



Public Health
Agency of Canada

Agence de santé
publique du Canada

SEASONAL INFLUENZA VACCINATION COVERAGE SURVEY, 2018–2019

Final Report

Submitted to Public Health Agency of Canada
Contract Number 6D034-183551/001/CY

Prepared By: Leger

Ce rapport est également disponible en français.

Contract value: 168,415.20\$

Award date: 06/11/2018

Delivery date: 13/03/2019

Registration number: POR 065-18

For more information on this report, please contact hc.cpab.por-rop.dgcap.sc@canada.ca

Leger
507 Place d'Armes, Suite 700
Montréal, Quebec
H2Y 2W8
Telephone: 514-982-2464
Fax.: 514-987-1960

SEASONAL INFLUENZA VACCINATION COVERAGE SURVEY

Final Report

Prepared for the Public Health Agency of Canada

Supplier Name: Leger

March 2019

This public opinion research report presents the results of a telephone survey conducted by Leger Marketing Inc. on behalf of the Public Health Agency of Canada. The research was conducted with 3,737 Canadians between January 21 and February 24, 2019.

Cette publication est aussi disponible en français sous le titre : Sondage concernant la couverture de la vaccination contre la grippe saisonnière, 2018-2019.

This publication may be reproduced for non-commercial purposes only. Prior written permission must be obtained from Health Canada. For more information on this report, please contact Health Canada at hc.cpab.por-rop.dgcap.sc@canada.ca or at:

Health Canada, CPAB
200 Eglantine Driveway, Tunney's Pasture
Jeanne Mance Building, AL 1915C
Ottawa, Ontario K1A 0K9

Catalogue Number:

H14-315/2019E-PDF

International Standard Book Number (ISBN):

978-0-660-30264-5

Related publications (registration number: POR 065-18):

Catalogue Number: H14-315/2019F-PDF (Final Report, French)

ISBN 978-0-660-30265-2

TABLE OF CONTENTS

1. SUMMARY	4
1.1 Background and objectives	4
1.2 Application of results	5
1.3 Methodology—Quantitative research	5
1.3 Notes on the interpretation of the findings	6
1.4 Declaration of political neutrality and contact information	7
APPENDIX A—DETAILED RESEARCH METHODOLOGY	8
A.1 Quantitative methodology	8
APPENDIX B— QUESTIONNAIRE	21
ENGLISH SURVEY QUESTIONNAIRE	21

1. Summary

Leger is pleased to submit this report to the Public Health Agency of Canada (PHAC) on the results of a quantitative survey assessing seasonal influenza vaccination coverage among the Canadian population.

This report was prepared by Leger following the awarding of a contract by PHAC (contract number 6D034-183551/001/CY, awarded November 6, 2018).

1.1 Background and objectives

For several years now, PHAC has been conducting a study at the beginning of the year on the incidence of seasonal influenza vaccination in the Canadian population. This study has multiple research objectives. The survey covers a variety of elements and topics. This year, some secondary objectives were added to the study while other items covered in previous years were removed from the study.

The primary objective of the research is to:

Provide national vaccination coverage estimates for seasonal influenza and estimates in four community-dwelling (i.e. non-institutionalized) groups: adults 18-64 years of age; adults 65 years of age and older; adults with a chronic medical condition; and young children (aged 6 to 59 months).

Secondary research objectives (new section in 2019) include:

Provide national vaccination coverage estimates for four antigens routinely offered to adults (i.e. tetanus, pertussis, shingles and pneumococcal disease) and;

For the pneumococcal vaccine, provide estimates for two groups to whom the vaccine is recommended (adults 65 years of age and older; and adults with a chronic medical condition).

Tertiary research objectives include:

Measure Canadians' awareness, knowledge, attitudes and beliefs towards these vaccines, determine reasons for non-vaccination, identify health care providers administering the influenza vaccine (i.e. nurse vs. doctor vs. pharmacist), and identify factors associated with vaccine uptake.

Once again, this year, special attention was paid to parents of children under 5 years to find out the reasons they choose whether or not to vaccinate their children.

1.2 Application of results

The survey results allow PHAC and the Government of Canada to monitor and evaluate vaccination programs during the flu seasons. They also identify factors that influence influenza vaccine uptake and sub-populations with low immunization coverage. This information is important for the development of targeted programs or strategies to improve immunization coverage of unvaccinated and under-vaccinated populations.

1.3 Methodology—Quantitative research

The quantitative research consisted of telephone interviews, which were conducted using a computer-assisted telephone interviewing system (CATI technology).

Data collection for this survey took place between January 21 and February 24, 2019. The national response rate for the survey was 20.1%. The comprehensive distribution of calls is presented in Appendix A. A pre-test of 100 interviews, in both official languages, was conducted between December 3 and 13, 2018. More specifically, 50 interviews were conducted in French and 50 in English. The interviews lasted an average of ten minutes. The interviews were recorded to assess the level of understanding of each issue in the population. Some adjustments were made to the questionnaire as a result of this evaluation. Another test was conducted prior to the full launch of data collection in January to confirm that all changes were properly implemented.

To obtain reliable data for each of the subgroups, we surveyed a total sample of 3,737 Canadian adults in all regions of the country. Only one adult respondent was interviewed per household. The national margin of error for this survey is +/- 1.60%, 19 times out of 20. Among these, 1,000 are parents of children under 5. The margin of error for this survey sample is +/- 3.10%, 19 times out of 20.

To estimate vaccine coverage in children aged 0 to 5 years, it was necessary to oversample parents of children of that age group because a simple random sample of all Canadian adults might not generate a sufficiently large sample of parents for an accurate analysis of young children. To avoid clustering, only one child per dwelling could be surveyed. Based on the previous edition of this survey, we estimated that we would find about 300 parents with children under 5 years of age in the random sample of the general population. Then, we oversampled this subgroup of the population to recruit 700 more in order to reach the PHAC target of 1,000 parents with children under 5 years of age. The additional sample was therefore a way to maximize the proportion of parents participating in the survey.

According to 2016 national census data from Statistics Canada, Leger weighted the results of this survey by age, gender, region, language (mother tongue) and education level. The results were also weighted according to the presence of children under 5 in the household (yes or no), as this question was asked and is important for this study. In addition, the weighting of respondents in the cellular sample only was also controlled to 32.5% after weighting, which corresponds to the latest Canadian Radio-television and Telecommunications Commission (CRTC) assessment of the percentage of Canadian households that do not have a landline.

Leger meets the strictest quantitative research guidelines. The questionnaire was prepared in accordance with the Standards for the Conduct of Government of Canada Public Opinion Research—Series B—Data collection and data tabulation for telephone surveys.

Details on the methodology, information on Leger’s quality control mechanisms, the questionnaire, and details on weighting procedures are provided in the appendix.

1.3 Notes on the interpretation of the findings

The opinions and observations expressed in this document do not reflect those of the Public Health Agency of Canada. This report was compiled by Leger based on research conducted specifically for this project. This research is probabilistic; the results can be applied to the general population of Canada. The research was designed with this objective in mind.

1.4 Declaration of political neutrality and contact information

I hereby certify, as chief agent of Leger, that the deliverables are in full compliance with the neutrality requirements of the [Policy on Communications and Federal Identity](#) and the [Directive on the Management of Communications—Appendix C](#) (Appendix C: Mandatory Procedures for Public Opinion Research).

Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, party positions, or the assessment of the performance of a political party or its leaders.

Signed by:

A handwritten signature in blue ink, appearing to read "Christian Bourque".

