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### Canadians and Privacy

**FINAL REPORT** 

#### Submitted to:

Office of the Privacy Commissioner of Canada Communications
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#### **EXECUTIVE SUMMARY**

The Office of the Privacy Commissioner of Canada (OPC) is an advocate for the privacy rights of Canadians with the power to investigate the handling of personal information in both the public and private sectors. With more and more Canadians embracing new technology and its potential to change our daily interactions with people, governments and businesses, there remains a significant need to ensure that personal information is kept safe and secure from any unauthorized use. In order to assist the public in the protection of personal information, there is an ongoing need to understand how the Canadian public's views on privacy issues continue to evolve in this increasingly complex environment.

The OPC commissioned EKOS Research Associates to undertake a survey of Canadians to better gauge their understanding and awareness of privacy issues, legislation and federal privacy institutions. Questions focussed on four strategic priority areas established by the Office: (i) information technology and privacy; (ii) national security and privacy; (iii) identity integrity and protection; and (iv) genetic privacy. In each of these areas, the research examined levels of awareness, understanding and concerns, and where available, results were tracked from earlier studies examining public views on these issues.

The study involved a telephone survey with a random sample of 2,028 Canadians, aged 16 years or older. The results are valid within a margin of error of  $\pm$  2.2 percentage points, 19 times out of 20.

Key findings from the study are outlined below and are described in more detail in later sections of this report.

#### **Privacy and Personal Information**

Respondents were first asked if they were aware of any federal institutions that help Canadians deal with privacy and the protection of personal information from inappropriate collection, use and disclosure. Results reveal that a majority of Canadians (66 per cent) continue to say they are unaware of any institutions that help protect personal information (although this is down 11 percentage points since 2007). The proportion of Canadians who say they are clearly aware of such institutions currently stands at 15 per cent (up from eight per cent in 2007), and about one in five (18 per cent) say they are vaguely aware of institutions dealing with privacy.

Respondents who claimed some awareness of federal institutions dealing with the protection of personal information and privacy were asked to identify, unprompted, the federal institutions with which they are familiar. About one in five of these respondents (18 per cent) name the Office of the Privacy Commissioner, making it the institution most often cited by respondents, although this is down somewhat from previous years.

Canadians were also asked to rate how well they protect the privacy of their personal information. Results suggest that Canadians are becoming more vigilant about guarding their personal information: one in five (20 per cent) say they do a very good job of protecting their privacy (up from 17 per cent in 2006), and over half (56 per cent) rate the job they're doing to protect their personal information as good (up three percentage points since 2006). Only six per cent of Canadians feel they are doing a poor (five per cent) or very poor (one per cent) job of protecting their personal information.

Results also reveal a general concern among Canadians about the protection of personal information and privacy, and a lack of confidence that businesses and organizations can adequately safeguard this information. The majority (62 per cent) agree that protecting personal information will be one of the most important issues facing Canadians in the next ten years, and almost half (47 per cent) are concerned that the focus on security in the wake of the 9/11 terrorist attacks will unnecessarily restrict the privacy and civil liberties of Canadian citizens. Moreover, only one-third of Canadians (34 per cent) are confident that companies have adequate mechanisms in place to safeguard the personal information of Canadians.

The majority of Canadians (71 per cent) also feel that strong privacy laws to protect their personal information is a matter of high importance, and one-quarter (27 per cent) see this as a moderately important issue. Only one per cent of Canadians consider strong privacy laws to be of little importance to them.

#### **New Technologies and Privacy Concerns**

Respondents were asked if they felt that they had enough information to understand how new technologies might affect their personal privacy. Results reveal that Canadians are somewhat less confident about this issue than they were a few years ago: while the plurality of Canadians (45 per cent) continue to feel that they do have enough information to know how their privacy could be affected by new technologies, this is down from 51 per cent in 2007. One-third of Canadians (33 per cent) feel that they do not have sufficient knowledge to assess the impact of new technologies on their privacy, and one in five (20 per cent) are neutral on the subject.

Results further reveal fairly high levels of concern about the impact of new technologies on privacy: almost half of Canadians (48 per cent) say they are somewhat concerned about this issue, and another 42 per cent say they are very concerned. Only one in ten (nine per cent) say they are not concerned about the impact of new technologies on privacy.

Respondents were also asked to rate their ability to take appropriate precautions to protect their personal information and ensure that using the Internet is as safe as possible. Overall, Canadians show a fairly high degree of confidence in their abilities to protect themselves online, with over half (54 per cent) rating themselves as doing a good job, and only one in seven (15 per cent) feeling they do a poor job of safeguarding their personal information while online.

#### **Genetic Privacy**

Turning to views on genetic privacy, results suggest that Canadians are divided in their views on whether genetic testing raises any privacy concerns. Half of Canadians (51 per cent) believe that genetic testing does raise issues around privacy, while over four in ten (45 per cent) feel that it does not.

Those respondents who indicated they were concerned about genetic testing and privacy issues were asked, unprompted, to name any privacy issues related to genetic testing that is of particular concern to them. The plurality of these respondents (31 per cent) could not specify any particular issue of concern. Among those able to provide a response, one in five (18 per cent) mentioned concerns about confidentiality and privacy of this information, and a further 12 per cent worry that results of genetic testing might be used for unintended purposes.

Results further reveal that over two-thirds of Canadians (68 per cent) oppose the use of genetic testing to determine who is insurable and at what premiums, and only one in ten (10 per cent) support this idea. Even stronger disagreement is expressed when asked whether employers should be able to use genetic tests to make hiring and promotion decisions: more than eight in ten Canadians (83 per cent) oppose such practices, while only one in ten (11 per cent) are in favour.

#### **Privacy and Security**

Survey results also suggest that Canadians feel personal privacy is an important consideration as governments provide law enforcement and intelligence agencies with enhanced powers. Nine in ten feel it is very (45 per cent) or somewhat (45 per cent) important that privacy considerations factor into decisions about enhanced security powers for law enforcement agencies, and fewer than one in ten view this issue as having little importance.

Canadians were also asked how confident they are that new security measures at borders and airports result in increased safety and security. Only one in five (20 per cent) say they are very confident that new security measures result in increased safety and security, however, a clear majority (62 per cent) say they are moderately confident. Only one in six (17 per cent) express no confidence in the impact of new security measures to increase the safety and security of Canadians.

When asked how confident they are that Canadian law enforcement and security agencies adhere to privacy laws that restrict the collection, storage, and sharing of personal information, results reveal some scepticism in this area: only about one in seven Canadians (15 per cent) are very confident that authorities respect the laws that protect Canadians' privacy; however, most (66 per cent) are moderately confident that this is the case. Only one in six (17 per cent) have little confidence that privacy rules are being followed by law enforcement agencies.

#### Identity Integrity and Protection

Turning to another topic, respondents were asked if they had ever been a victim of identity theft. Results suggest that the vast majority of Canadians (83 per cent) have not experienced identity theft, although over one in six (16 per cent) say they have. Interestingly, despite fairly limited first hand experience with this issue, almost half of Canadians (49 per cent) say that they are very concerned about identity theft, and 44 per cent are somewhat concerned; only six per cent of Canadians say they are not concerned about this issue.

