



A L B E R T A M U N I C I P A L A F F A I R S

ALBERTA SURVEY DATA

Summary of the 2008 Alberta HIRF Survey

December 4, 2008

PROVOKG^e

B A C K G R O U N D

Objectives

In support of a larger set of project objectives of:

- i. Identifying key messages and contexts to increase the public's fire safety behaviour
- ii. Identifying key message and contexts to increase the construction industry's fire safety practices and arson prevention practices
- iii. Providing the grounded framework for a successful education and awareness campaign

An in-depth research plan comprised of two phases was undertaken:

In-depth Interviews

The first phase of the insight plan involved a series of in-depth interviews conducted with a variety of stakeholders. In total, 66 one-on-one, confidential interviews were conducted over the telephone. Interview were conducted with:

34	Public
6	Advisory Committee
11	Stakeholders
15	Industry

As a first step this deep discovery effort delivered a set of insights that was reported under separate cover. Out of this we determined a number of quantitative factors to be utilized for benchmarking in the assistance of tracking this issue throughout the campaign.

Quantitative Telephone Survey

In the second phase of the research, a telephone survey was developed and administered in collaboration with Environics to 702 Albertans from the general public (age 18+).

This report summarizes the results from the quantitative telephone survey conducted with the general public.

M E T H O D

Quantitative Survey Design

The foundation of the quantitative telephone survey was a set of questions designed to assess Albertans' attitudes, perceptions and behaviors regarding fires and fire safety within the context of their homes.

Questions for the survey were developed based on the literature review completed in the first phase of the research, the learnings gleaned from the first phase of the research as well as discussions with internal Alberta Municipal Affairs representatives and with Environics Research Group representatives. The survey questions were piloted on several respondents and were found to be effective in soliciting the desired information.

Data Collection and Sample Construction

This report is based on a probability sample of 702 adults (age 18+) living in Alberta. The survey was conducted by Environics Research Group between November 10th and 16th, of 2008. The sampling method was designed to complete 700 interviews within households randomly selected across the province.

From within each multi-person household contacted, respondents age 18 and over were screened for random selection using the "Most Recent Birthday" method. The use of this technique produces results that are as valid and effective as enumerating all persons within a household and selecting one randomly.

Field supervisors were present at all times to ensure accurate interviewing and recording of responses. A minimum of 10 percent of each interviewer's work was unobtrusively monitored for quality control in accordance with the standards of practice set out by the Professional Marketing Research Society and the Canadian Association of Marketing Research Organizations. A minimum of five calls was made to each household before classifying it as a "no answer".

Data Analysis

After of the interviewing was completed, the data was analyzed in three ways:

- Detailed computer tables were produced which summarize total responses given, and breakdown responses according to several subgroups including such things as type of housing, distance from closest neighbor, presence of children in household, employment status (including employment in construction or fire service), age, gender, education, country of birth, income, and geographic region
- To examine if perceptions and behaviors differed by risk of experiencing a high intensity residential fire, we created two groups of respondents:
 - Lower risk (n = 336) – all respondents who reported living in high-rise apartment buildings as well as those respondents who reported living in a detached house with a distance of 11 feet or greater from their nearest neighbor
 - Higher risk (n = 338) – all respondents who reported living in a low-rise apartment building, duplex, semi-detached house, townhouse, or a detached house with a distance of 10 feet or less from their nearest neighbor.
- To examine if perceptions and behaviors differed by whether respondents had experienced a life change in the past six months (i.e., moved to a new house, had a baby, moved to a senior's residence, retired), we created two groups of respondents:
 - Experienced life change (n = 142) – all respondents who reported experiencing a change in the past six months
 - Did not experience life change (n = 560) – all respondents who did not experience change in the last six months

Statistical Reliability

For a given sample size, confidence bounds or limits around an observed percentage are often calculated to obtain a general sense of the reliability of the obtained results. For example, these confidence bounds may suggest that such limits are correct 95 percent of the time.

In the case of the present survey, the population produces results which are accurate to within $\pm 3.7\%$, 19 times out of 20. This means that if 100 people within the population were surveyed, and we ended up with 50% of respondents giving a particular response, we can be reasonably confident (95%) that the actual proportion of people in the total population with that opinion would be between 53.7% and 46.3% (plus or minus 3.7%).

The margin of error increases when looking at subgroups within the sample. Statistically significant difference in opinion between the subgroups analyzed are noted throughout this report. If no mention is made of a particular subgroup, the reader can assume opinions are not significantly different.

S U M M A R Y

The results of the present investigation quantitatively support the insights from the qualitative process – respondents in the present investigation clearly believe a fire is a fire (i.e., there is no delineation of HIRF versus any other fire) and perceptions and behaviors regarding fire safety were very similar across all segments of respondents.

Respondents appear to be quite comfortable with their risk of fire within their homes:

- Respondents somewhat inflate their likelihood of experiencing a fire as compared to Alberta fire statistics, but overall see it is an acceptable risk in their home
- Respondents believe they are largely attentive to fire prevention in their home, that it is a matter of common sense that prevents fire, and that they are doing enough within their homes to protect against fire

Note: Our qualitative interviews support these self-perceptions, however our in-depth interviews revealed that in fact their attentiveness is not as vigilant as they perceive that:

- Prevention actions that need to be taken may be common sense but much is actually unknown/unconsidered and therefore not enacted
- Virtually everyone could truly be doing more in terms of prevention

And while a change in life is an opportune time for people to reconsider their behaviours, with the sheer amount of coping involved, they are eager to leave automated behaviours unchallenged unless forced to confront them. This will be important in terms of messaging and timing of messaging should this window of relevance be targeted through communications.

Based on the results of the two phases of research, we believe the core communications challenge will be to have people question their assumptions regarding fire safety and fire safety behaviors. And as a result of this questioning, change their behaviors to be more fire safe.