Christian Bourque
Executive Vice President and Associate
Leger
507 Place d'Armes, Suite 700
Montréal, Quebec
H2Y 2W8
cbourque@leger360.com

Seasonal Influenza Vaccination Coverage Survey, 2018-2019

Appendix A—Detailed research methodology

A.1 Quantitative methodology

A.1.1 Methods

For tracking and comparability purposes, the methodology used for this survey was the same as that of previous waves of surveys. Leger used the same methods as those used in the 2017–2018 survey with respect to sampling methodology, data collection methods and some elements of the questionnaire.

The quantitative research consisted of telephone interviews, which were conducted using a computer-assisted telephone interviewing system (CATI technology). This approach is the most suitable for assessing seasonal influenza vaccination coverage among different subgroups of the Canadian population, while ensuring a high level of representativeness.

Leger meets the strictest quantitative research guidelines. The survey questionnaire was prepared in accordance with the Standards for the Conduct of Government of Canada Public Opinion Research—Series B—data collection and data tabulation for telephone surveys.

Respondents were assured of the voluntary and confidential nature of the approach, and the anonymity of their responses. As with all research conducted by Leger, any information that could identify respondents was removed from the data, in accordance with Canada’s Privacy Act.

All research interviews were conducted from the Montréal call centre, which has three separate divisions: one made up exclusively of English-speaking interviewers, another exclusively of French-speaking interviewers, and the last of bilingual interviewers. These divisions ensure that all telephone surveys can easily be conducted in either official language.

A.1.2 Data collection

Data collection for this survey was conducted between January 21 and February 24, 2019. The national response rate for the survey was 20.1%. The comprehensive distribution of calls is presented below. A pre-test of 100 interviews, in both official languages, was

conducted between December 3 and 13, 2018. More specifically, 50 interviews were conducted in French and 50 in English. The interviews lasted an average of ten minutes. This pre-test allowed some adjustments to be made to the questionnaire. Results from the pre-test were not included in the coverage calculations.

To obtain reliable data for each of the subgroups, we surveyed a total sample of 3,737 Canadian adults in all regions of the country. Only one adult respondent was interviewed per household. The national margin of error for this survey is +/- 1.60%, 19 times out of 20. Among these, 1,000 are parents of children aged 0 to 5 years. The margin of error for this survey sample is +/- 3.10%, 19 times out of 20.

A representative sample of approximately 3,000 Canadian adults, and an oversample of approximately 1,000 parents of children under 5 years of age

A. Representative sample of approximately 3,000 Canadians

A sample of 3,000 Canadian adults was selected using a stratified regional sampling approach. Flexible regional quotas were applied to ensure that a sufficient number of interviews were conducted in each region of Canada. The following table shows the regional quotas. Within the random sample of 3,000 Canadian adults, 297 parents of children under 5 years of age were recruited.

The following table details the regional quotas for the 3,000 Canadian adults:

Table 1. Flexible regional quotas

Region	Quotas	Number of completed interviews
Atlantic	Between 220 and 260	296
Quebec	Between 720 and 780	940
Ontario	Between 890 and 1,090	1,311
Manitoba and Saskatchewan	Between 220 and 260 (15 interviews in Nunavut)	266
Alberta	Between 340 and 380 (15 interviews in the NWT)	444
British Columbia	Between 400 and 440 (15 interviews in the Yukon)	480
Total	3,000	3,737

B. Oversample of parents of children under 5 years of age

To meet the quota of 1,000 parents of children under 5 years of age, an oversample of 703 parents of children under 5 years of age was required, in addition to the 297 naturally collected from the sample of 3,000 Canadian adults. Because children aged 6 to 59 months are one of the groups with the highest risk for influenza-related complications, PHAC wanted to estimate coverage in that group. The additional sample was therefore a way to maximize the proportion of parents with children aged 5 years and under participating in the survey. Only one child per household was included in the calculation of coverage. If there was more than one child in the dwelling, the child who answered the questions was selected randomly using a grid in order to have a good distribution in every age group.

A.1.3 Sampling procedures

Landline telephone numbers were generated, and only cell phone numbers were purchased¹ using a stratified regional sampling approach. Telephone interviews were conducted using Leger's computer-assisted telephone interviewing system (CATI technology). This system manages the sampling electronically, by selecting and randomly dialing the phone number to call. To ensure perfect coverage of a population, the sample included residential telephone numbers located in all of Canada's provinces and territories, as well as the cell phone numbers of Canadians who do not have a residential landline (i.e., pre-validated cell numbers only). Flexible quotas were established to ensure a sufficient number of interviews in each region of Canada. In addition to these regional quotas, data was collected to ensure proper distribution of respondents by gender (men and women) and language (English and French), using flexible quotas.

Canada-wide sampling: Households with a landline

We defined a Canada-wide sample of telephone numbers. All numbers were randomly selected to generate this basic sample. Each telephone number in this sampling frame was associated with a Canadian province. Subsequently, we used this Canada-wide sample to randomly select numbers by province or region, in proportion with the provincial or regional quotas established for the project.

¹ Leger has been purchasing its samples from ASDE Survey Sampler, a reputable and reliable supplier, for over 15 years.

Canada-wide sampling: households with a cell phone number only

For the portion of the sample composed of "households with only a cell phone," candidates were randomly selected for each province or region taking into account provincial or regional quotas. Based on the CRTC's 2016 communications monitoring report, which revealed that 32.5% of Canadian households used a cell phone exclusively, Leger ensured that 32.5% of the final sample came from cell phone numbers only.

Among the 3,737 interviews conducted as part of this project, 1,718 were conducted with respondents from households using only a cell phone. This represents 45.9% of the final sample, which is higher than the CRTC's estimate of 32.5% of Canadian households without landlines. Statistical weighting corrects the small difference between the sample and the actual proportion in the population.

A.1.4 Maximizing response rate

A low response rate compromises the reliability and validity of a survey. Based on their experience in surveying various populations, Leger has established the following methods to maximize response rates:

- Include a toll-free number that respondents can call if necessary;
- Be patient in discussions with respondents to help maintain interest in the survey and limit withdrawals during the call;
- Prepare points that interviewers can refer to in order to let respondents know that their participation is important: value of the study for them and their families, etc.
- Assign experienced interviewers to communicate with households and target the appropriate respondent;
- Make a minimum of eight call-backs at each number and schedule appointments for call-backs (even for initial contact);
- Include contact information for an experienced researcher so that respondents can confirm the validity of the research;
- Make calls to users of cell phones only to maximize sample representativeness and ensure that a sufficient number of young people, often on the move, are included in the final sample.

A.1.5 Call distribution

The overall response rate for this study is 20.1%. The response rate is calculated using the following formula: (Completed interviews + Out of sample) / (Total sample - Invalid sample). This is the former Marketing Research and Intelligence Association's standard calculation method for the response rate of a telephone survey. The table below provides details of the calculation.

Table 2. Call determination and response rate

ÉCHANTILLON DE BASE	50,834
Invalid sample	7,943
No service	7403
Non-residential	156
Fax / modem / pager	367
Double	17
Numbers outside of sample	4,870
Language Barrier	691
Unqualified	3897
Quota attained	282
EFFECTIVE SAMPLE*	38,021
Non-completed interviews	34,284
Refusal	11,974
No answer	10,066
Answering machine	10,775
Line busy	412
Incomplete	272
Appointment	785
COMPLETED INTERVIEWS	3,737
Response rate	20.1%

*Note that effective sample is calculated using the following formula: Non-completed interviews + Completed interviews

A.1.6 Non-response biases and additional socio-demographic analysis

An effective response rate of 20.1% is the average for a national telephone survey of 3,737 respondents conducted over a period of approximately four weeks. This rate is consistent with similar surveys. Participation rates in telephone surveys rarely exceed 25% for a national survey of the general public. Such a response rate reduces the risk of significant non-response bias in the survey, as it reduces the likelihood of an unrepresentative sample.