Respondents were also asked whether they had ever taken specific actions to protect their personal information, such as requesting to see personal information about themselves maintained by the government or a business, ordering a copy of their credit report, or declining to provide personal information to a business. Half (51 per cent) say they have refused to share personal information with a business, however, fewer than one in five say they have verified their credit report for accuracy (18 per cent), and an even smaller number have asked to see personal information about them kept by a business (13 per cent) or the government (10 per cent).

Results also suggest that Canadians' comfort with sharing personal information varies depending on the situation. The vast majority of Canadians (84 per cent) are not comfortable providing personal information to a telemarketer, and six in ten (61 per cent) are uncomfortable sharing personal information on social networking sites. However, only one-third (35 per cent) are uncomfortable providing personal information in transactions over the Internet, and just one in four (27 per cent) are uncomfortable with providing this type of information to a business or organization as part of a customer loyalty program.

Results further suggest that Canadians take precautions to protect their personal information. An overwhelming majority of Canadians (92 per cent) say they make a point of reviewing their credit card and bank statements to ensure there are no unauthorized purchases, and 71 per cent say they keep track of when their statements should arrive each month. A further 85 per cent of Canadians say they shred or destroy documents that contain personal information. In addition, almost half of all Canadians (48 per cent) say they refrain from carrying sensitive documents (e.g., SIN card, passport) with them on a daily basis.

Finally, respondents were asked whether political parties and politicians should be subject to legislation that sets out rules for how they collect and handle the personal information of Canadian citizens. An overwhelming majority of Canadians (92 per cent) feel that political parties and politicians should be subject to such legislation, while a scant six per cent think they should not.

# 1. BACKGROUND AND METHODOLOGY

The Office of the Privacy Commissioner of Canada (OPC) is an advocate for the privacy rights of Canadians with the power to investigate the handling of personal information in both the public and private sectors. With more and more Canadians embracing new technology and its potential to change our daily interactions with people, governments and businesses, there remains a significant need to ensure that personal information is kept safe and secure from any unauthorized use. In order to assist the public in the protection of personal information, there is an ongoing need to understand how the Canadian public's views on privacy issues continue to evolve in this increasingly complex environment.

The OPC commissioned EKOS Research Associates to undertake a survey of Canadians to better gauge their understanding and awareness of privacy issues, legislation and federal privacy institutions. Questions focussed on four strategic priority areas established by the Office: (i) information technology and privacy; (ii) national security and privacy; (iii) identity integrity and protection; and (iv) genetic privacy. In each of these areas, the research examined levels of awareness, understanding and concerns, and where available, results were tracked from earlier studies examining public views on these issues.

The study involved a telephone survey with a random sample of 2,028 Canadians, aged 16 years or older. The results are valid within a margin of error of  $\pm$  2.2 percentage points, 19 times out of 20. This margin of error increases for population sub-group results (e.g., age, region, gender). Surveying was undertaken between February 23 and March 9, 2009. The survey was conducted across Canada in both official languages.

This report presents the findings from the survey. Survey findings are divided into a number of sections, each of which contains a descriptive presentation of the results, and a discussion of key differences among population sub-groups for all questions included in the survey.

# 2. PRIVACY AND PERSONAL INFORMATION

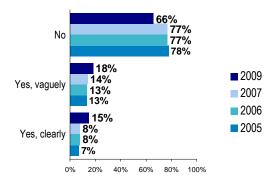
#### 2.1 AWARENESS OF FEDERAL INSTITUTIONS

Respondents were first asked if they were aware of any federal institutions that help Canadians deal with privacy and the protection of personal information from inappropriate collection, use and disclosure. Results reveal that a majority of Canadians (66 per cent) continue to say they are unaware of any institutions that help protect personal information (although this is down 11 percentage points since 2007). The number of Canadians who say they are clearly aware of such institutions currently stands at 15 per cent (up from eight per cent in 2007), and about one in five (18 per cent) say they are vaguely aware of institutions dealing with privacy.

- Regionally, Ontario residents are more likely to indicate clear awareness of federal institutions that help Canadians protect their personal information (18 per cent). Conversely, Quebec residents are more likely to indicate no awareness of federal institutions protecting Canadians' privacy (74 per cent).
- Canadians between 45 and 64 years of age express higher levels of clear awareness of federal institutions that deal with the protection of personal information (21 per cent). Conversely, almost eight in ten (78 per cent) Canadians aged 25 and under are unaware of any such institutions.
- Canadians with annual household incomes of \$100,000 or more (22 per cent), and those with university education (23 per cent) are particularly likely to cite a clear awareness of federal institutions dealing with privacy and protection of personal information.

#### **Awareness of Federal Institutions**

"Are you aware of any federal institutions that help Canadians deal with privacy and the protection of personal information from inappropriate collection, use and disclosure?"





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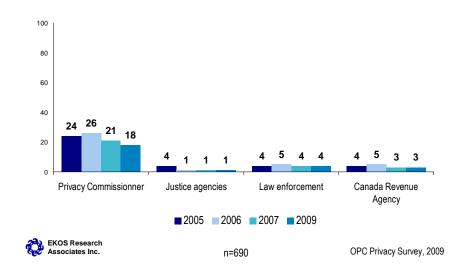
### 2.2 AWARENESS OF SPECIFIC FEDERAL INSTITUTIONS

Respondents who claimed some awareness of federal institutions dealing with the protection of personal information and privacy were asked to identify, unprompted, the federal institutions with which they are familiar. Almost one in five of these respondents (18 per cent) name the Office of the Privacy Commissioner, making it the institution most often cited by respondents; however, this is down somewhat from previous years. One in ten respondents (10 per cent) cite consumer protection agencies, up from just three per cent in 2005. Awareness of other institutions such as law enforcement and the Canada Revenue Agency has remained relatively stable over the past five years, at or around four per cent. In keeping with results from previous years, fully half of these respondents (50 per cent) did not offer a response to this question.

Regionally, awareness of the Office of the Privacy Commissioner is highest among residents of Ontario (23 per cent), and lowest in Quebec (nine per cent).

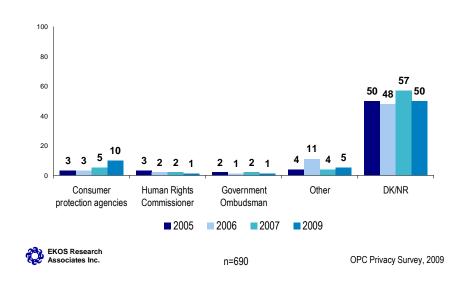
#### **Awareness of Specific Federal Institutions (1)**

"Which federal institutions are you aware of?"



#### **Awareness of Specific Federal Institutions (2)**

"Which federal institutions are you aware of?"