In terms of measures to specifically target in a communications campaign we suggest the following:

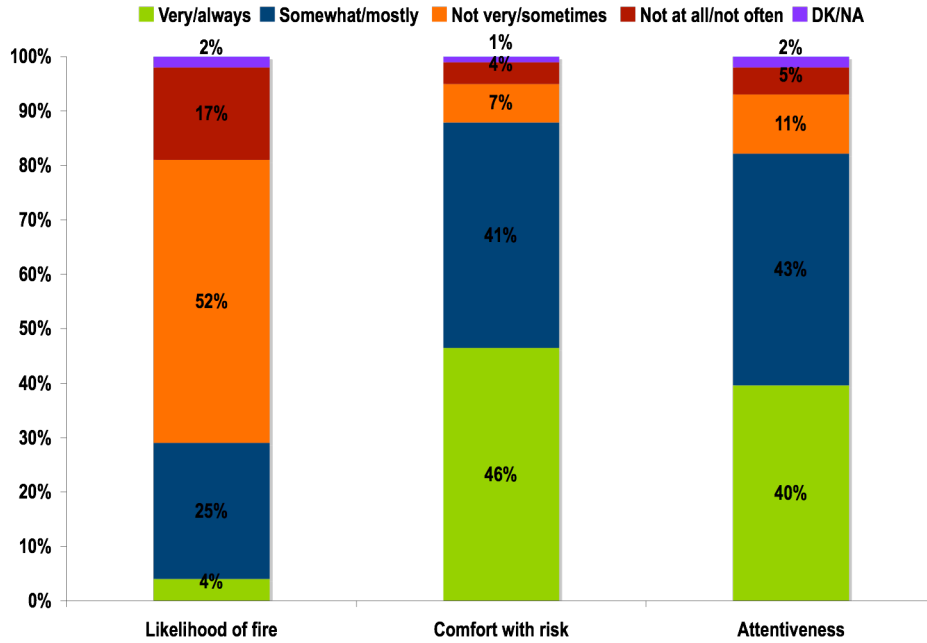
- Raise awareness that inattentiveness is a cause of fire
- Raise the percentage of Albertans who realize that there is more they can do to protect against fire
- Lower the percentage of Albertans who believe they know what they need to do (bumping them off of autopilot and into conscious consideration of their fire safety behaviors)

To begin to tap into the notion of conscious consideration of fire safety, we also suggest that future research begin to benchmark:

- The percentage of Albertans who have consciously considered the fire safety of their home inside and outside in the past 6 months

O V E R A L L P E R C E P T I O N S

Assessing Risk

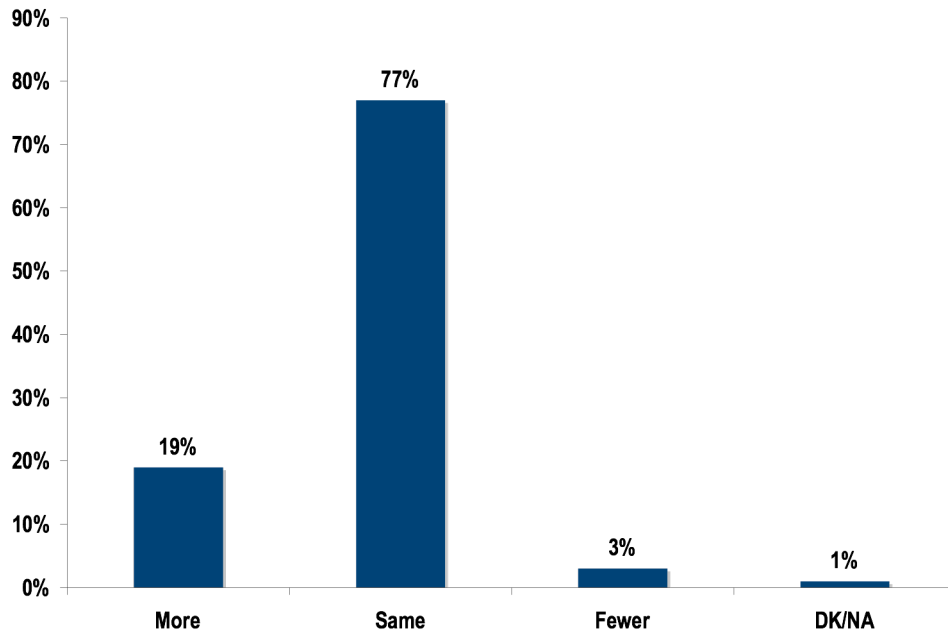


*In your opinion, what do you believe is the likelihood that you will ever face a fire in your home? Would you say it is...?
 How comfortable do you feel with the amount of risk you face from a fire in your home?
 How attentive would you consider yourself to be to fire safety practices? Would you say you are...?*

Almost 70% of Albertans surveyed indicated that they did not believe their likelihood of experiencing a fire in their home was very high and almost 90% indicated they were comfortable with the amount of risk they face from a fire in their home. These low indications of perceived risk will likely make it more difficult to break through to Albertans that there is an increased need for fire safety behaviors within their homes.

The difficulty of breaking through to Albertans will also be compounded by the high percentage of respondents who indicated that they are always or mostly attentive to fire safety practice.