Weighting

According to Statistics Canada's 2016 national census data, Leger weighted the results of this survey by age, gender, region, language (mother tongue) and education level. The results were also weighted according to the presence of children under 5 in the household (yes or no), as this question was asked and is important for this study. In addition, the weighting of respondents in the cell phone-only sample was also controlled to match the 32.5% expected after the weighting.

Nevertheless, a baseline comparison of weighted and unweighted samples was conducted to identify potential non-response biases that could be introduced by lower response rates in some demographic subgroups (see tables in the next section). As is usually the case for a telephone survey targeting mainly households with a landline, it was more difficult to reach young respondents and parents of young children. To compensate for this, Leger conducted 1,718 interviews with individuals whose homes do not have landlines (called on their cell phones). Through this procedure, we found that the size of our unweighted sample was very close to that of the weighted sample, calculated using the most recent data from Statistics Canada.

A.1.7 Weighted and unweighted samples

The table below shows the geographical distribution of respondents, before and after weighting. There is almost no geographical distribution imbalance in the unweighted sample. The weighting process mainly adjusted the weighting of Ontario and British Columbia—which were slightly underrepresented in the sample—to obtain more respondents in the smaller provinces and territories.

Table 3. Unweighted and weighted sample distribution by province

Province or territory	Unweighted	Weighted
Newfoundland and Labrador	61	57
Prince Edward Island	21	15
Nova Scotia	130	101
New Brunswick	84	81
Quebec	940	877
Ontario	1,311	1,430
Manitoba	136	131
Saskatchewan	115	112
Alberta	429	417
British Columbia	465	505
Nunavut	15	3
Northwest Territories	15	4
Yukon	15	4

The tables below illustrate the demographic distribution of respondents by gender, age, language (mother tongue), education and household income.

First, with respect to gender, we can see that the weighting adjusted the proportion of female respondents to male respondents, with women still slightly over-represented in telephone surveys.

Table 4. Unweighted and gender-weighted sample distribution

GENDER	Unweighted	Weighted
Male	1,572	1,805
Female	2,157	1,922
Refusal	8	11

With respect to age distribution, the unweighted sample far exceeds the Public Health Agency of Canada's expectations, which requires that at least 50% of the sample comprise people aged 18 to 64 years. In fact, 78% of the people in our unweighted sample are under 65 years of age and 61% of the unweighted sample is under 55 years of age.

Table 5. Unweighted and age-weighted sample distribution

AGE	Unweighted	Weighted
From 18 to 24 years old	195	348
From 25 to 34 years old	755	672
From 35 to 44 years old	803	604
From 45 to 54 years old	497	670
From 55 to 64 years old	654	653
From 65 to 74 years old	558	511
75 years old and older	275	278

Minor imbalances in language distribution have been corrected through weighting, as shown below.

Table 6. Unweighted and weighted sample distribution by mother tongue

LANGUAGE (MOTHER TONGUE)	Unweighted	Weighted
French	934	777
English	2,196	2,368
Other	596	582
Refusal	11	9

The table below shows the distribution of respondents according to the presence of children under 5 years of age in the household, before and after weighting. As we wanted to reach a larger number of parents than in a normally distributed sample, a quota of 1,000 parents of children under 5 years of age was set. It should be noted that a normally distributed sample would include about 11.5% of households with children aged 0–5 years, which is insufficient for proper data analysis of this very important group. As a result, there is a major imbalance in the distribution in the unweighted sample. However, weighting the sample made it possible to adjust the proportion of the two targets.

Table 7. Unweighted and weighted distribution of samples by the presence of children under 5 years of age in the household

PRESENCE OF CHILDREN UNDER 5 YEARS OF AGE IN THE HOUSEHOLD.	Unweighted	Weighted
1	701	236
2	267	87
3	29	11
4	3	1
5	2	0
TOTAL Yes	1,002	335
None	2,728	3,388
Refusal	7	13

The relatively small size of the weighting factors and differences in the responses of the various subgroups suggest that the quality of the data was not affected by the process. The weighting applied corrected the original imbalance for data analysis purposes; no further manipulation was required.

As with all research conducted by Leger, contact information was kept completely confidential, and any information that could identify respondents was removed from the data, in accordance with Canada’s Privacy Act.

A.1.9 Weighting factors

Certain subgroups tend to be underrepresented or overrepresented in a sample compared to the general population. The weighting of a sample makes it possible to correct for differences in the representation of the various subgroups of that sample compared to what is usually observed in the overall study population. Weighting factors are therefore the weight given to each respondent that corresponds to a subgroup of the sample.

The following tables illustrate the proportion allocated to each target in the sample.

Table 8. Weighting by gender and age

GENDER*AGE	Weighting
Male AND aged 18 to 34 years	0.1371
Male AND aged 35 to 44 years	0.0791
Male AND aged 45 to 54 years	0.0881
Male AND aged 55 to 64 years	0.0854
Male AND aged 65 and older	0.0959
Female AND aged 18 to 34 years	0.1358
Female AND aged 35 to 44 years	0.0826
Female AND aged 45 to 54 years	0.0912
Female AND aged 55 to 64 years	0.0894
Female AND aged 65 and older	0.1154
Total	1

Table 9. Weighting by gender and region

GENDER*REGION	Weighting
Newfoundland AND Male	0.007374
Newfoundland AND Female	0.007882
Prince Edward Island AND Male	0.001959
Prince Edward Island AND Female	0.002133
Nova Scotia AND Male	0.012915
Nova Scotia AND Female	0.014101
New Brunswick AND Male	0.010549
New Brunswick AND Female	0.011226
Quebec AND Male	0.114013
Quebec AND Female	0.119994
Ontario AND Male	0.184346
Ontario AND Female	0.198504
Manitoba AND Male	0.017095
Manitoba AND Female	0.017934

Saskatchewan AND Male	0.014739
Saskatchewan AND Female	0.015196
Alberta AND Male	0.055674
Alberta AND Female	0.056123
British Columbia AND Male	0.065618
British Columbia AND Female	0.069703
Yukon AND Male	0.000502
Yukon AND Female	0.00051
Northwest Territories AND Male	0.000568
Northwest Territories AND Female	0.000544
Nunavut AND Male	0.000408
Nunavut AND Female	0.000389
Total	1

Table 10. Weighting by region and language

REGION*LANGUAGE	Weighting
QC AND French	0.1809
QC AND English	0.0537
Rest of Canada AND French	0.0271
Rest of Canada AND English	0.7382
Total	1

Table 11. Households with a cell phone number only

HOUSEHOLDS WITH A CELL PHONE NUMBER ONLY	Weighting
Yes	0.325
No	0.675
Total	1

PHAC wanted to have the opportunity to consider the oversample of children as a representative sample of children under five in Canada. Leger produced a separate SAS file and data set of the 1,000 oversampled participants in this subgroup. As we had information on child age, gender and region, we were able to weight the 1,000 respondents to reflect the actual distribution of children under 5 years of age in Canada.

The following table illustrates the proportion factor according to each target in the sample.