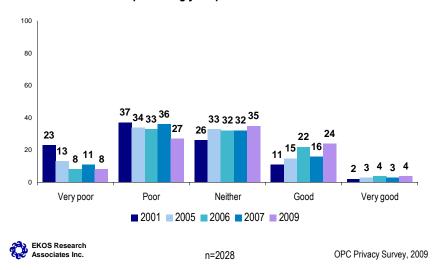
#### 2.3 KNOWLEDGE OF PRIVACY RIGHTS

Respondents were also asked to rate their knowledge of individual privacy rights under the laws that protect their personal information. The number who consider themselves very well informed remains low (four per cent), however, a fairly large proportion of Canadians (24 per cent) rate their knowledge of privacy rights as good (up from 16 per cent in 2007). At the same time, the number of Canadians who rate their knowledge of privacy rights as poor is now 27 per cent (down nine percentage points since 2007), and the proportion who consider their knowledge very poor now stands at eight per cent (down from 23 per cent in 2001).

- Respondents in British Columbia rate their knowledge of privacy rights lower than their regional counterparts, with 31 per cent saying their knowledge is poor (compared to 27 per cent nationally); similarly, only 17 per cent of British Columbia residents rate their knowledge as good.
- Respondents aged 25 to 44 are less likely to feel their knowledge of privacy rights is good (20 per cent, vs. 24 per cent nationally).
- > Canadians earning less than \$20,000 in annual income are more likely to rate their knowledge of privacy rights as very poor (13 per cent).

#### **Knowledge of Privacy Rights**

"How would you rate your knowledge of your privacy rights under the various laws protecting your personal information?"



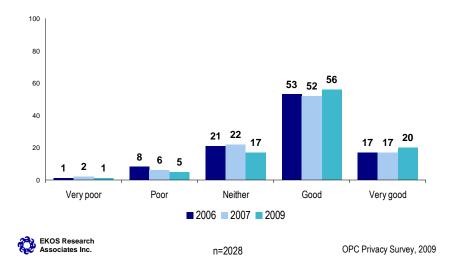
# 2.4 RATING OWN PROTECTION OF PERSONAL INFORMATION

Survey results suggest that Canadians are becoming more vigilant about guarding their personal information: one in five (20 per cent) say they do a very good job of protecting their privacy (up from 17 per cent in 2006), and over half (56 per cent) rate the job they're doing to protect their personal information as good (up three percentage points since 2006). Only six per cent of Canadians feel they are doing a poor (five per cent) or very poor (one per cent) job of protecting their personal information.

- > Quebec residents are somewhat less likely than other Canadians to rate themselves as doing a very good job in guarding their personal information (16 per cent, vs. 20 per cent nationally).
- > Canadians over the age of 65 are particularly likely to feel they are doing a very good job of protecting their personal information (27 per cent).

#### **Rating Own Protection of Personal Information**

"In your day to day life, how good of a job would you say you are doing to protect the privacy of your own personal information?"



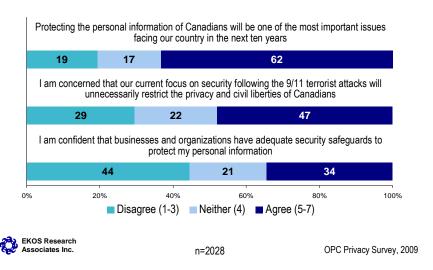
#### 2.5 VIEWS ON PRIVACY AND SECURITY

Survey results also reveal a general concern among Canadians about the protection of personal information and privacy, and a lack of confidence that businesses and organizations can adequately safeguard this information. The majority (62 per cent) agree that protecting personal information will be one of the most important issues facing Canadians in the next ten years, and almost half (47 per cent) are concerned that the focus on security in the wake of the 9/11 terrorist attacks will unnecessarily restrict the privacy and civil liberties of Canadian citizens. Moreover, only one-third of Canadians (34 per cent) are confident that companies have adequate mechanisms in place to safeguard the personal information of Canadians.

- Regionally, residents of British Columbia express a greater concern about the impact of security measures on Canadians' privacy and civil liberties (56 per cent, vs. 47 per cent nationally).
- Those with higher incomes and education levels have less confidence in the safeguards of businesses and other organizations.
- British Columbia residents are particularly unlikely to feel that businesses have adequate security safeguards in place to protect personal information (25 per cent, vs. 34 per cent nationally).
- > Those under 25 years of age have the most confidence in the ability of businesses to protect personal information (47 per cent), while Canadians aged 45 to 64 are less likely to agree with this idea (27 per cent).

#### **Views on Privacy and Security**

"Please indicate the extent to which you agree or disagree with the following statements."

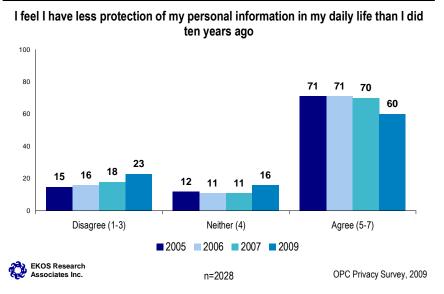


### 2.6 PROTECTION OF PERSONAL INFORMATION COMPARED TO TEN YEARS AGO

Respondents were asked whether they agreed that they had less protection of their personal information than they did ten years ago. Results reveal that the majority of Canadians (60 per cent) feel that their information is less protected than it was ten years ago, although this is down from 71 per cent in 2005. Disagreement with this idea how stands at 23 per cent (up from 15 per cent in 2005).

- Residents in Quebec are less likely than other Canadians to feel that they have less protection than they did ten years ago (52 per cent, vs. 60 per cent nationally). Conversely, British Columbia and Alberta residents are more likely to feel their information is less protected than it was ten years ago (66 per cent and 68 per cent, respectively).
- Canadians under 25 are much less likely to believe their personal information is less protected than it was ten years ago (38 per cent). Conversely, Canadians between 45 and 64 years of age are more likely to feel they have less protection of their personal information than they did ten years ago (67 per cent).
- Those with university education are more likely to feel their personal information is more vulnerable than it was ten years ago (68 per cent).

#### Protection of Personal Information Compared to Ten Years Ago

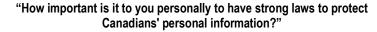


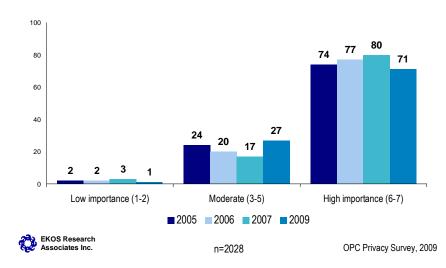
#### 2.7 IMPORTANCE OF STRONG PRIVACY LAWS

Respondents were asked how important it was to them personally to have strong laws in place to protect Canadians' personal information. The majority (71 per cent) see it as a matter of high importance, although this is down nine percentage points since 2007. Over one-quarter (27 per cent) see it as an issue of moderate importance, and a scant one per cent consider it a matter of low importance.