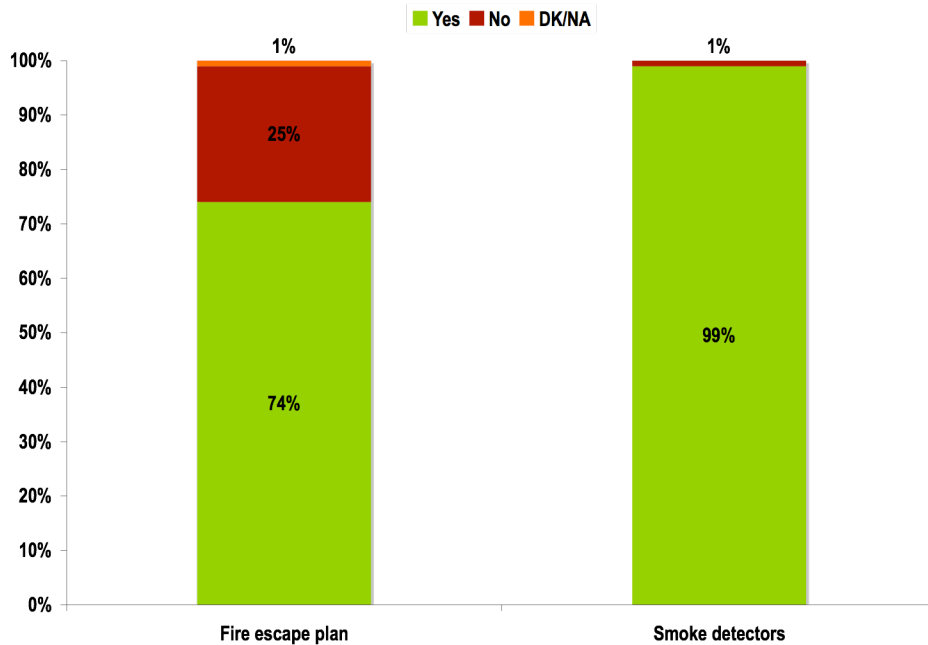
Steps for Safety



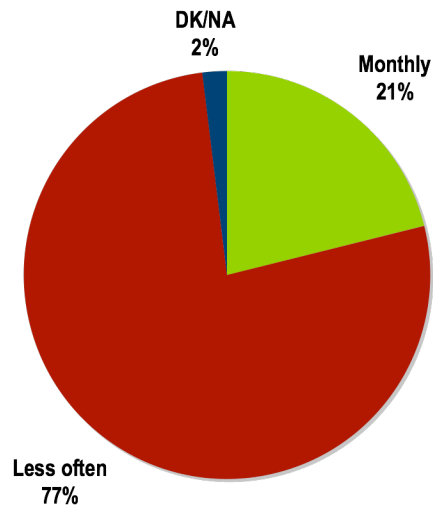
In the past six months, have you taken more steps to address your home's fire safety, taken fewer steps, or taken the same steps you always have?

Although roughly a fifth of respondents indicated that they have taken more steps in the past six months to address their home's fire safety, most respondents indicated they were taking the same steps they always have to address their home's fire safety.

Fire Escape Plan/Detectors



*Do you have a fire escape plan for your home?
Do you have smoke detectors installed in your home?*



How often do you test your smoke detectors to make sure they are in working condition? Would you say at least once a month, or less often?

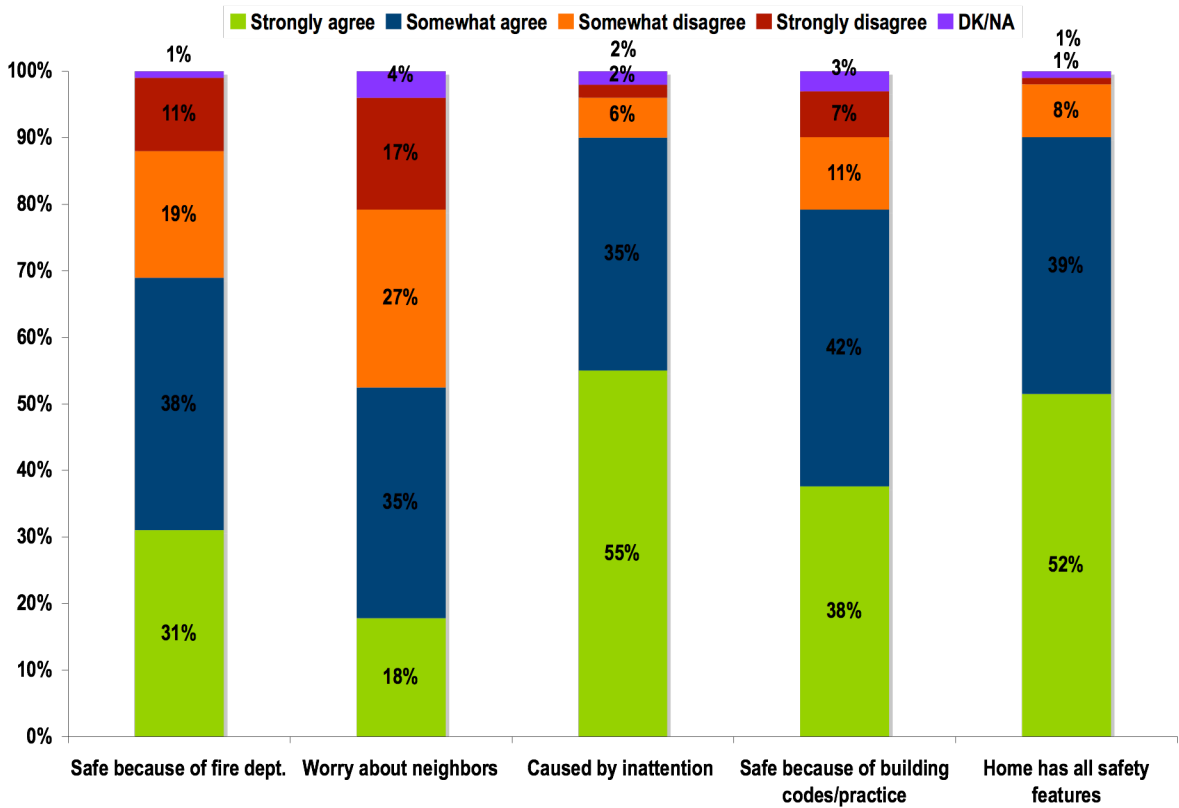
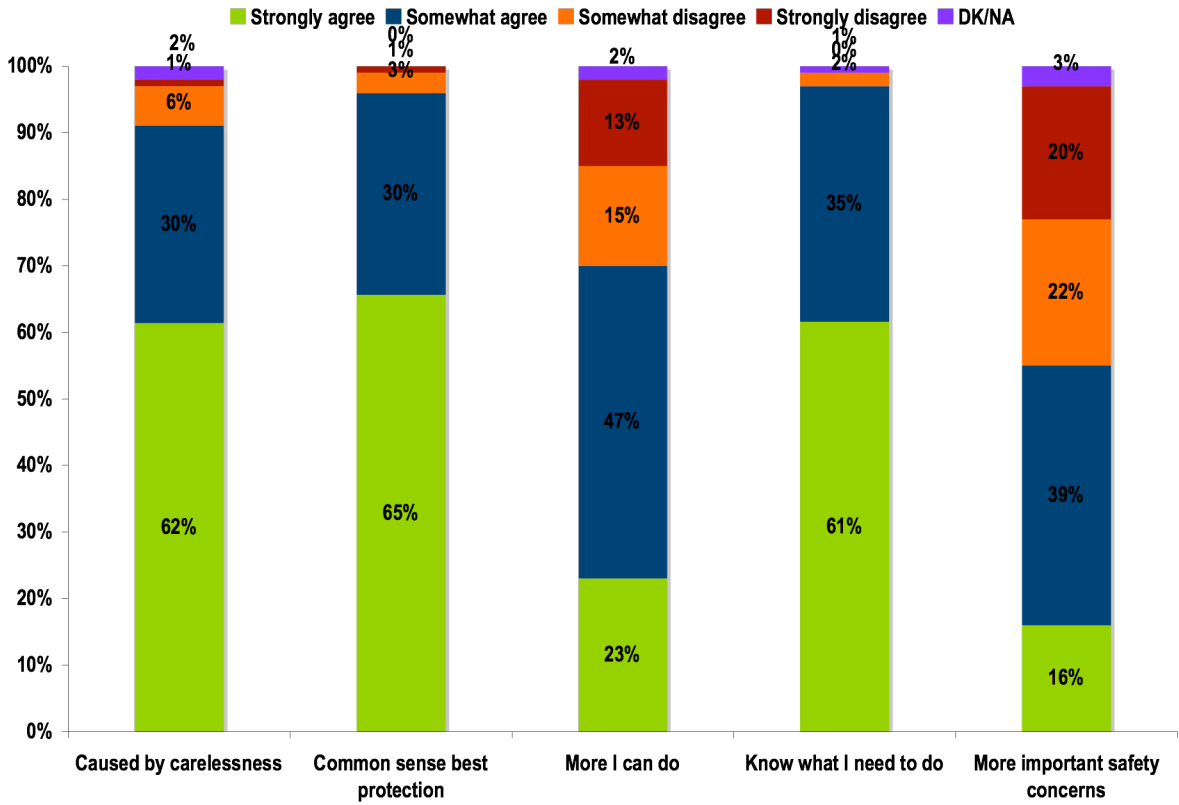
Responses related to the steps respondents have taken within the past six months to address their homes' fire safety, combined with responses regarding the presence of fire detectors and the frequency by which respondents reported checking their detectors suggests that respondents may have responded to some of the survey items in a socially desirable manner – that is replying in a manner that will be viewed favorably by others. In the case of the present research, this takes the form of over-reporting "fire safe" behavior or underreporting "non fire safe" behavior.