Table 12. Age- and region-specific weighting of children

CHILDREN*REGION	Weighting
ATLANTIC AND less than 1 year old (from 1 to 11 months)	0.0106
ATLANTIC AND 1 year old to less than 2 years old (12 to 23 months)	0.0109
ATLANTIC AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.0111
ATLANTIC AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.0112
ATLANTIC AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.0118
QC AND less than 1 year old (from 1 to 11 months)	0.0452
QC AND from 1 year old to less than 2 years old (from 12 to 23 months)	0.0456
QC AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.047
QC AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.048
QC AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.0486
ON AND less than 1 year old (from 1 to 11 months)	0.071
ON AND from 1 year old to less than 2 years old (from 12 to 23 months)	0.0717
ON AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.0732
ON AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.0749
ON AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.0766
MB/SK AND less than 1 year old (from 1 to 11 months)	0.0161
MB/SK AND from 1 year old to less than 2 years old (from 12 to 23 months)	0.0161
MB/SK AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.0163
MB/SK AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.0164
MB/SK AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.0162
AB AND less than 1 year old (from 1 to 11 months)	0.0283
AB AND from 1 year old to less than 2 years old (from 12 to 23 months)	0.028
AB AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.0279
AB AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.028
AB AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.0282
BC AND less than 1 year old (from 1 to 11 months)	0.0226
BC AND 1 year old to less than 2 years old (12 to 23 months)	0.0228
BC AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.0231
BC AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.0238
BC AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.0239
North AND less than 2 years old (from 1 to 23 months)	0.0019
North AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.001
North AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.001
North AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.001
Total	1

Table 13. Weighting by region and gender of children

REGION*GENDER	Weighting
ATLANTIC AND male	0.0284
ATLANTIC AND female	0.0273
QC AND male	0.1200
QC AND female	0.1143
ON AND male	0.1881
ON AND female	0.1791
MB/SK AND male	0.0416
MB/SK AND female	0.0396
AB AND male	0.0719
AB AND female	0.0685
BC AND male	0.0597
BC AND female	0.0565
North AND male	0.0026
North and female	0.0024
Total	1

Table 14. Weighting by gender and age of children

GENDER*AGE	Weighting
MALE AND under 1 year old (from 1 to 11 months)	0.0996
MALE AND from 1 year old to less than 2 years old (from 12 to 23 months)	0.1005
MALE AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.1021
MALE AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.1046
MALE AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.1056
FEMALE AND under 1 year old (from 1 to 11 months)	0.0951
FEMALE AND from 1 year old to less than 2 years old (from 12 to 23 months)	0.0957
FEMALE AND from 2 years old to less than 3 years old (from 24 to 35 months)	0.0974
FEMALE AND from 3 years old to less than 4 years old (from 36 to 47 months)	0.0988
FEMALE AND from 4 years old to less than 5 years old (from 48 to 59 months)	0.1006
Total	1

Appendix B— Questionnaire

English Survey Questionnaire

INFLUENZA COVERAGE INSTRUCTION 2018/2019

GENERAL PROGRAMMING INSTRUCTIONS :

[TYPE DE PROJET : Tel]

[LANGUES : FR/EN]

[TRACKING : Non]

NOTE TO READER : Text in green and in gray indicate programming instructions.

LEGEND FOR ATTRIBUTE COLUMN

X= Exclusive choice

F= Fixed Choice (not part of the rotation or permutation)

O= Open-ended

Over sample

Oversample of parents of child under 5

Criteria Number of completed questionnaires

Number falling naturally in the sample of 3,000 Canadians (rep)

Oversample needed to reach 1,000

Final sample of 1,000 parents of children under 5

Section info

Page info

[ASK ALL]

QINF#

Good morning (afternoon, evening), my name is XX and I'm calling from LEGER research. We are currently conducting a study on flu vaccine. This survey is led by the Public Health Agency of Canada. Your answers will help improve services that impact Canadians like you. We would therefore greatly appreciate your cooperation.

Your participation is voluntary and completely confidential. Your answers will remain anonymous and cannot affect in any way your dealings with the government of Canada. Can I ask you a few questions? It will take no more than 10 minutes.

IF ASKED: Your opinion counts. Leger research is a renowned company throughout Canada. Today's study is about a topic related to public health in Canada. There are no wrong answers. When may I contact you again? When would be a good time to contact you? Whom should I ask to speak with when I call back? Is there another person in your household with whom we could talk?

NOTE: If a respondent requests to speak with a study leader at Health Canada, please take his / her name and phone number and mention that a supervisor will call back to establish the link with Health Canada.

Contact:

Jared Cohen

Health Canada / Government of Canada

Phone number: 613-608-4123

Section info

[ASK ALL]

QSCTDEMO1

INTERVIEWER SCRIPT:

To begin, I have a few questions about you.

Simple mention question

[ASK IF ECHA=CELL]

ADTADM_010

Do you currently have a residential land-line telephone service at home?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

Yes	1	RECODE LANDLINE
No	0	
(DO NOT READ) Valid skip / Not applicable	7	

(DO NOT READ) Don't know	8	
(DO NOT READ) Refusal	9	TERMINATE

Numeric question

[ASK ALL]

[NUMeric : Min=18, Max=150]

[NOTES: Under 18 = terminate]

[VALIDATION: ÂGE]

ADTDEM_010

How old were you as of September 1, 2018?

INTERVIEWER INSTRUCTIONS: (RECORD THE NUMBER.)

Enter number	XXX	
(DO NOT READ) Refusal	999	TERMINATE

Calculated variable

[NOTES: CALCULATION FROM ADTDEM_010]

ADTDEM_011

Under 18	0	TERMINATE
...Between 18 and 24	1	
...Between 25 and 34	2	
...Between 35 and 44	3	
...Between 45 and 54	4	
...Between 55 and 64	5	
...Between 65 and 74	6	
...75 or older	7	
Refusal	9	TERMINATE

Simple mention question

[ASK PROV TO ALL]

PROV

In which province or territory do you live?

British Columbia	BC
Alberta	AB
Saskatchewan	SK
Manitoba	MB
Ontario	ON
Quebec	QC
New Brunswick	NB
Nova Scotia	NS
Prince Edward Island	PE

Newfoundland	NF
Northwest Territories	NT
Yukon	YK
Nunavut	NU

Simple mention question

[ASK ALL]

ADTDEM_020

What is the language you first learned at home in your childhood and that you still understand?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

French	1
English	2
Other; specify	6
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTDEM_030

What is your gender?

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: Gender is the way a person internally feels and/or publicly expresses in their daily life. A person's gender may differ from the sex they were assigned at birth (male or female). (DO NOT READ LIST. ONLY ONE MENTION)

Male	1
Female	2
Other; specify	6
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_010

As far as you know, are you up to date on your vaccines?

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: Getting your flu vaccine this season is included in being up to date on your vaccines. If you missed it in a previous season, but got it this time, then you can still be considered up to date. READ. ONLY ONE MENTION

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

INTERVIEWER SCRIPT:

The next few questions I will ask you how much do you agree or disagree with a series of statements. The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree.

Simple mention question

[ASK ALL]

ADTKAB_020

“In general, I consider vaccines to be important for my health.” :

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_030

“I know enough about vaccines to make an informed decision about getting vaccinated.” :

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

ADULT – Flu vaccination

INTERVIEWER SCRIPT: Now, I will ask you some questions about the flu vaccine, and your vaccination status.

Simple mention question

[ASK ALL]

ADTFLU_010

Before September 1st, 2018, have you ever received the seasonal flu vaccine (also known as the flu shot)?

INTERVIEWER INSTRUCTIONS:

Note: The flu vaccine can be received by a shot (needle) or nasal spray.

(DO NOT READ LIST. ONLY ONE MENTION)

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTFLU_020

From September 1st 2018 to now, have you received the seasonal flu vaccine?

