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with The Hay Health Care Consulting Group

Special Report
Risk Behaviours Among Smokers
Surveys November 2003-November
2004

POR-03-68
H1011-03-0102

Special Report on Risk Behaviour Among Smokers

Executive Summary

This report sets out of the findings of the questions commissioned by Health Canada regarding risk behaviours among smokers. The questions were administered by the Institute for Social Research, York University, in the monthly national surveys during the period from November 2003 through November 2004 with a response rate of 50.2% (see Methodology below). The sample size of smokers is 1,772 persons aged 15 and older, representing approximately 20% of the population aged 15 and older.

The detailed Statistical Tables follow after the charts and written analysis, Methodology and Questions sections.

First, a technical note. Most of the items have multiple response categories. In the Statistical Tables we have produced all the responses in the statistical tables along with the individual cell sizes. We emphasize that cells, or aggregations of cells, with less than 31 respondents are not large enough to be published on their own.

Smoking in Bed

Fourteen percent of smokers reported they had smoked in bed in the past week. This translates into about 670,000 smokers.

Seven in 10 (72%) smokers volunteered that they 'never' smoked in bed.

In all 28% of smokers admitted they had smoked in bed at some point in their smoking life. Among this group, when asked how often they did so in the past year, a quarter (26%) volunteered they had not done it in the past year; and four in 10 said they smoked in bed everyday, a few times a week, or once a week.

One in 10 smokers acknowledged they have fallen asleep in bed with a lit cigarette sometime in the past week, in the past month, in the past several months or more than six months ago. Among those who admit to falling asleep this way, when asked how often they had done so in the past year, 36% volunteered they had not done so in the past year, 39% said they had done it once; another 18% said they had fallen asleep more than once in the past year.

Cigarettes and Ashtrays

One in five (22%) of smokers report they left a cigarette burning in the ashtray in the previous week, and a quarter said they had done so in the past month, six months or more than six months ago. Half (51%) reported they had never done such a thing and 1 percent said they did not use ashtrays.

Among those who admit to having left a cigarette burning in the ashtray at some time, when asked

how often they had done so in the past year, more than a quarter (28%) volunteered they had not done it in the past year, and 41% reported they had done it at least once a week or more frequently.

Disposing of Cigarettes

Four in 10 smokers (39%) report they empty their ashtrays into their indoor garbage bin. The question does not provide for soaking the ashtray before dumping it or other precautionary measures, so we do not know what proportion of those using indoor garbage bins or other receptacles are taking these precautionary measures first. A third (35%) of smokers report they use a metal container.

Almost 8 in 10 smokers (77%) report they do not empty their ashtrays immediately but wait until it is full or almost full.

Smokers and Burns

One in 10 (13%) of smokers report that they accidentally burned something with their cigarettes 'today, yesterday', the day before yesterday, in the past week, or in the past two weeks.

Most of those (77%) who acknowledged they burned something with their cigarettes report it was one to five objects over the past year. Another 15% report they burned six objects or more (Note: the aggregated size of this group of aggregated responses is only 34 but we consider this percentage reasonably solid because of the 77% reporting they burned one to five objects, N=173.

Asked the size of the burns (sfr11), 86% reported that none of the burns were as large as 2 centimetres (the size of a quarter).

Unpublished Results

The results for the questions sfr12 and sfr13 are not analysed because the cells sizes for the response categories are <30 and therefore too small to report.

sfr12 How many burn marks would you say were bigger than 10 centimetres, or the size of a small saucer? Would you say none, one to three, four to ten, or more than ten?

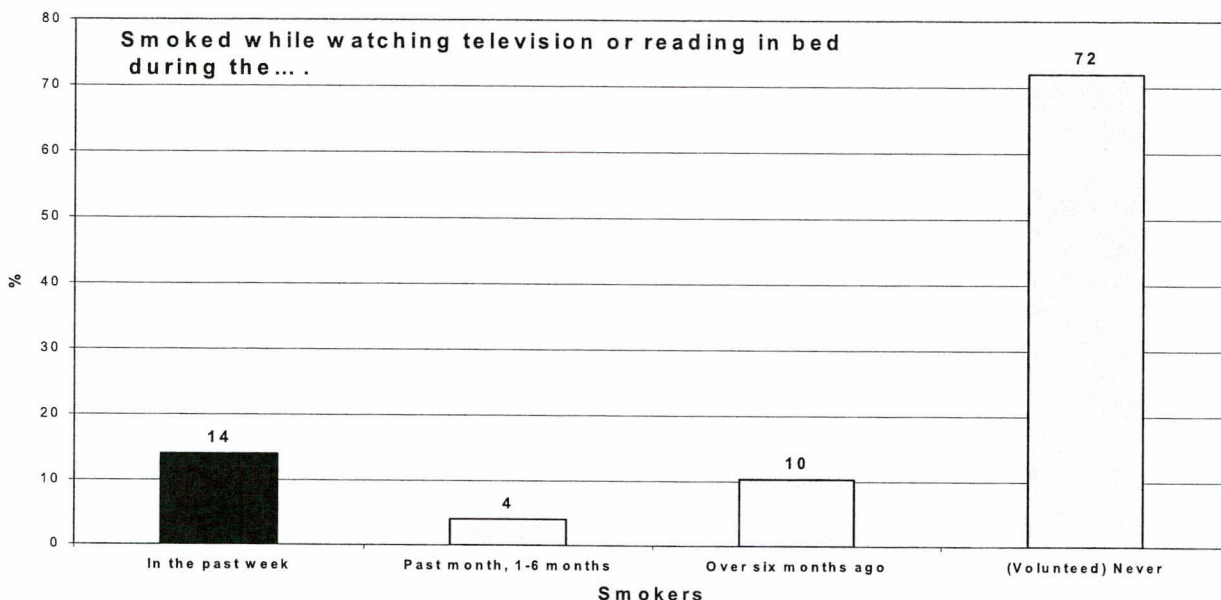
sfr13 Were the burn marks on any of the following items: READ List, enter 1 to all that apply a ... Upholstered furniture such as sofa, couch or easy chair? b ... Carpet? c ... Clothing? d ... Bedding or mattresses? e dont know r refused

sfr14 Was the fire department called?

- 1 Yes
- 5 No
- d dont know
- r refused

The results for these questions are available in the microdata in order to provide a full record of the items and results.

Smokers' Risk Behaviours: A Quarter of Smokers Acknowledge Smoking in Bed; One in Seven in the 'Past Week'



sfr1. Many people smoke while watching television or reading a book in bed. So far as you can remember have you smoked in bed....READ, CODE ONE a. In the past week b. In the past month c. Within one to six months d. Over six months ago (Volunteer) never

Surveys #27-28 Oct '03-Nov '04

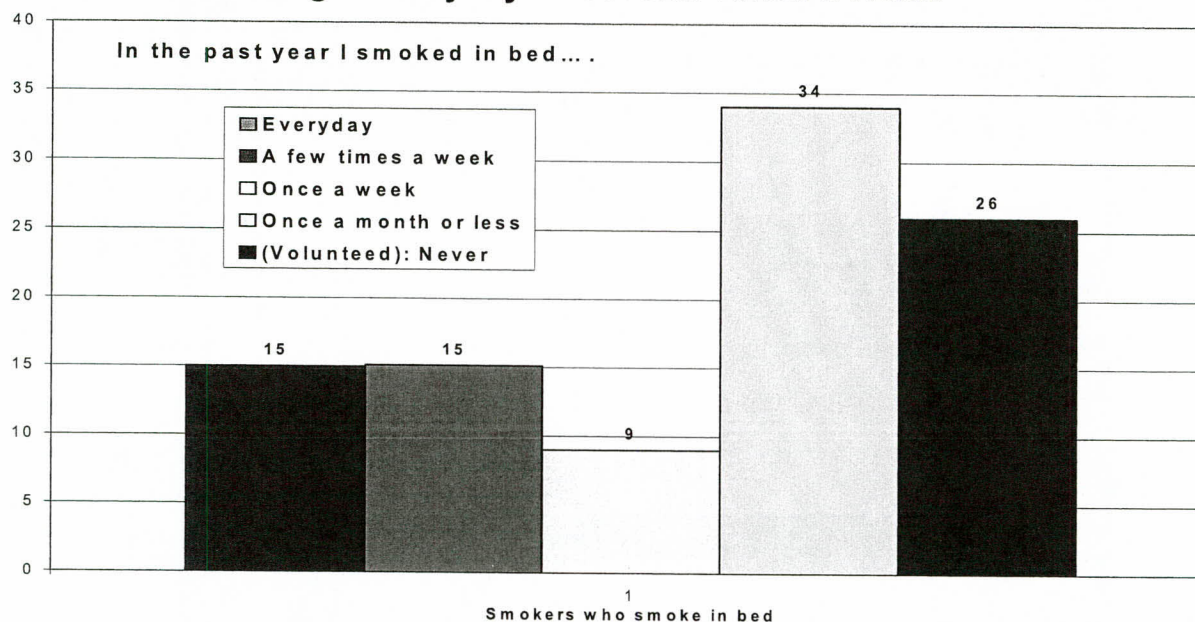
Sample: smokers
N= 1,772

Overall:

Seven in 10 smokers (72%) volunteered that they have never smoked in bed.