Some evidence for this socially desirable responding is the fact that 99% of respondents indicated they had smoke detectors installed in their homes. Other research has consistently indicated that while the percentage of Albertans who have smoke detectors in the home is over 90%, it is not as high as the percentage found in the present research (e.g., 6% of Alberta residents do not have fire alarms as reported in *2006 Duracell Fire Safety Study*; in 1997, 96.2% of all households in Alberta were installed with at least one smoke alarm as reported by *Statistics Canada*). Similar evidence exists for fire escape planning – the *2006 Duracell Fire Safety Study* found that 69% of Canadians admitted that they haven't developed a home fire escape plan.

This tendency to over-report fire safe behaviors and to minimize non fire safe behaviors leads us to two conclusions –

- The results of the present research must be viewed in light of the likely slight over-reporting of fire safe behaviors (i.e., allowing for error due to socially desirable responding)
- And consequently, there is likely considerable room for improvement in terms of fostering fire safety behaviors in Albertans

Agreement



For each of the following statements, please tell me if you agree strongly, agree somewhat, disagree somewhat or disagree strongly.

Most residential fires are caused by carelessness

Using common sense is the best prevention against residential fires

There is more I could do to protect my home from fire

I know what I need to do to protect my home from fire

There are more important safety concerns to worry about in life than house fires

I am safe because the fire department is there to help me

I worry about how fire safe my neighbors are

A moment of inattention is a frequent cause of fire

I believe that between building codes and builder practices my home is adequately fire safe

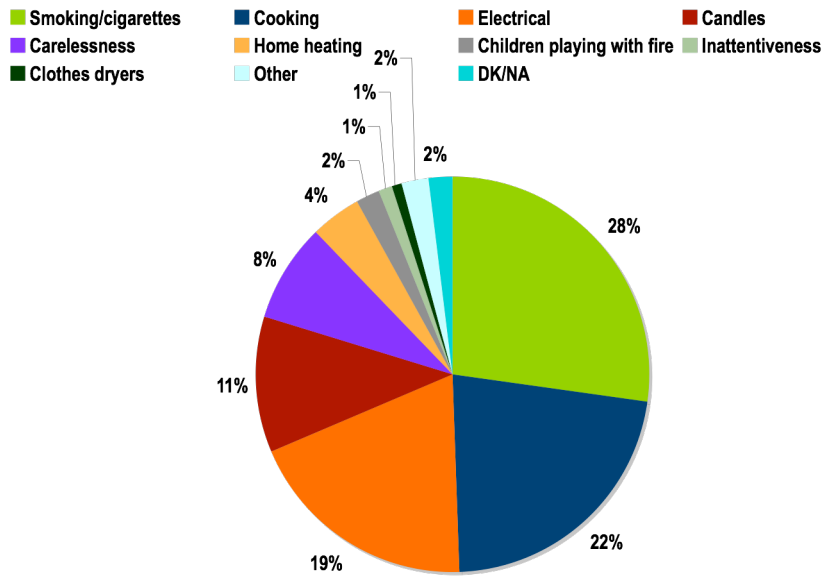
My home has all the safety features it requires to be safe enough for me and my family

Some of the perceived low risk of home fire may be attributed to the fact that respondents believe:

- They know what they need to do to protect their home from fire (96%)
- Their homes are largely safe because of building codes/practices (80%) and safety features (91%)
- The fire department will be there to help in the case of fire (69%)
- That common sense is the best prevention against fire (95%)

This combination of perceptions translates into the belief that with attention, care, and common sense, my home will be safe from fire. And since attention, care, and common sense are very hard to quantify (much less foster), it will be crucial to translate these notions of attention, care and common sense into actual fire safe behaviors. For example, “attention” and “care” may translate into developing a fire escape plan and “common sense” may involve practicing the plan twice a year.

Causes of Fire (first mention)



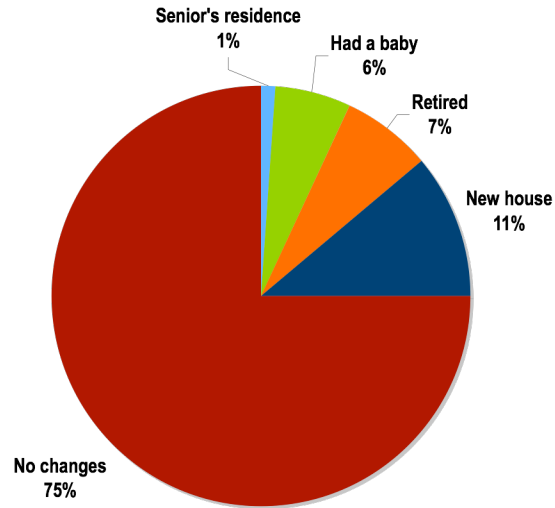
To the best of your knowledge, what are the top three causes of home fires?