INTERVIEWER INSTRUCTIONS:

Note: The flu vaccine can be received by a shot (needle) or nasal spray. (DO NOT READ LIST. ONLY ONE MENTION)

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF ADTFLU_020=0]

ADTFLU_030

How likely is it that you will get the seasonal flu vaccine between now and June? Would you say you:

INTERVIEWER INSTRUCTIONS: (READ LIST. ONLY ONE MENTION)

- Will definitely get one 1
- Will probably get one 2
- Will probably not get one 3
- Will definitely not get one 4
- (DO NOT READ) Valid skip/ Not applicable 7
- (DO NOT READ) Don't know 8
- (DO NOT READ) Refusal 9

Simple mention question

[ASK IF ADTFLU_020=0]

ADTFLU_040

What was the *most important* reason why you did not receive the flu vaccine this time? Would you say it is because...?

INTERVIEWER INSTRUCTIONS:

If the respondents say, 'all of the above', prompt them to pick, among those, the most important reason

If the respondent says, "Other specify" (96) – capture verbatim response. Do not back-code. (READ LIST. ONLY ONE MENTION)

- You don't need the flu vaccine 01
- The flu vaccine does not work 02
- You did not get around to it 03
- You have concerns about the flu vaccine, and/or its side effects 04
- No specific reason, you just didn't get it 05
- Something else (other; specify) 96
- (DO NOT READ) Valid skip/ Not applicable 97
- (DO NOT READ) Don't know 98
- (DO NOT READ) Refusal 99

Simple mention question

[ASK IF ADTFLU_040=01]

ADTFLU_041

When you say, "You don't need the flu vaccine", would you say that is because...

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason
 If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

You are healthy, and/ or never get the flu	01
Getting the flu doesn’t make you that sick	02
You are not at high risk, or there is no recommendation that says you should get it	03
The flu vaccine doesn’t work	04
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF ADTFLU_040=02]

ADTFLU_042

When you say, “*The flu vaccine does not work*”, would you say that is because ...

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason
 If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

The flu vaccine doesn’t protect you against getting the flu	01
Sometimes, you can get the flu from the flu vaccine	02
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF ADTFLU_040=03]

ADTFLU_043

When you say, “*You did not get around to it*”, would you say that is because ...

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason
 If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

You did not have time	01
You had trouble getting to where flu vaccines are given, or making an appointment	02

You tried, but they were out of vaccine	03
Flu vaccines are too expensive	04
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF ADTFLU_040=04]

ADTFLU_044

When you say, “*You have concerns about the flu vaccine, and/or its side effects*”, would you say your concern is about ...:

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason

If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.

READ. ONLY ONE MENTION

What is in the flu vaccine	01
A bad experience you had with the flu vaccine, in the past	02
Getting a side effect/ bad reaction from the flu vaccine	03
Getting the flu from the flu vaccine	04
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF ADTFLU_020=1]

ADTFLU_050

Was the flu vaccine you received this year given by a shot (with a needle) or a spray in the nose?

INTERVIEWER INSTRUCTIONS: READ. ONLY ONE MENTION

Flu shot	1
Nasal spray (Flumist)	2
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF ADTFLU_020=1]

ADTFLU_060

In which month did you receive the flu vaccine this time?

INTERVIEWER INSTRUCTIONS: READ. ONLY ONE MENTION

September 2018	0
October 2018	1
November 2018	2
December 2018	3
January 2019	4
February 2019	5
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF ADTFLU_020=1]

ADTFLU_070

Where did you receive the flu vaccine this time?

INTERVIEWER INSTRUCTIONS: (READ IF NEEDED - ONE ANSWER ALLOWED)

Temporary vaccine clinic (i.e. at the mall)	01	
Doctor's office / health clinic	02	
CLSC / Community health centre	03	
Hospital	04	
Pharmacy	05	
Workplace	06	
Retirement residence / eldercare centre	07	
Other, specify:	96	FO
(DO NOT READ) Valid skip/ Not applicable	97	F
(DO NOT READ) Don't know	98	F
(DO NOT READ) Refusal	99	F

Multiple mentions question

[ASK if ADTFLU_020=1]

[MENTIONS MULTIPLES : Max=12]

[NOTES AU PROGRAMMEUR : Assurer de créer une colonne par choix de réponses code 0,1]

ADTFLU_080

What are the reasons you decided to receive the flu vaccine this time?

INTERVIEWER INSTRUCTIONS:

If the respondent says "Other specify" (96) – capture verbatim response. Do not back-code.DO

NOT READ - MULTIPLE ANSWERS ALLOWED

Please select all that apply.

I want to prevent infection / I do not want to get sick	01
I am at risk because of my health condition	02

I am at risk because of my age	03	
I was recommended by a health care professional	04	
I was encouraged by family members, colleagues or friends	05	
It is required in my workplace	06	
I would be required to wear a mask at work if not vaccinated	07	
It was offered / free (by employer or other)	08	
If not vaccinated, I can transmit the disease to at-risk people (children, elderly or sick people/patients)	09	
If not vaccinated, I can transmit the disease to family members, colleagues or friends (without mention of at-risk people)	10	
I receive it every year (no specific reason)	11	
Other specify:	96	O
(DO NOT READ) Valid skip/ Not applicable	97	X
(DO NOT READ) Don't know	98	X
(DO NOT READ) Refusal	99	X

INTERVIEWER SCRIPT: The next few questions I will ask you how much do you agree or disagree with a series of statements. The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree.

Simple mention question

[ASK ALL]

ADTKAB_040

“Getting sick with the flu can be serious.” :

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_050

“I will probably get sick with the flu this season.” :

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don’t know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_060

“The flu does not affect very many people.”:

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don’t know	8
(DO NOT READ) Refusal	9

INTERVIEWER SCRIPT: As a reminder, the options are: strongly disagree, somewhat disagree, somewhat agree or strongly agree.

Simple mention question

[ASK ALL]

ADTKAB_070

“The flu vaccine does not protect you against getting the flu.”:

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don’t know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_080

“Sometimes, you can get the flu from the flu vaccine.”:

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: «The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don’t know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_090

“The opinion of my family doctor, general practitioner or nurse practitioner is an important part of my decision when it comes to getting the flu vaccine.”:

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: “The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree”.

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2

Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK ALL]

ADTKAB_100

"The flu vaccine is safe.":

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: "The options are: strongly disagree, somewhat disagree, somewhat agree, or strongly agree".

DO NOT READ, UNLESS ASKED BY RESPONDENT.

ONLY ONE MENTION.

Strongly disagree	1
Somewhat disagree	2
Somewhat agree	3
Strongly agree	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Section info

CHILDREN – Flu vaccination

INTERVIEWER SCRIPT: Now, I will ask you a few questions about children in your household under the age of 5 years, and their flu vaccination status.

Numerical question

[ASK ALL]

[NUMERIC: Min=0, Max=5]

[NOTES: ALLOW 5 CHILD]

ADTCHD_010

On September 1 2018, how many children **under 5 years of age**, of whom you are the parent or guardian, were living in your household?

INTERVIEWER INSTRUCTIONS: We do not want the respondent to provide information about children of which he or she is not the parent or guardian, such as younger siblings. If a respondent asks if they can answer for their spouse's children, the answer would be "yes, if you are aware of the vaccines they received and their state of health" (Record number of children: VALIDATE THAT THEY ARE LESS THAN 5 YEARS.

