Evaluation of the Smog Advisory Program - Montreal, 1997

Final Report

Prepared for the:

Atmospheric Environment Service Environment Canada

November, 1997

Corporate Research Associates Inc.

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Introduction

In 1993, the federal government established the Canadian Smog Advisory Program in the four regions of the country which experience recurrent episodes of elevated levels of ground-level ozone. Based on similar programs in southern California and elsewhere, the Canadian program is designed to provide the public (as well as businesses and other organizations) with health and environmental messages to raise awareness of air quality hazards, and to influence behaviors that will reduce both exposure and those activities (e.g. automobile use) that contribute to high levels of ground-level ozone.

Environment Canada and Health Canada are evaluating the program to assess its impact to date and identify how it might be improved further. In 1994, Corporate Research Associates Inc. was retained to conduct a sample survey of area residents to evaluate the program in Southern New Brunswick, Toronto, rural Ontario, and Vancouver. In 1997, CRA conducted a survey to evaluate the Info Smog program in Montreal. The objectives of this research are to:

- Obtain baseline information on public awareness and understanding of the Program and its impact on attitudes and behaviors, from which the Program can be assessed over subsequent periods;
- Evaluate Canadians' current awareness and understanding of smog and its effects on human health and the environment; and
- Identify how to better inform the Canadian public about the Smog Advisory Program and the hazards associated with smog.

The current study was designed to collect the required information from Montreal residents immediately following the issuance of a Smog Advisory in early July 1997, in order to test awareness of, and response to, a specific smog episode.

The survey consisted of telephone interviews conducted with a representative sample of 407 residents (18 years and older) of the Montreal Metropolitan area. The survey was conducted between July 3 and 6, 1997, from Créatec's dedicated facilities in Montreal. A survey of this size drawn from the population would be expected to be accurate within ±4.9 percent, in 95 out of 100 samples. A more detailed description of the methodology used to conduct this study is provided at the back of this report.

This summary report presents the key findings and conclusions from the survey conducted in Montreal, including an analysis by key subgroups of the population as defined by demographic characteristics and attitudes on key issues. Appended to this report is a copy of the survey questionnaire and detailed tabular results of all questions by key subgroups.

Executive Summary

Results from the survey provide a valuable early assessment of the Smog Advisory Program in the Montreal, in terms of meetings its objectives of alerting the community about local smog conditions, raising public awareness and knowledge, and promoting appropriate actions to both reduce personal exposure and curtail activities which contribute to smog.

Results from the survey indicate that the Advisory Program has not been very effective in alerting the general public about local smog conditions. Fewer than four in ten area residents recalled hearing or reading something about smog conditions, either during the previous week (24%) or at some other point in the past year (15%). This level of recall is well below the result measured in Southern New Brunswick in 1994, when Saint John area residents were surveyed shortly after an advisory was issued in their area. Moreover, recall of the recent advisory was low across most subgroups of the Montreal population. Area residents who did recall hearing about the advisory were most likely to have heard about it on television or radio, with fewer mentioning newspapers, billboards, or other sources.

Not only was general recall of the advisory quite low, the program was also by no means fully successful in communicating all of the specific messages about air quality conditions, causes of smog, and how residents should respond. Just over a third of residents who heard the advisory could not recall anything specific about the announcement. It is not clear from the survey, however, how much this selective recall is a function of the specific messages provided to the media, how the media transmitted these messages, or what types of information residents were most apt to focus on. Although few could recall the content of the advisory, most residents do place importance in hearing such advisories, even though comparatively few believe they are effective in terms of providing guidance on how to reduce contributions to smog.

Whether or not a function of the Advisory Program, Montreal area residents do have some understanding of smog and its impacts. Eight in ten recognize smog to be a health hazard (primarily in terms of respiratory problems such as asthma and lung disease), and many also identify environmental damage (e.g. to forests, wildlife) that can result from smog. In terms of what produces smog, residents are much more likely to finger motor vehicles than factories or other local sources.

The Montreal public, however, reveals a limited understanding of how residents can avoid or minimize exposure, beyond staying indoors or moving away, as was the case in Southern New Brunswick. Very few identified such strategies as avoiding strenuous activity or exposure at certain times of the day, and one in four residents could not identify anything they could do to minimize exposure to smog. Similarly, residents exhibited a narrow understanding of how individuals could help reduce smog emissions, with just over a third mentioning reducing automobile use, making it the most frequently cited strategy.

Similar to Southern New Brunswick in 1994, the Advisory Program appears to have had only limited impact in terms of encouraging Montreal residents to take appropriate actions. One in four of the households that recalled the advisory reported some change in activity as a direct result of the advisory, with somewhat higher response among households with key health problems. Most of the specific actions taken were directed at reducing personal exposure (e.g. avoiding the outdoors) rather than in curtailing smog producing activities (reducing car use). Many residents who did nothing in response to hearing the Advisory said this was because either no response was necessary (i.e. smog was not seen as an immediate hazard) or that there was nothing they could do about the problem.

A significant distinction is apparent when the data are analysed along linguistic lines. Whereas francophones are more likely than anglophones to say that smog poses a serious health problem and that it is very important to hear smog advisories, francophones are less likely to respond to such advisories. As well, francophones are also more likely to believe that smog has no impact on them. Other research suggests that the differences may in part be a function of cultural differences, with francophones being more passive in terms of intervention in health matters.

Only limited comparisons can be made with 1994 studies in Vancouver and Toronto. Those surveys were conducted well after a smog advisory was issued, whereas the Montreal and Southern New Brunswick studies were conducted immediately after an advisory. Nonetheless, for questions which do not pertain to a smog advisory it is helpful to compare the Montreal results with those from the Vancouver and Toronto studies. For example, results from these three cities are similar concerning such matters as recognition of smog as a health hazard, environmental damage resulting from smog, and how to avoid or minimize exposure to smog.

In conclusion, findings from this study indicate the Smog Advisory Program in Montreal has not been particularly successful in terms of making contact with the target audience, or encouraging efforts to limit exposure, and reducing smog-producing activities. Generally, the survey results for Montreal are less encouraging than those reported three years ago in Southern New Brunswick.

Further progress is needed in improving public understanding of their own role in producing smog and what specific steps they can (and ought to) do when advisories are issued. For instance, in order to encourage people to reduce their use of cars, gas-powered equipment or oil-based solvents, a more convincing job must be done to expand awareness of these activities as contributors to local area smog. Establishing this link may require communications or educational initiatives that go beyond what is now provided in the advisories, such as programs developed specifically for schools and senior citizen centres. On a positive note, the fact that many Montreal area residents believe the Program provides valuable information, and clearly want to hear advisories when they are issued, indicates there is a strong potential to achieve the Program's objectives.

This initial study provides a baseline evaluation of the Smog Advisory Program in Montreal. It is expected that the impact of this type of program will grow over time, with repeated exposure to the advisories, and a growing awareness of what is required. As such, it is important that further research be conducted on an annual basis to evaluate the program over time, in order to measure growth in public awareness, to evaluate the impact of specific Program components (e.g. messages, media), and to identify how it can be improved.

Survey Results

Awareness and Knowledge of Smog

- The vast majority of Montreal residents hold a favourable impression of environmental quality in their community, while a similar number rate the overall air quality as either excellent or good.
 - > Seven in ten Montreal residents rate the **overall quality of the environment in their community** as excellent (16%) or good (55%), while a minority believe the quality is only fair (23%) or poor (5%) (Question 1).
 - > Montreal residents have similar perceptions of the air quality in their community, with seven in ten rating it as generally excellent (14%) or good (55%), with a smaller proportion indicating it is only fair (25%) or poor (5%) (Question 2).
 - > Anglophones (77%) are more likely than francophones (67%) to say the local air quality is either excellent or good.
 - > Perceptions of local air quality are closely linked to how overall environmental quality is rated, suggesting that residents' evaluation of the former is a primary determinant in how they view the latter.
- Many Montreal residents were aware that air quality during the previous week (during which an advisory was issued) was poorer than usual.
 - > In contrast to residents' views of local air quality generally, only one-half rated their community's air quality to be excellent (10%) or good (39%) over the past week (during which smog levels were high and an advisory was issued). The same number rated air quality during this period as only fair (31%) or poor (15%) (Question 3).
 - > Perceptions of air quality during the episode, however, were influenced largely by views about air quality generally. Among residents who believe their local air quality is generally excellent or good, two in three (66%) rated it as such during the episode (compared with only 11% of those who believe the air quality is generally only fair or poor).

- Residents are most likely to believe smog in their community is caused by either automobile traffic or local industry emissions, while relatively few identify other contributors.
 - > When asked to identify (unaided) what causes smog in their area, Montrealers are most likely to mention automobile or other motor vehicle traffic (47%), with this response being the most common one across all identified subgroups. One-quarter (24%) believe local smog is caused by factories or other industrial or gas emissions. No other cause is mentioned by more than four percent (Question 4).
 - > One in five residents (23%) could not identify any causes of local smog, with these respondents more likely to be women and those with less education. Another 17 percent of residents say there is no smog in their immediate area.
- A large majority believe smog to be a serious health hazard to residents in their area, primarily in terms of respiratory illness such as asthma and lung disease.
 - > Almost two in three Montreal residents believe smog presents a very (25%) or somewhat (36%) serious health hazard to people living in their area, compared with one in three who say smog is either not serious (24%) or no hazard at all (9%) (Question 5).
 - > Smog is most likely to be rated as very serious by those who believe local air quality is generally only fair or poor (43%). Residents in households with key health problems (e.g. asthma, lung disease, heart disease) are somewhat more inclined to view smog as a very serious health hazard, as compared to residents in households without such health concerns.
 - > Francophones (65%) are more likely than anglophones (49%) to say that smog presents a very or somewhat serious health hazard.
 - > When asked (unaided) what specific types of health problems can result from exposure to smog, most residents identify respiratory problems, either generally (54%), or more specifically in terms of asthma (28%), allergies (14%), worsening of lung disease (10%), emphysema (5%), or bronchitis (4%) (Question 6).
 - > Few identify other types of health problems, such as cancer (8%), skin problems (8%), irritation to eyes/nose/throat (7%), or heart disease (5%). Fourteen percent were unable to provide any response to this question.

- Residents appear to have a limited understanding of how people can limit exposure to smog, with the most common response being to stay indoors.
 - > When asked (unaided) how people can limit their exposure to smog, residents are most likely to say they can stay indoors (29%), with women and residents who recalled the recent advisory being more likely to offer this comment. Another 12 percent say that people can limit their exposure to smog by moving to another location or area, while the same number suggest avoiding high traffic areas (Question 7).
 - > Few identify such strategies as wearing a mask (10%), using air purifiers or filters (7%), exerting pressure on government and/or industries (5%), avoiding strenuous activity (4%), or avoiding exposure at certain times of the day (4%). Another seven percent believe there is nothing that can be done, while more than one in four (28%) could not provide any response to the question.
- A significant percentage of residents indicate an awareness that smog also damages forests, wildlife, and the earth's environment.
 - > When asked (unaided) if smog can cause other types of damage, more than four in ten say that smog can have harmful effects on forests or trees (44%), while a large number also identify wildlife (35%), the environment (20%), and agricultural crops (17%). More than one in ten say that smog can harm buildings/property (12%) or water courses (11%), while 11 percent mention other miscellaneous impacts. Another 28 percent are unable to provide any response (Question 8).
 - > Residents who have attended university are more likely to mention smog's harmful impacts on forests and on wildlife. Anglophones (64%) are more likely than Francophones (38%) to say that forests can be damaged by smog.
- People are most likely to believe that individuals can reduce smog levels by reducing automobile use.
 - > Just as many Montrealers regard automobiles as a major cause of smog, when asked (unaided) how individuals can help reduce smog levels in their area, residents are most likely to identify reducing automobile use (36%), using alternative transportation (21%), using car pools (10%), or ensuring cars are properly tuned (5%) (Question 9).

- > No other action is identified by more than one in ten, including recycling/not burning garbage (10%), lobbying government (6%), not smoking (6%), avoiding aerosols (5%), and avoiding gas-powered equipment (3%).
- > Almost one in ten (8%) say there is nothing individuals can do to reduce smog in their community, while another one in five (20%) provided no response.
- > Men and better-educated residents are more likely to identify actions that individuals can take to reduce smog levels in their area.