- Quebec residents are particularly likely to place a high level of importance on having strong laws to protect personal information (77 per cent). Conversely, British Columbia and Alberta residents are less inclined to rank the issue as highly important (63 per cent and 64 per cent, respectively).
- Three in four women (75 per cent) see strong privacy laws as a matter of high importance, compared to two-thirds of men (67 per cent).
- Canadians 45 to 64 years of age are particularly likely to feel that it is very important that Canada has strong laws to protect their personal information (78 per cent). Conversely, Canadians under 25 are less likely to feel this is very important (61 per cent).

#### **Importance of Strong Privacy Laws**





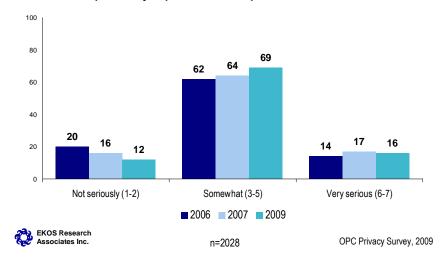
### 2.8 SERIOUSNESS GOVERNMENTS TAKE IN PROTECTING PERSONAL INFORMATION

Respondents were asked how seriously they think the federal government takes its responsibility to protect the personal information of Canadian citizens. Relatively few Canadians (16 per cent) feel the federal government takes the matter very seriously, however, a clear majority (69 per cent) feel the government takes this responsibility somewhat seriously (up from 62 per cent in 2006). Only about one in ten (12 per cent – down from 20 per cent in 2006) feel the government does not take its responsibility to protect citizen information seriously.

- > Regionally, those from the Atlantic Provinces are more likely than other Canadians to believe that the government takes its responsibility very seriously (22 per cent).
- Those 65 years and older are most likely to feel the government is not very serious about safeguarding Canadians' personal information (16 per cent). Conversely only four per cent of Canadians under 25 feel that the government is not diligent in its responsibility to protect personal information.

### Seriousness Governments Take In Protecting Personal Info (1)

"In your opinion, how seriously does the federal government take its responsibility to protect citizens' personal information?"

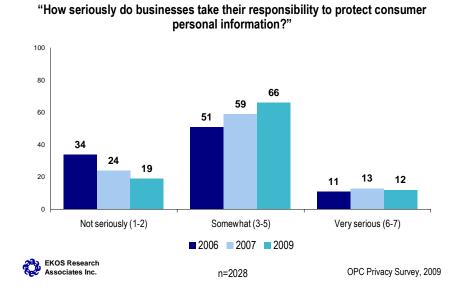


### 2.9 SERIOUSNESS BUSINESSES TAKE IN PROTECTING PERSONAL INFORMATION

Results are very similar when asked how seriously businesses take their responsibility to protect the personal information of consumers. Only 12 per cent of Canadians feel that businesses take this matter very seriously, however, a clear majority (66 per cent) feel that businesses take the privacy of consumer information somewhat seriously (up 15 percentage points since 2006). Results also reveal a significant decline in the number of respondents who say that businesses do not take their responsibility to protect customer information seriously (19 per cent – down from 34 per cent in 2006).

- Regionally, respondents in Alberta express the highest confidence in businesses' commitment to safeguarding the information of consumers (17 per cent).
- > Canadians under 25 years of age are more likely than their older counterparts to believe that businesses are very serious about keeping consumer information safe (20 per cent).

### Seriousness Businesses Take In Protecting Personal Info (2)



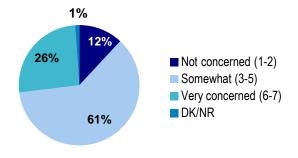
## 2.10 CONCERN ABOUT IMPACT OF ECONOMIC UNCERTAINTY ON PERSONAL INFORMATION

Respondents were asked if they were concerned that in a time of economic uncertainty, businesses might choose to spend less on the protection of personal information about their customers. Results reveal that six in ten (61 per cent) say they are somewhat concerned about this possibility, and fully one-quarter (26 per cent) are very concerned that businesses will compromise protection of confidential information to save money. Only about one in ten Canadians (12 per cent) are not concerned about this issue.

- Regionally, Ontarians are more likely to indicate they are very concerned about the possibility that businesses might be willing to sacrifice protection of personal information to cut costs (30 per cent), whereas residents in Quebec are less likely to feel this way (22 per cent).
- Canadians aged 45 to 64 are somewhat more likely than others to be very concerned that businesses might spend less on protecting customers' personal information (30 per cent, vs. 26 per cent nationally).

#### Concern About Impact of Economic Uncertainty on Personal Information

"How concerned are you that in a time of economic uncertainty, businesses may choose to spend less to protect customers' personal information?"





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# 3. New Technologies and Privacy Concerns

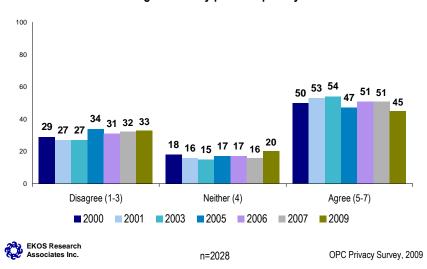
### 3.1 Knowledge of How New Technology Affects Privacy

Respondents were asked if they felt that they had enough information to understand how new technologies might affect their personal privacy. Results reveal that Canadians are less confident about this issue than they were a few years ago: while the plurality of Canadians (45 per cent) continue to feel that they do have enough information to know how their privacy could be affected by new technologies, this is down six percentage points since 2007. One-third of Canadians (33 per cent) feel that they do not have sufficient knowledge to assess the impact of new technologies on their privacy, and one in five (20 per cent) are neutral on the subject.

- Men are more confident than women that they have enough information to understand how emerging technologies might affect their personal privacy (49 per cent, vs. 42 per cent, respectively).
- Regionally, Quebec residents are more confident that they have enough information to determine how their privacy might be affected by new technologies (51 per cent).

#### **Knowledge of How New Technology Affects Privacy**

I feel confident that I have enough information to know how new technologies might affect my personal privacy



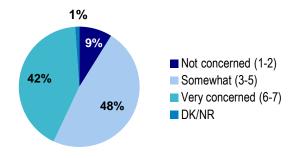
### 3.2 CONCERN ABOUT IMPACT OF NEW TECHNOLOGY ON PRIVACY

Canadians were also asked how concerned they were about the impact of new technologies on their privacy. Results reveal fairly high levels of concern with this issue: almost half of Canadians (48 per cent) say they are somewhat concerned, and another 42 per cent say they are very concerned. Only one in ten (nine per cent) say they are not concerned about the impact of new technologies on privacy.

- Residents in Ontario express the highest levels of concern, with almost half (48 per cent) saying they are very concerned. In Quebec, only one-third (31 per cent) feel that new technologies represent a threat to their privacy.
- > Twice as many men as women say they are not concerned about new technologies affecting their privacy (11 per cent, vs. six per cent, respectively).
- Those between the ages of 45 and 64 are particularly likely to say they are very concerned about the implications of emerging technologies on their personal privacy (48 per cent). Conversely, Canadians 25 and under are much less likely to express high levels of concern about this issue (33 per cent).