Number of children under 5 years XX
 None 00
 (DO NOT READ) Prefer not to answer 99

Numerical question

[ASK IF AT ADTCHD_010>0, < 999]
 [NUMERIC YEAR: Min=1, Max=5]
 [NUMERIC MONTH: Min = 1, Max=59]
 [NOTES: PROGRAM FOR UP TO THE NUMBER OF CHILD <5 YEARS PER HOUSEHOLD]
 [ENABLE SEIZURE IN MONTH OR YEARS]

[MUST BE LESS THAN 5 YEARS OLD OR LESS THAN 60 MONTHS]

CHDDEM_011 to CHDDEM_015

How old was your child as of September 1, 2018?
 INTERVIEWER INSTRUCTIONS: (RECORD THE AGE OF THE CHILD)

Enter child age # 1 CHDDEM_011
 Enter child age # 2 CHDDEM_012
 Enter child age # 3 CHDDEM_013
 Enter child age # 4 CHDDEM_014
 Enter child age # 5 CHDDEM_015

Simple mention question

[ASK IF ANY OF CHDDEM_01X >0, < 6. IF CHDDEM_01X ≥ 6 then CHDDEM_02X = YEARS]

CHDDEM_021 to CHDDEM_025

And to confirm – was that [CHDDEM_01X] months, or [CHDDEM_01X] years?

Month(s) 1
 Year(s) 2
 (DO NOT READ) Valid skip/ Not applicable 7
 (DO NOT READ) Don't know 8
 (DO NOT READ) Refusal 9

Calculated variable

[IF CHDDEM_02X=1 THEN CHDDEM_03X = CHDDEM_01X. ELSE, IF CHDDEM_02X = 2 THEN
 CHDDEM_03X = (CHDDEM_01X *12)]

CHDDEM_031 to CHDDEM_035

RECODE AGE OF EVERY CHILD IN MONTH FORMAT (FROM YEAR(S) TO MONTHS)

MONTHS XXX
 (DO NOT READ) Prefer not to answer 999

Calculated variable

CHDDEM_041 to CHDDEM_045

Assign value(s) from CHDDEM_03X to category, below

Under 1 year old - (1 to 11 months old)	1
1 to under 2 year old – (12 to 23 months old)	2
2 to under 3 year old – (24 to 35 months old)	3
3 to under 4 year old – (36 to 47 months old)	4
4 to under 5 year old – (48 to 59 months old)	5

Calculated variable

CHDDEM_050

***RANDOMLY SELECT ONE CHILD** about whom to complete the survey, and indicate their age in months.*

NOTE FOR PROGRAMMING: [IF ADTCHD_010>0, <999] – RANDOMLY SELECT ONE USING GRID FROM CHDDEM_04X. IN THE END WE WOULD LIKE TO HAVE A GOOD DISTRIBUTION IN EVERY AGE GROUP OF THE TABLE. BASE THE SELECTION ON ANSWER AT CHDDEM_04X FOR AGE GROUP MATCHING. INDICATE AS THE VALUE FROM CHDDEM_03X FOR THE CHILD THAT WAS SELECTED.

*INTERVIEWER SCRIPT: For the next few questions in this survey, please respond about your child who is *****(CHDDEM_01X) (CHDDEM_02X) ***-old.***

Simple mention question

[ASK IF ADTCHD_010 >0, < 999]

CHDDEM_060

What is the gender of your *****(CHDDEM_01X) (CHDDEM_02X)***-old child?**

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: Gender is the way a person internally feels and/or publicly expresses in their daily life. A person's gender may differ from the sex they were assigned at birth (male or female). **DO NOT READ. ONLY ONE MENTION**

Male	1
Female	2
Other, specify	6
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF ADTCHD_010 >0, < 999]

CHDFLU_010

From September 1st 2018 to now, has your *****(CHDDEM_01X) (CHDDEM_02X) *****-old child received the seasonal flu vaccine?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF CHDFLU_010=1]

CHDFLU_020

In which month did your child receive their most recent flu vaccine?

INTERVIEWER INSTRUCTIONS: (READ LIST. ONLY ONE MENTION)

September 2018	0
October 2018	1
November 2018	2
December 2018	3
January 2019	4
February 2019	5
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF CHDFLU_010= 1]

CHDFLU_030

Was it the first time your *****(CHDDEM_01X) (CHDDEM_02X) *****-old child has ever received the flu vaccine?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF CHDFLU_030=1]

CHDFLU_040

From September 1st 2018 to now, has your *****(CHDDEM_01X) (CHDDEM_02X) *****-old child received one or two doses of the flu vaccine?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

One dose	1
Two doses	2
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Single mention question

[ASK IF CHDFLU_040=1; AND CHDDEM_03X IS ≥6, and ≤59]

CHDFLU_050

Young children who are receiving the flu vaccine for the first time are sometimes given two doses. What was the *most important* reason why your *****(CHDDEM_01X) (CHDDEM_02X) *****-old child did not receive a second flu vaccine? Would you say it is because...?

INTERVIEWER INSTRUCTIONS:

If respondents says, 'all of the above', prompt them to pick, among those, the most important factor.

If respondent selects "Something else (other; specify) (96)", capture verbatim response. Do not back-code. READ. ONLY ONE MENTION

You didn't know that a second dose was recommended	01
You felt this was too many vaccines for a child his/ her age	02
S/He will be getting it soon	03
You didn't get around to it	04
No specific reason, s/he just didn't get it	05
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF CHDFLU_010=1]

CHDFLU_060

Children do not always get the flu vaccine during the same visit as for their other childhood vaccines. Knowing that, how sure are you that your child got the flu vaccine? Would you say you are...?

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: childhood vaccines means the vaccines usually given during a ‘Well Child’ visit with a health care professional. They protect against diseases like measles, mumps and rubella (MMR), diphtheria, tetanus, pertussis, polio and Haemophilus influenzae b (DTaP-IPV-Hib). (READ LIST. ONLY ONE MENTION)

Not at all sure	1
Not very sure	2
Somewhat sure	3
Very sure	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don’t know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF CHDFLU_010=0]

CHDFLU_070

What was the *most important* reason why your *****(CHDDEM_01X) (CHDDEM_02X) *****-old child did not receive the flu vaccine this year? Would you say it is because...?

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason

If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code. READ. ONLY ONE MENTION

S/he doesn’t need the flu vaccine	01
The flu vaccine does not work	02
You did not get around to it	03
You have concerns about the flu vaccine, and/or its side effects	04
No specific reason, s/he just didn’t get it	05
S/he is afraid of needles	06
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF CHDFLU_070=01]

CHDFLU_071

When you say “S/he doesn’t need the flu vaccine”, would you say that is because...:

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason

If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

S/he is healthy, and/ or never gets the flu	01
Getting the flu doesn’t make him/ her that sick	02
S/he is not at high risk, or there is no recommendation that says s/he should get it	03
The flu vaccine doesn’t work that well	04
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF CHDFLU_070=02]

CHDFLU_072

When you say, “The flu vaccine does not work”, would you say that is because...:

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason

If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

It doesn’t prevent him/ her from getting the flu	01
The flu vaccine gives him/ her the flu	02
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF CHDFLU_070=03]

CHDFLU_073

When you say, “*You did not get around to it*”, would you say that is because...:

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason

If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

You did not have time	01
You had trouble getting to where flu vaccines are given, or making an appointment	02
You tried, but they were out of vaccine	03
Flu vaccines are too expensive	04
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK IF CHDFLU_070=04]

CHDFLU_074

When you say, “*You have concerns about the flu vaccine, and/or its side effects*”, would you say your concern is about ...:

INTERVIEWER INSTRUCTIONS:

If the respondents say, ‘all of the above’, prompt them to pick, among those, the most important reason

If the respondent says, “Other specify” (96) – capture verbatim response. Do not back-code.
 READ. ONLY ONE MENTION

What is in the flu vaccine	01
A bad experience you or your child had with the flu vaccine in the past	02
S/he could get a side effect/ bad reaction from the flu vaccine	03
S/he could get the flu from the flu vaccine	04
Something else (other; specify)	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don’t know	98
(DO NOT READ) Refusal	99

Section info

ADULT VACCINATION - OTHER

INTERVIEWER SCRIPT:

This section, we will ask questions about you again, but this time about diseases other than the flu.