Recall of Recent Advisory

- Only a quarter of Montreal residents recall hearing or seeing the recent smog advisory, while another 15 percent recall hearing one sometime earlier in the past year.
 - > One in four residents (24%) say they recall hearing or seeing announcements about high levels of smog or poor air quality in their area during the previous few days (Question 10).
 - > It is interesting to review awareness of the advisory by respondent subgroup:
 - Recall is lowest among those who have not completed high school (10%), and highest among Montrealers with a high school diploma (34%). One-quarter (24%) of those who have attended university recall the advisory;
 - Level of recall does not differ between those who rate local air quality to be excellent or good, and those who regard it as fair or poor;
 - Recall is lower among those who believe smog does not pose a serious health hazard to the local community (20%);
 - Recall is somewhat higher among males, while it does not vary by the presence of key health problems in the household, by whether the household has high risk individuals;
 - Recall does not vary between francophones and anglophones.
 - > Of those residents who did not recall the recent advisory (76% of the population), one-fifth say they remember such an announcement either earlier this past summer (8%) or

sometime last year (11%) (Question 11). This group represents another 14 percent of the total population, indicating that close to four in ten residents (38%) recall an advisory at some point in the past year.

- Residents are most likely to recall hearing the announcement on the television, followed by radio, newspapers, and media billboards.
 - > When asked where they recall hearing or seeing the recent (or any) smog advisory, six in ten (59%) identify television, while considerably fewer report hearing it on the radio (37%). Fewer than one in ten recall seeing the announcement in the newspaper (9%), on a media billboard (9%), or on The Weather Channel (7%). Another four percent say they heard about it from a friend or family member (Question 12).
 - > Television is the most frequently mentioned source across most subgroups, but is more likely to be the source recalled by men (66%), francophones (64%), high school graduates (74%), residents who heard the recent advisory (63%), and those who regard the local air quality as either excellent or good (63%). Television is only slightly more likely to be mentioned by residents who took actions in response to an advisory (65%), than by those who did not (60%).
 - > Radio is more apt to be mentioned by females (41%), anglophones (47%), and those residents who heard the recent advisory (46%).
- Most residents could recall something about the message contained in the advisory, although many could not recall the specific content.
 - > When those who recalled an advisory were asked (unaided) what type of information they remembered from the announcement(s), the most common response was non-specific: that either air quality was poor or that smog was present (35%) (Question 13).
 - > No one specific message was mentioned by as many as three in ten:
 - One in four recalled hearing the specific index or measure of air quality in their area (26%); fewer Montrealers recalled mention of the types of people at risk (13%), possible health problems caused by smog (9%), how to reduce smog, or requests to limit personal exposure (5%);
 - One-tenth of those who recalled an advisory could not remember anything about what they heard (10%).

- > Some differences in message recall are apparent across subgroups:
 - Residents with higher levels of education are more likely to remember information contained in it;
 - Men are more likely to mention the specific index or air quality measure in their area.

Six in ten Montreal residents say the information provided in the advisory was useful.

- > Of those who recall hearing or seeing an advisory, six in ten say the information provided by the most recent announcement was very (21%) or generally (38%) useful to them. More than a third found the information to be not very (23%) or not at all (14%) useful (Question 14).
- > Residents' evaluation of the usefulness of the advisory was largely consistent across groups, although Montrealers who believe smog presents a very serious health hazard are significantly more inclined to have found the advisory useful, as compared to those who say smog does not present a serious health hazard.
- > It is noteworthy that the information was much more likely to be rated as very useful by those residents in households which took actions in response to an advisory (41%), than by those who took no actions (15%).
- > Those most likely to say the advisory was either not very or not at all useful include men (40%), and residents who believe smog does not present a serious health hazard (46%).
- > Those residents who say the advisory was not useful were asked specifically how this was so, and almost a third say they believe smog has no effect on them (31%, with only francophones giving this response). Others maintain there is nothing they could do as a result of the advisory, either generally (16%), or because they had to continue with their usual work activity rather than stay at home (5%) (Question 15).
- > Three in ten wanted more information, either generally (2%) or in specific areas such as how to reduce emissions (10%), how to avoid exposure (9%), how long the smog would last (5%), or the health effects of the hazard (3%).

Response to the Advisory

- One in four households reported some change in activity in response to the smog advisory, with most efforts directed at reducing personal exposure, while some curtailed smog-producing activities.
 - > Of those who recalled an advisory, one in five (21%) reported to have done something different as a result of hearing it. Another three percent indicated that someone else in their household had taken such action (Question 16).
 - > Response to the advisory is higher among households with key health problems (29%). As well, anglophone households (43%) are more likely than francophone households (20%) to have done something in response to the advisory.
 - > Those who report changes are most likely to report actions intended to reduce personal exposure to smog, in terms of avoiding the outdoors (26%), reducing time outdoors (18%), cutting down on strenuous activity (8%), using an air conditioner (5%), or leaving the local area (3%) (Question 17).
 - > Considerably fewer reported actions intended to lower their contribution to smog such as reducing car trips (15%), using another form of transportation (8%), and avoiding use of gas-powered equipment (3%).
- Those Montrealers who did not respond to the advisory gave a range of reasons for not doing so, the most common being that the smog does not have an effect on them, or that nothing could be done about the problem.
 - > When those who reported no changes in response to the advisory were asked (unaided) why they chose not to act, a number of reasons were given. These residents were most likely to say the smog doesn't have an effect on them (28%), there was nothing they themselves could do about the problem (14%), or that it was unclear what had to be done (13%) (Question 18).
 - > Others said they did not take any actions because:
 - It was not necessary to do anything (8%)
 - It was too inconvenient or too much trouble (7%)
 - They were unable to do anything about the problem (6%)
 - They do not drive or own a car (4%)
 - Could not take the action (e.g. not use car) on that particular day (3%)

- > Another 16 percent gave a range of other reasons, while five percent provided no response to the question.
- > Reasons given for not taking actions vary somewhat by subgroups of the population, but no clear pattern in these differences is apparent. Consistent with other results presented above, francophones (30%) are more likely than anglophones (12%) to say that smog does not have an effect on them.
- Residents who had not heard an advisory were more likely than not to say they
 would likely respond to one by taking specific actions, depending in part on the
 degree of inconvenience involved.
 - > Those residents who did not recall hearing any advisory (N=248) were given a short description and asked their likelihood in taking actions in response to hearing one.
 - > Overall, residents were more inclined than not to say they would be likely to take actions in response to hearing a smog advisory in their area. The degree of expressed intent varies across types of actions, however, along what would appear to be a continuum of inconvenience or disruption (Questions 19a-c):
 - Almost three in four would definitely (46%) or likely (27%) limit or avoid strenuous exercise outdoors during an advisory, while the remaining fifth would likely (14%) or definitely (7%) not do so.
 - Two in three say they would definitely (40%) or likely (25%) avoid using gas-powered equipment (e.g. lawnmowers, motorboats) during an advisory; the remainder say they would be unlikely to do so (14%), or say it does not apply (i.e. do not own or use such equipment) (17%).
 - Just over half would definitely (30%) or likely (26%) cut down on the use of their car during an advisory, while the remainder are split between those who would likely not (19%) or definitely not (10%) do so, and those who say they do not own or use a car (12%).
 - > In each of the three cases, francophones are more likely than anglophones to say they definitely or likely would change their behaviour. In addition, residents who believe smog presents a very serious health hazard are more likely to say they definitely would cut down on use of their car, as well as limit or avoid strenuous outdoor exercise.

Importance Placed in the Advisory Program

- Whether or not residents did (or would be likely to) take actions in response to an
 advisory, most say it is important to them or others in their household to know
 about smog advisories when they are issued.
 - > Eight in ten residents say it is very (38%) or somewhat (44%) important to them (and/or to others in their household) that they hear about smog advisories when they are issued. Almost one in five indicate this is not very (11%) or not at all (6%) important (Question 20).
 - > Importance is placed on hearing the advisories by a strong majority across all identifiable subgroups, but residents who say it is very important are most likely to be those who rate smog to be a very serious health hazard (54%), those in households with a key health problem (43%), and those who regard local air quality as only fair or poor (45%). Francophones (84%) are more likely than anglophones (72%) to say it is very or somewhat important to hear about smog advisory announcements.
- Residents express strong interest in obtaining different types of information from advisories, particularly how individuals can avoid adding to the smog and limiting personal exposure.
 - > The survey asked residents how much importance they would place on receiving four different types of information from advisories during a smog episode (Questions 21a-d). Overall, residents express strong interest in all four types:
 - Virtually all residents say it is very (79%) or somewhat (17%) important that they find about what residents should do to avoid adding to smog.
 - The same percentage say it is very (75%) or somewhat (21%) important to learn how they can limit their exposure to smog.
 - Almost everyone says it is very (65%) or somewhat (30%) important to get information about how long the episode is expected to last.
 - The same percentage say it is very (66%) or somewhat (29%) important to know about the air quality index or pollution level.

- > Strong interest is expressed in all four types of information across all subgroups of residents. Among those generally more likely to say the information is very important are women, residents in households with key health problems (e.g. asthma, lung or heart disease), and those who believe smog is a very serious health hazard. Francophones (71%) are more likely than anglophones (46%) to say it is very important to be aware of the air quality index or level of pollution for that day.
- Fewer than half of Montreal residents feel the advisories are effective in helping people reduce exposure to smog, and even less likely to believe they will encourage people to reduce activities that contribute to smog.
 - > Only a limited segment of the public believe the advisory program is likely to be effective. Fewer than half of Montreal residents believe the advisories are very (10%) or somewhat (37%) effective in helping people reduce exposure to smog. An equal number say they are not very (40%) or not at all (8%) effective (Question 23).
 - > Residents are even less likely to believe the program is very (7%) or somewhat (26%) effective in getting people to reduce their smog-producing activities. Almost two in three consider the advisories to be not very (49%) or not at all (14%) effective in achieving this goal (Question 22).
 - > This difference in public views about the program's effectiveness in these two areas is consistent with the finding that those residents who took actions in response to advisories were more likely to do so in order to reduce their exposure than to reduce their contribution to smog levels. This would suggest that the former is the higher priority for most residents.
 - > Views on the effectiveness of the smog advisory program are generally consistent across subgroups of the population. However, anglophones are more likely than francophones to view the advisories as very or somewhat effective.

Study Methodology

Questionnaire Design

The questionnaire used for this study was designed by senior CRA researchers, in consultation with representatives from the Atmospheric Environmental Service (Environment Canada) and the Environmental Health Directorate (Health Canada). Prior to being finalized, the survey was pre-tested on a small sample of eligible respondents in Montreal. A copy of the final questionnaire is attached as Appendix A.

Sample Design and Selection

The sample was designed to complete interviews with a representative sample of 400 residents (18 years and older), residing in households in the Metropolitan Montreal area, with the sample designed to be representative of this area proportionate to population.

Within multi-person households selected for inclusion in the sample, eligible respondents were selected using the "last birthday" technique, whereby the person in the household with the most recent birthday is selected to be interviewed. Substitution was made in those cases where the selected respondent would not be available during the four day period during which the survey was being administered.

Survey Administration

The survey was conducted by telephone in English and French from Créatec's dedicated facilities in Montreal, during the period July 3-6, 1997, following a smog advisory that had been in effect over the previous few days. All interviewing was conducted by fully trained and supervised interviewers, with 10 percent of all completed interviews subsequently verified by supervisors. The average length of time required to complete an interview was 14 minutes.

A total of 407 interviews were completed. A sample of this size drawn from the population would be estimated to produce a sampling error of ± 4.9 percent, in 95 out of 100 samples. The margin of sampling error, however, will be greater for subgroups of the overall sample.

Completion Results

A total of 1,046 telephone numbers were dialled. Of these, 173 were ineligible because they were either not in service or business/fax numbers. Among eligible (or potentially eligible) households, the rate of interview completion is 54 percent. Completion rate is calculated as the

number of completed interviews (407), divided by the total number of numbers dialled (1,046) minus ineligible numbers (173) and those respondents who could not be reached during the short interview period (113). The final disposition of all telephone numbers dialled is shown below.