According to the *High-Intensity Residential Fires Working Group Final Report, Government of Alberta, October 31, 2007*, of the 65 HIRFs that occurred in Edmonton, Calgary, Medicine Hat, Fort McMurray, Airdrie, Camrose and Beaumont from 2000 to 2007, the largest portion of HIRFs in occupied residential buildings was related to accidents involving smoking (15%), cooking (11%) or carelessness (11%) where cause could be determined.

Based on the data collected in the present research, Albertans are relatively well informed on the causes of fire in that the two most frequently mentioned causes were smoking/cigarettes (28%) and cooking (22%). However, carelessness was only mentioned as a first response by 8% of respondents and inattentiveness (which is likely related to carelessness to some extent) was only mentioned as a first response by 1% of respondents – even after they had already been prompted on carelessness and inattention on previous questions!!!

This highlights the importance of focusing on the risk that slight moments of inattention and carelessness play in fire safety – in a non-blaming way.

Life Changes



Did you or anyone in your household experience any of the following major life changes within the last 6 months?

As we found in the qualitative phase of this research, the points in time when people are naturally going through life changes present a window of opportunity to change behavior as new patterns of behaviors have not been firmly established.

This research suggests that one fourth of Albertans have the potential of experiencing a significant life transition within the course of a six month period – meaning that at any given time, approximately 838,600 Albertans may be within the window of opportunity in terms of altering their behaviors to become more fire safe within their homes.

A N A L Y S I S B Y S E G M E N T : H I R F R I S K

To examine if perceptions and behaviors differed by risk of experiencing a high intensity residential fire, we created two groups of respondents:

- Lower risk (n = 336) – all respondents who reported living in high-rise apartment buildings as well as those respondents who reported living in a detached house with a distance of 11 feet or greater from their nearest neighbor
- Higher risk (n = 338) – all respondents who reported living in a low-rise apartment building, duplex, semi-detached house, townhouse, or a detached house with a distance of 10 feet or less from their nearest neighbor.

Overall, both groups of respondents were very similar in their assessments across the vast majority of items. In fact, these two groups only differed significantly in one primary area. This reinforces the idea that fire safety is fire safety, it is only audience targeting that will distinguish between HIRF and other residential fires.

Agreement

Safe because of building codes/practice	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	DK/NA
Lower risk (M = 1.92, SD = 1.24)	39%	46%	8%*	5%	2%
High risk (M = 2.20, SD = 1.64)	36%	39%	13%*	8%	4%

t(672) = 2.50, *p* < .05 *Z* = 1.99, *p* = .05
 For each of the following statements, please tell me if you agree strongly, agree somewhat, disagree somewhat or disagree strongly.
 I believe that between building codes and builder practices my home is adequately fire safe

The one difference that did emerge was on ratings of agreement that pertain directly to building codes – those people for whom building codes are being modified (i.e., higher risk) indicated less agreement to the statement that they were safe due to building codes than those individuals who are lower risk.

There are a few implications of this finding:

- Improving the building codes for these types of buildings will be well received by the public
- People living in existing “higher-risk” buildings may worry that they are even less safe as these buildings codes are often not retro-active. This will be another window of relevance to talk about what they can do in their own home.

As stated earlier, targeting the fire safety message will be the only way to directly target HIRF versus other residential fires.

A N A L Y S I S B Y S E G M E N T : L I F E C H A N G E S

As discussed in the first phase of the research, the core communication strategy is to create and leverage windows of relevance (i.e., life change events such as moving into a new home, building or renovating a home, having children, experiencing a fire nearby, media coverage of a fire) and re-normalize a safer level of behaviour.

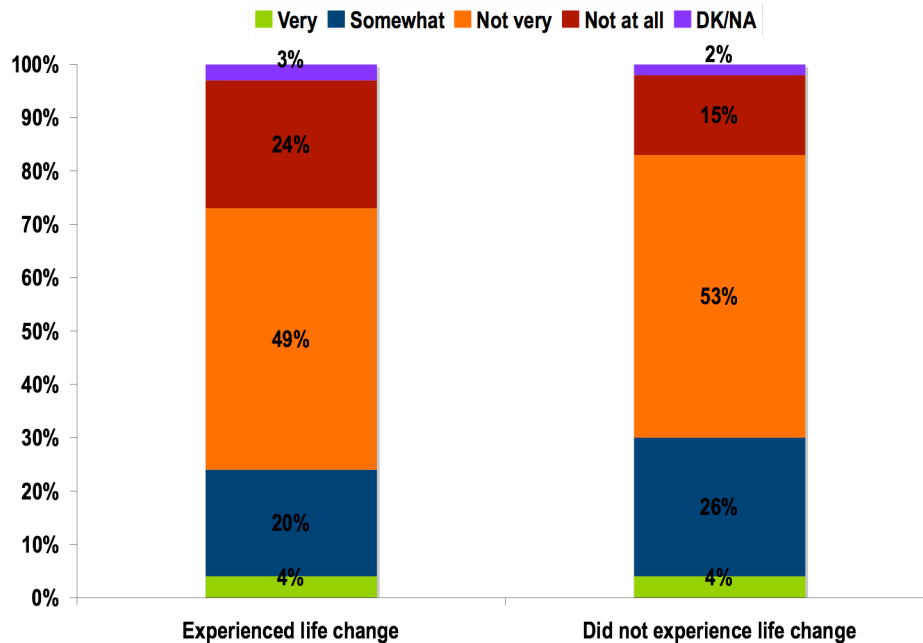
To examine if perceptions and behaviors differed by whether respondents had experienced a life change in the past six months (i.e., moved to a new house, had a baby, moved to a senior’s residence, retired), we created two groups of respondents:

- Experienced life change (n = 142) – all respondents who reported experiencing a change in the past six months
- Did not experience life change (n = 560) – all respondents who did not experience change in the last six months

These two groups were different in three areas. The net impact is that people who have experienced life change feel *less* likely to have a fire, and have increased faith in the fire department, yet they are less attentive.

