups with children ages 8 through 12.

Survey of Parents and Extended Family

Eligible respondents in the sample were parents or extended family members of children 12 years old or younger. A total of 2,300 parents and 700 extended family members were interviewed. The survey samples reflect normal distributions across the country.

The sample of parents was selected at random using a computer listing of telephone numbers. Parents were asked to provide the name of an extended family member fitting the criteria for the survey. One in three respondents were typically able to provide one. This resulted in interviews with two-thirds of the extended family member sample (n=460). The remaining one-third of extended family members (n=240) were selected randomly.

Focus Groups With Children

In addition to the two surveys, the study consulted with children between the ages of 8 and 12 in 20 focus groups conducted across the country. Ten groups were held with 8 to 10 year olds and ten were held with 11 and 12 year olds. Groups were also evenly split between children of smoking parents and those of non-smoking parents.

KEY FINDINGS

Profile

Smokers are far more likely to be younger, less educated and have lower incomes than non-smokers. Francophones and residents of Quebec are also found in disproportionately high numbers among those currently smoking. Smokers also cluster together, in that several smokers can often be found in one household and it is more likely that many members of their social circle also smoke.

Knowledge

When asked to list the top-of-mind health impacts of ETS, survey respondents identified lung cancer and asthma most frequently, followed by respiratory illnesses, heart disease and allergies. Respondents' level of knowledge about specific health impacts was variable: while most were fairly certain that arthritis is not caused by ETS and that lung cancer, asthma and bronchial problems are, most were not aware that ear infections in children and SIDS are related to ETS.

Knowledge levels were more systematically assessed using an index which was closely examined to determine whether there are particular segments of the population which are more or less knowledgable. While there were no differences between parents and extended family members, females and allophones were more likely to score higher on the index. As well, there were close relations between smoking behaviour, exposure to ETS and reaction to this exposure and the index: smokers and people living in smoking households demonstrated lower levels of knowledge about the health impacts of second-hand smoke.

Sources of Information

Most respondents reported having heard about second-hand smoke through news reports, friends and family, doctors and paid advertisements. Not surprisingly, individuals who scored lower on the knowledge index reported having heard about ETS from fewer sources than those scoring higher. From a selection of possible sources of information, doctors and health groups were considered to be the most believable. News reports, warnings on cigarette packages and the government were the second most believable group of sources of information. The tobacco industry was found to be the least credible.

As might be expected, different groups of people believe different deliverers of messages. Rated credibility of sources were related to a variety of socio-demographic variables. For example, doctors were viewed as more believable by individuals in higher income groups, those with a university education and by anglophones and allophones. Francophones, on the other hand, gave higher believability ratings to news reports and the tobacco industry than did other language groups.

Smoking behaviour and exposure were also related to the credibility ratings given to these sources. By and large, all sources, with the exception of the tobacco industry, were viewed as less believable by smokers, individuals living in smoking households and by those who are not bothered by ETS, which presents a particular communications challenge as these may be the people who need most to receive messages about ETS.

The majority feel that too little information is available on the health impacts of ETS on children. This provides added weight to the finding that

EXECUTIVE SUMMARY

Background

There is accumulating scientific evidence confirming the deleterious effects of second-hand smoke, or environmental tobacco smoke (ETS), on people's health. Various research findings make a compelling case about the harmful effects of people's exposure to tobacco smoke in the environment, even when they themselves are not smoking.

In response to scientific information, governments have begun to take steps to increase people's awareness of these issues, to protect the rights of non-smokers and to reduce people's exposure to ETS and the associated health risks.

In Canada, the *National Strategy to Reduce Tobacco Use (NSTRTU)* was initiated in 1987 with three primary goals: (1) to help non-smokers stay smoke-free (prevention); (2) to encourage and help people who want to quit smoking to do so (cessation); and (3) to protect the rights and health of non-smokers (protection). A number of measures are being implemented to pursue the NSTRTU goals, including policy and legislation (e.g., the 1989 *Non-Smokers' Health Act* and the 1989 *Tobacco Products Control Act*), education, public awareness, research and taxation.

Study Objectives and Issues

The present research involved a survey of adults and discussion groups with children to provide information Health Canada can use to develop policies and programs which protect non-smokers and reduce exposure to ETS, particularly in children.