#### **Concern About Impact of New Technology on Privacy**

"How concerned are you about the impact of new technologies on your privacy?"





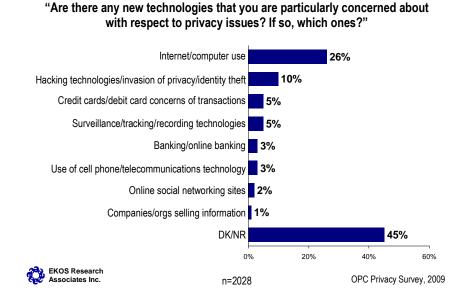
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### 3.3 New Technologies and Privacy Concerns

Respondents were asked to identify, without prompting, any new technologies that are of particular concern to them with respect to privacy issues. The plurality of respondents (45 per cent) did not identify any technologies that were of particular concern to them. Among those who provided a response, one-quarter (26 per cent) mentioned the Internet or computer use as representing a possible threat to privacy, and another one in ten (10 per cent) say that hacking technologies (to invade privacy and facilitate identity theft) are worrisome in this regard. Security around credit card transactions and surveillance technologies were also mentioned by a number of respondents.

- Concern over the implications of Internet/computer use on privacy is highest in Quebec (38 per cent) and lowest in Ontario (21 per cent).
- Canadians between the ages of 45 and 64 are particularly worried about Internet/computer use (30 per cent), while those under 25 are much less worried about this issue (16 per cent).
- University-educated respondents are twice as concerned about hacking technologies and identity theft as Canadians with a high school education or less (15 per cent, vs. seven per cent, respectively).

#### **New Technologies and Privacy Concerns**



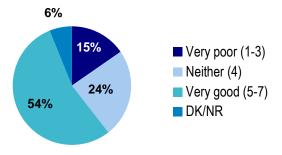
### 3.4 SELF-RATED ABILITY TO PROTECT PERSONAL INFORMATION

Respondents were asked to rate their ability to take appropriate precautions to protect their personal information and ensure that using the Internet is as safe as possible. Overall, Canadians show a fairly high degree of confidence in their abilities to protect themselves online, with over half (54 per cent) rating themselves as doing a good job, and only one in seven (15 per cent) feeling they do a poor job of safeguarding their personal information while online.

- Six in ten Canadians between the ages of 25 and 44 (60 per cent) give themselves high marks for the precautions they take online, compared to just one in four (39 per cent) of those aged 65 and over.
- Those with university education are more confident than those with a high school education or less that they take appropriate precautions to safeguard themselves online (62 per cent, vs. 43 per cent, respectively).

#### **Self-Rated Ability to Protect Personal Information**

"How would you rate your ability to take the appropriate precautions to protect your personal information and ensure that using the Internet is as safe and secure as possible?"





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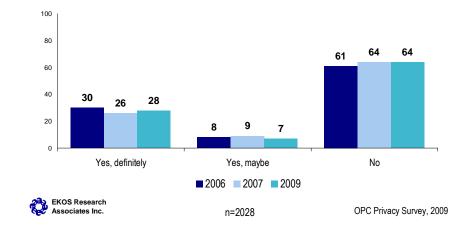
## 3.5 AWARENESS OF RADIO FREQUENCY IDENTIFICATION TAGS

Respondents were asked about their awareness of radio frequency identification (RFID) tags, which allow any item that carries them to be tracked and monitored. Familiarity with this technology has remained largely stable over the past few years, with two-thirds of Canadians (64 per cent) saying they have never read or heard anything about RFID tags. Less than one-third (28 per cent) are certain they have heard of RFID technology, and seven per cent believe they may have heard of it.

- A higher proportion of men than women say they have definitely heard about RFID tags (38 per cent, vs. 19 per cent, respectively).
- Respondents in Ontario express higher levels of clear familiarity with RFID tags (33 per cent, compared to 28 per cent nationally); residents in Quebec are the least familiar, with four in five (80 per cent) saying they have never heard of this technology.

#### **Awareness of Radio Frequency Identification Tags**

"Radio frequency identification or RFID tags use wireless technology and are designed to allow things to be tracked and monitored. When installed in products, they allow companies to keep track of products in warehouses and retail stores. These tags may still be active after the items have been purchased and taken out of a retail store. Before this survey, have you ever read or heard about radio frequency identification tags?"



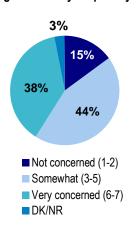
# 3.6 Concern About RFID Tags and Privacy

Canadians were also asked how concerned they are about the impact that RFID technology might have on their privacy. A plurality of Canadians (44 per cent) say they are somewhat concerned, while four in ten (38 per cent) are very concerned. Only 15 per cent do not view RFID technology as a potential threat to their privacy.

- Canadians between 45 and 64 years old are particularly likely to say they are very concerned about RFID tags (43 per cent).
- A higher proportion of men than women say they have no concerns about the implications of RFID technology for privacy (19 per cent, vs. 12 per cent, respectively).

#### **Concern About RFID Tags and Privacy**

"To what extent are you concerned about the impact this new technology might have on your privacy?"





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### 3.7 AWARENESS AND CONCERN ABOUT NANOTECHNOLOGY

Respondents were also asked about their awareness of nanotechnology, a field that involves the development of materials on an extremely small scale, which could in turn be used to make surveillance devices that are virtually undetectable. Close to half of the respondents surveyed (45 per cent) say they have definitely heard of nanotechnology, and another one in ten (11 per cent) cite some familiarity with it. About four in ten Canadians (43 per cent) say they have never read or heard about nanotechnology.

Claimed familiarity with nanotechnology is highest in the West (59 per cent in British Columbia and 58 per cent in Alberta say they have definitely heard of nanotechnology), and lowest in Quebec (where only 32 per cent say they have definitely heard of it).

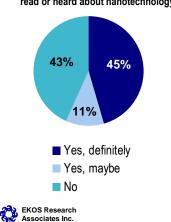
When asked about the extent to which they were concerned that nanotechnology might impact their privacy, results reveal high levels of concern with this issue. More than eight in ten Canadians say they are very (41 per cent) or somewhat (42 per cent) concerned about the impact of nanotechnology on their privacy, and only one in seven (14 per cent) are not concerned.

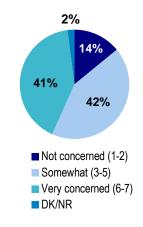
- Ontarians are most likely to say they are very concerned about the impact of nanotechnology on privacy (48 per cent), while Quebec residents are less likely to express high levels of concern (36 per cent).
- A higher proportion of men express little concern about the implications of nanotechnology for privacy (17 per cent, compared to only 12 per cent of women).
- Canadians between 45 and 64 years are more likely to be very concerned about nanotechnology (46 per cent); conversely, Canadians between 25 and 44 years old are less likely to be very concerned (35 per cent).

#### **Awareness and Concern About Nanotechnology**

"Nanotechnology involves developing materials or devices on an ultra small scale. In the near future, this technology will make it possible to make surveillance devices that are smaller than a grain of sand. Before this survey, have you ever read or heard about nanotechnology?"