This represents a unique window of attitudes where behaviour change is possible.

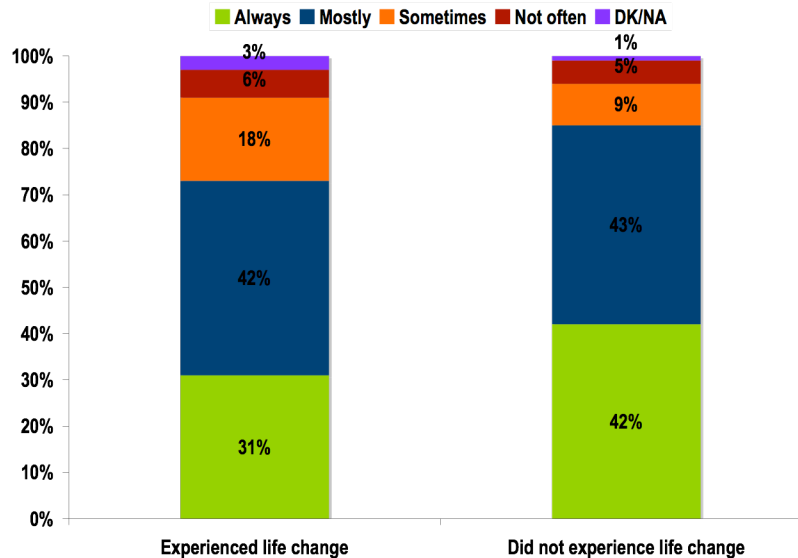
Assessing Risk



In your opinion, what do you believe is the likelihood that you will ever face a fire in your home? Would you say it is...?

A marginally significant difference emerged in that those who had experienced a life change in the past six months believed their likelihood of experiencing a fire in their home was less than those who did not experience a life change (24% versus 15%, $Z = 2.44$, $p < .05$; experienced life change $M = 3.13$, $SD = 1.27$, did not experience life change, $M = 2.93$, $SD = 1.11$, $t(700) = 1.86$, $p < .10$).

This appears to be a dynamic that reinforces our need to believe our homes are a safe sanctuary when we experience a life change. In other words, in the moment when people are most open to a behaviour change, they are less likely to believe they are at risk of a fire.



How attentive would you consider yourself to be to fire safety practices? Would you say you are...?

People who reported experiencing a life change in the past six months also reported being less attentive overall to fire safety practices than those who did not experience life changes in the past six months (31% versus 42%, $Z = 2.30$, $p < .05$; 18% versus 9%, $Z = 2.93$, $p < .05$; experienced life change $M = 2.18$, $SD = 1.42$, did not experience life change, $M = 1.87$, $SD = 1.19$, $t(700) = 2.66$, $p < .05$).

Agreement

Safe because of fire dept.	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	DK/NA
Experienced life change ($M = 1.99$, $SD = 1.06$)	42%*	30%*	14%	14%	0%
Did not experience life change ($M = 2.18$, $SD = 1.10$)	28%*	40%*	21%	10%	1%

$t(700) = 1.85$, $p < .10$

$Z = 3.12$, $p < .05$

$Z = 2.10$, $p < .05$

For each of the following statements, please tell me if you agree strongly, agree somewhat, disagree somewhat or disagree strongly. I am safe because the fire department is there to help me

In addition, those who had experienced life changes also tended to agree more with the statement that they were safe because the fire department was there to help them.

This pattern of findings suggests that while those times of life change may appear to be the most opportune moments to foster behavior change in terms of fire safety, fire safety behaviors may retreat even further into the background during these points in time as people try to manage all the newness in their lives. We suspect that one strategy to manage this newness is an even greater reliance on automation – doing what has worked in the past.

But we do suspect that with life changes there is a very small window of time where people think more consciously about some things and less consciously about other things – fire is one of those other things. The key will be in using cues to bump fire safety up to be consciously considered at these windows in time – that is using cues to create relevance and bolster attention and behavior change related to fire safety.

ANALYSIS BY SEGMENT: CHILDREN AT HOME

In total, 279 respondents indicated they had children 18 years of age and under and 413 respondents indicated they did not. Significant differences were found on the following three variables:

Comfort with risk					
	Very comfortable	Somewhat comfortable	Not very comfortable	Not at all comfortable	DK/NA
Have children under 18 (M = 1.94, SD = 1.28)	39%	44%	9%	5%	2%
No children under 18 (M = 1.66, SD = .92)	51%	39%	6%	4%	0%
$t(690) = 3.35, p < .05$	$Z = 3.03, p < .05$				
More I could do					
	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	DK/NA
Have children under 18 (M = 2.19, SD = 1.27)	27%	46%	14%	10%	2%
No children under 18 (M = 2.44, SD = 1.41)	20%	47%	15%	15%	2%
$t(690) = 2.38, p < .05$	$Z = 2.06, p = .05$				
Safe because of fire department					
	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	DK/NA
Have children under 18 (M = 2.29, SD = 1.19)	27%	37%	20%	15%	1%
No children under 18 (M = 2.07, SD = 1.03)	33%	39%	19%	9%	0%
$t(690) = 2.59, p < .05$	$Z = 2.31, p = .05$				

*How comfortable do you feel with the amount of risk you face from a fire in your home?
There is more I could do to protect my home from fire
I am safe because the fire department is there to help me*

**Note due to rounding, some of the totals above may not add exactly to 100.*

These results indicate that those respondents with children under the age of 18:

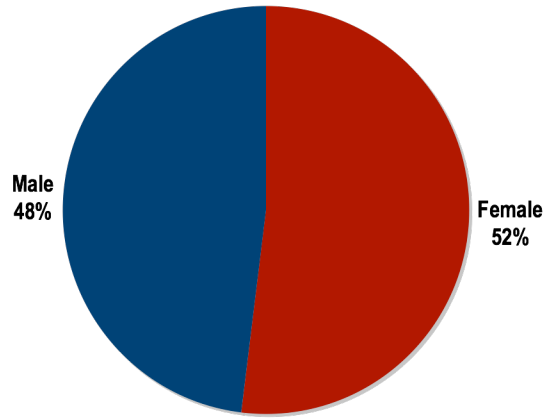
- Are less comfortable with their risk of fire than those with no children under the age of 18
- Believe that there is more they could do to protect their homes from fire than those with no children under the age of 18
- Are less likely to believe they are safe because of the fire department in the case of fire as compared to those with no children under the age of 18

We hypothesize that this higher level of concern among the group of respondents who have children 18 and younger may be attributed to the natural tendency of parents to want to protect their children and thus be more vigilant and sensitive to risk – in this case, risk related to fire. It is also possible that people with children in their homes may be exposed to some messages regarding fire safety delivered through the children’s school, thus raising overall concern but from the interview portion of the research, parents are not necessarily doing anything about this concern – they simply add it to their list of “shoulds”.