Based on a review of the literature, it is apparent that there are tremendous data gaps with respect to levels of general knowledge and awareness of the ill effects of ETS, especially for specific target groups. The present study was

EXHIBIT 8.8
Government Involvement by ETS Segments

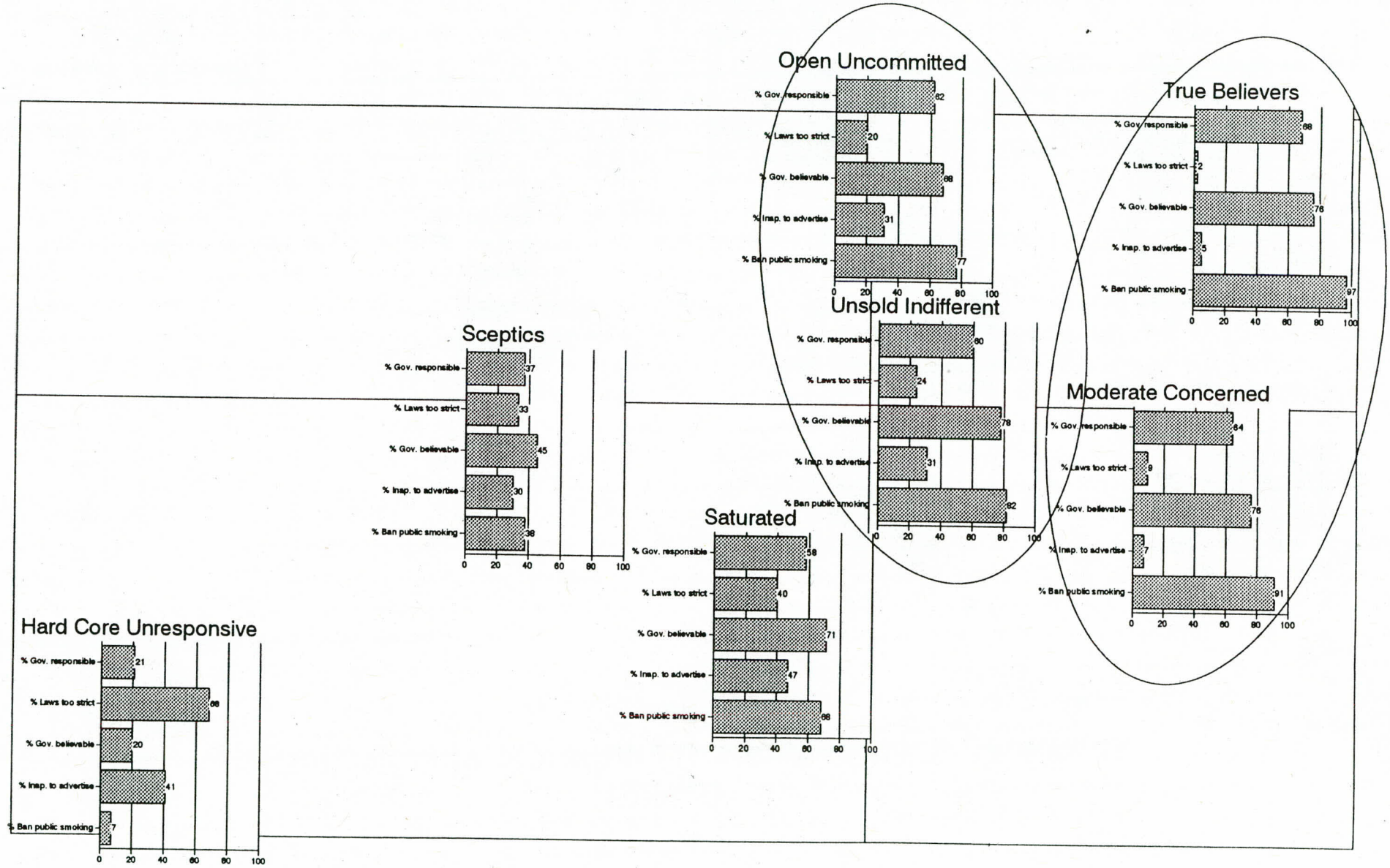


EXHIBIT 8.7
Believability of Various Sources for ETS Segments
(% believable)