However, 14% report they have done so in the past week and another 14% report they have done so less recently.

Smokers' Risk Behaviours: Of Smokers Who Report Smoking in Bed, Almost A Third Admit Doing It Everyday or Several Times a Week



sfr2 In the last year, would you say that you smoked in bed everyday, a few times a week, once a week, once a month or less, (Volunteered: never)

Surveys #27-28 Oct '03-Nov '04

Sample: respondents who reported smoking in bed

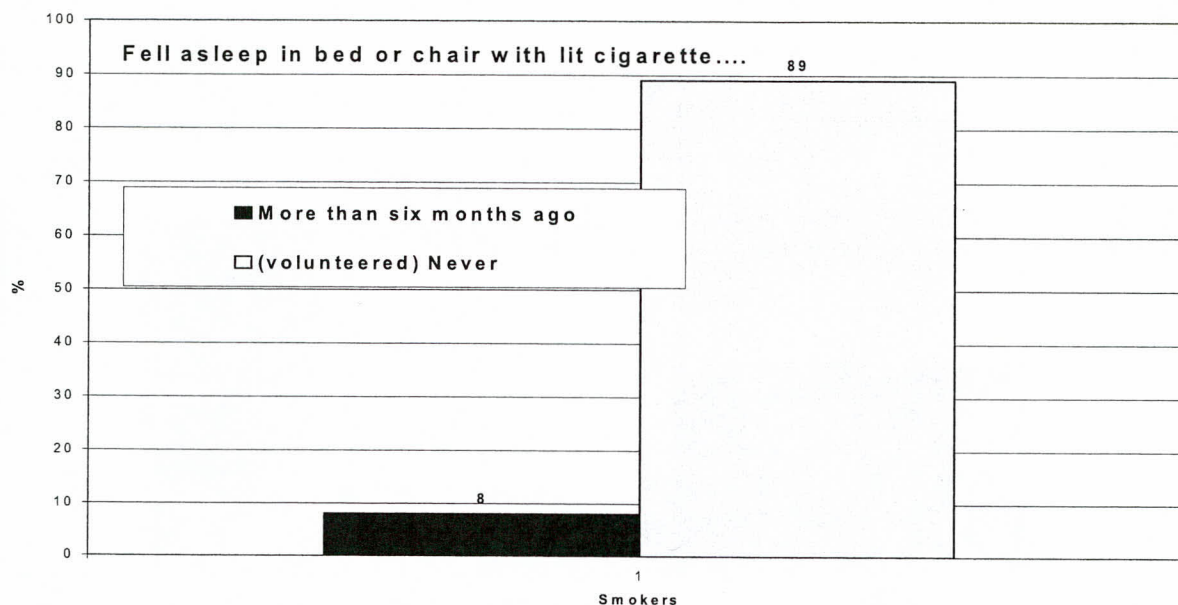
N=496

Overall:

Responses to this question, despite the social bias involved, indicate a high proportion of smokers frequently smoke in bed. Among those acknowledging they have smoked in bed:

- 15% report they have done so every day in the past year.
- 24% report they have done so several times a week or at least once a week;
- 34% report they smoke in bed once a month or less.
- A quarter (26%) of those in this subsample volunteered that they never smoked in bed in the past year.

Smokers' Risk Behaviours: One in 10 Smokers Admits Falling Asleep With A Lit Cigarette



sfr3 Sometimes people doze off or fall asleep in a chair or in bed with a lit cigarette either in their hands or in the ashtray. So far as you can remember, has this happened to you in the past week, in the past month, within one to six months, or over six months ago?

Surveys #27-28 Oct '03-Nov '04

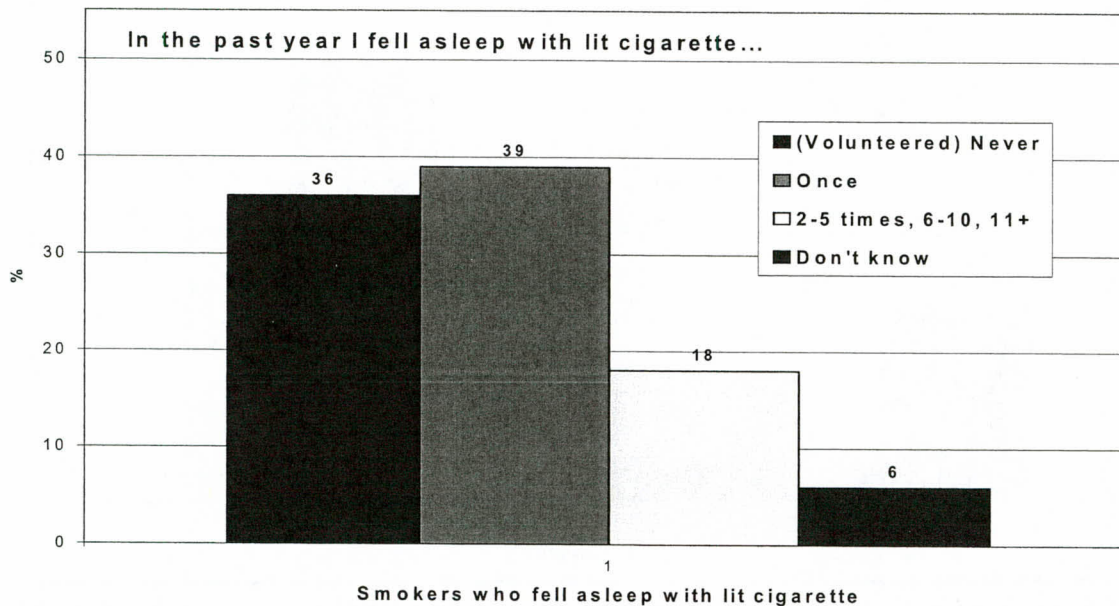
All smokers N=1,770

Overall:

Nine in 10 smokers insist that they have never fallen asleep with a lit cigarette:

- 8% report they had fallen asleep with a lit cigarette more than 6 months ago;
- Very few respondents reported they had fallen asleep with a lit cigarette in the past week, month, or 1-6 months (the aggregated responses produce N<31 which is too small to report).

Smokers' Risk Behaviour: Almost Six in 10 Smokers Who Acknowledge Falling Asleep In Bed With Lit Cigarette Report They Have Done So In The Past Year



sfr4 In the last year, would you say that this has happened to you once, two to five times, six to ten times, or eleven or more times?

Surveys #27-28 Oct '03-Nov '04

Smokers who report falling asleep with lit cigarette

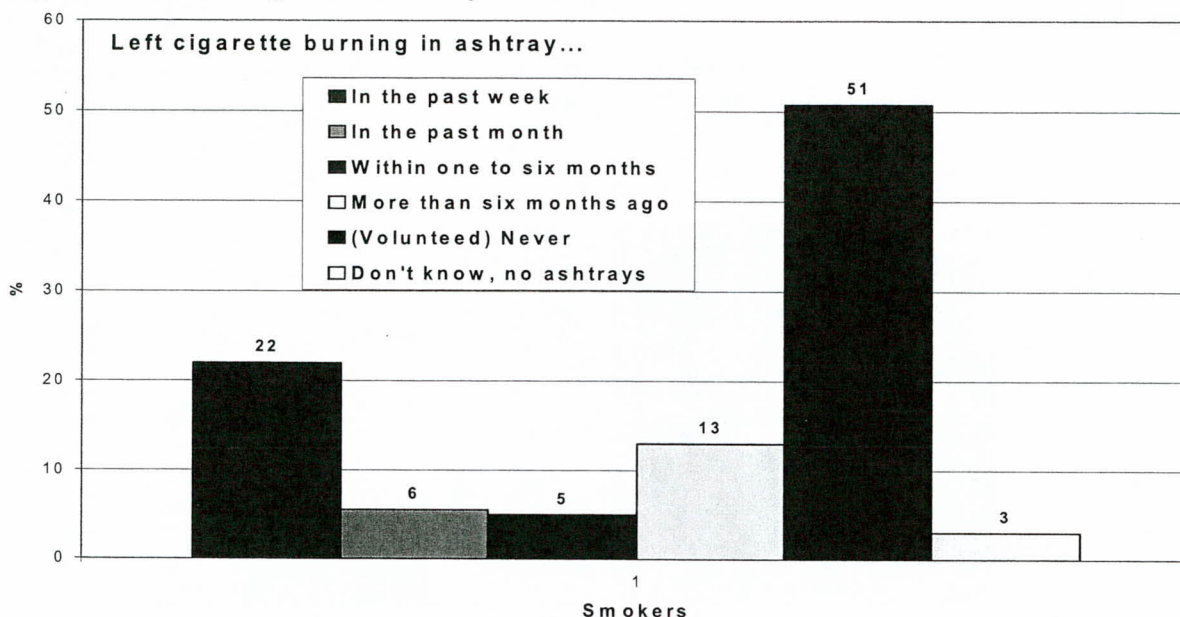
N=174

Overall:

Among those who had just reported they had at some time fallen asleep with a lit cigarette, almost 4 in 10 (36%), on being asked how often this had happened in the past year, volunteered that it had never happened during that time period.

One in five (18%) reported that they had fallen asleep two to five time, six to 10 times or 11 or more times. The responses for the individual categories are not reported here because of the small cell sizes.

Smokers' Risk Behaviour: One in Three Smokers Acknowledge They Left Cigarette Burning in Ash Tray At Least Once in Previous Six Months



sfr5 Sometimes people have reason to leave a cigarette burning in an ashtray while they attend to other things, such as answering the door or the phone. Would you say that you have found yourself in this situation: 1. In the past week 2 In the past month 3 Within one to six months 4 Over six months ago 5 (Volunteered): Never

Surveys #27-28 Oct '03-Nov '04

Sample: smokers
N=1,772

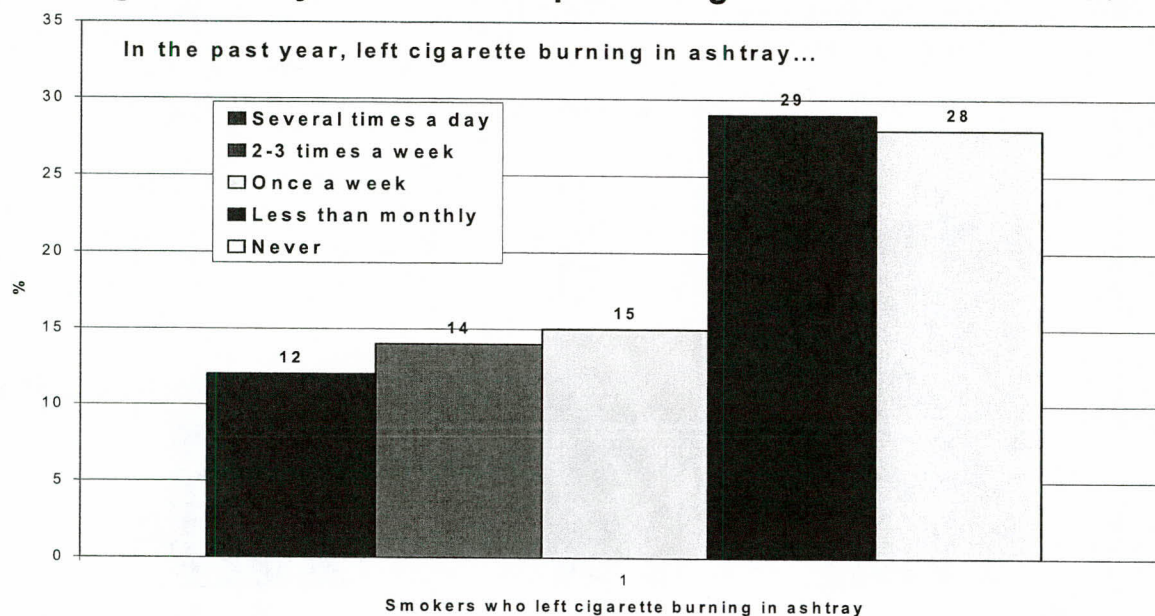
Overall:

One in three smokers (33%) acknowledge that within the past six months at least once they had left a cigarette burning in an ashtray while they left to do other things; 13% reported they had done so more than six months ago.

Half (51%) volunteered they had never done such a thing.



Smokers' Risk Behaviour: Among Those Who Report Leaving Cigarette Burning in Ashtray, Four in 10 Report Doing It At Least Once A Week



sfr6 In the last year, would you say that you have left a cigarette burning in an ashtray while you had to attend to something else: 1 Several times a day 2 2-3 times a week 3 Once a week 4 Less than monthly 5 (volunteered) Never

Surveys #27-28 Oct '03-Nov '04

Sample: smokers reporting they had left a cigarette burning in an ashtray

N=820

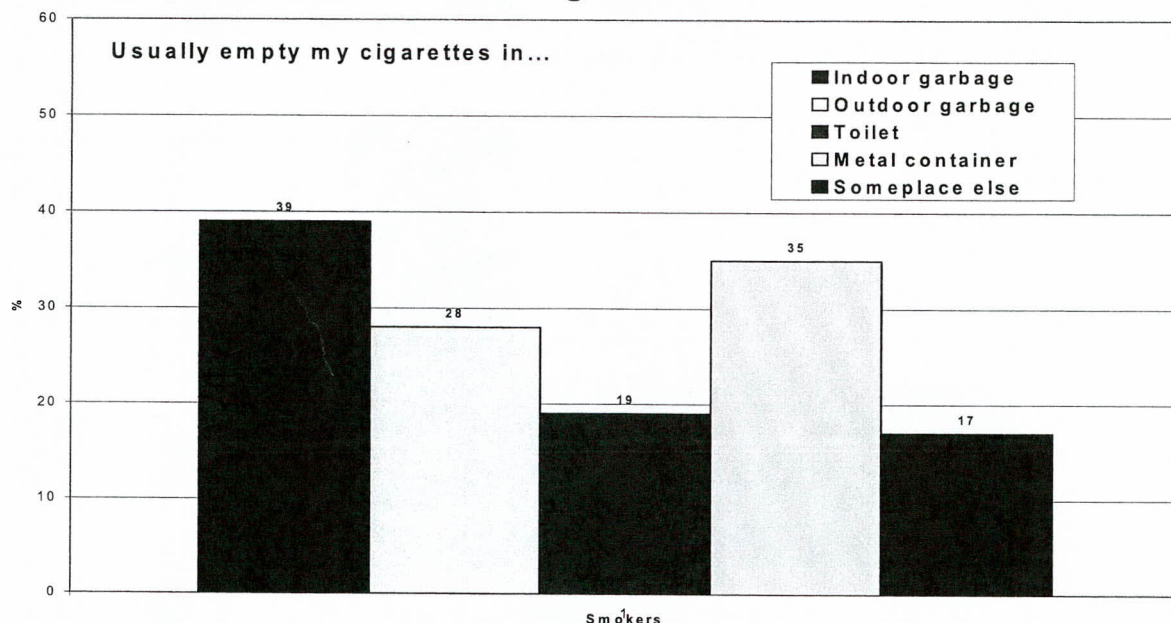
Overall:

A substantial proportion of respondents (28%) deny they ever left a cigarette burning in an ashtray during the past year.

More specifically:

- 12% say they have left a cigarette burning several times a day in the past year;
- another 14% report they do so 2-3 times a week
- 15% report they do it about once a week
- 29% report they do it less than once a month.

Smokers' Risk Behaviour: Almost Four in Ten Smokers Report They Dispose of Their Cigarettes in Indoor Garbage



sfr7 Where do you usually empty your ashtrays? a. Indoor garbage bin b. Outdoor garbage bin c. Toilet d. Metal container, i.e., tin can e. Some place else?