COMPLETION RESULTS INELIGIBLE NUMBERS 127 Not in Service Business/Fax 46 RESPONDENT NOT REACHABLE No Answer (After 5 Attempts) 113 INTERVIEW NOT COMPLETED Language Barrier (other than English or French) 50 299 Incomplete Interviews 4 **COMPLETED INTERVIEWS** 407 TOTAL TELEPHONE NUMBERS CALLED 1,046

Appendix A: Survey Questionnaire

1	2	3	4
For Off	ice U	se On	ly

ATMOSPHERIC ENVIRONMENT SERVICE EVALUATION OF INFO-SMOG PROGRAM [429-0003]

O	al Instructions:
Gener	ai instructions:
o Inter o Inter	viewer must read each set of instructions for each part of this questionnaire. viewer must record all responses clearly and verbatim where required. viewer must avoid paraphrasing or rewording responses. ord the following information:
	Respondent's Name:
	Telephone #:
	City/Town:
	Postal Code:
conduc commu n order	nave I reached the of Créatec +, a Montreal Research firm and we are ting a brief study on behalf of Environment Canada about some environmental issues in your unity. The to select at random someone in your household, I would like to speak to the next adult to celebrate the birthday.
110 01 11	- Accepted1
	- Other Person 2 - Refusal 9
۹.	Awareness and Knowledge of Smog
would	like to begin by asking about the environment in your area.
1.	How would you rate the overall quality of the environment in your community, that is, the presence or absence of different forms of pollution? Would you say the quality is:
	- Excellent

	pollution? Is it generally:		
	- Excellent	1	
	- Good		
	- Only fair		
	- Poor	4	
	- Depends	5	
	- DK/NA		
	- DIVINA	9	
3.	And how would you rate the air quality over the past week? Has it been:		
	- Excellent	1	
	- Good		
	- Only fair		
	- Poor		
	VOLUNTEERED		
	- Depends	5	
	- DK/NA		
	- DIVINA	9	
4.	As you may or may not know, this area sometimes experiences high levels of generally known as "smog", which consists primarily of ground level ozone, a brownish-yellow haze. Can you tell me what causes smog in your area? DO NOT READ - CODE ALL THAT APPLY; PROBE: Anything else?		
	Automobiles/troffin	01	
	- Automobiles/traffic		
	- Factories/industry/emissions		
	- Power plants		
	- CFCs/Freon/refrigeration/air conditioners		
	- Aerosols/spray cans		
	- Burning fuel/fossil fuels		
	- Weather conditions (non-specific)		
	- Hot/sunny weather	08	
	- Sunlight	09	
	- High temperatures/heat waves		
	- Landscape/topography/geography		
	- Ozone/ground level		
	- Loss of ozone layer		
	- Forest fires		
	- Volcanoes		
	- Pollution from the U.S./elsewhere		
	- DK/NA - Other (SPECIFY:)	99	
5.	How much of a hazard do you believe smog presents to the health of peop Does smog present:		in your area?
	- A very serious health hazard	01	
	- A somewhat serious health hazard		
	- Not a serious health hazard		
			SKIP TO Q.7
	- No health hazard at all	04	SKIF 10 Q./
	- Depends	ΩE	
			CKID TO O
	- DK/NA	99	SKIP TO Q.7

How would you rate the quality of the air in your community, that is, the presence or absence of

2.

What specific types of health problems can result from exposure to smog? DO NOT READ - CODE ALL THAT APPLY. PROBE: Is there anything else	∍?
- Irritation to eyes/nose/throat	01
- Respiratory/breathing problems (non-specific)	02
- Lung Disease (non-specific)	16
- Other (SPECIFY:)	90
effects? DO NOT READ - CODE ALL THAT APPLY; PROBE: Anything else? - Stay indoors - Avoid strenuous exercise - Avoid high traffic areas - Avoid exposure at certain times of the day - Move to another location - Wear masks - Lobby government, industry - Use air purifiers, fitters - None/No way to limit exposure - DK/NA	01 02 03 04 05 06 07 08 09
damaged by smog? DO NOT READ - CODE ALL THAT APPLY - Crops/agriculture - Buildings/property - Forests/trees - Water/rivers/streams - Wildlife/animals	01 02 03 04 05
	DO NOT READ - CODE ALL THAT APPLY. PROBE: Is there anything else Irritation to eyes/nose/throat Respiratory/breathing problems (non-specific)

9.	What, if anything, do you believe individuals can do to help reduce the amount of DO NOT READ - CODE ALL THAT APPLY	smog	in the air?
	- Cut down/limit car trips or auto use	01	
	- Use public transit (bus, subway) or bicycles		
	- Car pool		
	- Avoid using lawnmower/other gas-powered equipment	04	
	- Avoid using solvents		
	- Avoid using oil-based paints.		
	- Avoid using aerosols		
	- Turn down air conditioning		
	- Recycle/don't burn garbage		
	- Check-up/tone-up cars		
	- Lobby government		
	- Don't smoke		
	- Keep informed		
	- Nothing can be done		
,	- DK/NA	99	
	- Other (SPECIFY:)	90	
B. Now I v	Awareness and Recall of Recent Advisory vould like to turn to a slightly different topic.		
10.	Do you recall seeing or hearing any announcements in the past several days a smog or poor air quality in your area?	about	high levels of
	- Yes	1	SKIP TO Q.12
	- No	2	
	- DK/NA	9	
11.	(IF NO) Do you recall having seen or heard such an announcement either ear last year?	lier th	is summer, or
	- Yes, earlier this summer	1	
	- Yes, last year		
	- No		SKIP TO Q.19
	- DK/NA		
12.	(IF YES TO Q.10 OR Q.11) Where, specifically, do you recall seeing or hearing about smog conditions in your area? DO NOT READ - CODE ALL THAT APPLY. PROBE: Anywhere else?	this a	announcement
	- TV		
	- Radio		
	- Newspaper		
	- Computer/electronic mail or bulletin board		
	- Media billboard (outdoor electronic sign)	CU	
	- From friend/family member		
	- When phoning local weather office		
	- WEATHERADIO (Environment Canada)		
	- WEATHERCOPY (Environment Canada)		
	- Weather Channel (TV)		
	- DK/NA		
	- Other (SPECIFY:)	90	

- Poor air quality/smog conditions present in area	01	
- Air Quality Index/measure of air quality conditions	02	
- Forecast for air quality over next day or so		
- Request to residents to reduce emissions		
(PROBE FOR SPECIFICS) - Request to residents to limit personal exposure	05	
(PROBE FOR SPECIFICS)	00	
(PROBE FOR SPECIFICS) - Possible health problems caused by smog)	06	
- Mentioned types of people who might experience problems/be at risk	07	
- Environmental/plant/wildlife damage caused by smog		
- How people can cut down on smog		
- Ozone levels		
- UV levels		
- Length of advisory		
- Cannot recall		
- DK/NA		
- Other (SPECIFY:)	90	
Overall, how useful did you find the information provided in the INFO-SMonheard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful	Was it: 1	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful	Was it: 1	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful	Was it:123	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful VOLUNTEERED	Was it:1234	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful VOLUNTEERED - DK/NA	Was it:1234	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful VOLUNTEERED - DK/NA (IF NOT VERY/NOT AT ALL USEFUL) In what way was the information not DO NOT READ - CODE ALL THAT APPLY - Not enough information provided (PROBE FOR SPECIFICS) - Too technical/difficult to understand - Not specific enough (PROBE FOR SPECIFICS)	Was it:1349 useful to:010203	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful VOLUNTEERED - DK/NA (IF NOT VERY/NOT AT ALL USEFUL) In what way was the information not DO NOT READ - CODE ALL THAT APPLY - Not enough information provided (PROBE FOR SPECIFICS) - Too technical/difficult to understand - Not specific enough (PROBE FOR SPECIFICS) - Not enough information on health effects	Was it:1349 useful to01020304	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful - NOT VERY/NOT AT ALL USEFUL) In what way was the information not DO NOT READ - CODE ALL THAT APPLY - Not enough information provided (PROBE FOR SPECIFICS) - Too technical/difficult to understand - Not specific enough (PROBE FOR SPECIFICS) - Not enough information on health effects - Not enough information on how to avoid exposure	Was it:12349 useful to0102030405	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful - Generally useful - Not very useful - Not at all useful - NOT VERY/NOT AT ALL USEFUL) In what way was the information not DO NOT READ - CODE ALL THAT APPLY - Not enough information provided (PROBE FOR SPECIFICS) - Too technical/difficult to understand - Not specific enough (PROBE FOR SPECIFICS) - Not enough information on health effects - Not enough information on how to avoid exposure - Not enough information on how people can reduce emissions	Was it:12349 useful to010203040506	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful	Was it:12349 useful to010204050607	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful	Was it:12349 useful to0102030405060708	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful	Was it:12349 useful to0102030405060708	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful	Was it:12349 useful to01020304050607080910	SKIP TO
heard ["in the past few days"include this only for those saying yes to Q.10]? - Very useful	Was it:	SKIP TO

C.	Response to Recent Advisory		
16.	Did you, or someone else in your household, do anything differently as a [recent] INFO-SMOG?	result (of hearing this
	- Yes, myself	1	
	- Yes, someone else in household	2	
	- No	3	SKIP TO Q.18
	- DK/NA		
17.	(IF YES) What specifically did you/the other person do? DO NOT READ - CODE ALL THAT APPLY		
	- Reduced car use/avoided non-essential trips	01	
	- Used another form of transportation (SPECIFY)	02	
	- Used car pool	03	
	- Avoided use of gas-powered equipment (lawnmower/chain saw/power boat)	04	
	- Avoided use of oil-based paints	05	
	- Avoided use of solvents	06	
	- Avoided use of aerosols	07	
	- Cut down/avoided strenuous activity		
	- Reduced time spent outdoors		
	- Avoided going outdoors		
	- Sought out more information on the advisory/smog		
	- Left area/avoided area		
	- Used air conditioner		
	- Cannot recall		
	- DK/NA		
	- Other (SPECIFY:).	90	
	SKIP TO Q 20		

	Jnable to do anything (PROBE FOR SPECIFICS)		
	Could not reduce/avoid use of car		
	No transportation alternative available		
	Transportation alternatives inconvenient		
	Because of schedule/obligations on that particular day		
	Do not drive/own car		
	Vas not driving that day anyway		
	Do not have/use gas-power equipment		
	Do not have/use paints/solvents/aerosols		
	Nothing I could do		
	Foo much trouble		
	Foo inconvenient		
	Vouldn't make a difference/one person has no impact on smog		
	Not necessary to do anything/smog not a problem		
	Did not think about it		
	Smog did not affect them		
	DK/NA		
- C	Other (SPECIFY:)	90	
Þ٢	SKIP TO Q.20 F DID NOT HEAR ANY ADVISORY IN Q.11) As you may or may orgram is now in place in your area, which issues public announcer ovide important health and environmental information when smog exceptions.	ments through th	e me
Propro	F DID NOT HEAR ANY ADVISORY IN Q.11) As you may or may	ments through the eds a specified keeds in your household to particular day:	e me evel.
Propro	F DID NOT HEAR ANY ADVISORY IN Q.11) As you may or may ogram is now in place in your area, which issues public announcer ovide important health and environmental information when smog exceed you did see or hear one of these announcements, would you or others ely, likely not, or definitely not take each of the following actions on that EAD AND ROTATE (NOTE: NOT APPLICABLE—DO NOT OWN CA	ments through the eds a specified keeds in your household to particular day:	e me evel. d det
Propro	F DID NOT HEAR ANY ADVISORY IN Q.11) As you may or may rogram is now in place in your area, which issues public announcer ovide important health and environmental information when smog exceed you did see or hear one of these announcements, would you or others ely, likely not, or definitely not take each of the following actions on that EAD AND ROTATE (NOTE: NOT APPLICABLE—DO NOT OWN CATCHER LIKELY DEFINITELY DEFINI	ments through the eds a specified keeds a specified keeds in your household the particular day: AR/EQUIPMENT) Not Depends Applicable (Vol.) (Vol.)	e me evel. d det
Propro	F DID NOT HEAR ANY ADVISORY IN Q.11) As you may or may orgram is now in place in your area, which issues public announcer ovide important health and environmental information when smog exceed you did see or hear one of these announcements, would you or others ely, likely not, or definitely not take each of the following actions on that EAD AND ROTATE (NOTE: NOT APPLICABLE—DO NOT OWN CATCHER CONTINUES OF THE PROPERTY OF THE PRO	ments through the eds a specified keeds a specified keeds in your household to particular day: AR/EQUIPMENT) Not Depends Applicable (Vol.) (Vol.)	e me evel. d de

Why did you personally not take any specific actions or do anything differently as a result of the

18.