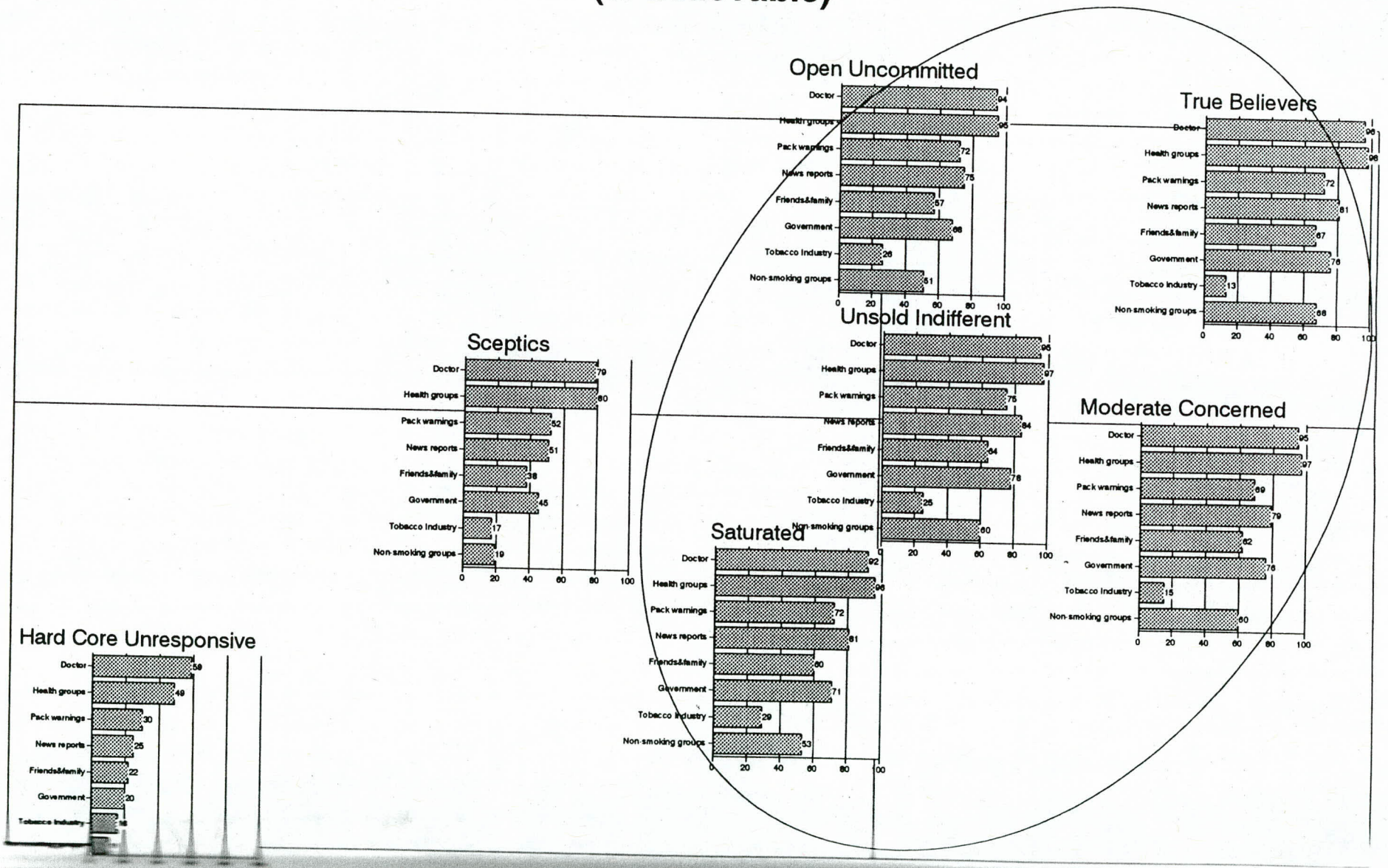


EXHIBIT 8.6

Attitude to the Amount of Information Available on ETS by ETS Segments (% too little)