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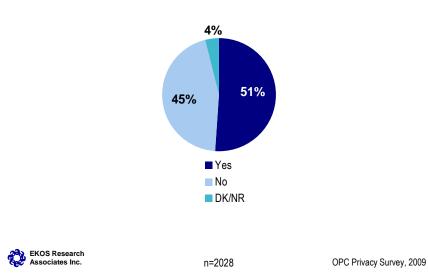
#### 3.8 GENETIC TESTING AND PRIVACY ISSUES

Respondents were also asked if they thought that genetic testing raised any privacy issues. Canadians are divided on this question, with half (51 per cent) believing that such testing does raise issues around privacy, and over four in ten (45 per cent) saying that it does not.

- Residents of Ontario are more concerned than other Canadians about genetic testing and privacy (56 per cent), while respondents in Quebec are less concerned (40 per cent).
- > Women are more concerned than men about the impact of genetic testing on personal privacy (54 per cent, vs. 48 per cent, respectively).
- University-educated Canadians express greater concern about genetic testing (58 per cent) than do those with a high school education or less (46 per cent).

#### **Genetic Testing and Privacy Issues**

"Do you think genetic testing raises any privacy issues?"

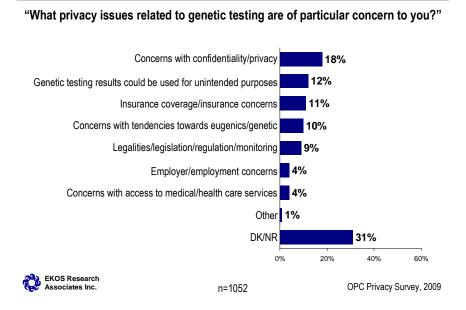


#### 3.9 GENETIC TESTING AND PRIVACY CONCERNS

Those respondents who indicated they were concerned about genetic testing and privacy issues were asked, unprompted, to name any privacy issues related to genetic testing that is of particular concern to them. The plurality of these respondents (31 per cent) could not specify any particular issue of concern. Among those able to provide a response, one in five (18 per cent) mention concerns about confidentiality and privacy of information, and a further 12 per cent worry that results of genetic testing might be used for unintended purposes. Just over one in ten (11 per cent) worry that such information might affect insurance coverage.

Canadians with a university level education are more concerned than others about the potential implications for insurance coverage (18 per cent) and the possibility that test results might be used in unintended ways (17 per cent).

#### **Genetic Testing and Privacy Concerns**



#### 3.10 Support for Use of Genetic Testing

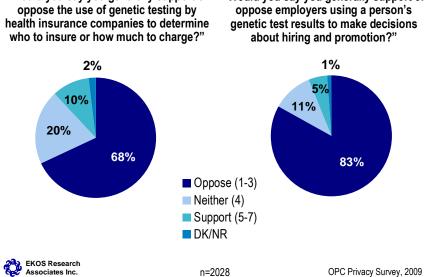
Respondents were asked whether they support or oppose the use of genetic testing results by health insurance companies to determine who is insurable and at what premiums. Results reveal that over two-thirds of Canadians (68 per cent) oppose the use of genetic testing for such purposes, and only one in ten (10 per cent) support it.

- > Fully three-quarters of university-educated respondents (75 per cent) oppose health insurance companies using genetic test results to determine insurability
- Men are slightly more predisposed to support genetic testing for health insurance purposes than women (12 per cent, vs. nine per cent, respectively).

Even stronger disagreement is expressed when asked whether employers should be able to use genetic tests to make hiring and promotion decisions: more than eight in ten Canadians (83 per cent) oppose such practices, while only one in ten (11 per cent) are in favour.

- Quebec residents are somewhat less likely to oppose an employer's use of genetic testing results for hiring and promotion decisions (78 per cent).
- Canadians between the ages of 25 and 64 are particularly likely to oppose the use of genetic testing by employers (87 per cent).

## "Would you say you generally support or "Would you say you generally support or oppose the use of genetic testing by oppose employers using a person's



### 4. PRIVACY AND SECURITY

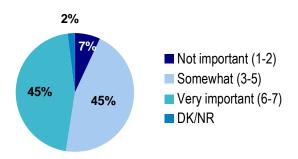
# 4.1 BALANCE BETWEEN PRIVACY AND SECURITY

Survey results suggest that Canadians feel personal privacy is an important consideration as governments provide law enforcement and intelligence agencies with enhanced powers. Nine in ten feel it is very (45 per cent) or somewhat (45 per cent) important that privacy considerations factor into decisions about enhanced security powers for law enforcement agencies, and fewer than one in ten (seven per cent) view this issue as having little importance.

- Canadians between 45 and 64 years are particularly likely to view consideration of personal privacy in the context of enhanced powers for law enforcement as very important (51 per cent).
- Conversely, Canadians under 25 are more likely than others to view the consideration of personal privacy as a matter of little importance (12 per cent).

#### **Balance Between Privacy and Security**

"How important should a person's privacy be considered as governments provide law enforcement and intelligence agencies with enhanced powers?"





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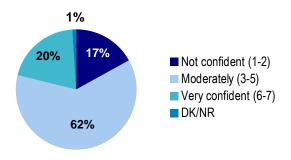
#### 4.2 CONFIDENCE IN NEW SECURITY MEASURES

Canadians were also asked how confident they are that new security measures at borders and airports result in increased safety and security. Only one in five (20 per cent) say they are very confident that new security measures result in increased safety and security, however, a clear majority (62 per cent) say they are moderately confident. Only one in six (17 per cent) express no confidence in the impact of new security measures to increase the safety and security of Canadians.

- Residents in British Columbia are less likely to be very confident of the effectiveness of new security measures (11 per cent), while Quebec residents (24 per cent) are most likely to be very confident.
- Respondents with high school education or less are particularly likely to say they are very confident in the ability of new security measures to increase safety (26 per cent), while those with university education are less likely to feel this way (13 per cent).

#### **Confidence in New Security Measures**

"How confident are you that new security measures (at borders and airports, for example) result in increased safety and security?"





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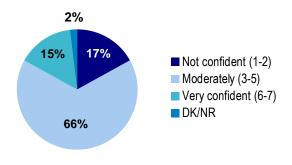
### 4.3 CONFIDENCE THAT LAW ENFORCEMENT AGENCIES WILL ADHERE TO PRIVACY LAWS

Respondents were asked how confident they are that Canadian law enforcement and security agencies adhere to privacy laws that restrict the collection, storage, and sharing of personal information. Results reveal some scepticism among Canadians in this area: only about one in seven (15 per cent) are very confident that Canadian authorities respect the laws that protect Canadians' privacy, however, most (66 per cent) are moderately confident that this is the case. Only one in six (17 per cent) have little confidence that privacy rules are being followed by law enforcement agencies.