20.	How important is it for you and/or others in announcements when they are issued? Is it:	your hous	sehold to	hear abou	it INFO-S	MOG
	- Very important			1		
	- Somewhat important					
	- Not very important					
	- Not at all important					O Q.22
	VOLUNTEERED					
	- Depends					
	- DK/NA			9		
21.	When a smog advisory is issued, would it be very in for you to find out about each of the following: READ AND ROTATE	mportant, s	somewhat i	mportant, o	or not imp	ortant
		Very Important	Somewhat Important	Not Important	Depends (Vol.)	DK/NA (Voi.)
	a. The air quality index or level of					
	pollution for that day.	1	2	3	4	9
	b. The forecast of how long the episode					
	is expected to last	1	2	3	4	9
	c. How residents can limit their					
	exposure to smog	1	2	3	4	9
	d. What residents should do to avoid adding to the smog	1	2	3	4	9
22.	One of the primary reasons for issuing smog advisor many people as possible to limit activities, such as drawn you think the advisories are likely to be very effective at all effective in getting people to reduce smog-prod	iving cars, e, somewh	that are co nat effective	ntributing to	o the smog	j. Do
	- Very effective			1		
	- Somewhat effective			2		
	- Not very effective			3		
	- Not at all effective			4		
	VOLUNTEERED			_		
	- Depends - DK/NA					
23.	Another purpose of the advisories is to advise pe smog, and to recommend how people can limit their to be very effective, somewhat effective, not very eff reduce their exposure to smog?	exposure.	Do you fe	el the advi	sories are	likely
	- Very effective			1		
	- Somewhat effective					
	- Not very effective					
	- Not at all effective					
	VOLUNTEERED Depends			5		
	- Depends - DK/NA					
	- PIAIAU	•••••		ອ		

Personal Interest and Support of Program

D.

E. Respondent Characteristics

Finally, I would like a little information about yourself that will help us analyze the results of this survey.

24.	What was your main activity during the last 12 months? READ - CODE ONE ONLY		
	- Working at a job or business	01	CONTINUE
	- Looking for work		
	- Unable to work for health reasons		
	- Going to school	04	CONTINUE
	- Keeping house or looking after children		
	- Retired	06	SKIP TO Q.29
	- Something else (SPECIFY)	99	SKIP TO Q.29
	VOLUNTEERED		
	- Refused	99	SKIP TO Q.29
25.	(IF WORKING AT JOB/BUSINESS OR GOING TO SCHOOL) Appro- kilometres, do you generally have to travel to and from (work/school) each - Number of Kilometres:	n day?	·
	- None (work at home)	000	SKIP TO Q.29
	- Refuse/NA	999	SKIP TO Q.29
26.	By what means do you generally travel to and from [work/school]? DO NOT READ - CODE MORE THAN ONE IF VOLUNTEERED		
	- Car		
	- Car pool		
	- Bus/streetcar/subway	3	
	- Bicycle		
	- On foot		SKIP TO Q.29
	- DK/NA		
	- Other (SPECIFY:)	8	SKIP TO Q.29
27.	(IF BY CAR/CAR POOL) How many passengers, including the driver, as you commute?	re typically in	the car when
	- Number of people:		
	- DK/NA	999	
28.	(IF BY CAR/CAR POOL) Do you have access to another form of to [work/school] other than your own car?	ransportation	to and from
	- Yes	1	
	- No		
	- NO - DK/NA		
	- DIVINA	ອ	

	hours would you be likely to spend out of doors on a typical day? Wou READ - CODE ONE ONLY	ld it be:		
	- Less than 1 hour		1	
	- 1 to 3 hours			
	- 3 to 6 hours			
	- More than 6 hours			
	VOLUNTEERED			
	- Depends (PROBE FOR TYPICAL DAY)		8	
	- Cannot say/No Answer		9	
30.	And about how many hours would you be likely to spend out of doors of weekend day?	luring the	summ	er on a typical
	- Less than 1 hour		1	
	- 1 to 3 hours			
	- 3 to 6 hours			
	- More than 6 hours			
	VOLUNTEERED			
	- Depends (PROBE FOR TYPICAL DAY)		8	
	- Cannot say/No Answer		9	
31.	Compared to other people your age, would you say your health is gene READ CODE ONE ONLY	rally:		
	- Excellent		1	
	- Very good			
	- Good			
	- Only fair			
	- Poor			
	VOLUNTEERED			
	- DK/NA/Refuse		9	
32.	Has a doctor ever told you that you have any of the following health pro	oblems?		Refuse/
		Yes	No	NA
	a. Asthma			
	b. Lung disease			
	c. Heart disease	1	2	9
33.	Has anyone else in your household ever been told by a doctor they have READ & ROTATE	ve:		Refuse/
		Yes	No	NA
	a. Asthma			
	b. Lung disease	1	2	9
	c. Heart disease	1	2	9
34.	In what year were you born?			
	- Year:			
	- REFUSE	9999		

Thinking about your own general activities on weekdays during the summer months, how many

29.

		Yes	No	Refuse NA
_ a. b.	Children under 16 years of age	1 1	2	9
	/hat is the highest level of education you have completed? O NOT READ - CODE ONE ONLY			
- 1	Elementary school (Grades 1-8)	01		
	Some high school			
- (Graduated high school	03		
	Some community/technical college/CEGEP			
	Graduated community/technical college/CEGEP			
	Some college/university			
	Graduated college/university			
	Post graduate degree			
	No schooling			
- 1	REFUSED	99		
G	ender (BY OBSERVATION)			
_ [Male	1		
	Female			
	Citale	2		ė
tis yo	our postal code?			
_				
on:				
- 1	anaudiere	06		
	aval			
	Monteregie			
	Montreal			
	Other (SPECIFY:)			

This completes the interview. This study was conducted on behalf of Environment Canada. In case my supervisor would like to verify that I conducted this interview, may I have your first name?

First Name		

Thank you for your assistance and cooperation.

Appendix B: Tabular Results

MONTREAL, JULY 1997

QUESTION 1:

How would you rate the overall quality of the environment in your community, that is, the presence or absence of different forms of pollution? Would you say the quality is:

	TOTAL		L AIR LITY		IOUSNESS IOG HAZA		HEA REC ADVI:	ENT	EMPLOY STAT		HEA	EHOLD LTH ILEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	GUAGE
	% 	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Excellent	16	20	5	12	9	25	15	16	16	16	17	15	17	15	16	19	15	13	19	13	15	19
Good	55	68	25	41	63	59	54	56	55	56	54	56	57	53	48	49	66	55	49	60	55	55
Only fair	23	10	52	36	22	13	28	21	24	19	22	23	21	25	23	22	18	28	25	21	24	20
Poor	5	0	16	10	5	2	3	6	5	7	6	5	4	6	11	8	2	2	6	4	6	1
Depends	1	1	1	0	0	0	0	1	0	2	0	1	1	0	1	1	0	1	1	1	0	3
DK/NA	0	0	0	1	0	1	0	1	0	1	1	0	0	1	0	0	0	2	0	1	0	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

MONTREAL, JULY 1997

QUESTION 2:

How would you rate the quality of the air in your community, that is, the presence or absence of pollution? Is it generally:

	TOTAL	LOCA QUA			IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HEA	HOLD LTH LEMS	KEY GRO	AGE OUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Excellent	14	20	0	9`	11	22	12	15	14	14	14	14	13	15	12	17	17	11	17	12	13	17
Good	55	80	0	39	57	65	57	55	57	50	52	57	59	51	45	56	58	59	53	57	54	60
Only fair	25	0	83	42	25	12	26	25	23	29	26	24	23	27	33	19	22	27	23	27	26	20
Poor	5	0	17	9	7	1	4	5	5	5	7	4	5	6	10	6	4	3	7	4	6	2
DK/NA	0	0	0	1	1	0	1	0	0	2	1	0	0	1	0	1	0	1	1	0	1	0
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

MONTREAL, JULY 1997

QUESTION 3:

And how would you rate the air quality over the past summer? Has it been:

	TOTAL	LOCA QUA	L AIR LITY		OUSNESS OG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSE HEA PROB		KEY GRO		EDUCATION				GENDER		LANGUAGE	
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Excellent	10	14	1	4	8	16	9	10	10	9	8	11	10	10	10	10	11	8	13	7	9	11
Good	39	52	10	26	41	47	31	42	42	29	34	41	41	37	33	35	40	45	42	36	37	47
Only fair	31	24	47	35	34	26	32	31	30	34	33	30	29	33	27	33	29	33	28	34	34	20
Poor	15	6	38	30	13	7	26	12	14	21	19	14	15	16	27	19	11	8	13	18	17	11
Depends	1	1	2	2	0	1	1	1	1	0	1	1	1	2	0	0	3	2	1	1	0	5
DK/NA	4	4	3	2	3	3	2	4	3	7	4	3	5	3	3	2	6	4	3	5	3	6
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

MONTREAL, JULY 1997

QUESTION 4:

Can you tell me what causes smog in your area?

	TOTAL	LOCA QUA	L AIR LITY		OUSNES OG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HEA	EHOLD ALTH ILEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	GUAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Automobiles/traffic	47	45	52	56	53	37	57	43	52	36	46	47	44	50	26	47	43	64	51	43	46	51
Factories/industry/gas emissions	24	20	31	33	25	17	26	23	26	20	33	19	25	23	18	23	26	27	28	20	27	13
No smog in the area	17	23	5	11	9	31	11	20	15	24	14	19	20	14	23	16	15	18	18	17	18	15
High temperatures/heat waves	4	4	3	4	5	3	13	1	3	5	2	4	3	5	1	5	2	6	4	4	5	0
Hot/sunny weather	3	2	5	3	2	4	5	2	4	0	1	4	1	5	1	2	4	4	3	3	3	3
Burning fuel/fossil fuels	2	1	5	4	1	1	1	3	2	4	4	1	2	2	1	2	2	4	3	2	2	3
Weather conditions	2	2	2	2	2	2	2	2	2	3	2	2	2	2	3	1	2	3	2	2	2	2
Fireplaces/ Smoke from Chimneys	1	1	2	3	2	0	1	2	1	3	1	1	2	1	0	1	0	4	1	2	1	2
Burning of garbage/waste	1	1	3	1	3	1	1	2	2	1	1	2	1	2	1	1	2	2	2	1	1	2
CFCs/Freon/refrigeration/air conditioners	1	1	2	1	2	0	0	2	1	1	1	1	1	1	0	1	3		1	1	2	0
Aerosols/spray cans	1	1	1	1	0	0	0	1	1	1	2	0	1	1	1	0	1	1	1	1	1	1 1
Ozone/ground level	0	0	1	1	1	0	2	0	1	0	0	1	0	1	0	0	0	2	1	0	1	0
Forest fires	0	1	0	1	0	0	0	1	0	0	0	1	0	1	0	0	2	0	1	0	0	1
Landscape/topography/geography	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0
Loss of ozone layer	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0
Volcanoes	0	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
Pollution from the US/elsewhere	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0
Other	7	5	10	10	7	4	7	7	7	5	8	6	7	7	12	5	8	4	6	7	7	6
DK/NA	23	22	25	24	24	18	14	25	21	28	25	22	24	22	32	29	27	6	15	30	22	26
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

MONTREAL, JULY 1997

QUESTION 5:

How much of a hazard do you believe smog presents to the health of people living in your area? Does smog present:

	TOTAL	LOCA QUA	L AIR LITY		IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSE HEA PROB		KEY GRO			EDUC	ATION		GEN	DER	LANG	IUAGE
	76	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
A very serious health hazard	25	17	43	100	0	0	28	24	24	27	30	22	22	28	26	29	18	28	24	26	27	19
A somewhat serious health hazard	36	35	39	0	100	0	45	34	38	33	37	36	33	39	33	31	40	39	34	38	38	30
Not a serious health hazard	24	30	11	0	0	72	19	25	26	19	21	26	28	20	14	27	28	25	28	20	21	35
No health hazard at all	9	12	4	0	0	28	8	10	7	16	9	10	12	7	21	6	9	6	10	9	10	6
Depends	2	2	1	0	0	0	0	2	1	2	1	2	2	1	3	2	3	0	2	2	1	6
DK/NA	3	4	3	0	0	0	0	5	3	3	1	4	2	5	4	5	2	3	2	5	3	5
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 6:

What specific types of health problems can result from exposure to smog?