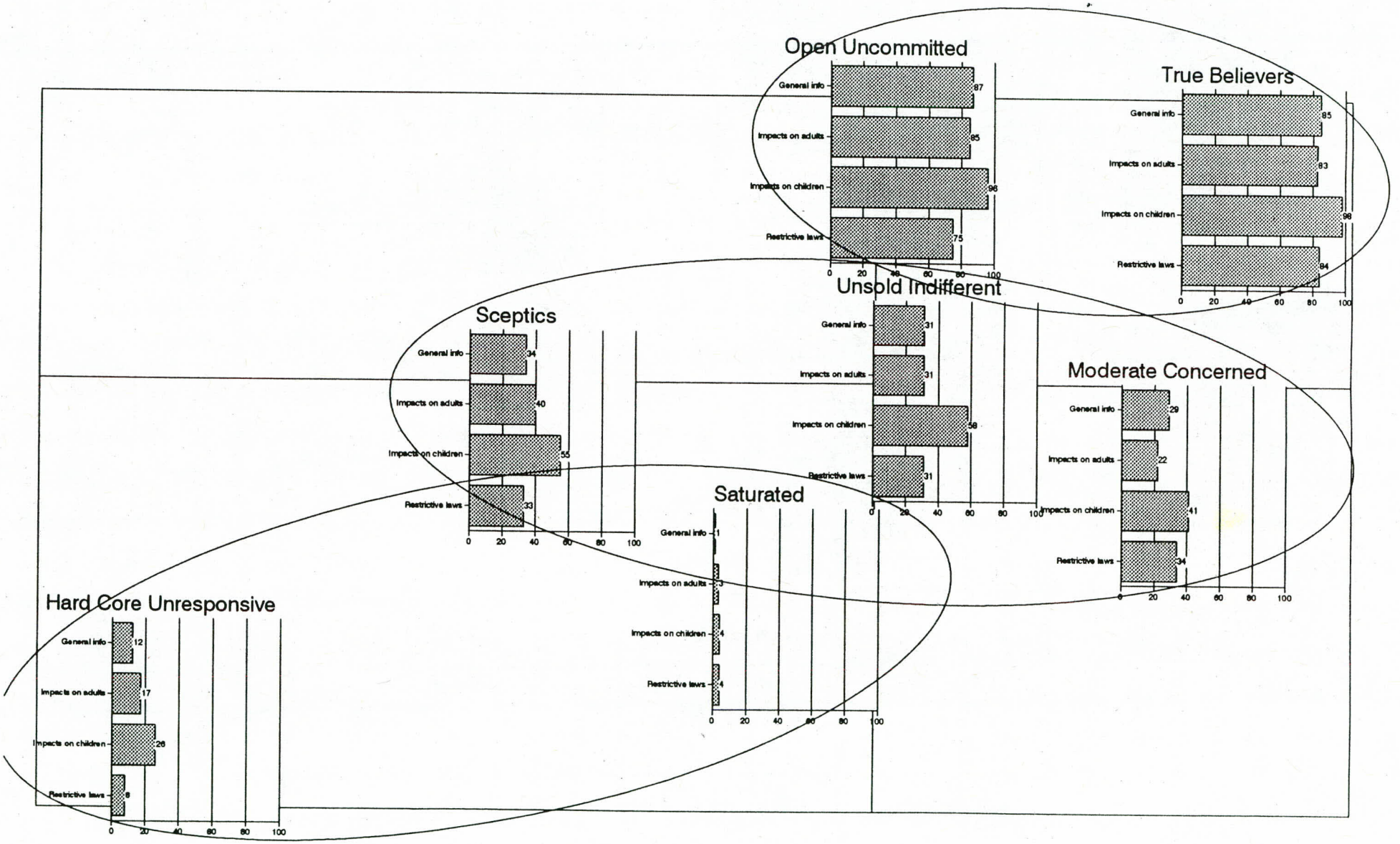


EXHIBIT 8.5
Attitudes to ETS by ETS Segments
(% agree)