Simple mention question

[ASK ALL]

ADTPNE_010

As an adult, have you ever had the pneumococcal vaccine, which protects against pneumonia?

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: This vaccine might also be called Prevnar-13, or Pneumovax-23

Pronunciations:

Pneumococcal (noo-muh-kok-uhl)

Pneumonia (noo-mohn-yuh)

Prevnar (prev-narh)

Pneumovax (noo-moh-vaks)

READ. ONLY ONE MENTION

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF ADTPNE_010= 1, and ADTDEM_010≥ 65]

ADTPNE_020

How old were you when you received your most recent pneumococcal vaccine?

INTERVIEWER INSTRUCTIONS:

Pronunciations:

Pneumococcal (noo-muh-kok-uhl)

READ. ONLY ONE MENTION

NUMERIC	XXX
(DO NOT READ) Valid skip/ Not applicable	997
(DO NOT READ) Don't know	998
(DO NOT READ) Refusal	999

Multiple mentions question

[ASK IF ADTPNE_010 =00]

[MENTIONS MULTIPLES: Max=10]

ADTPNE_030

What are the reasons that you have not had the pneumococcal vaccine?

INTERVIEWER INSTRUCTIONS:

Pronunciations:

Pneumococcal (noo-muh-kok-uhl)

DO NOT READ. MULTIPLE ANSWERS ALLOWED

Select all that apply

Never heard of this vaccine	01
Respondent - did not think it was necessary	02
Doctor - did not mention it	03
Have not gotten around to it	04
Feelings of fear or discomfort	05
Bad reaction to previous vaccine	06
Unsure of / does not believe in benefits of vaccine	07
Fear of what the vaccine contains	08
Cost of the vaccine	09
Other	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK ALL]

ADTSHZ_010

As an adult, have you ever had the shingles vaccine?

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: Shingles is also known as herpes zoster. This vaccine might also be called Shingrix, or Zostavax

Pronunciations:

Shingles (shing-guh lz)

Herpes zoster (hur-pee-zos-ter)

Shingrix, (shing-riks)

Zostavax (zos-tah-vaks)

READ. ONLY ONE MENTION

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8

(DO NOT READ) Refusal

9

Multiple mentions question

[ASK IF ADTSHZ_010=00]

[MENTIONS MULTIPLES: Max=10]

ADTSHZ_020

What are the reasons that you have not had the shingles vaccine?

INTERVIEWER INSTRUCTIONS:

Pronunciations:

Shingles (shing-guh lz)

DO NOT READ. MULTIPLE ANSWERS ALLOWED

Select all that apply

Never heard of this vaccine	01
Respondent - did not think it was necessary	02
Doctor - did not mention it	03
Have not gotten around to it	04
Feelings of fear or discomfort	05
Bad reaction to previous vaccine	06
Unsure of / does not believe in benefits of vaccine	07
Fear of what the vaccine contains	08
Cost of the vaccine	09
Other	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK ALL]

ADTTET_010

Within the last ten years, have you had the tetanus vaccine?

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: This vaccine might also be called Adacel, Boostrix, Tdap or Td Adsorbed

Pronunciations:

Tetanus (tet-n-uh s)

Adacel (ah-dah-sel)

Boostrix (boost-riks)

Tdap (tee-dahp)

Td Adsorbed (Tee-dee ad-sawrb d)
 READ. ONLY ONE MENTION

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Multiple mentions question

[ASK ADTTET_010=0]
 [MENTIONS MULTIPLES: Max=10]

ADTTET_020

What are the reasons that you have not had the tetanus vaccine?

INTERVIEWER INSTRUCTIONS:

Pronunciations:

Tetanus (tet-n-uh s)

DO NOT READ. MULTIPLE ANSWERS ALLOWED

Select all that apply

Never heard of this vaccine	01
Respondent - did not think it was necessary	02
Doctor - did not mention it	03
Have not gotten around to it	04
Feelings of fear or discomfort	05
Bad reaction to previous vaccine	06
Unsure of / does not believe in benefits of vaccine	07
Fear of what the vaccine contains	08
Cost of the vaccine	09
Other	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK ADTTET_010=1]

ADTTET_030

Some tetanus vaccines also protect against pertussis, or whooping cough. This vaccine can be called Tdap, Adacel or Boostrix. Is this the vaccine you got?

INTERVIEWER INSTRUCTIONS:

Pronunciations:

Tetanus (tet-n-uh s)

Pertussis (per-tuh-sis)
 Tdap (tee-dahp)
 Adacel (ah-dah-sel)
 Boostrix (boost-riks)
 READ. ONLY ONE MENTION

Yes	1
I think so	2
I don't think so	3
No	4
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention question

[ASK IF ADTTET=0, OR IF ADTTET_030 DOES NOT =1]

ADTPER_010

As an adult, have you had the pertussis vaccine? Pertussis is also known as whooping cough.

INTERVIEWER INSTRUCTIONS:

Clarification, if asked: This vaccine can be called Tdap, Adacel or Boostrix

Pronunciations:

Pertussis (per-tuh-sis)
 Tdap (tee-dahp)
 Adacel (ah-dah-sel)
 Boostrix (boost-riks)
 READ. ONLY ONE MENTION

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Multiple mentions question

[ASK IF ADTPER_010=00]

[MENTIONS MULTIPLES: Max=10]

ADTPER_020

What are the reasons that you have not had the pertussis vaccine?

INTERVIEWER INSTRUCTIONS:

Pronunciations:

Pertussis (per-tuh-sis)

DO NOT READ. MULTIPLE ANSWERS ALLOWED

Select all that apply

Never heard of this vaccine	01
Respondent - did not think it was necessary	02
Doctor - did not mention it	03
Have not gotten around to it	04
Feelings of fear or discomfort	05
Bad reaction to previous vaccine	06
Unsure of / does not believe in benefits of vaccine	07
Fear of what the vaccine contains	08
Cost of the vaccine	09
Other	96
(DO NOT READ) Valid skip/ Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Section info

HEALTH STATUS

INTERVIEWER SCRIPT:

In this next section, I will ask you a few general questions about your health.

Simple mention question

[ASK ALL]

ADTHLT_010

On a scale of one to five, with one being poor and five being excellent, how would you rate your health?

INTERVIEWER INSTRUCTIONS: READ. ONLY ONE MENTION

One (poor)	1
Two (fair)	2
Three (good)	3
Four (very good)	4
Five (excellent)	5
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Multiple mentions question

[ASK ALL]

[MENTIONS MULTIPLES: Max=12]

[ORDRE DE LA LISTE : En ordre]

ADTCMC_010

Are you currently suffering from or being treated for any of the following conditions? Indicate only conditions that have been diagnosed.

INTERVIEWER INSTRUCTIONS: (READ LIST - MULTIPLE ANSWERS ALLOWED)

Please select all that apply.