	TOTAL	LOCA QUA	L AIR LITY		IOUSNES IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSI HEA PROB		KEY GRO	AGE DUP		EDUC	ATION		GEN	IDER	LANG	UAGE
	% 	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Respiratory/breathing problems	54	53	56	50	59	51	59	53	56	45	57	52	53	54	35	54	51	68	52	55	57	44
Asthma/attacks	28	27	30	25	27	33	34	25	27	28	35	24	25	31	27	28	29	24	28	27	27	30
Allergies	14	13	16	17	12	13	18	12	14	14	20	10	13	15	15	10	15	16	8	19	14	13
Lung disease (non specific)	13	12	13	17	11	12	12	12	11	15	12	13	15	10	9	7	17	16	12	13	11	20
Worsening of lung disease	10	10	12	15	8	9	9	11	12	6	10	10	5	16	7	13	11	10	11	10	11	10
Cancer	8	7	12	7	9	9	2	10	10	2	6	10	9	8	7	5	8	12	10	7	9	6
Skin problems	8	9	5	7	7	9	2	10	8	7	10	7	9	6	5	7	8	10	6	9	8	8
!rritation to eyes/nose/throat	7	7	7	8	7	5	4	8	8	2	5	8	8	5	2	2	8	13	7	7	6	9
Heart disease	5	5	7	6	7	3	8	5	4	9	6	5	5	5	7	2	5	7	4	7	5	5
Emphysema	5	4	5	6	5	3	4	5	4	6	8	3	3	6	0	2	7	7	5	4	3	9
Bronchitis	4	4	4	7	3	2	6	3	3	6	6	3	2	6	5	2	4	5	4	4	4	3
Lung Cancer	4	5	2	7	2	3	4	3	4	2	6	3	4	3	2	3	4	5	5	2	4	4
Angina/heart attack/heart failure	3	3	3	3	3	2	4	2	3	1	2	3	3	2	0	4	1	4	3	2	3	0
Coughing/wheezing	1	1	2	2	0	3	1	2	1	2	2	1	2	1	0	2	2	1	1	2	1	1
Stomach/digestive problems	1	1	0	1	1	0	1	0	0	1	1	0	0	1	2	0	0	1	1	1	1 1	0
Chest pains	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	1	0	0	1	0	0	0
Other	4	4	4	3	5	3	7	3	5	2	3	4	3	5	2	3	3	7	5	3	5	1
DK/NA	14	14	13	12	11	17	4	17	12	17	8	16	14	13	25	18	11	6	16	11	11	22
SAMPLE SIZE (#)	355	240	113	102	148	98	90	262	261	86	124	231	182	173	55	96	102	100	171	184	276	79

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QUESTION 7:

Smog can cause health problems among both healthy people and those with heart or lung illness. What, if anything, do you believe people can do to limit their exposure to smog and its harmful effects?

	TOTAL		L AIR LITY		OUSNES: OG HAZA			IRD ENT SORY	EMPLOY STAT		HEA	HOLD LTH LEMS		AGE OUP		EDUC	ATION		GEN	DER	LANG	UAGE
	70	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Stay indoors	29	32	25	32	31	26	40	26	31	25	25	32	29	30	19	36	27	32	25	34	29	30
Move away	12	11	16	16	11	11	11	13	13	11	9	14	12	12	5	7	12	22	16	9	12	13
Avoid high traffic areas	12	12	11	14	12	10	13	11	11	11	11	12	13	10	5	10	8	21	12	11	11	14
Wear a mask	10	9	11	13	10	7	8	10	11	5	14	7	10	9	7	8	9	14	13	7	10	9
Use air purifiers, filters	7	8	4	11	9	3	8	7	7	8	5	8	4	10	3	8	5	10	7	7	7	8
No way to limit exposure to smog	7	6	8	9	3	9	8	6	6	7	10	5	8	5	8	9	5	5	10	4	8	3
Put pressure on the Gov't / industries	5	5	6	7	2	7	3	6	5	5	5	5	5	5	1	3	5	9	5	5	3	11
Avoid exposure at certain times of the day	4	5	4	6	7	1	5	4	4	5	6	4	3	6	0	3	6	7	4	5	5	3
Avoid strenuous exercise	4	4	4	2	5	4	11	2	5	2	3	5	4	4	3	6	3	6	5	3	5	2
Other	14	13	14	19	12	10	7	15	12	16	13	14	9	18	22	7	11	15	10	16	11	24
DK/NA	28	28	28	12	32	32	18	31	27	31	28	28	31	25	38	27	32	18	25	30	30	20
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 8:

Apart from any effects on human health, what else, if anything, do you believe can be affected or damaged by smog?

	TOTAL	LOCA QUA	L AIR LITY		IOUSNES: IOG HAZA		HEA REC ADVI:	ENT	EMPLOY STAT		HEA	EHOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Forests/trees	44	43	45	45	51	38	48	42	47	36	50	41	42	46	27	36	55	50	40	47	38	64
Wildlife/animals	35	38	29	40	36	32	35	36	36	31	38	34	37	33	22	31	42	41	30	40	33	43
The earth/environment	20	18	24	29	20	15	22	19	21	14	22	19	19	20	16	19	20	22	17	22	22	13
Crops/agriculture	17	18	17	17	19	18	18	17	18	17	20	16	18	17	16	14	20	19	17	18	17	19
Buildings/property	12	13	11	9	15	11	12	12	12	13	12	12	13	11	5	7	14	19	16	9	10	20
Water/rivers/streams	11	10	12	12	11	10	9	11	11	8	8	12	9	12	8	6	11	16	11	10	10	14
Ozone layer	3	3	5	8	3	1	5	3	4	2	3	4	3	4	3	4	2	6	5	2	4	1
Car paint/metal	3	3	3	2	4	3	3	3	2	6	6	2	3	4	3	5	3	3	5	1	3	3
Other	5	5	7	9	4	4	4	6	5	4	8	4	3	8	4	6	4	7	6	5	6	3
DK/NA	28	27	28	22	22	33	17	31	24	37	26	28	28	27	42	39	20	14	29	26	29	20
SÄMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 9:

What, if anything, do you believe individuals can do to help reduce the amount of smog in the air?

	TOTAL	LOCA QUA	IL AIR LLITY		OUSNES! OG HAZA			ARD ENT SORY	EMPLOY STAT		HOUSI HEA PROB	LTH	KEY GRO	AGE DUP		EDUC	ATION		GEN	IDER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Cut down/limit car trips or auto use	36	38	31	36	39	34	48	32	38	28	38	35	35	37	15	31	45	46	41	31	36	38
Use public transit or bicycles	21	22	17	17	30	15	29	18	24	11	20	21	18	24	4	18	25	30	22	19	22	17
Car pool	10	12	6	13	8	12	10	10	11	8	9	11	10	10	1	7	11	17	10	10	8	18
Recycle/Don't burn garbage/waste	10	8	13	13	9	9	5	11	10	8	8	10	8	11	21	6	10	6	10	9	10	7
Don't smoke	6	6	8	7	4	8	5	7	6	8	6	7	6	7	5	6	10	4	7	6	6	8
Put pressure on the Gov't	6	5	8	8	5	6	7	6	7	5	7	6	7	6	5	5	6	8	8	5	5	9
Check-up/Tune up your car	5	5	7	7	5	4	3	6	4	8	5	5	5	6	4	4	4	8	5	5	3	14
Avoid using aerosols	5	4	6	4	5	6	4	5	4	7	6	4	5	5	4	6	4	4	4	6	5	3
Avoid using lawnmower/other gas-powered equipment	3	2	4	2	3	2	2	3	3	1	1	3	3	3	1	2	2	6	3	2	3	2
Remain informed	2	4	0	1	4	2	2	3	3	0	3	2	2	3	0	2	2	6	2	3	2	5
Avoid using solvents	1	1	2	1	1	1	0	2	1	2	1	1	1	2	1	1	3	0	2	1	1	1
Avoid using oil-based paints	1	1	2	2	1	1	1	1	0	3	2	1	1	2	1	1	3	0	2	1	1	1 1
Turn down air conditioning	1	1	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	2	0	0	2
Other	18	18	18	26	14	15	17	18	18	15	18	17	16	20	15	16	18	20	20	15	19	14
Nothing can be done	8	7	10	10	7	9	8	8	6	14	11	7	10	6	12	9	6	6	7	9	9	6
DK/NA	20	20	20	19	19	20	16	21	19	25	17	22	21	19	33	25	17	10	15	24	22	13
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 10:

Do you recall seeing or hearing any announcements in the past several days about high levels of smog or poor air quality in your area?

	TOTAL	EXC FAIR/ V			IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HEA	EHOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD		VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	<hs< th=""><th>GRAD HS</th><th>SOME UNIV</th><th>GRAD UNIV</th><th>М</th><th>F</th><th>French</th><th>English</th></hs<>	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	24	24	24	26	30	20	100	0	26	20	25	23	23	26	10	34	23	25	27	21	25	22
No	75	76	75	72	70	79	0	100	74	78	73	76	76	74	89	65	76	75	73	78	75	77
DK/NA	1	0	2	2	0	1	0	0	0	2	1	0	1	0	1	1	1	0	1	1	1	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 11:

Do you recall having seen or heard such an announcement either earlier this summer or last year?

	TOTAL %	LOCA QUA			IOUSNESS IOG HAZA		HEAR D RECE NT ADVIS ORY	EMPLOY STAT		HEA	EHOLD LTH SLEMS		AGE DUP		EDUC	NOITA		GEN	DER	LANG	.UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes, earlier this summer	8	7	13	13	9	6	8	9	6	9	8	7	10	9	11	7	7	11	7	9	6
Yes, last year	11	13	9	11	15	8	11	13	8	11	12	10	12	5	7	15	17	13	10	12	10
No	77	78	76	72	74	83	77	75	84	76	78	80	74	85	79	78	68	75	79	77	80
DK/NA	3	3	2	4	2	4	3	3	2	5	2	2	3	2	3	0	7	1	4	3	4
SAMPLE SIZE (#)	309	2 15	93	75	104	109	30 6	216	85	103	206	164	145	66	71	88	82	141	168	24 0	6 9

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QUESTION 12:

Where, specifically, do you recall seeing or hearing this announcement about smog conditions in your area?

	TOTAL		L AIR LITY		IOUSNES IOG HAZA		HEA REC ADVI:		EMPLOY STAT		HEA	EHOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	iUAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME	GRAD UNIV	М	F	French	English
TV	59	63	49	58	65	52	63	53	59	61	62	58	57	61	31	74	58	53	66	51	64	40
Radio	37	38	37	31	38	43	46	23	36	42	35	38	34	40	38	38	29	43	34	41	35	47
Newspaper	9	10	6	7	9	10	5	15	8	3	7	10	10	7	6	8	13	6	8	9	5	27
Media billboard	9	7	12	13	7	7	6	13	9	9	7	10	8	10	6	2	9	17	7	11	10	3
The Weather Channel	7	4	12	9	9	2	3	13	7	6	11	5	6	7	0	4	7	13	9	4	8	3
From friend/family member	4	4	4	4	6	0	4	2	5	0	7	2	5	2	6	2	2	6	4	4	5	0
Computers/electronic mail or bulletin board	1	1	2	2	0	2	0	3	2	0	4	0	0	2	0	2	2	0	1	1	2	0
WEATHERADIO (Environment Canada)																						
	1	0	2	2	0	0	1	0	1	0	2	0	1	0	6	0	0	0	1	0	1	0
Other	1	1	2	2	0	2	0	3	1	3	2	1	1	1	13	0	0	0	1	1	1	3
DK/NA	1	0	2	0	0	2	1	0	0	3	0	1	1	0	0	0	2	0	1	0	0	3
SAMPLE SIZE (#)	159	109	49	45	69	42	98	60	122	33	55	104	77	82	16	50	45	47	85	74	129	3 0

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QUESTION 13:

Can you tell me roughly what type of information was provided in the announcement you heard or saw?