Surveys #27-28 Oct '03-Nov '04

Sample: smokers N=1,758

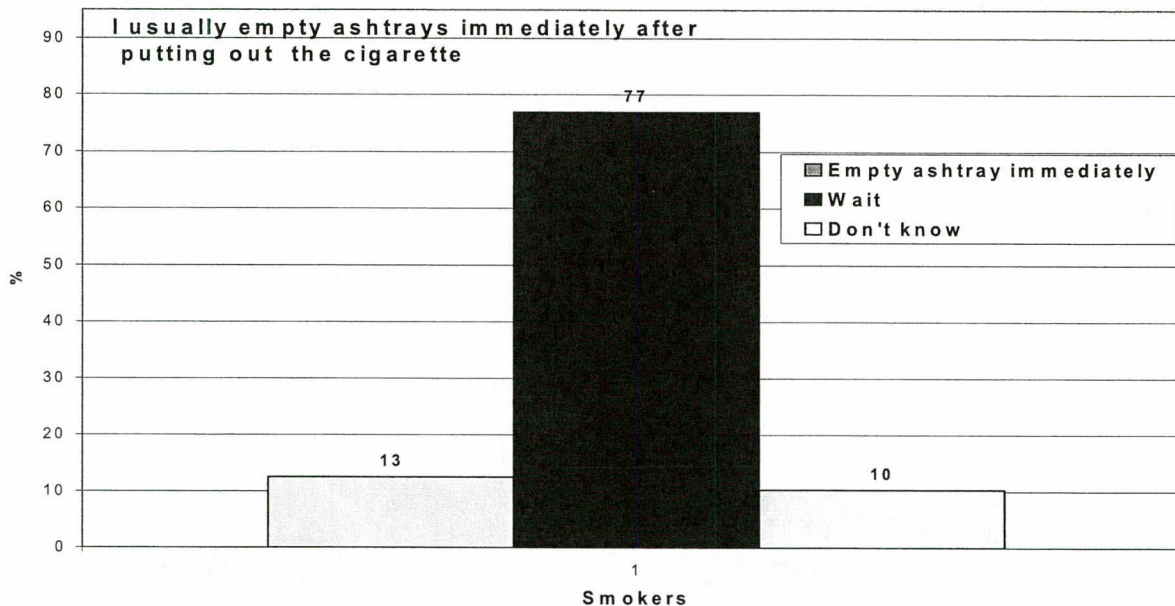
Overall:

Asked where they empty their ashtrays, smokers report:

- Four in 10 smokers (39%) report they empty their ashtrays into their indoor garbage,
- Almost the same percentage (35%) say they empty their ashtrays into metal containers (the location is not specified),
- A quarter (28%) say they use the outdoor garbage,
- 19% use the toilet, and
- 17% use something else.



Smokers' Risk Behaviour: Many Smokers Wait To Empty Ashtrays



sfr8 Do you empty ashtrays immediately after putting out a cigarette or do you usually wait until it is full or almost full?

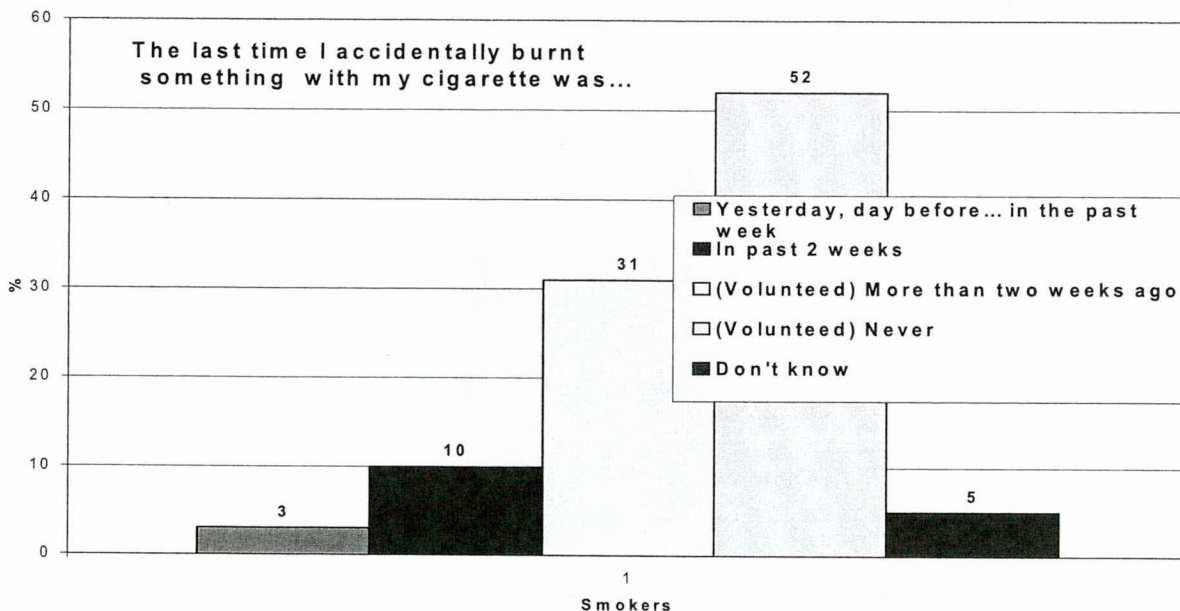
Surveys #27-28 Oct '03-Nov '04

Smokers N=1,759

Overall:

Almost 8 in 10 smokers (77%) report that they do not empty their ashtrays immediately, but wait until it is full or almost full; 13% report they empty ashtrays immediately.

Smokers' Risk Behaviours: One in Ten Smokers Report Burning Furnishings in Past Two Weeks; Half Claim Their Cigarettes Never Burned Anything



sfr9 It is quite common for things such as carpets, couches and clothing to get burnt accidentally by cigarettes. Would you say that the last time one of your cigarettes accidentally burned something was: 1. today or yesterday, 2. the day before yesterday, 3. in the past week, or 4. in the past two weeks, 5. (volunteered) more than two weeks ago 6. (volunteered) never.

Surveys #27-28 Oct '03-Nov '04

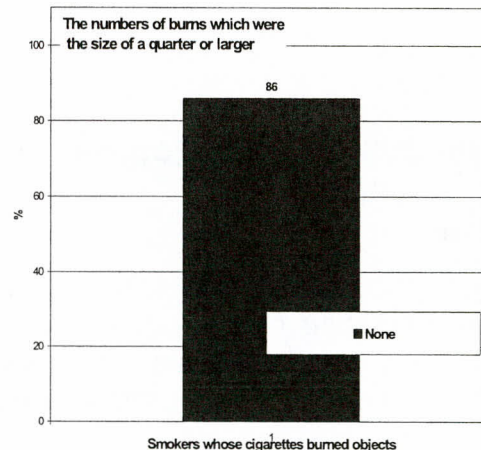
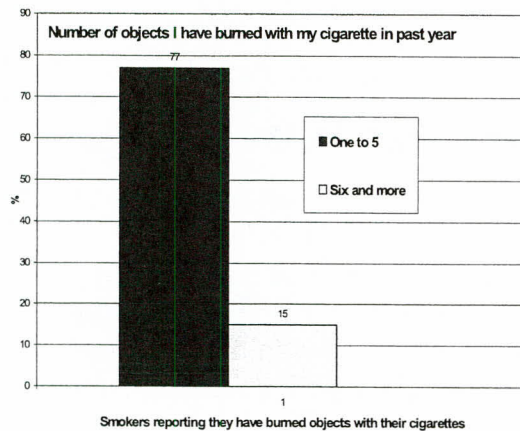
Sample: smokers N=1,770

Overall:

Three percent reported they had burned something yesterday, the day before or in the past week (the categories have been aggregated because of small cell sizes).

In all, 13 percent of smokers reported they had burned something in the past two weeks. Half (52%) of all smokers claim they had never burnt anything with their cigarettes.

Smokers' Risk Behaviour: Few Smokers Who Burn Something Admit to More Than Five Incidents; Most Report the Burns Were Smaller Than Size of A Quarter



sfr10 Thinking back over the last year, how many things would you say you have accidentally burnt with a cigarette?
Would you say: 1. One to five objects 2. Six to 10 objects 3. 11 to 15 objects 4. More than 15 objects 5 (volunteered) none.
sfr11 As best you can remember, how many of the burn marks were larger than two centimetres, or the size of a quarter?
Would you say: 1 None 2 One to three 3 Four to ten 4 more than ten?

Surveys #27-28 Oct '03-Nov '04

Sample: sfr10 Smokers who report they burned something with their cigarettes N=225, sfr11-209

Overall:

Most of those (77%) who acknowledge they burned something with their cigarettes report it was one to five objects over the past year.

Another 15% report they burned six objects or more in the past year.

Very few of the 225 respondents report they had not burned any objects in the past year. The N for this subgroup is <31 and too small to report on its own.

Asked the size of the burns (sfr11), 86% reported that none of the burns were as large as 2 centimetres or the size of a quarter. Very few respondents reported burns larger than a quarter (N<31 which is too small to report).