Asthma	01	
Another chronic lung disease such as emphysema, chronic bronchitis or cystic fibrosis	02	
A heart condition such as angina, high blood pressure, heart failure, heart attack	03	
Cancer	04	
Diabetes or other metabolic diseases	05	
Chronic liver disease	06	
Chronic kidney disease	07	
Immune disorder or immune suppression such as chemotherapy, radiation, steroid use, HIV or an organ transplant	08	
Spleen problems or removal	09	
Anemia / thalassemia/ hemoglobinopathy	10	
Morbid obesity (BMI > 40)	11	
Conditions that compromises management of respiratory secretions, with increased risk of aspiration	12	
Chronic cerebrospinal fluid (CSF) leak	13	
Cochlear implant	14	
(DO NOT READ) Valid skip/ Not applicable	97	X
(DO NOT READ) Don't know	98	X
(DO NOT READ) Refusal	99	X

Single mention question

[ASK ALL]

ADTHLT_020

Do you have a regular family doctor, general practitioner or nurse practitioner?

INTERVIEWER INSTRUCTIONS: READ LIST. ONLY ONE MENTION

Yes	1	
No	0	
(DO NOT READ) Valid skip/ Not applicable	7	X
(DO NOT READ) Don't know	8	X
(DO NOT READ) Refusal	9	X

Single mention question

[ASK IF ADTHLT_020=1]

ADTHLT_030

Since September 1, 2018, have you seen your family doctor, general practitioner or nurse practitioner?

INTERVIEWER INSTRUCTIONS: READ LIST. ONLY ONE MENTION

Yes	1	
No	0	
(DO NOT READ) Valid skip/ Not applicable	7	X
(DO NOT READ) Don't know	8	X
(DO NOT READ) Refusal	9	X

Simple mention question

[ASK IF ADTHLT_030=1]

ADTHLT_040

Did your family doctor, general practitioner or nurse practitioner recommend that you get the flu vaccine?

INTERVIEWER INSTRUCTIONS:
READ. ONLY ONE MENTION

Yes	1
No	0
(DO NOT READ) Valid skip/ Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Single mention question

[ASK ALL]

ADTHLT_050

This flu season, have you had the flu?

INTERVIEWER INSTRUCTIONS:

If asked: "This flu season" means September 1, 2018 to now

If asked: flu refers to influenza, which is different from a stomach flu (i.e. gastrointestinal illness)

READ LIST. ONLY ONE MENTION

Yes, I had the flu	1	
I had something, but I'm not sure if it was the flu, or something else	2	
No, I did not have the flu	3	X
(DO NOT READ) Valid skip/ Not applicable	7	X
(DO NOT READ) Don't know	8	X
(DO NOT READ) Refusal	9	X

Single mention question

[ASK IF ADTHLT_050=1]

ADTHLT_051

Would you say that you had a severe, moderate or mild case of the flu?

INTERVIEWER INSTRUCTIONS:

Clarifications, if asked: A severe case might include hospitalization or pneumonia. A mild case might include sudden onset of high fever, chills, sore throat, cough or muscle pain.

DO NOT READ LIST. ONLY ONE MENTION

Severe case	1	
Moderate case	2	
Mild case	3	
Other, specify	6	X
(DO NOT READ) Valid skip/ Not applicable	7	X
(DO NOT READ) Don't know	8	X
(DO NOT READ) Refusal	9	X

Single mention question

[ASK ALL]

ADTHLT_060

Not including this flu season, have you **ever** had the flu?

INTERVIEWER INSTRUCTIONS:

If asked: "This flu season" means September 1 2018 to now

If asked: flu refers to influenza, which is different from a stomach flu (i.e. gastrointestinal illness).

READ LIST. ONLY ONE MENTION

Yes, I have had the flu	1	
I had something, but I'm not sure if it was the flu, or something else	2	
No, I have never had the flu	3	X
(DO NOT READ) Valid skip/ Not applicable	7	X
(DO NOT READ) Don't know	8	X
(DO NOT READ) Refusal	9	X

Single mention question

[ASK IF ADTHLT_060=1]

ADTHLT_061

Thinking about the worst flu you ever had, not including this flu season, would you say you had a severe, moderate or mild case of the flu?

INTERVIEWER INSTRUCTIONS:

Clarifications, if asked: A severe case might include hospitalization or pneumonia. A mild case might include sudden onset of high fever, chills, sore throat, cough or muscle pain.

DO NOT READ LIST. ONLY ONE MENTION

Severe case	1	
Moderate case	2	
Mild case	3	
Other, specify	6	X
(DO NOT READ) Valid skip/ Not applicable	7	X
(DO NOT READ) Don't know	8	X
(DO NOT READ) Refusal	9	X

Section info

QSCTDEMO

INTERVIEWER SCRIPT:

The next questions are for statistical purposes only. It will allow us to group your answers with those of other similar respondents.

Single mention question

Scola

[ASK ALL]

[ORDRE DE LA LISTE : En ordre]

ADTDEM_040

First, what is the highest level of formal education that you have completed?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE ANSWER)

Grade 8 or less	01
Some high school	02
High School diploma or equivalent	03
Registered Apprenticeship or other trades certificate or diploma	04
College, CEGEP or other non-university certificate or diploma	05
University certificate or diploma below bachelor's level	06
Bachelor's degree	07
Post graduate degree above bachelor's level	08
(DO NOT READ) Valid skip / Not applicable	97

(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Single mention question

Reven

[ASK ALL]

[ORDRE DE LA LISTE : En ordre]

ADTDEM_050

Which of the following categories best describes your total household income? That is, the total income of all persons in your household combined, before taxes.

INTERVIEWER INSTRUCTIONS: (READ LIST UP TO CATEGORY THAT RESPONDENT SELECTS. ONE MENTION POSSIBLE.)

...Under \$20,000	01
... \$20,000 to \$39,999	02
... \$40,000 to \$59,999	03
... \$60,000 to \$79,999	04
... \$80,000 to \$99,999	05
... \$100,000 to \$149,999	06
...\$150,000 and above	07
(DO NOT READ) Valid skip / Not applicable	97
(DO NOT READ) Don't know	98
(DO NOT READ) Refusal	99

Simple mention question

[ASK ALL]

ADTDEM_060

Were you born in Canada?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

Yes	1
No	0
(DO NOT READ) Valid skip / Not applicable	7
(DO NOT READ) Don't know	8
(DO NOT READ) Refusal	9

Simple mention -open

[ASK IF ADTDEM_060=0]

ADTDEM_070

In which country were you born?

INTERVIEWER INSTRUCTIONS: (DO NOT READ LIST. ONLY ONE MENTION)

China	156
France	250
Germany	276
Greece	300
Guyana	328
Hong Kong	344
India	356
Iran	364
Italy	380
Jamaica	388
Lebanon	422
Netherlands	528
Pakistan	586
Philippines	608
Poland	616
Portugal	620
Romania	642
Korea, Republic of (South Korea)	410
Sri Lanka	144
Taiwan	158
Trinidad and Tobago	780
United Kingdom	826
United States	840
Vietnam	704
Algeria	012
Belgium	056
Colombia	170
Afghanistan	004
Bangladesh	050
Turkey	792
Ukraine	804
Other; specify	996
(DO NOT READ) Valid skip/ Not applicable	997
(DO NOT READ) Don't know	998
(DO NOT READ) Refusal	999

Numerical question

[ASK IF ADTDEM_060=0]

[NUMERIC: BORNES Min=1, Max=100]

ADTDEM_080

How many years have you been living in Canada?

INTERVIEWER INSTRUCTIONS: (RECORD NUMBER OF YEARS.)

Record number of years:	XXX
(DO NOT READ) Valid skip/ Not applicable	997
(DO NOT READ) Don't know	998
(DO NOT READ) Refusal	999

Thank you for your participation.