	TOTAL		AL AIR ILITY		IOUSNES OG HAZA		HE/ REC ADVI	ENT	EMPLOY STAT		HOUSI HEA PROB			AGE OUP		EDUC	ATION		GEN	DER	LANG	GUAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	<hs< th=""><th>GRAD HS</th><th>SOME UNIV</th><th>GRAD UNIV</th><th>М</th><th>F</th><th>French</th><th>English</th></hs<>	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Poor air quality/smog conditions present in area	35	34	37	42	36	26	40	25	36	30	38	33	35	34	31	34	40	32	34	35	33	40
Air Quality Index/measure of air quality conditions	26	22	35	29	23	26	21	33	29	15	27	25	25	27	19	16	24	40	33	18	29	10
Mentioned types of people who might experience problems/be a	13	12	12	9	12	19	14	10	12	15	7	15	12	13	6	16	11	13	12	14	13	10
Possible health problems caused by smog	9	8	8	7	6	17	11	5	7	15	5	11	9	9	0	16	9	4	8	9	9	7
How people can cut down on smog	8	6	10	7	10	5	8	7	9	3	5	9	9	6	0	8	7	9	7	8	9	3
Request to residents to limit personal exposure	5	5	6	7	6	2	5	5	4	9	2	7	6	4	13	4	2	4	5	5	5	7
Level of UV Rays/ strength of UV rays	3	3	4	2	4	2	3	3	2	3	4	3	3	4	0	0	7	4	2	4	2	10
Environmental/plant/wildlife damage caused by smog	3	4	0	0	1	5	3	2	2	0	4	2	1	4	0	4	4	0	4	1	2	7
Ozone layer's condition	3	3	2	0	1	5	3	2	2	3	4	2	3	2	6	2	4	0	4	1	2	3
Forecast for air quality over next day or so	2	3	0	2	3	0	1	3	2	0	2	2	4	0	0	2	4	0	4	0	2	0
Request to residents to reduce emissions	2	2	2	4	1	0	1	3	2	3	4	1	3	1	0	2	2	2	2	1	2	0
Other	9	9	8	9	10	7	10	7	8	12	5	11	8	10	6	10	2	15	7	11	9	10
Cannot recall	4	3	8	4	4	5	4	5	4	6	5	4	4	5	25	0	4	2	7	1	5	3
DK/NA ·	6	6	6	4	7	5	3	12	7	6	5	7	5	7	19	2	4	9	4	9	6	7
SAMPLE SIZE (#)	159	109	49	45	69	42	98	60	122	33	55	104	77	82	16	50	45	47	85	74	129	30

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QUESTION 14:

Overall how useful did you find the information provided in the smog advisory announcement you heard? Was it:

	TOTAL	Entered States (Section 1997)	L AIR LITY		IOUSNES: IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSI HEA PROB			AGE OUP		EDUC	ATION		GEN	DER	LANG	GUAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Very useful	21	23	16	29	22	12	28	10	19	30	27	18	17	26	19	36	18	9	18	26	21	23
Generally useful	38	36	43	40	39	36	42	32	38	36	35	39	43	33	44	34	36	43	39	36	38	37
Not very useful	23	20	29	20	20	29	17	32	25	15	20	24	27	18	25	16	20	32	25	20	25	13
Not at all useful	14	17	8	11	14	17	12	17	13	15	15	13	12	16	13	12	18	13	15	12	12	23
DK/NA	4	5	4	0	4	7	1	10	5	3	4	5	1	7	0	2	9	4	4	5	5	3
SAMPLE SIZE (#)	159	109	49	45	69	42	98	60	122	33	55	104	77	82	16	50	45	47	85	74	129	30

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QUESTION 15:

In what way was the information not useful to you?

	TOTAL	LOCA QUA	LLAIR LITY		OUSNES OG HAZA		HEA REC ADVI:		EMPLOY STAT		HEA	EHOLD LTH ILEMS		AGE OUP		EDUC	ATION		GEN	IDER	LANG	iUAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Smog has no effect on them	31	40	11	21	17	53	31	31	32	30	32	31	23	39	17	64	18	24	35	25	38	0
Nothing they can do	16	15	17	7	25	11	7	24	17	10	16	15	23	7	17	14	24	10	21	8	15	18
Not enough information on how people can reduce emissions	10	5	22	21	13	0	7	14	11	10	16	8	13	7	0	14	6	14	12	8	13	0
Not enough information on how to avoid exposure	9	10	6	14	13	0	14	3	9	10	5	10	10	7	0	0	12	14	3	17	2	36
Not enough information on how long smog will last	5	5	6	0	4	11	0	10	2	20	5	5	3	7	33	0	6	0	3	8	2	18
Must work/ can't stay home	5	8	0	7	4	5	0	10	6	0	0	8	10	0	0	0	12	5	6	4	6	0
Not enough information on health effects	3	3	6	0	8	0	7	0	4	0	0	5	3	4	17	0	0	5	3	4	2	9
Not enough information provided	2	3	0	0	4	0	3	0	2	0	0	3	0	4	0	0	0	5	0	4	2	0
Not specific enough	2	0	6	7	0	0	3	0	0	10	5	0	0	4	0	0	6	0	0	4	0	9
Other	10	5	22	14	8	11	7	14	11	0	11	10	17	4	0	7	6	19	15	4	11	9
DK/NA	16	15	17	14	17	16	28	3	17	10	16	15	10	21	17	7	18	19	12	21	17	9
SAMPLE SIZE (#)	58	40	18	14	24	19	29	29	47	10	19	39	30	28	6	14	17	21	34	24	47	11

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QUESTION 16:

Did you, or someone in your household, do anything differently as a result of hearing this smog advisory?

	TOTAL		OCAL AIR QUALITY KC FAIR/ V		OUSNESS OG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSE HEA PROB		KEY GRO			EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	<hs< th=""><th>GRAD HS</th><th>SOME UNIV</th><th>GRAD UNIV</th><th>М</th><th>F</th><th>French</th><th>English</th></hs<>	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes, myself	21	20	22	18	26	19	26	13	18	33	24	20	23	20	25	22	24	15	18	26	19	30
Yes, someone else in household	3	5	0	0	3	7	2	5	2	6	5	2	1	5	13	4	0	2	2	4	1	13
No	75	75	78	82	71	74	72	82	80	61	71	78	75	76	63	74	76	83	80	70	80	57
SAMPLE SIZE (#)	159	109	49	45	69	42	98	60	122	33	55	104	77	82	16	50	45	47	85	74	129	3 0

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QUESTION 17:

What specifically did you/the other person do?

	TOTAL		L AIR LITY		IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HEA	EHOLD LTH ILEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	WAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Avoided going outdoors	26	26	18	25	35	9	33	9	28	23	31	22	11	40	17	31	18	25	18	32	27	23
Reduced time spent outdoors	18	22	9	13	20	18	19	18	12	31	19	17	11	25	33	15	18	13	18	18	15	23
Reduced car use/avoided non-essential trips	15	11	27	0	30	0	15	18	24	0	0	26	16	15	0	15	9	38	24	9	23	0
Used another form of transportation	8	11	0	0	15	0	7	9	8	8	0	13	5	10	0	8	9	13	18	0	12	0
Cut down/avoided strenuous activity	8	11	0	13	5	9	11	0	12	0	6	9	5	10	0	8	0	25	18	0	12	0
Used an air conditioner	5	7	0	0	5	9	7	0	4	8	6	4	5	5	0	0	0	25	12	0	4	8
Avoided use of gas-powered equipment	3	0	9	0	5	0	4	0	4	0	0	4	0	5	0	0	0	13	6	0	4	0
Leave/ avoid the area	3	4	0	0	5	0	4	0	4	0	0	4	0	5	0	8	0	0	0	5	4	0
Other	31	26	45	50	15	45	19	55	28	31	31	30	47	15	50	23	55	0	24	36	27	38
DK/NA	5	7	0	13	0	9	4	9	4	8	13	0	5	5	0	15	0	0	6	5	4	8
SAMPLE SIZE (#)	39	27	11	8	20	11	27	11	25	13	16	23	19	20	. 6	13	11	8	17	22	26	13

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QUESTION 18:

Why did you personally not take any specific actions or do anything differently as a result of the advisory?

	TOTAL	LOCA QUA	L AIR LITY		IOUSNES: IOG HAZA		HEA REC ADVI:	ENT	EMPLOY STAT		HOUSE HEA PROB	LTH	KEY GR0	AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
The smog doesn't have an effect	28	33	16	19	27	42	31	22	26	40	15	33	31	24	20	35	24	26	26	29	30	12
Nothing I can do	14	13	16	27	6	13	14	14	14	15	23	10	14	15	20	5	26	10	15	13	14	18
Unclear/Not sure what to do	13	9	24	19	12	10	14	12	14	10	10	15	16	11	20	8	9	21	13	13	13	18
Not necessary to do anything/smog not a problem	8	10	5	5	10	6	3	16	10	0	10	7	10	6	0	3	9	15	9	8	10	0
Too inconvenient	7	6	8	5	10	3	7	6	7	5	10	5	2	11	10	8	3	8	7	6	8	0
Unable to do anything	6	6	5	3	8	3	6	6	5	5	3	7	3	8	0	8	9	3	6	6	3	24
Do not drive/own car	4	5	3	3	4	6	4	4	3	0	10	1	5	3	0	5	3	5	3	6	4	6
Could not reduce/avoid use of car	3	2	5	3	6	0	4	2	4	0	5	2	3	3	0	5	3	3	0	8	4	0
Because of schedule/obligations on that particular day	3	2	5	5	2	3	4	2	3	5	3	4	3	3	20	5	0	0	1	6	4	0
Wouldn't make a difference/one person has no impact on smog	3	1	5	3	2	3	3	2	3	0	3	2	2	3	0	0	3	5	3	2	3	0
Did not think about it	2	1	3	0	4	0	1	2	1	5	3	1	3	0	0	3	3	0	1	2	2	0
No transportation alternative available	1	1	0	0	0	0	0	2	1	0	0	1	0	2	0	3	0	0	1	0	1	0
Was not driving that day anyway	1	1	0	0	0	3	0	2	1	0	0	1	0	2	0	0	0	3	0	2	1	0
Other	6	7	3	14	4	0	7	4	6	5	5	6	3	8	0	5	6	8	6	6	6	6
DK/NA	5	5	5	0	6	10	6	4	4	10	8	4	5	5	10	5	6	3	9	0	3	18
SAMPLE SIZE (#)	120	82	38	37	49	31	71	49	97	20	39	81	58	62	10	37	34	39	68	52	103	17

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QUESTION 19a:

If you did see or hear one of these announcements, would you or others in your household definitely, likely, likely not, or definitely not take each of the following actions on that particular day: CUT DOWN ON USE OF YOUR CAR

	TOTAL	LOCA QUA			IOUSNESS OG HAZAI	OF	HEAR D RECE NT ADVIS ORY	EMPLOYSTAT		HOUSI HEA PROB			AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	NO	EMP/ SCHOOL	отн	YES	NO	HIGH BISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Definitely	30	26	38	49	25	24	30	23	45	35	27	33	27	33	34	29	24	31	29	35	14
Likely	26	29	18	19	34	24	26	31	14	23	27	23	29	18	31	25	31	29	24	26	24
Likely Not	19	20	15	14	16	23	19	22	10	17	19	19	19	9	17	26	21	21	16	16	28
Definitely Not	10	10	11	5	9	13	10	12	5	14	8	9	12	11	10	9	10	8	11	9	12
Depends	3	3	1	4	1	4	2	3	3	2	3	4	1	0	2	6	3	3	3	1	9
Not applicable	12	10	15	9	14	10	12	7	23	8	14	12	12	26	5	6	11	7	16	12	12
DK/NA	1	1	1	0	0	1	1	1	0	0	1	1	1	4	0	0	0	1	1	1	2
SAMPLE SIZE (#)	248	174	73	57	79	94	246	169	73	83	165	135	113	57	58	69	62	108	140	190	58

MONTREAL, JULY 1997

QUESTION 19b:

If you did see or hear one of these announcements, would you or others in your household definitely, likely, likely not, or definitely not take each of the following actions on that particular day: AVOID USE OF ANY GAS-POWERED EQUIPMENT, SUCH AS LAWN MOWERS, CHAINSAWS OR OUTBOARD MOTORS

	TOTAL %	LOCA QUA			IOUSNESS IOG HAZA	OF	HEAR D RECE NT ADVIS ORY	EMPLOY STAT		HOUSE HEA PROB	LTH	KEY GRO			EDUC	ATION		GEN	DER	LANG	UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Definitely	40	37	48	49	34	43	40	40	41	43	39	39	42	33	52	41	37	39	41	43	31
Likely	25	27	21	19	30	27	25	30	15	2 7	24	27	23	19	14	30	34	23	26	25	26
Likely Not	10	11	8	7	11	12	11	12	8	10	11	7	14	11	14	10	8	16	6	12	5
Definitely Not	4	5	3	7	3	5	4	4	4	6	4	6	3	7	5	6	0	6	4	4	7
Depends	2	2	0	0	1	1	2	2	1	0	2	3	0	2	3	0	2	3	1	1	5
Not applicable	17	16	19	16	20	12	17	11	29	14	19	17	18	26	10	13	19	14	20	15	26
DK/NA	1	1	1	2	0	1	1	1	1	0	1	1	1	2	2	0	0	0	1	1	0
SAMPLE SIZE (#)	248	174	73	57	79	94	246	169	7 3	83	165	135	113	57	58	69	62	108	140	190	58

MONTREAL, JULY 1997

QUESTION 19c:

If you did see or hear one of these announcements, would you or others in your household definitely, likely, likely not, or definitely not take each of the following actions on that particular day: LIMIT OR AVOID ANY STRENUOUS EXERCISE OUTDOORS