Methodology

1. The 2004 Berger Population Health Monitor - Methodology

1.1 Outline

The Berger Population Health Monitor conducts a national telephone survey of the Canadian population 15 years of age and older with a one year rolling sample with monthly targets for completions. The survey instrument is shared with the Physical Activity Monitor of the not-for-profit Canadian Fitness and Lifestyle Research Institute in Ottawa.

The Smoker Fire Safety questions were part of the surveys conducted during November and December 2003 as part of the 2003 Berger Population Health Monitor and from January to November 2004 as part of the 2004 Berger Population Health Monitor.

The surveys were administered by the Institute for Social Research (ISR) at York University, Toronto, Ontario.

1.2 Questionnaire Design

The questions in this report were prepared by Health Canada.

1.3 Survey Administration

All interviews were conducted from ISR's centralized CATI telephone facilities using Computer Assisted Telephone Interviewing (CATI) software. The Institute uses CATI software from the Computer-assisted Survey Methods Program (CSM) at the University of California, Berkeley.

Random Digit Dialing (RDD) procedures were used to select the households where interviews were conducted, and within households the Most Recent Birthday method was used to select respondents. At least 12 calls were made to each telephone number before a final outcome was established for that telephone number. Attempts were made to encourage households that refused to complete the interview at a later date by calling them at least once after they had refused. Approximately 10% of interviews in both years were completed after an initial household refusal.

The samples for the 2003 Berger Population Health Monitor and the 2004 Berger Population Health Monitor were prepared at the beginning of each year and released in batches as needed throughout the year. All sample remained in the field until a final disposition was determined. Repeated callback attempts and refusal conversion attempts meant that some cases did not reach a final disposition for up to ninety days.

The sample from the 2003 Berger Population Health Monitor was not used in the 2004 Berger Population Health Monitor. As a result, data collected in November and December of 2003 is comprised of a higher proportion of converted initial refusals and may not be representative of the general population.

While the final response rate for the 2003 Berger Population Health Monitor was 51.3%, the response rate for November and December of 2003 during which the Smoker Fire Safety questions were first asked was 26.04%. The final response rate for the 2004 Population Health Monitor was 50.2%.

There are many different methods for calculating response rates. ISR uses a conservative method to calculate response rate; other methods would inflate the response rate. The method used to calculate the response rates is explained in detail later in this report.

2. Interviewing Dates, Sample Size and Margin of Error

From November 3, 2003 to November 22, 2004 the Institute for Social Research interviewed a representative sample of 9,065 Canadians, 15 years of age and older as part of the 2003 and 2004 Berger Population Health Monitors. For a sample of 9,065 the margin of error is plus or minus 1.03 percentage points in 19 samples out of 20. The margins of error are correspondingly higher for Provincial, demographic and other subgroups.

All sample remained in the field until a final disposition was determined. Repeated callback attempts and refusal conversion attempts meant that some cases did not reach a final disposition for up to ninety days. Sample released as part of the 2003 Berger Population Health Monitor was not included as part of the 2004 Berger Population Health Monitor.

3. Data Collection

In order to maximize the likelihood of completing an interview from each telephone number in the sample, call attempts were made during the morning, afternoon and evening - for both weekday and weekend days. A minimum number of 12 attempts were made to each telephone number, of which at least eight were made during evening and weekend hours.

In the period from November 2003 to November 2004, 9,065 interviews were completed. Although fifty-seven percent of the interviews took five or fewer call attempts to complete, 24 percent of the completed interviews required ten or more calls to complete, and approximately 5.73% percent of the completed interviews took 21 calls or more to complete. (See Table 3.1)

Table 3.1 Number of Call Attempts: November 2003 to November 2004

Number of Call Attempts	Completed Interviews	Percent of total Completions
1	1214	13.4
2	1327	14.6
3	1105	12.2
4	823	9.1
5	666	7.3
6	557	6.1
7	452	4.9
8	428	4.7
9	327	3.6
10	288	3.2
11-15	881	9.7
16-20	479	5.2
21-30	406	4.5
31-40	81	.89
41-55	31	.34
TOTAL	9065	100*

* percentages may not add to 100 due to rounding.

Most households that refused to participate in the 2003 and 2004 Berger Population Health Monitors were contacted a second time, three or more weeks after someone in the household first indicated they did not wish to participate in the study. Approximately twenty one percent (21%) of the households that had originally declined to participate agreed to participate when contacted again after the initial refusal. These “converted” refusals represent 10.1 percent of the cases completed from November 2003 to November 2004. Note however that “converted” refusals comprise forty percent (40%) of the data collected in November and December of 2003. The variable REFUSALS in the datasets indicates these “converted” refusal completions.

The careful attention to the number of call attempts, the timing of callbacks and attempts to convert initial refusals maximizes the response rate and therefore the representativeness of the sample. Many researchers have found that respondents who are “hard to reach” or initial “refusers” have characteristics that differ from typical survey respondents (Dunkelberg and Day, 1973; Steech, 1981; Fitzgerald and Fuller, 1982; and McDonald, 1979).

4.0 Response Rate

There are numerous ways to calculate response rate in survey research (Groves, 1989; Groves and Lyberg, 1988; Wiseman and Billington, 1984; Frey, 1983; and Dillman, 1978). The method used for the 2003 and 2004 Berger Population Health Monitor was conservative, most other ways of calculating response rate would produce higher values.

4.1 Response Rate for November and December 2003

The response rate was defined as the number of completed interviews divided by the eligible households plus estimated eligible households times 100 percent. Using this formula the response rate for the November to December 2003 data collection component of the 2003 Berger Population Health Monitor is 26.25%

Details on the calculation of the response rate are as follows. Of the 7,514 telephone numbers included in this time period, 5,648 were identified as being eligible households. An eligible household is defined as a completed interview ($n=1,576$), a refusal ($n=3,174$) or a callback ($n=898$). Not eligible households (respondent was unable to speak English or French, was not healthy enough to complete the interview or suffered cognitive difficulties ($n=340$) and nonresidential and not in service numbers ($n=1,009$) accounted for 1,349 of the telephone numbers. It was not possible to determine the eligibility status for 500 of the sample telephone numbers.

For response rate calculation purposes it was assumed that of these 500 telephone numbers where eligibility could not be determined, the proportion which were eligible households was the same proportion as in the rest of the sample where eligibility could be determined. This proportion is referred to as the "household eligibility rate". The household eligibility rate for the November to December 2003 data collection period was .808. The household eligibility rate is defined as eligible households ($n=5,648$) divided by eligible households ($n=5,648$) plus not eligible households ($n=1,341$). The number of households where eligibility could not be determined ($n=500$) was multiplied by the household eligibility rate (.808) to estimate the number of eligible households that existed within the total number of unknown households ($n=404$).

The final response rate calculation is completions ($n=1,576$) divided by eligible households ($n=5,648$) plus estimated eligible households ($n=404$) or $1,576 / (5,648+404)$ or $1,576 / 6,052$ or 26.04 percent. Table 4.1 summarizes the sample disposition for the period November 2003 to December 2003.

Many organizations do not include "eligibility not determined" numbers in the denominator of the response rate calculation on the argument that few, if any, of these telephone numbers would in fact be households. (See Groves and Lyburg, 1988 for a

debate on this issue). The method used by ISR is consistent with methods suggested by the American Association for Public Opinion Research (AAPOR).

Table 4.1 Final Sample Disposition November and December 2003.

Results	Number	Percent
Completions	1,576	21.02
Refusals	3,174	42.33
Callbacks	898	11.97
Ill/aged/language/absent	340	4.53
Not in service/nonresidential	1,009	13.45
Eligibility not determined	500	6.66
Total	7,497	100%*
Household eligibility rate	.808	
Estimated number of eligible households	404	
Response Rate	26.04%	

* percentages may not add to 100 due to rounding.

4.2 Response Rate for January to November 2004

The response rate was defined as the number of completed interviews divided by the eligible households plus estimated eligible households times 100 percent. Using this formula the response rate for the 2004 Berger Population Health Monitor is 50.2%

Details on the calculation of the response rate are as follows. Of the 23,722 telephone numbers included in the sample, 14,172 were identified as being eligible households. An eligible household is defined as a completed interview (n=7,489), a refusal (n=5,623) or a callback (n=1060). Not eligible households (respondent was unable to speak English or French or was not healthy enough to complete the interview or suffered cognitive difficulties (n=1548) and nonresidential and not in service numbers (n=6,819) accounted for 8,367 of the telephone numbers. It was not possible to determine the eligibility status for 1,183 of the sample telephone numbers.