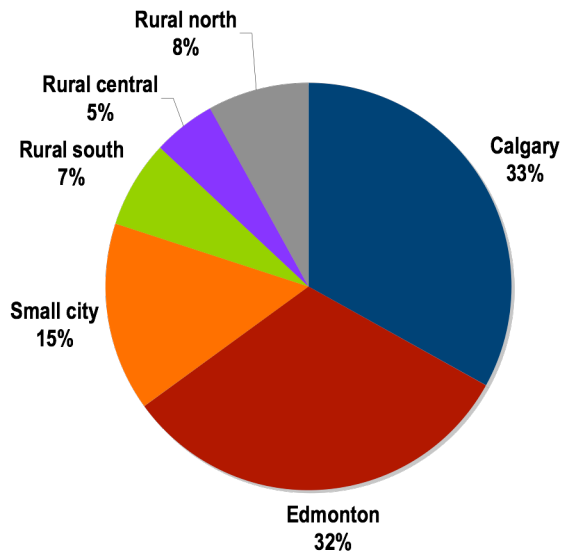
This analysis demonstrates that parents have a somewhat heightened sense of accountability (likely because the children add another uncertainty factor into all things fire) but we maintain that all the other factors affecting perceptions and tendencies to engage in fire safety behaviors are going to be same for this group (i.e., busyness, the desire to believe that my home is largely safe, the tendency to do what has worked in the past). Overall, this finding suggests there may be more opportunity to reach parents through specific targeting and placement of key messages regarding fire safety.

DEMOGRAPHIC DATA

Gender

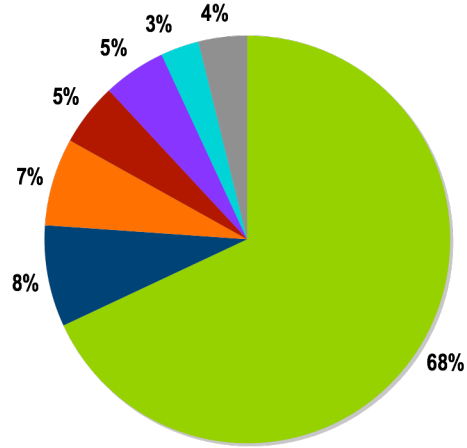


Geographical Region



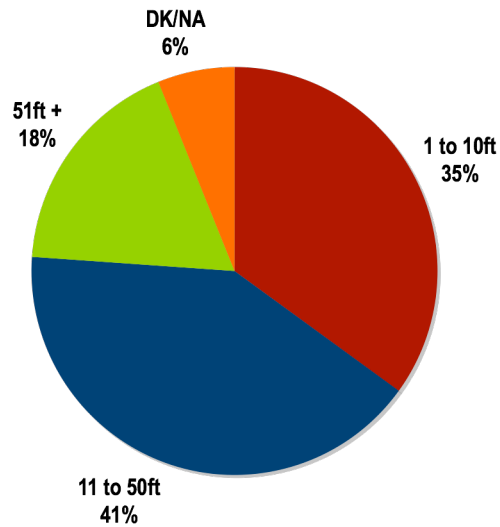
Type of Residence

- Detached house
- Apartment - low rise
- Townhouse
- Duplex
- Semi-detached house
- Apartment - high rise
- DK/NA



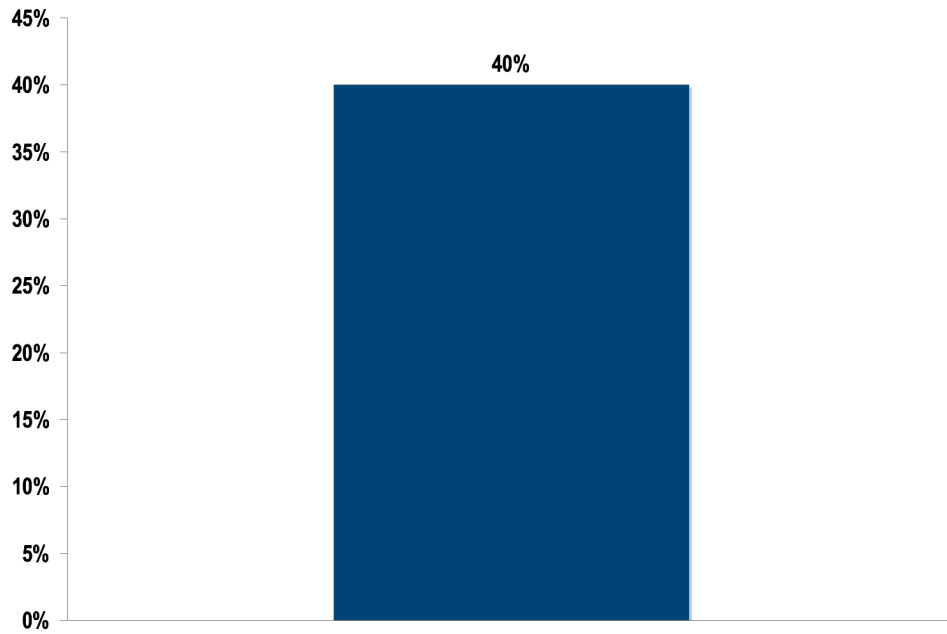
Which of the following best describes your home?