	TOTAL %	LOCA QUA			IOUSNESS IOG HAZAI		HEAR D RECE NT ADVIS ORY	EMPLOY STAT		HOUSE HEA PROB			AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Definitely	46	44	51	60	38	48	46	41	56	52	43	50	42	49	50	42	45	43	49	52	28
Likely	27	26	27	21	33	24	27	30	19	22	29	23	31	19	21	35	29	22	30	27	24
Likely Not	14	14	12	9	15	15	14	17	8	16	13	10	18	14	16	12	15	17	11	11	22
Definitely Not	7	9	3	4	8	7	7	8	4	7	7	7	7	5	7	9	6	11	4	4	17
Depends	2	2	1	2	3	2	2	2	1	0	3	3	1	2	0	3	3	3	1	1	7
Not applicable	4	3	4	4	3	3	4	1	10	4	4	5	2	9	5	0	2	5	3	4	2
DK/NA	1	1	1	2	1 1	0	1	1	1	0	1	1	0	2	2	0	0	0	1	1	0
SAMPLE SIZE (#)	248	174	73	5 7	79	94	246	169	73	83	165	135	113	57	58	69	62	108	140	190	58

MONTREAL, JULY 1997

QUESTION 21a:

When a smog advisory is issued, would it be very important, somewhat important, or not important for you to find out about each of the following: THE AIR QUALITY INDEX OR LEVEL OF POLLUTION FOR THAT DAY

	TOTAL	LOCA QUA	L AIR LITY		IOUSNES! IOG HAZA		HEA REC ADVI		EMPLOY STAT		HEA	EHOLD LTH ILEMS		AGE OUP		EDUC	ATION		GEN	DER	LANG	GUAGE
	76	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Very important	66	61	77	85	62	54	67	65	66	68	71	63	66	66	76	67	59	65	63	68	71	46
Somewhat important	29	33	20	11	34	40	29	30	30	25	24	32	28	31	14	29	39	30	31	28	24	50
Not Important	2	3	2	1	1	5	1	3	2	4	3	2	3	2	8	2	1	1	3	2	3	1
Depends	1	1	1	1	1	0	1	1	1	0	1	1	2	0	0	2	0	2	2	0	1	3
DK/NA	1	1	1	2	1	2	1	1	1	3	1	1	1	2	3	0	1	2	1	1	2	0
SAMPLE SIZE (#)	384	267	115	102	140	125	92	289	276	99	134	250	198	186	66	104	109	102	181	203	304	80

MONTREAL, JULY 1997

QUESTION 21b:

When a smog advisory is issued, would it be very important, somewhat important, or not important for you to find out about each of the following: THE FORECAST OF HOW LONG THE EPISODE IS EXPECTED TO LAST

	TOTAL	LOCA QUA	L AIR LITY		IOUSNES: IOG HAZA			ARD ENT SORY	EMPLOY STAT		HEA	HOLD LTH LEMS	KEY GRO	AGE DUP		EDUC	ATION		GEN	IDER	LANG	iUAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Very important	65	62	71	81	58	58	57	67	65	66	70	62	63	68	68	67	61	65	64	66	67	59
Somewhat important	30	33	25	16	39	34	39	28	32	26	25	33	32	28	21	29	39	29	30	30	29	34
Not Important	3	4	1	1	1	6	3	3	2	5	4	2	3	3	8	3	0	3	3	3	3	4
Depends	2	1	2	1	2	1	1	2	1	2	0	2	2	1	2	1	1	3	3	0	1	4
DK/NA	0	0	1	1	0	0	0	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0
SAMPLE SIZE (#)	384	267	115	102	140	125	92	289	276	99	134	250	198	186	66	104	109	102	181	203	304	80

MONTREAL, JULY 1997

QUESTION 21c:

When a smog advisory is issued, would it be very important, somewhat important, or not important for you to find out about each of the following: HOW RESIDENTS CAN LIMIT THEIR EXPOSURE TO SMOG

	TOTAL		IL AIR LITY		IOUSNES: OG HAZA		HEA REC ADVI:	ENT	EMPLOY STAT		HEA	HOLD LTH LEMS	KEY GRO	AGE DUP		EDUC	АПОП		GEN	DER	LANG	iUAGE
	76	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	ОТН	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Very important	75	74	77	84	71	71	70	76	74	79	75	75	75	74	79	74	81	66	69	80	77	66
Somewhat important	21	22	18	14	24	23	23	20	23	14	21	21	21	21	17	19	17	29	26	16	18	30
Not Important	3	3	1	2	2	4	4	2	2	4	4	2	3	3	3	4	1	3	3	2	3	3
Depends	1	1	2	0	1	1	2	1	1	1	0	2	1	2	0	3	0	1	2	0	1	1
DK/NA	1	0	3	0	1	1	1	1	0	2	1	1	1	1	2	0	1	1	1	1	1	0
SAMPLE SIZE (#)	384	26 7	115	102	140	125	92	289	276	99	134	250	198	186	66	104	109	102	181	203	304	80

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QUESTION 21d:

When a smog advisory is issued, would it be very important, somewhat important, or not important for you to find out about each of the following: WHAT RESIDENTS SHOULD DO TO AVOID ADDING TO THE SMOG

	TOTAL	%			IOUSNES: IOG HAZA		HE/ REC ADVI:	ENT	EMPLOY STAT			EHOLD LTH LEMS	KEY GRO	AGE OUP		EDUC	ATION		GEN	DER	LANG	GUAGE
	70	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Very important	79	78	82	88	79	72	78	79	81	75	81	78	77	81	80	77	82	76	77	81	82	66
Somewhat important	17	18	15	9	17	23	17	17	17	18	15	18	18	17	15	19	16	19	20	15	14	29
Not Important	2	3	2	1	3	3	2	2	2	4	2	2	4	1	3	2	2	3	2	2	2	3
Depends	1	1	1	0	1	2	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	3
DK/NA	1	0	1	2	0	0	1	0	0	2	1	0	1	1	0	1	0	1	0	1	1	0
SAMPLE SIZE (#)	384	267	115	102	140	125	92	289	276	99	134	250	198	186	66	104	109	102	181	203	304	80

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QUESTION 22:

One of the primary reasons for issuing smog advisories is to help reduce the problem by getting as many people as possible to limit activities, such as driving cars, that are contributing to the smog. Do you think the advisories are likely to be very effective, somewhat effective, not very effective, or not at all effective in getting people to reduce smog-producing activities?

	TOTAL		LL AIR LLITY		IOUSNES: IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSI HEA PROB			AGE OUP		EDUC	ATION		GEN	DER	LANG	UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Very effective	7	6	9	14	5	4	6	8	7	9	9	6	8	7	10	10	4	6	9	6	7	9
Somewhat effective	26	28	20	24	26	30	27	25	23	33	22	28	26	25	32	23	29	21	25	26	21	42
Not very effective	49	49	47	44	55	47	51	48	51	42	53	46	48	50	36	49	53	53	47	50	52	36
Not at all effective	14	13	16	14	13	14	14	14	17	7	14	14	15	13	14	13	11	17	17	11	16	7
Depends	1	1	2	3	1	0	1	2	1	3	1	1	2	1	3	2	2	0	1	2	1	3
DK/NA	3	2	5	2	1	4	1	4	2	6	1	4	2	4	7	3	1	4	2	4	3	2
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 23:

Another purpose of the advisories is to advise people about the health impacts associates with smog, and to recommend how people can limit their exposure. Do you feel the advisories are likely to be very effective, somewhat effective, not very effective, or not at all effective in helping people to reduce their exposure to smog?

	TOTAL		OCAL AIR QUALITY XC FAIR/ \		IOUSNES: IOG HAZA		HE/ REC ADVI	ENT	EMPLOY STAT		HEA	EHOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD		VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Very effective	10	10	8	15	7	8	11	9	10	9	12	9	8	11	11	11	9	7	8	11	7	19
Somewhat effective	37	38	36	35	35	41	36	37	37	35	35	38	39	35	38	36	38	37	37	37	32	56
Not very effective	40	39	43	41	46	34	44	39	41	40	44	38	41	39	32	42	45	39	41	39	45	22
Not at all effective	8	8	10	6	7	11	4	10	9	8	5	10	8	9	11	8	4	11	11	6	10	1
Depends	1	1	1	0	1	1	1	1	0	2	1	0	1	1	4	0	0	0	1	1	1	1
DK/NA	4	5	2	3	3	5	4	4	3	7	3	5	3	5	4	3	4	6	3	6	5	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 24:

What was your main activity during the last 12 months?

	TOTAL	EASTERNACE CONTRACTOR	L AIR LITY		IOUSNESS IOG HAZA		HE/ REC ADVI:	ENT	EMPLOY STAT			EHOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	SUAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Working at a job or business	64	68	57	61.	66	65	71	62	90	0	58	67	57	72	36	65	63	83	72	57	65	61
Looking for work	3	2	3	5	2	2	4	2	0	10	2	3	2	4	5	3	3	1	3	3	3	1
Unable to work for health reasons	2	3	1	1	4	2	3	2	0	9	2	3	1	4	7	2	2	1	2	3	3	1 1
Going to school	7	6	11	7	9	6	5	8	10	0	11	6	6	9	7	6	13	4	7	7	8	7
Keeping house or looking after children	7	5	11	7	7	4	2	8	0	25	9	6	11	2	14	6	6	3	0	13	5	11
Retired	14	14	14	16	10	17	11	14	0	53	15	13	20	7	29	15	10	7	14	14	14	11
Other	2	2	3	4	1	1	2	3	0	0	3	2	2	3	3	3	3	1	2	3	1	7
Refused	0	1	0	0	0	1	1	0	0	2	0	1	0	1	0	1	1	0	1	0	1	0
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 25:

Approximately what distance, in kilometers, do you generally have to travel to and from (work/school) each day?

	TOTAL	LOCA QUA			IOUSNESS IOG HAZAI		HEA REC ADVI:	ENT	EMPLOY MENT STATUS	HEA	EHOLD LTH ILEMS	KEY GRO	AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	М	EMP/ SCHOOL	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
1 to 5 kms	17	16	20	17	19	15	19	16	17	19	16	15	18	35	18	14	13	16	17	19	7
6 to 10 kms	14	12	20	16	13	18	16	14	14	15	14	13	15	19	14	13	15	15	14	13	20
11 to 40 kms	33	36	24	22	38	32	33	33	33	37	31	37	29	13	36	36	35	31	35	31	40
41 to 100 kms	19	22	12	20	13	26	13	21	19	16	20	19	19	10	18	24	18	24	14	19	18
More than 100 kms	4	4	5	9	4	3	5	4	4	2	6	4	4	6	4	0	8	7	1	4	5
None	6	7	5	6	8	3	5	7	6	4	7	4	8	6	4	6	7	5	7	5	10
Refused/NA	7	3	15	10	7	3	8	6	7	7	6	7	6	10	5	8	4	2	12	8	0
SAMPLE SIZE (#)	291	209	82	69	112	97	75	215	291	95	196	134	157	31	76	87	95	153	138	231	60

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QUESTION 26:

By what means do you generally travel to and from [work/school]?

	TOTAL	LOCA QUA	L AIR LITY		IOUSNESS IOG HAZAI		HEA REC ADVI:	ENT	EMPLOY MENT STATUS	HEA	EHOLD LTH ILEMS	KEY GR	AGE DUP		EDUC	ATION		GEN	DER	LANG	IUAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME	GRAD UNIV	М	щ	French	English
Car	71	71	74	67	69	77	68	73	71	66	74	71	72	67	78	68	70	76	65	73	66
Car pool	2	3	1	2	3	2	3	2	2	5	1	2	2	0	1	4	2	3	2	2	2
Bus/streetcar/subway	18	19	16	16	21	16	24	16	18	20	17	15	20	11	15	27	14	11	26	17	22
Bicycle	5	3	10	7	7	2	0	7	5	6	4	4	6	4	4	4	7	6	3	5	5
On foot	8	6	14	11	9	4	4	9	8	7	8	8	8	26	4	4	9	6	10	9	3
Other	0	1	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	0	1	0	0
DK/NA	6	8	0	7	5	5	4	6	6	7	5	8	3	4	4	4	9	5	7	4	12
SAMPLE SIZE (#)	269	200	69	61	102	94	68	200	269	88	181	125	144	27	72	79	90	148	121	210	59

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QUESTION 27:

How many passengers, including the driver, are typically in the car when you commute?