For response rate calculation purposes it was assumed that of these 1,183 telephone numbers where eligibility could not be determined, the proportion which were eligible households was the same proportion as in the rest of the sample where eligibility could be determined. This proportion is referred to as the "household eligibility rate". The household eligibility rate for the 2004 Berger Population Health Monitor was .629. The

household eligibility rate is defined as eligible households ($n=14,172$) divided by eligible households ($n=14,172$) plus not eligible households ($n=8,367$). The number of households where eligibility could not be determined ($n=1,183$) was multiplied by the household eligibility rate (.629) to estimate the number of eligible households that existed within the total number of unknown households ($n=738$).

The final response rate calculation is completions ($n=7,489$) divided by eligible households ($n=14,173$) plus estimated eligibles ($n=738$) or $7,489 / (14,172 + 738)$ or $7,489 / 14,910$ or 50.2 percent. Table 4.2 summarizes the sample disposition for the 2004 Berger Population Health Monitor.

Many organizations do not include "eligibility not determined" numbers in the denominator of the response rate calculation on the argument that few, if any, of these telephone numbers would in fact be households. (See Groves and Lyburg, 1988 for a debate on this issue). The method used by ISR is consistent with methods suggested by the American Association for Public Opinion Research (AAPOR).

Table 4.2 Final Sample Disposition January to November 2004.

Results	Number	Percent
Completions	7,489	31.57
Refusals	5,623	23.70
Callbacks	1,060	4.47
Ill/aged/language/absent	1,548	6.52
Not in service/nonresidential	6,819	28.74
Eligibility not determined	1,183	4.98
Total	23,722	100%*
Household eligibility rate	.629	
Estimated number of eligible households	14,990	
Response Rate	50.2%	

* percentages may not add to 100 due to rounding.

4.3 Response Rate for November 2003 to November 2004

The response rate was defined as the number of completed interviews divided by the eligible households plus estimated eligible households times 100 percent. Using this formula the response rate for the period November 2003 to November 2004 is 43.31%.

Details on the calculation of the response rate are as follows. Of the 31,236 telephone numbers included in the sample, 19,837 were identified as being eligible households. An eligible household is defined as a completed interview (n=9,082), a refusal (n=8,797) or a callback (n=1,958). Not eligible households (respondent was unable to speak English or French or was not healthy enough to complete the interview or suffered cognitive difficulties (n=1,888) and nonresidential and not in service numbers (n=7,828) accounted for 9,716 of the telephone numbers. It was not possible to determine the eligibility status for 1,683 of the sample telephone numbers.

For response rate calculation purposes it was assumed that of these 1,683 telephone numbers where eligibility could not be determined, the proportion deemed eligible households was the same proportion as in the rest of the sample where eligibility could be determined. This proportion is referred to as the "household eligibility rate". The household eligibility rate for the period November 2003 to November 2004 was .672. The household eligibility rate is defined as eligible households (n=19,837) divided by eligible households (n=19,837) plus not eligible households (n=9,716). The number of

households where eligibility could not be determined (n=1,683) was multiplied by the household eligibility rate (.672) to estimate the number of eligible households that existed within the total number of unknown households (n=1,131).

The final response rate calculation is completions (n=9,082) divided by eligible households (n=19,837) plus estimated eligibles (n=1,131) or $9,082 / (19,837 + 1,131)$ or $9,082 / 20,968$ or 43.31 percent. Table 4.3 summarizes the sample disposition for the period from November 3003 to November 2004.

Many organizations do not include "eligibility not determined" numbers in the denominator of the response rate calculation on the argument that few, if any, of these telephone numbers would in fact be households. (See Groves and Lyburg, 1988 for a debate on this issue). The method used by ISR is consistent with methods suggested by the American Association for Public Opinion Research (AAPOR).

Table 4.2 Final Sample Disposition November 2003 to November 2004.

Results	Number	Percent
Completions	9,082	29.07
Refusals	8,797	28.16
Callbacks	1,958	6.26
Ill/aged/language/absent	1,888	6.04
Not in service/nonresidential	7,828	25.06
Eligibility not determined	1,683	5.38
Total	31,236	100%*
Household eligibility rate	.672	
Estimated number of eligible households	20,968	
Response Rate	43.31%	

* percentages may not add to 100 due to rounding.

5. Quality Control Procedures

Quality Control Supervisors and Senior Supervisors monitored approximately 10% of all interviews conducted by ISR on the 2004 Berger Population Health Monitor. Each Quality Control supervisor work station is equipped with a telephone which allows for unobtrusive monitoring of both sides of the interview as it is being conducted. In addition a video display terminal replicates an image of the screen seen by the interviewer as they conduct the interview. Quality Control supervisors verify that the interviewer is reading the question verbatim and recording responses correctly. While monitoring, the

Quality Control supervisors complete a standard report which scores the interviewers work in a number of key areas. Form data is entered into a standard data file and scores for each item on the report for each interviewer are prepared. These reports along with a report on the number of days since a specific interviewer has been monitored are used at the start of each shift to determine which interviewers are to be monitored on a specific shift.

6. Interviewer Training

Over the course of the 10-month project both experienced and interviewers new to ISR worked on the project. Prior to working on the main study, experienced interviewers received project specific training conducted by a senior supervisor. This training consists of a question-by-question review of the data collection instrument, followed by information on the client and the goals of the research project. The final stage of this training is a review of the CATI version of the questionnaire, followed by at least one "cold call" to a non-sample household during which the full survey is conducted. Once the Supervisor is satisfied with the interviewers' performance on cold calls, the experienced interviewer begins work on the main study.

When first hired by the Institute for Social Research all interviewers receive a three day training process which includes sessions on reasons and methods of social science research, a question by question review of the questionnaire that includes role playing with quality control supervisors or experienced interviewers, a session on using the CATI software, followed by a role playing session with other new interviewers. Once the three-day session has been completed, new hires must complete three full four-hour work shifts conducting "cold call" interviews with non-sample households using standard respondent selection procedures, telephone number verification, and verbatim reading of each question in the survey. Quality control supervisors monitor and review the new hires work. Once three "cold call" interviews have been satisfactorily completed the new hires begin work on the project using prospects from the valid sample.

7. Sample Design

The sample for the 2004 Berger Population Health Monitor was designed to represent the adult population of Canada. More specifically, the intention was to sample Canadians 15 years of age or older who speak one of Canada's official languages, and reside in private dwellings in the ten Canadian provinces and two Territories (Nunavut was not included). Because the survey was conducted by telephone, the small proportion of households without telephones is excluded from the sample population.

The sample design allows for the division of the country into six "regions":

1, Atlantic Canada (Newfoundland, Nova Scotia, Prince Edward Island and New Brunswick);

- 2, Quebec;
- 3, Ontario;
- 4, the Midwest (Manitoba and Saskatchewan);
- 5, the West (Alberta and British Columbia);
- 6, The North (Yukon, Northwest Territories).

Relative to their population, smaller provinces and the territories were over-represented in the sample. The intent of over-representing the smaller provinces and territories, of course, is to optimize comparisons between the six regions and provinces within a region.

Because the sample distribution is not proportional to the population, the data must be weighted before national estimates are derived. Weights are obtained by dividing the proportion of households (in Canada) in the province by the proportion of the households in the sample in the province. The weight variable which adjusts for Province size is PROVWGT.

British Columbia has the largest PROVWGT, 1.501, as the province has 13 percent of Canada's households, but only 8.73 percent of the sample (See Table 7.1). In preparing national estimates, each British Columbia case counts for 1.501 observations in the weighted data set; in other words, British Columbia cases are "weighted up" to make the impact of the British Columbia sample on national estimates an accurate reflection of British Columbia's proportion of the number of households in Canada.

Conversely, provinces where the weights are small, for example PEI (.155), are those in which the proportion of the sample allocated to the province considerably exceeds the province's proportion of the national population. Such cases are "weighted down".