Distance of Residence from Neighbor

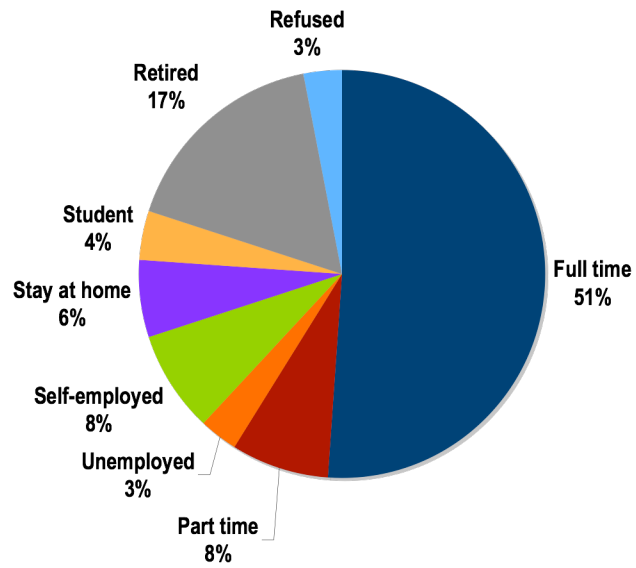


How far away is your home from the home of your closest neighbor?

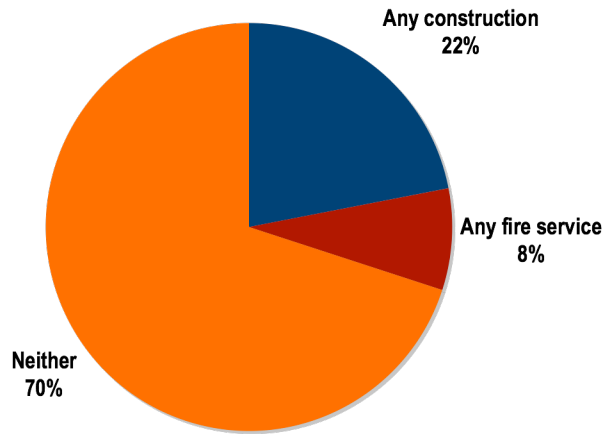
Presence of Children in Residence



Employment Status

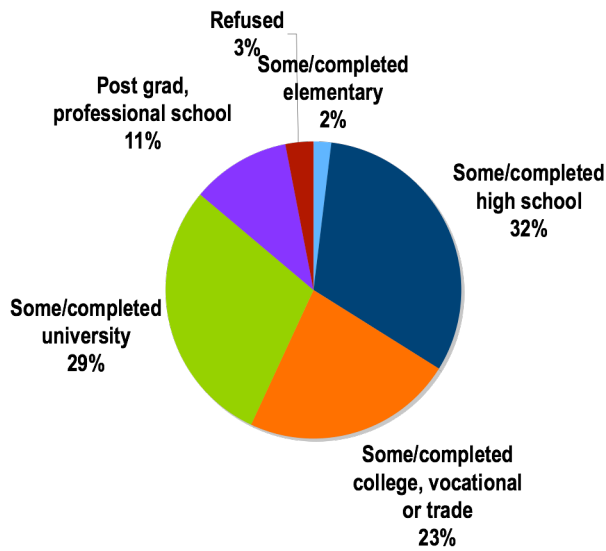


Which of the following best describes your own present employment status?



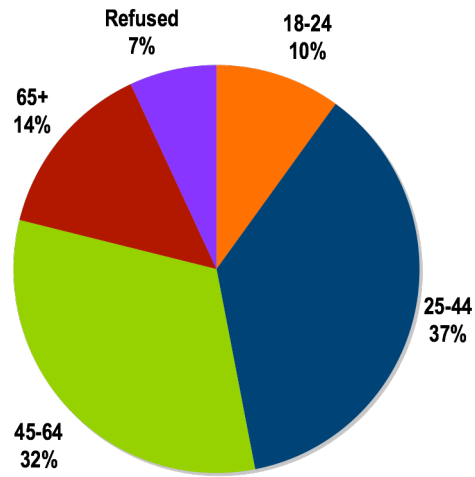
Do (did) you work in...?
Do (did) you work in any of the following areas relating to fire services?
Note: The total number of respondents who reported working in any of these areas was 225.

Education



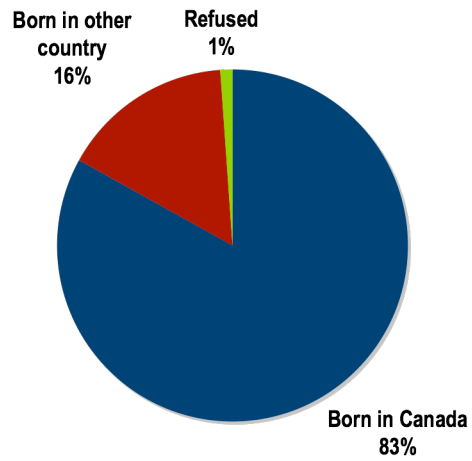
What is the highest level of education that you have reached?

Age



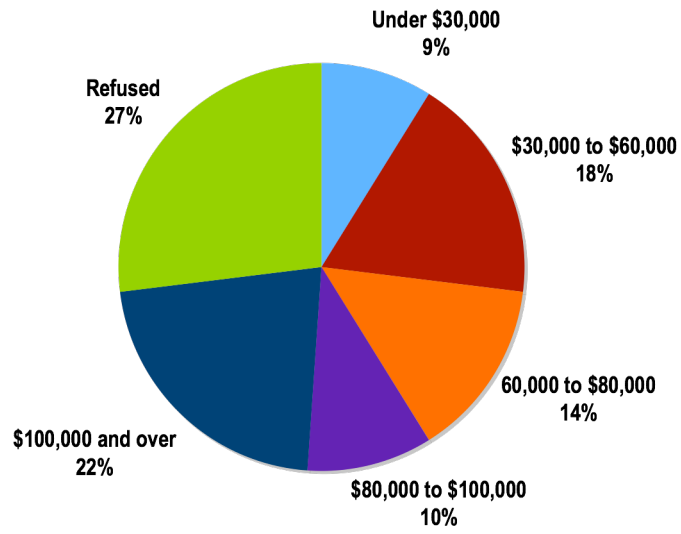
In what year were you born?

Country of Birth



In what country were you born?

Income



For statistical purposes only, we need information about your income. All individual responses will be kept confidential. Which of the following categories best corresponds to the total annual income, before taxes, of all members of your household, for 2007?



P R O V O K E T H O U G H T
P R O V O K E D I S C U S S I O N
P R O V O K E A C T I O N

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