	TOTAL	LOCA QUA	L AIR LITY		IOUSNESS IOG HAZA		HEA REC ADVI:	ENT	EMPLOY MENT STATUS	HOUSE HEA PROB	LTH	KEY GRO			EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	YES	NO	HIGH RISK	LOW RISK	≺HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
1	75	75	76	63	71	85	81	73	75	70	77	79	72	56	73	79	78	73	78	76	72
2	15	15	14	20	15	13	8	17	15	11	17	8	22	19	20	14	11	16	14	16	13
3	6	7	4	5	11	3	6	6	6	11	4	8	5	6	5	5	8	5	8	5	13
4	2	1	4	5	3	0	2	2	2	3	2	3	1	6	2	2	2	4	0	3	0
Five or more	2	1	2	8	0	0	2	1	2	3	1	2	1	13	0	0	2	2	1	1 1	3
SAMPLE SIZE (#)	193	142	51	40	72	72	48	145	193	61	132	91	102	16	56	56	64	113	80	154	39

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QUESTION 28:

Do you have access to another form of transportation to and from [work/school] other than you own car?

	TOTAL	LOCA QUA			IOUSNES! IOG HAZA		HEA REC ADVIS	ENT	EMPLOY MENT STATUS	HOUSI HEA PROB		KEY GRO			EDUC.	ATION		GEN	DER	LANG	UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	Z	F	French	English
Yes	48	44	57	53	56	40	58	44	48	52	45	46	49	44	43	50	52	49	46	49	41
No	52	56	43	48	44	60	42	56	52	48	55	54	51	56	57	50	48	51	54	51	59
SAMPLE SIZE (#)	193	142	51	40	72	72	48	145	193	61	132	91	102	16	56	56	64	113	80	154	39

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QUESTION 29:

Thinking about your own general activities on weekdays during the summer months, how many hours would you be likely to spend out of doors on a typical day? Would it be:

	TOTAL		AL AIR ILITY		OUSNES: OG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HEA	HOLD LTH LEMS	KEY GRO	AGE SUP		EDUC	ATION		GEN	DER	LANG	iUAGE
	76	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	Engilsh
Less than 1 hour	10	11	9	10	11	11	10	10	12	7	12	10	8	13	11	16	8	6	8	13	10	11
1 to 3 hours	38	38	38	40	41	33	39	38	38	38	36	39	41	35	30	33	36	50	29	46	36	44
3 to 6 hours	32	34	29	26	33	36	32	32	30	39	31	33	36	28	26	31	37	31	38	27	33	31
More than 6 hours	19	17	24	23	15	20	19	19	20	16	21	18	15	24	32	19	19	11	25	14	21	11
Depends	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
Cannot say/No answer	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1 1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 30:

And about how many hours would you be likely to spend out doors during the summer on a typical weekend day?

	TOTAL		QUALITY EXC FAIR/ VE		IOUSNES: IOG HAZA		HE/ REC ADVI		EMPLOY STAT		HEA	EHOLD LTH ILEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	IUAGE
	%	EXC GOOD		VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Less than 1 hour	4	4	4	4	3	4	3	4	3	6	5	3	3	4	10	6	1	0	1	7	4	1
1 to 3 hours	15	16	15	17	18	11	18	15	13	23	14	16	13	18	19	19	10	17	11	1 9	16	14
3 to 6 hours	38	38	36	31	40	40	30	40	37	40	38	38	46	28	26	33	43	43	34	41	37	40
More than 6 hours	43	42	45	48	39	44	49	41	47	31	43	43	37	50	44	43	46	40	54	33	43	44
Depends	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 31:

Compared to other people your age, would you say your health is generally:

	TOTAL	LOCA QUA	L AIR LITY		IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSE HEA PROB	LTH	KEY GRO	AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	70	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Excellent	28	29	25	26	28	26	30	27	31	18	17	33	27	28	12	28	37	28	30	25	25	36
Very good	38	41	31	34	38	42	37	38	40	31	36	39	37	38	34	39	36	40	35	40	38	36
Good	24	23	25	24	25	23	23	24	23	28	30	20	24	24	26	26	20	25	25	22	24	22
Only fair	8	4	15	10	8	5	10	7	6	13	14	4	8	8	19	5	4	6	7	8	9	3
Poor	3	3	2	5	1	4	0	4	1	9	2	3	4	2	8	3	3	0	2	4	3	1
DK/NA/Refuse	0	0	2	1	0	0	0	1	0	0	1	0	0	1	0	0	1	1	1	0	0	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 32a:

Has a doctor ever told you that you have any of the following health problems? ASTHMA

	TOTAL	LOCAL AIR QUALITY EXC FAIR/ GOOD POOR		IOUSNES: IOG HAZA		HEA REC ADVIS	ENT	EMPLOY STAT		HOUSI HEA PROB		KEY GRO	AGE OUP		EDUC	ATION		GEN	DER	LANG	UAGE	
	%			VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	8	6	12	13	7	5	8	8	7	11	23	0	8	8	16	6	6	6	7	8	9	2
No	92	94	88	86	93	95	92	92	93	89	76	100	92	91	82	94	94	94	93	91	91	97
Refused/NA	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 32b:

Has a doctor ever told you that you have any of the following health problems? LUNG DISEASE

	TOTAL				IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HEA	HOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%			VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	МО	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	M	F	French	English
Yes	5	4	6	5	7	3	6	5	3	10	14	0	5	5	10	5	3	5	4	6	6	1
No	95	95	94	94	93	97	94	95	97	90	85	100	95	94	89	95	97	95	96	93	94	98
Refused/NA	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 32c:

Has a doctor ever told you that you have any of the following health problems? HEART DISEASE

	TOTAL		L AIR LITY		OUSNES! OG HAZA		HE/ REC ADVI		EMPLOY STAT		HOUSI HEA PROB	LTH		AGE DUP		EDUC.	ATION		GEN	DER	LANG	JAGE
	/6 	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	5	6	5	5	6	6	7	5	4	8	16	0	5	6	12	5	2	6	5	6	5	6
No	94	94	95	94	94	94	93	95	96	92	83	100	95	94	86	95	98	94	95	93	95	93
Refused/NA	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 33a:

Has anyone else in your household ever been told by a doctor they have: ASTHMA

	TOTAL	LOCA QUA	L AIR LITY		IOUSNESS IOG HAZA		HEA REC ADVIS		EMPLOY STAT		HOUSE HEA PROB		KEY GRO	AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	Ю	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	17	17	16	23	18	13	21	15	19	9	49	0	18	15	1 5	14	22	16	17	17	16	1 9
No	78	77	80	74	79	81	72	80	78	81	48	94	78	78	74	81	74	82	77	79	81	68
Refused/NA	5	6	3	4	3	6	6	5	3	9	3	6	4	7	11	5	4	3	6	4	3	13
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 33b:

Has anyone else in your household ever been told by a doctor they have: LUNG DISEASE

	TOTAL	LOCA QUA			IOUSNESS OG HAZA		HEA REC ADVI:	ENT	EMPLOY STAT	MENI		EHOLD LTH ILEMS	KEY GRO			EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	4	3	6	6.	6	1	9	3	5	3	12	0	4	5	4	2	6	5	5	3	5	1
No	91	91	91	90	91	93	85	92	92	88	85	94	92	89	85	94	89	93	89	93	92	86
Refused/NA	5	6	3	4	3	6	6	5	3	9	3	6	4	7	11	5	4	3	6	4	3	13
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 33c:

Has anyone else in your household ever been told by a doctor they have: HEART DISEASE

	TOTAL	TOTAL QUALITY									MPLOYMENT HOUSEHOLD HEALTH PROBLEMS			AGE DUP	EDUCATION				GENDER		LANGUAGE	
		EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	9	8	10	8	9	10	8	9	9	9	26	0	9	9	7	8	11	9	6	11	9	7
No	86	86	87	88	88	84	86	86	88	81	71	94	87	85	82	87	85	88	88	85	87	81
Refused/NA	5	6	3	4	3	6	6	5	3	9	3	6	4	7	11	5	4	3	6	4	3	13
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 34:

In what year were you born?

	TOTAL		L AIR LITY	100000000000000000000000000000000000000	IOUSNESS IOG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSE HEA PROB	LTH		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	ОТН	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Between 1913 and 1932	12	13	11	14	7	16	7	13	1	41	13	12	23	0	27	15	6	6	11	13	12	14
Between 1933 and 1942	9	9	10	10	9	7	7	10	6	19	9	9	3	16	21	7	4	9	7	12	10	6
Between 1943 and 1952	17	18	17	15	18	20	19	17	21	8	15	19	11	25	19	20	10	21	21	14	17	19
Between 1953 and 1972	51	53	46	51	53	49	59	48	58	29	51	50	57	44	19	52	63	59	50	51	50	51
Between 1973 and 1980	9	7	13	8	12	7	6	9	11	2	9	8	6	12	12	5	16	3	10	7	9	7
Refused	2	1	3	3	1 1	1	1	2	2	1	1	2	1	3	1	1	1	3	1	3	2	3
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 35a:

Does you household currently include children under 16 years of age?

	TOTAL		L AIR LITY		OUSNESS OG HAZA		REC	ARD ENT SORY	EMPLOY STAT		HOUSE HEA PROB	LTH		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	37	39	33	29	39	43	39	36	41	25	37	37	71	0	21	33	47	41	37	37	38	35
No	61	58	66	70	61	54	58	62	57	73	62	60	28	96	78	64	51	57	62	60	62	56
Refused/NA	2	3	1	1	1	3	3	2	2	2	1	3	1	4	1	3	2	2	2	3	0	9
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 35b:

Does you household currently include adults 65 years or over?

	TOTAL		L AIR LETY		NOUSNESS MOG HAZA		REC	ARD ENT SORY	EMPLOY STAT	MENI		EHOLD LTH ILEMS	KEY GRO			EDUC	ATION		GEN	DER	LANG	WAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Yes	11	11	13	15	7	13	9	12	6	25	17	9	22	0	18	. 14	6	10	8	14	10	16
No	86	87	86	84	92	85	88	86	92	73	82	89	77	96	81	83	92	88	90	83	90	75
Refused/NA	2	3	1	1	1	3	3	2	2	2	1	3	1	4	1	3	2	2	2	3	0	9
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 36:

What is the highest level of education you have completed?

	TOTAL	LOCA QUA	L AIR LITY		IOUSNES: IOG HAZA		REC	IRD ENT SORY	EMPLOY STAT		HEA	EHOLD LTH LEMS		AGE DUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD	FAIR/ POOR	VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	< HS	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English
Elementary school (Grades 1-8)	5	4	7	4	4	6	1	6	1	16	6	4	6	4	27	0	0	0	5	5	6	0
Some high school	13	11	18	15	12	13	6	15	10	22	14	13	11	15	73	0	0	0	9	16	14	9
Graduated high school	27	28	23	30	23	26	38	23	26	27	25	27	26	27	0	100	0	0	30	24	29	17
Some community/technical college/CEGEP	5	4	6	5	6	4	5	5	5	3	8	3	6	3	0	0	17	0	5	4	5	3
Graduated community/technical college/CEGEP	17	18	16	12	19	19	19	16	19	12	14	19	17	17	0	0	61	0	15	20	17	19
Some college/university	6	8	2	4	6	8	2	8	5	8	6	6	7	5	0	0	22	0	6	7	3	16
Graduated college/university	20	19	21	20	21	20	22	19	24	9	20	20	17	23	0	0	0	74	23	17	18	27
Post graduate degree	7	8	5	10	8	4	5	8	9	3	7	7	8	5	0	0	0	26	8	6	7	6
Refused	1	0	2	1	1	0	1	1	1	0	1	1	0	1	0	0	0	0	0	1	0	2
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88

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QUESTION 37:

Gender

	TOTAL %	TOTAL	LOCA QUA	L AIR LITY		OUSNESS OG HAZA		HEA REC ADVIS	ENT	EMPLOY STAT		HOUSI HEA PROB	LTH	KEY GRO	AGE OUP		EDUC	ATION		GEN	DER	LANG	UAGE
	%	EXC GOOD		VERY SER	SMWHT SER	NOT SER	YES	NO	EMP/ SCHOOL	отн	YES	NO	HIGH RISK	LOW RISK	<hs< th=""><th>GRAD HS</th><th>SOME UNIV</th><th>GRAD UNIV</th><th>М</th><th>F</th><th>French</th><th>English</th></hs<>	GRAD HS	SOME UNIV	GRAD UNIV	М	F	French	English	
Male	47	48	47	46	45	54	53	46	53	35	44	49	45	50	38	53	43	54	100	0	48	44	
Female	53	52	53	54	55	46	47	54	47	65	56	51	55	50	62	47	57	46	0	100	52	56	
SAMPLE SIZE (#)	407	283	122	102	148	136	98	306	291	106	138	269	212	195	73	108	114	109	193	214	319	88	