7.1 Selection of Households

To select individual survey respondents, a two-stage probability selection process was necessary. The first stage involves the selection of households by randomly selecting telephone numbers. To select numbers ISR employs a form of random digit dialling (RDD). All telephone numbers in Canada consist of an area code, a "central office code" or exchange (the first three digits of the telephone number), and a suffix or "bank" (the last four digits of the number). A list of most telephone numbers in Canada can be constructed from cd-rom versions of telephone books and the other commercially available lists of telephone numbers. Numbers from these sources, as well as telephone numbers between or on either side of listed numbers are included in the sampling frame. For example, if the following two telephone numbers are found in a directory, (416) 651-8513 (416) 651-8518, then all numbers from (416) 651-8500 to (416) 651-8599 are included in the sample. A random sample of telephone numbers from this list is then selected as the sample of numbers to be called for the project. Since unlisted numbers and numbers too new to be included in the directory are interspersed among valid numbers, this strategy provides a much better sample than one based on

listed numbers alone. In addition, concentrating on numbers that are listed or close to a listed number prevents the inclusion of large proportions of randomly generated numbers that are not numbers of actual households.

RDD samples include "not-in-service" and "non-residential" telephone numbers as well as household numbers (including unlisted household numbers). Typically, non-household numbers are identified the first time the interviewer calls and most of the interviewer's subsequent efforts are then directed at encouraging an informant from the household to provide information about the number of adults living in the home, and after randomly selecting a respondent, completing the interview.

7.2 Selection of Respondents

The second stage of the sample selection process was the random selection of a respondent (15 years of age or older) in the household. Information on the composition of the household was gathered by first determining if the person answering the telephone was 18 years of age or older. Then determining the number of people in the household 15 years of age or older. When there was more than one person 15 years of age or older living in the household the most recent birthday method was used to select the potential respondent. The "birthday" selection method is used as it ensures a random selection of respondents and it is a much less intrusive way to start an interview than the traditional "Kish method," which requires a listing of household residents or other methods based on a count of the men and women in the household. The less intrusive start makes it easier for the interviewer to secure the respondent's cooperation. If the potential respondent was 15-17 years of age, permission from a parent or guardian of the potential respondent was secured prior to speaking to the 15-17 year old.

7.3 Household Weights for the 2004 Berger Population Health Monitor

The probability of a member of the household being selected for an interview varies inversely with the number of people living in that household. In a household with only one eligible person, she or he has a 100 percent chance of selection, in a household with two eligible persons each eligible person has a 50 percent chance of selection, and so on. Analyses based on unweighted estimates are therefore biased: members of households with one eligible person are over-represented, and larger households are under-represented. As with the provincial weights, described above, most practitioners of survey research "weight the data" in order to compensate for the unequal probabilities of selection (households with one eligible person are given a weight of one, households with two eligible persons are given a weight of two, households with three eligible persons are given a weight of three, etc.).

Again, conventionally, some users of survey data wish to have the same number of observations in the weighted and unweighted data set. This adjustment is made by

determining the number of cases in each household size category that would have been in the sample, if an interview had been completed with each eligible member of the household, and then dividing the sample among each household size category according to the proportion of interviews completed in each household size category.

Following this strategy, the following summarizes the calculation of the household weights for the 2004 Berger Population Health Monitor: There were 7,489 households in the sample: 1,949 households with one eligible person, 3,797 households with two eligible persons, 1,042 households with three eligible persons, and so on. The weights are calculated as follows. First, the total number of weighted cases is calculated using the number of eligible respondents in a household as the weight. For three-person households, for example, the calculation is: 1,042 respondents times 3, which gives 3,126 weighted members of three-adult households. In total there are 15,700 weighted cases. Second, the 15,700 weighted cases are adjusted down to the original sample size of 7,489 (weighted cases for each household size divided by the weighted sample size times the original sample size). For three-person households the calculation gives $3,126 * (7,489 / 15,700) = 1,491.12$ persons. Third, the weight for persons of each household size is calculated by dividing that desired number by the actual number of (in this case members of three-adult households), which is: $1,491.12 / 1,042 = 1.43101$.

Table 7.2 Calculation of Household Weights for the 2004 Berger Population Health Monitor

HH Size	Number of HH's	Weighted Cases	Adjustment	Weight
1 Eligible Person	1949	1949	929.6854	0.47700
2 Person	3797	7594	3622.3864	0.95401
3 Person	1042	3126	1491.1219	1.43101
4 Person	524	2096	999.8054	1.90802
5 Person	141	705	336.2895	2.38503
6 Person	28	168	80.1371	2.86203
7 Person	5	35	16.6952	3.33904
8 Person	1	8	3.8161	3.81605
9 Person	1	9	4.2931	4.29305
10 Person	1	10	4.7701	4.77006
TOTALS	7489	15700	7489	

7.4 Weighting for National Estimates when using the 2004 Berger Population Health Monitor Data.

When national estimates are required, the user is advised to correct for both the unequal probabilities of selection at the household stage and the unequal probabilities of selection based on province of residence. In order to facilitate this correction, the variable NATWGT (National Weight) has been prepared. NATWGT is the product of the household weight and the provincial weight and should be used when national estimates are required.

Although the weights are provided as part of the data set, users must specify the weights they wish to use in the appropriate programming language before analysing the data.

In the calculation of national weights the total of the weights for all observations in the sample – often termed the “weighted sample size” – is based on the original sample size, but note that we do not have a true random sample and there is no accounting for sample design effects.

7.5 Post Stratification Weighting for the 2004 Berger Population Health Monitor.

In spite of weighting corrections that reflect household selection probabilities and unequal Provincial and Territorial distributions, weighted sample distributions for age and gender characteristics do not correspond exactly to those of the known population of Canada, as willingness to do the survey varied by age, gender and other characteristics. Post stratification weights are corrections to analysis weights designed to bring weighted sample for these sub-groups in line with corresponding population totals that are available from a source that is external to the survey data. In this case Census data was used as the external source.

Post-stratification was done by age and gender sub groups consistent with post-stratification weights prepared for previous Berger Population Health Monitor surveys.

The post-stratification weights for age and gender were calculated by determining the percentage of the specific age and gender group within the general population using Census data, and dividing that percentage by the percentage of that age and gender group within the sample population. For example, there are 220 Males between 15 and 19 years of age in the sample population, or 2.93% of the entire sample. Census data indicates that Males 15 to 19 years of age are 4.33% of the general population. The post stratification weight is determined by dividing 4.33 by 2.93 resulting in a correction weight of 1.477. Table 7.3 summarizes the post stratification weights for the different age and gender sub-groups.

To facilitate obtaining national estimates that correct for the unequal probabilities of selection at the household stage and the unequal probabilities of selection based on province of residence and the post-stratification corrections for age and gender groups the variable POSTWGT (Post Stratification Weight) has been prepared. POSTWGT is the product of the household weight, the provincial weight and the post stratification weight.

Table 7.3 Calculation of Post Stratification Weights for the 2004 Berger Population Health Monitor.

Age Group and Sex	% of Population	Total in Sample	% of Sample	Post Stratification Weight
Males 15-19	4.33	220	2.93	1.477
Males 20-24	4.05	261	3.48	1.163
Males 25-44	18.46	1181	15.76	1.171
Males 45-64	14.81	1168	15.59	.949
Males 65 +	6.85	470	6.27	1.092
Females 15-19	4.12	212	2.83	1.455
Females 20-24	4.01	260	3.47	1.155
Females 25-44	19.00	1503	20.06	.947
Females 45-64	15.21	1443	19.26	.789
Females 65 +	9.17	771	10.29	.891
TOTAL	100	7489	100	

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Questions

Questions

The following is the final text of the smoking risk questions as they were asked, in English and in French.

sfr1 Many people smoke while watching television or reading a book in bed. So far as you can remember have you smoked in bed in the past week, in the past month, within one to six months, or over six months ago?

- 1 In the past week
- 2 In the past month
- 3 Within one to six months
- 4 Over six months ago
- 5 (R Volunteers) never
- d dont know r refused

sfr1.2 Beaucoup de personnes fument au lit en regardant la télévision ou en lisant une livre. Vous rappelez-vous l'avoir fait...La semaine dernière, un mois passé, Il y a entre un et six mois, Il y a plus de six mois?

- 1 La semaine dernière
- 2 Le mois passé
- 3 Il y a entre un et six mois
- 4 Il y a plus de six mois
- 5 (Réponse spontanée) Je ne le fais jamais
- d ne sait pas r refuse de répondre

sfr2 In the last year, would you say that you smoked in bed everyday, a few times a week, once a week, once a month or less?

- 1 Everyday,
- 2 A few times a week,
- 3 Once a week
- 4 Once a month or less
- 5 R Volunteers: never
- d dont know r refused

sfr2.2 Depuis un an, diriez-vous que vous avez fumé au lit... Chaque jour, Quelques fois par semaine, une fois par semaine, Une fois par mois ou moins?