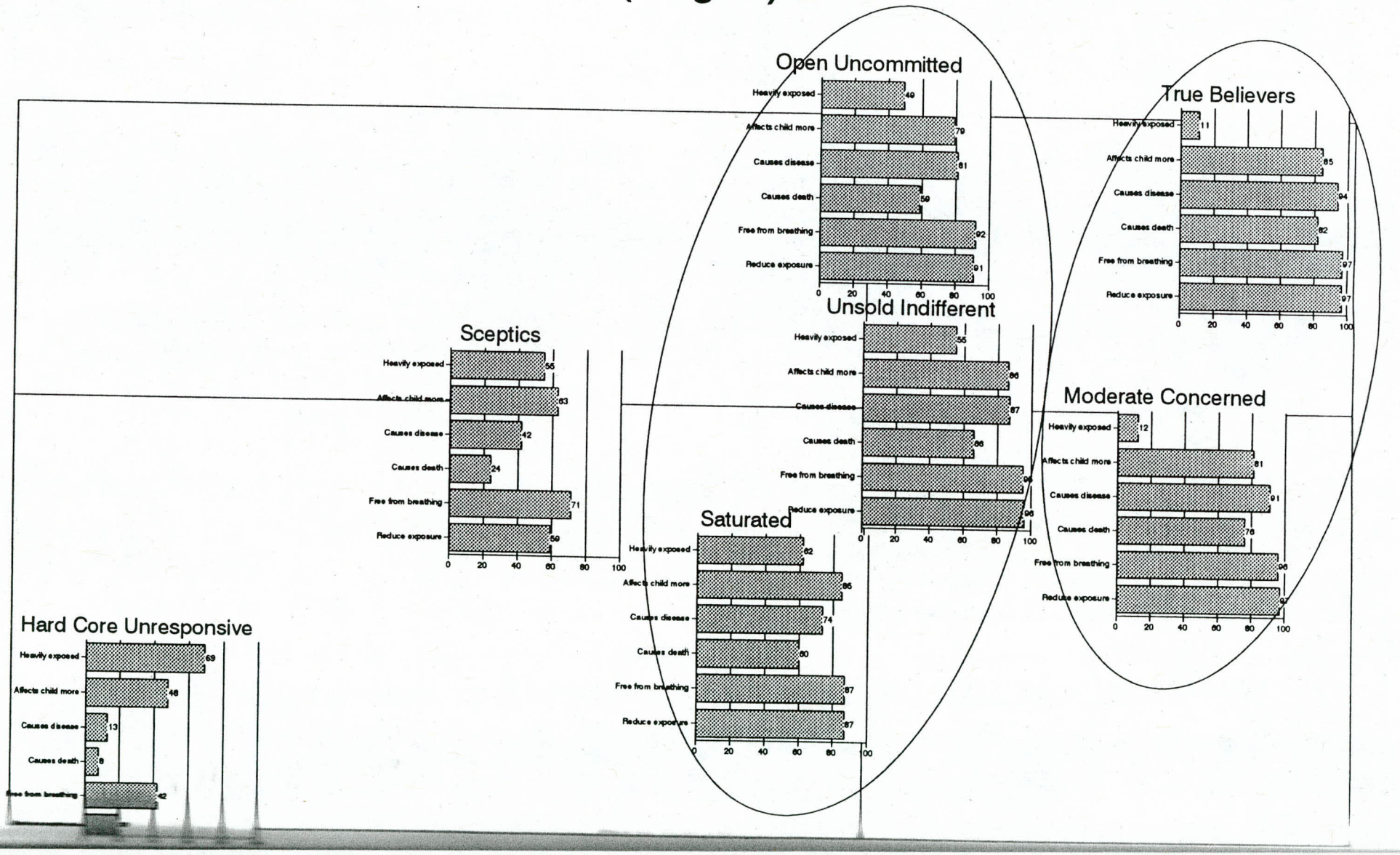


EXHIBIT 8.4
General Attitudes About Tobacco by ETS Segments
(% agree)