- British Columbia residents are more sceptical about Canadian law enforcement's commitment to adhering to privacy laws, with over one in four (26 per cent) saying they are not confident that privacy laws are being followed.
- Those 65 years of age and older are more likely than their younger counterparts to express little confidence that security agencies are adhering to the laws set out to protect Canadians' privacy (23 per cent, vs. 17 per cent nationally).

### Confidence that Law Enforcement Agencies Will Adhere to Privacy Laws

"As you may be aware, law enforcement and security agencies in Canada are subject to privacy laws that place restrictions on the collection, storage and sharing of personal information. How confident are you that law enforcement and security agencies in Canada adhere to these privacy laws?"





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# 5. IDENTITY INTEGRITY AND PROTECTION

## 5.1 EXPERIENCE AND CONCERN WITH IDENTITY THEFT

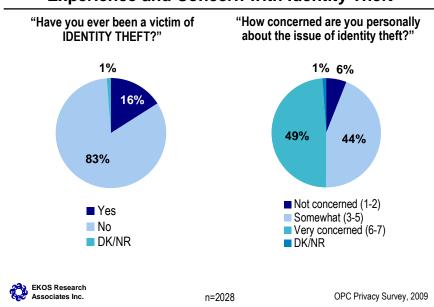
Turning to another topic, respondents were asked if they had ever been a victim of identity theft. Results suggest that the vast majority of Canadians (83 per cent) have not experienced identity theft, although over one in six Canadians (16 per cent) say they have.

> Those earning \$100,000 or more are particularly likely to say they have been victims of identity theft, with one in five (21 per cent) saying they have been a victim of this crime.

Interestingly, despite fairly limited first hand experience with this issue, almost half of Canadians (49 per cent) say that they are very concerned about identity theft, and 44 per cent are somewhat concerned; only six per cent of Canadians say they are not concerned about this issue.

- > Canadians 45 to 64 years of age are more likely than others to be very concerned about identity theft (58 per cent).
- Regionally, concern about identity theft is highest in Ontario (58 per cent) and lowest in Quebec (33 per cent).

#### **Experience and Concern with Identity Theft**



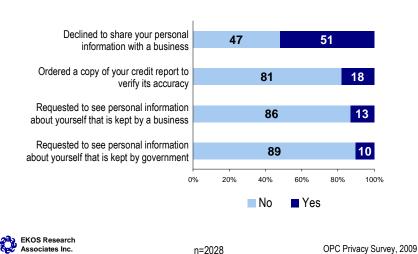
### 5.2 ACTIONS TAKEN TO PROTECT PERSONAL INFORMATION

Respondents were also asked whether they had ever taken specific actions to protect their personal information, such as requesting to see personal information about themselves maintained by the government or a business, ordering a copy of their credit report, or declining to provide personal information to a business. Half (51 per cent) of respondents say they have refused to share personal information with a business, however, fewer than one in five say they have verified their credit report for accuracy (18 per cent), and an even smaller number have asked to see personal information about them kept by a business (13 per cent) or the government (10 per cent).

- Interestingly, Canadians under 25 years of age are twice as likely as the national average to indicate that they have requested to see information about themselves kept by the government (19 per cent).
- British Columbia residents are particularly likely to say they have declined to share personal information with a business (61 per cent). Conversely, only four in ten Quebeckers (40 per cent) say they have refused to provide personal information to a business.
- One in four Canadians between 25 and 44 years (25 per cent) say they have verified their own credit report, compared to only one in ten (10 per cent) Canadians 65 and over.

#### **Actions Taken to Protect Personal Information**

"Have you ever ...?"



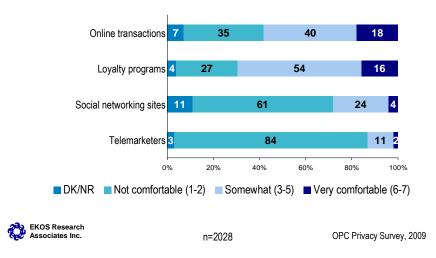
### 5.3 COMFORT WITH SHARING PERSONAL INFORMATION

When asked how comfortable they are sharing personal information in a variety of contexts (i.e., online transactions, social networking sites, telemarketing solicitations, and customer loyalty programs), results suggest that Canadians' comfort with sharing personal information varies depending on the situation. The vast majority of Canadians (84 per cent) are not comfortable providing personal information to a telemarketer, and six in ten (61 per cent) are uncomfortable sharing private information on social networking sites. However, only one-third (35 per cent) are uncomfortable providing personal information in transactions over the Internet, and just one in four (27 per cent) are uncomfortable with providing this type of information to a business or organization as part of a customer loyalty program.

- As education and income levels increase, so too do comfort levels with providing personal information in the context of online transactions and customer loyalty programs. However, those with higher incomes and education levels are also less comfortable sharing personal information with telemarketers or social networking sites.
- Canadians 65 years and older are more uncomfortable than other respondents in sharing personal information through customer loyalty programs (35 per cent), and online transactions (43 per cent).

#### **Comfort with Sharing Personal Information**

"How comfortable are you with sharing personal information such as your name, address, telephone number, email address, date of birth, or financial information for each of the following?

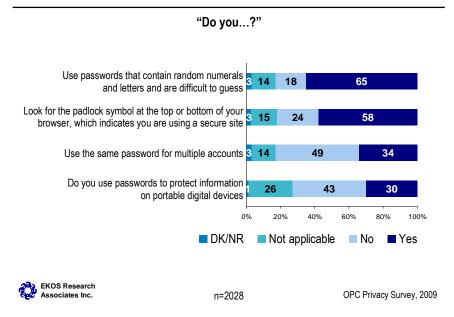


#### 5.4 ACTIONS TAKEN TO PROTECT PASSWORDS

Survey results also suggest that Canadians take action to protect their passwords. Two-thirds (65 per cent) say they use passwords that contain random letters and numerals, almost six in ten (58 per cent) check their browser to ensure they are using a secure site, and half (49 per cent) make a point of using different passwords for multiple accounts. About one in three (30 per cent) also say they password-protect information held on portable digital devices.

- Those with higher education and income levels are particularly likely to use passwords that are difficult to guess.
- Men are more likely to password-protect information on their portable digital devices than are women (33 per cent, vs. 26 per cent, respectively).

#### **Actions Taken to Protect Passwords**



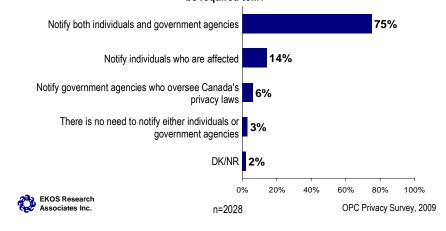
### 5.5 PREFERRED ACTION IN EVENT OF BREACH OF PERSONAL INFORMATION

Respondents were asked what actions they thought a company should be required to take in the event of a security breach that compromised customers' personal information. Three in four (75 per cent) say that companies should be required to notify both the individuals affected and the government agencies who oversee Canada's privacy laws. One in seven (14 per cent) feel that only the individuals affected need be notified, and six per cent say that the company in question should only be required to notify the relevant government agencies. Virtually no one feels that in the event of an information breach involving their personal information there is no need to notify either individuals or government agencies.