- 1 Chaque jour
- 2 Quelques fois par semaine
- 3 Une fois par semaine
- 4 Une fois par mois ou moins
- 5 (Réponse spontanée) Jamais
- d ne sait pas r refuse de répondre

sfr3[#ALL SMOKERS] Sometimes people doze off or fall asleep in a chair or in bed with a lit cigarette either in their hands or in the ashtray. So far as you can remember, has this happened to you in the past week, in the past month, within one to six months, or over six months ago?

- 1 In the past week
- 2 In the past month
- 3 Within one to six months
- 4 Over six months ago

5 R Volunteers: never
d dont know r refused

sfr3.2 Il arrive qu'on somnole ou s'endorme dans un fauteuil ou au lit avec une cigarette allumée à la main ou dans un cendrier. Diriez-vous que cela vous est arrivé... La semaine dernière, Le mois passé, Il y entre un et six mois, Il y a plus de six mois ?

1 La semaine dernière
2 Le mois passé
3 Il y entre un et six mois
4 Il y a plus de six mois
5 (Réponse spontanée) Je ne le fais jamais
d ne sait pas r refuse de répondre

sfr4 In the last year, would you say that this has happened to you once, two to five times, six to ten times, or eleven or more times?

1 Once
2 Two to five times
3 Six to ten times
4 More than eleven times
0 Never
d dont know r refused
e

sfr4.2 Depuis un an, diriez-vous que cela vous est arrivé... Une fois, Entre deux et cinq fois, Entre six et dix fois, Plus de dix fois?

1 Une fois
2 Entre deux et cinq fois
3 Entre six et dix fois
4 Plus de dix fois
0 Jamais
d ne sait pas r refuse de répondre

sfr5 [#ALL SMOKERS] Sometimes people have reason to leave a cigarette burning in an ashtray while they attend to other things, such as answering the door or the phone. Would you say that you have found yourself in this situation: In the past week, in the past month, within one to six months, or over six months ago?

1 In the past week
2 In the past month
3 Within one to six months
4 Over six months ago
5 R Volunteers: never
7 Don't use ashtrays (specify)
d dont know r refused

sfr5.2 Il faut parfois laisser sa cigarette brûler dans le cendrier quand on doit faire autre chose, comme répondre à la porte ou au téléphone. Diriez-vous que ça vous est arrivé... Depuis une semaine, Depuis un mois, Depuis un à six mois, Depuis plus de six mois?

1 Depuis une semaine
2 Depuis un mois
3 Depuis un à six mois
4 Depuis plus de six mois
5 (Réponse spontanée) Jamais
d ne sait pas r refuse de répondre

sfr6 [#ALL THOSE WHO RESPONDED a-d ABOVE] In the last year, would you say that you have left a cigarette burning in an ashtray while you had to attend to something else, several times a day, 2-3 times a week, once a week, less than monthly, or never?

- 1 Several times a day
- 2 2-3 times a week
- 3 Once a week
- 4 Less than monthly
- 5 Never
- d dont know r refused

sfr6.2 Diriez-vous que, depuis un an, vous avez laissé brûler une cigarette dans un cendrier pour vous occuper d'autre chose... Plusieurs fois par jour, Deux ou trois fois par semaine, Une fois par semaine, Moins d'une fois par mois, Jamais?

- 1 Plusieurs fois par jour
- 2 Deux ou trois fois par semaine
- 3 Une fois par semaine
- 4 Moins d'une fois par mois
- 5 Jamais
- d ne sait pas r refuse de répondre

sfr7 [#ALL SMOKERS]Where do you usually empty your ashtrays?

INTERVIEWER: Read list, enter 1 to all that apply

- a Indoor garbage bin
- b Outdoor garbage bin
- c Toilet
- d Metal container, i.e., tin can
- e Some place else (SPECIFY)
- d dont know r refused

sfr7.2 Où videz-vous normalement le cendrier?

INTERVIEWER: Entrez 1 pour tout ce qui s'applique

- a Dans une poubelle à la maison
- b Dans une poubelle à l'extérieur
- c Dans la toilette
- d Dans un contenant de métal, p.ex. boîte de conserve
- e Ailleurs (SPÉCIFIER)
- d ne sait pas r refuse de répondre

sfr8 Do you empty ashtrays immediately after putting out a cigarette or do you usually wait until it is full or almost full?

- 1 Yes empty immediately after putting out a cigarette
- 5 Wait
- d dont know r refused

sfr8.2 Videz-vous le cendrier immédiatement après y avoir mis un mégot ou pas avant qu'il soit plein ou presque?

- 1 Je le vide immédiatement
- 5 J'attends avant de le vider
- d ne sait pas r refuse de répondre

sfr9 [#ALL SMOKERS] It is quite common for things such as carpets, couches and clothing to get burnt accidentally by cigarettes. Would you say that the last time one of your cigarettes accidentally burned something was yesterday, the day before yesterday, in the past week, or in the past two weeks?

- 1 Yesterday/Today
- 2 The day before yesterday
- 3 In the past week

4 In the past two weeks.
5 R volunteers "more than two weeks ago"
6 R VOLUNTEERS: NEVER
d dont know r refused
@

sfr9.2 Il arrive souvent que des objets comme des tapis, des canapés et des vêtements soient accidentellement brûlés par une cigarette. Quand diriez-vous que votre cigarette a accidentellement brûlé quelque chose la dernière fois? Hier, Avant-hier, Depuis moins d'une semaine, Depuis moins de deux semaines?

1 Hier/aujourd'hui
2 Avant-hier
3 Depuis moins d'une semaine
4 Depuis moins de deux semaines
5 R volunteers "more than two weeks ago"
6 (Réponse spontanée) Ce n'est jamais arrivé
d ne sait pas r refuse de répondre

sfr10 Thinking back over the last year, how many things would you say you have accidentally burnt with a cigarette? Would you say one to five objects, six to 10 objects, eleven to 15 objects, or more than 16 objects?

1 One to five objects
2 Six to 10 objects
3 Eleven to 15 objects
4 More than 15 objects
5 R VOLUNTEERS: NEVER
d dont know r refused
@

sfr10.2 Depuis un an, combien d'objets diriez-vous avoir brûlés accidentellement avec une cigarette? Prenez le temps d'y penser. De un à cinq objets, De six à dix objets, De onze à quinze objets, Plus de quinze objets?

1 De un à cinq objets
2 De six à dix objets
3 De onze à quinze objets
4 Plus de quinze objets

5 (Réponse spontanée) Aucun
d ne sait pas r refuse de répondre

sfr11 As best you can remember, how many of the burn marks were larger than two centimetres, or the size of a quarter? Would you say none, one to three, four to ten, or more than ten?

1 None
2 One to three
3 Four to ten
4 more than ten
d dont know r refused

sfr11.2 Vous rappelez-vous combien de fois la marque de la brûlure faisait plus de 2cm, soit la grosseur d'un vingt-cinq cents? Jamais, De une à trois fois, De quatre à dix fois, Plus de dix fois?

1 Jamais
2 De une à trois fois
3 De quatre à dix fois
4 plus de dix fois
d ne sait pas r refuse de répondre

sfr12 How many burn marks would you say were bigger than 10 centimetres, or the size of a small saucer? Would you say none, one to three, four to ten, or

more than ten?

- 1 None
- 2 One to three
- 3 Four to ten
- 4 more than ten
- d dont know r refused

sfr12.2 Combien de fois diriez-vous que la marque de la brûlure faisait plus de 10 cms, soit la dimension d'une petite soucoupe? Jamais, De une à trois fois, De quatre à dix fois, Plus de dix fois?

- 1 Jamais
- 2 De une à trois fois
- 3 De quatre à dix fois
- 4 onze ou plus de dix fois
- d ne sait pas r refuse de répondre

sfr13 Were the burn marks on any of the following items....

READ List, enter 1 to all that apply

- a ... Upholstered furniture such as sofa, couch or easy chair?
- b ... Carpet?
- c ... Clothing?
- d ... Bedding or mattresses?
- d dont know r refused

sfr13.2 Qu'est-ce qui a été brûlé...

LIRE, POUR COCHER TOUTES LES RÉPONSES DONNÉES

- @a ... Un meuble rembourré, comme un canapé ou un fauteuil
- @b ... Un tapis
- @c ... Un vêtement
- @d ... De la literie ou un matelas
- d ne sait pas r refuse de répondre

sfr14 Was the fire department called?

- 1 Yes
- 5 No
- d dont know r refused

sfr14.2 A t-on appelé les pompiers?

- 1 Oui
- 5 Non
- d ne sait pas r refuse de répondre