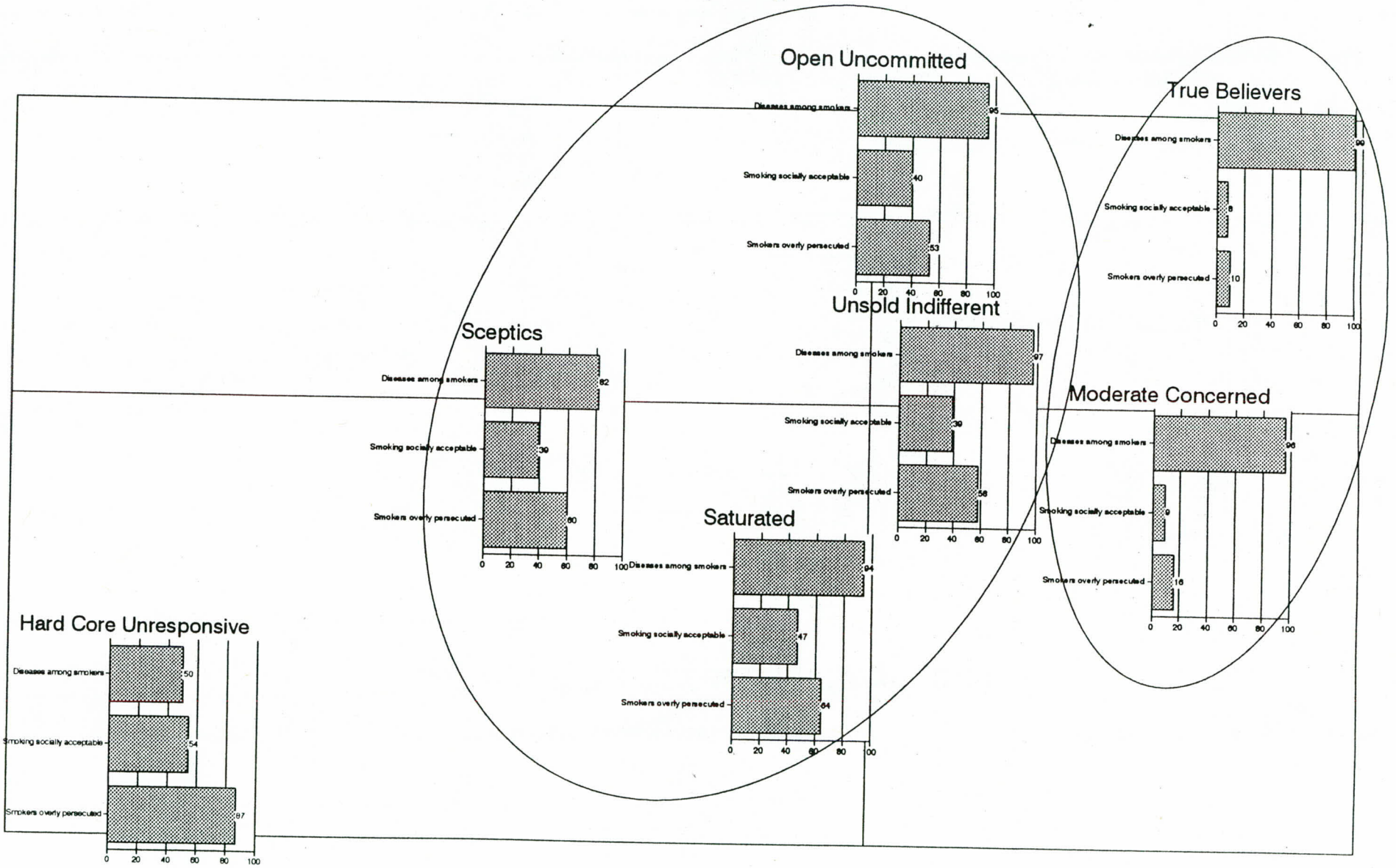
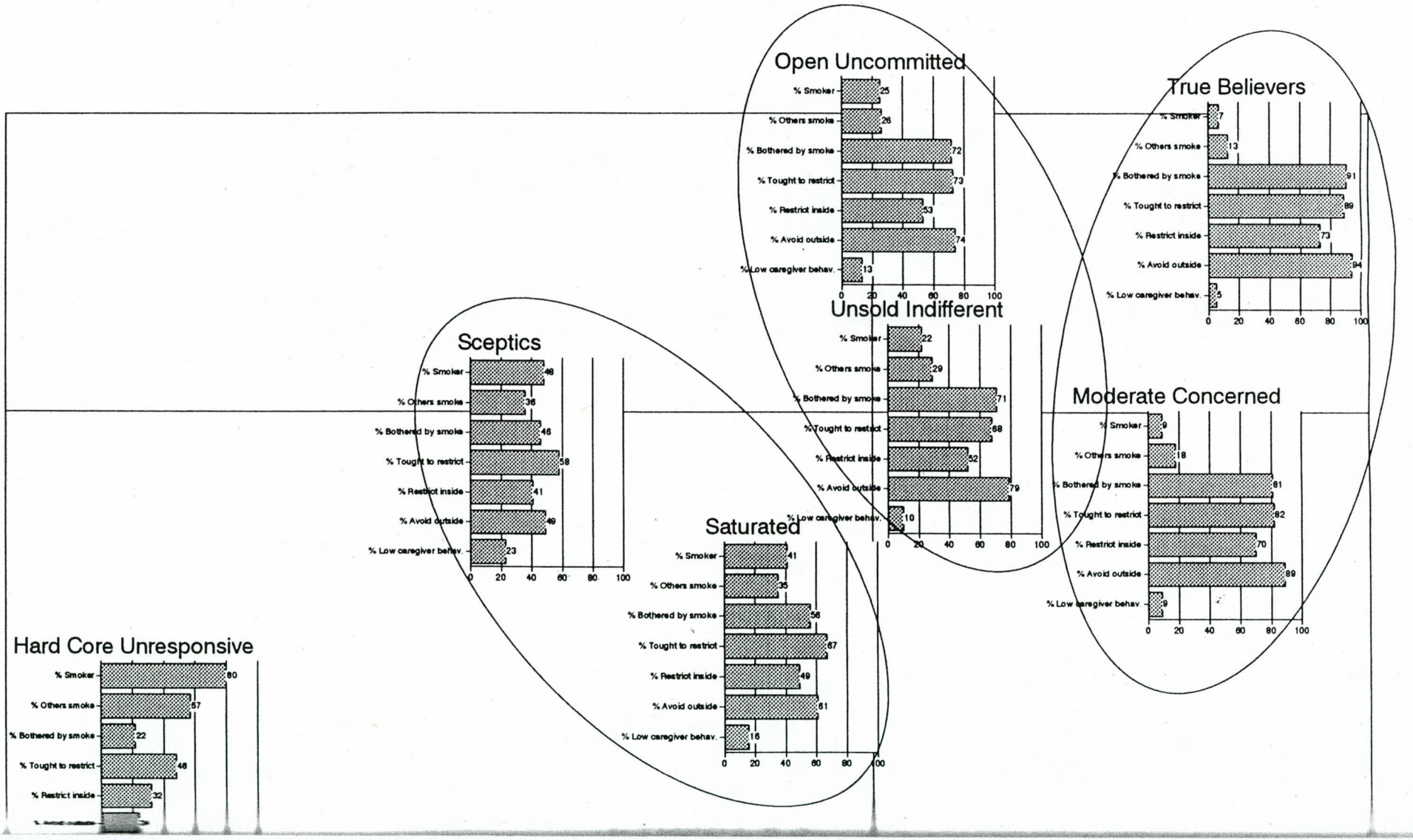


EXHIBIT 8.3
Behavioral Profile of ETS Segments



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Monograph

NAME(S): Horvath, John
Canada. Health Promotion Directorate
Ekos Research Associates

TITLE(S): *An assessment of knowledge, attitudes and practices concerning environmental tobacco smoke : final report, March 31, 1995 / submitted to John Horvath, Health Promotion Directorate, Health Canada ; submitted by Ekos Research Associates Inc

PUBLISHER: Ottawa : Ekos Research Associates Inc., [1995]

DESCRIPTION: 1 v. (various pagings) : ill. ; 28 cm.

NOTES: Running title: Assessment of knowledge, attitudes and practices concerning ETS
Cover title.
Includes bibliographical references: p. [73-77] (3rd group).

NUMBERS: Canadiana: 987033239

CLASSIFICATION: LC Class no.: RA645 T62 A88

SUBJECTS: Passive smoking--Canada
Passive smoking--Health aspects--Canada
Tobacco smoke pollution--Canada
Health surveys--Canada

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Created: 2002-07-08
Updated: 2003-11-19

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