Those with college and university-level education are more apt to want notification of both individuals and government agencies in the event of a security breach (79 per cent and 83 per cent, respectively), while Canadians with high school education or less lean more towards notification of individuals only (21 per cent).

### Preferred Action in Event of Breach of Personal Information

"Sometimes, personal information that is held by a company about their customers might be compromised, either due to criminal activity or due to a flaw in the company's security system. If a company were to experience a breach involving your personal information, which of the following best describes your views? Would you say that companies should be required to...?"



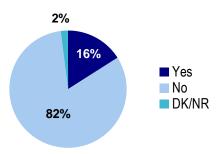
## 5.6 EXPERIENCE WITH BREACH OF PERSONAL INFORMATION

Canadians were also asked if they had ever experienced a serious incident in which their personal information was used inappropriately, or released to a third party without their consent. While a small minority of Canadians (16 per cent) say they have been victims of unauthorized use of their personal information, a clear majority (82 per cent) say they have not experienced this situation.

- Residents of British Columbia report a higher incidence of violations of their personal information (23 per cent), while those in Quebec report a lower incidence of inappropriate release of their personal information (10 per cent).
- > Canadians with high school education or less are less likely than others to say they have experienced unauthorized use of their personal information (11 per cent).

#### **Experience with Breach of Personal Information**

"Have you ever experienced a serious incident where your personal information was used inappropriately or released without your consent (such as credit card information)?"





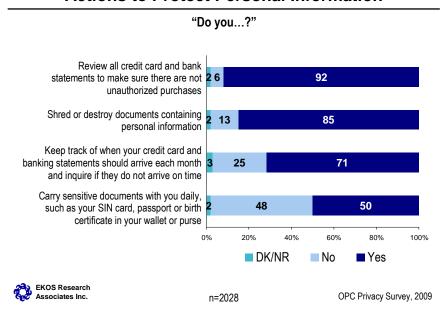
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## 5.7 ACTIONS TO PROTECT PERSONAL INFORMATION

When asked about the precautions they take to protect their personal information, results suggest that Canadians are extremely careful about their personal information. An overwhelming majority of Canadians (92 per cent) say they make a point of reviewing their credit card and bank statements to ensure there are no unauthorized purchases, and 71 per cent say they keep track of when their statements should arrive each month. A further 85 per cent of Canadians say they shred or destroy documents that contain personal information. In addition, almost half of all Canadians (48 per cent) say they refrain from carrying sensitive documents (e.g., SIN card, passport) with them on a daily basis.

- In general, women are more cautious than men when it comes to protecting their personal information: women are more likely than men to keep track of credit card and banking statements (75 per cent, vs. 67 per cent, respectively), and are also more likely than men to destroy documents containing their personal information (87 per cent, vs. 83 per cent, respectively).
- Canadians 65 years of age and older tend to be more vigilant about protecting their personal information than their younger counterparts. Seventy-eight per cent say they keep track of credit card and banking statements and fully 96 per cent scrutinize their statements for unauthorized purchases. Interestingly, however, these older Canadians also have a greater tendency to carry sensitive documents with them on a regular basis (61 per cent).

#### **Actions to Protect Personal Information**



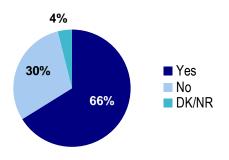
# 5.8 CONCERN ABOUT BUSINESSES TRANSFERRING PERSONAL INFORMATION OUTSIDE CANADA

Respondents were also asked if they were concerned about businesses or organizations transferring their personal information for processing or storage outside of Canada. Results reveal that two-thirds of respondents (66 per cent) express concern about their personal information being stored outside of Canada, while one-third (30 per cent) are not bothered by it.

- > Regionally, residents of Ontario are more concerned about their personal information being processed abroad (71 per cent), while those living in Quebec are less concerned (49 per cent).
- > Canadians under 25 are less concerned about off-shore processing and storage of their personal information (49 per cent), while those aged 45 to 64 express higher levels of concern over this practice (72 per cent).
- Men are more concerned than women about their information being stored outside of Canada (71 per cent, vs. 62 per cent, respectively).

### Concern About Businesses Transferring Personal Information Outside Canada

"Are you concerned about businesses or organizations transferring your personal information for processing or storage outside of Canada?"





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#### 5.9 ACTIONS TO PRESERVE PRIVACY

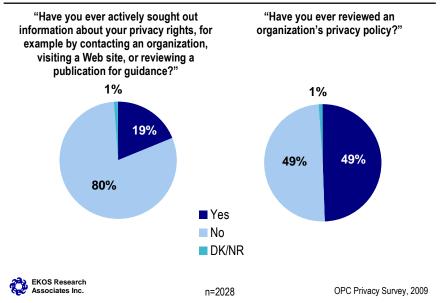
Respondents were asked if they had ever actively sought information about their privacy rights (e.g., by contacting an organization, visiting a Web site, or reviewing a publication for guidance). Results reveal that only one in five Canadians (19 per cent) say they have sought out such information, while four in five (80 per cent) say they have not.

- Those 65 years of age and older are less likely than others to have sought out information about their privacy rights (nine per cent, vs. 19 per cent nationally).
- > Those with a university education are more likely to have inquired about their privacy rights (27 per cent), while those with high school education or less are less likely to have done this (13 per cent).

Canadians were further asked if they had ever reviewed an organization's privacy policy. Results suggest a more proactive stance on the part of Canadians on this issue: half of respondents (49 per cent) say they have reviewed an organization's privacy policy, and half (49 per cent) say they have not.

- Regionally, residents in Alberta show the strongest inclination to familiarize themselves with an organizational policy on privacy, with 65 per cent saying they have reviewed an organization's policy. In contrast, only one in four respondents in Quebec (24 per cent) say they have checked an organization's policy about the privacy of information.
- Those with higher education levels and higher incomes are more likely to report having looked into an organization's privacy policy.

#### **Actions to Preserve Privacy**



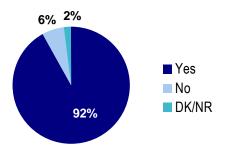
# 5.10 AGREEMENT THAT POLITICAL PARTIES SHOULD BE SUBJECT TO PRIVACY LEGISLATION

Finally, respondents were asked their opinion as to whether political parties and politicians should be subject to legislation that sets out rules for how they collect and handle the personal information of Canadian citizens. An overwhelming majority of Canadians (92 per cent) feel that political parties and politicians should be subject to such legislation, while a scant six per cent think they should not.

As with many other issues, Quebec residents prove to be a regional exception, with only eight in ten (83 per cent) believing that political parties and politicians should be subject to rules that regulate the collection and handling of personal information. Conversely, respondents in British Columbia (97 per cent) and Alberta (99 per cent) almost universally feel that politicians should be subject to such laws.

#### Agreement that Political Parties Should Be Subject to Privacy Legislation

"Do you believe that political parties and politicians should be subject to legislation setting out rules for how they collect and handle your personal information?"





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