TOBACCO ATTITUDES AND BEHAVIOURS SURVEY REPORT

2008 FINAL REPORT

APRIL 2009

BRITISH COLUMBIA
The Best Place on Earth

BCStats

This report was prepared by Westat (Rockville, Maryland, USA)
under the direction of BC Stats with funding provided by the Ministry of Healthy Living and Sport

For more information, contact Beth Collins at BC Stats at (250) 356-7982

Table of Contents

Tables **Page**

Tables **Page**

Introduction

This report profiles the smoking-related behaviours and attitudes of British Columbians in 2008. It presents selected information obtained throughout 2008 by the Community, Health, Education and Social Services (CHESS) Omnibus Survey, conducted monthly by BC Stats. The CHESS Omnibus Survey currently covers such topics as tobacco use, pregnancy and alcohol use, employment and workplace issues, disability, and general demographics.

Survey Sample and Weights

CHESS is a random-digit dial (RDD) telephone survey. As such, CHESS selects a random sample of telephone numbers from all possible telephone numbers in the province; interviewers then call each number to determine if it belongs to a residence. CHESS then seeks to interview one person at each identified residential number, by asking to interview the person aged 15 or older whose birthday comes next. Using standard scientific statistical methods, the resulting random sample is weighted so that it is representative of all British Columbians, aged 15 or over.

This weighted sample can be used to estimate the percentages and numbers of British Columbians who belong to any of the various categories covered by the survey, such as those who currently smoke cigarettes or who have certain opinions about smoking.

In calendar year 2008, CHESS conducted 6,746 interviews, approximately 500 per month from January through May, and 600 per month from June through December. The analyses appearing in this report combine all 6,746 interviews to produce annual statistics for 2008, adjusting the monthly survey weights so that the entire set of combined interviews is representative of the population aged 15 or over. These adjustments used the 2006/2007 Population Estimates and Projections (P.E.O.P.L.E. 32) By Standard Age Groups (BC Stats, BC Ministry of Labour and Citizens' Service).

Margin of Error

Statistics produced from sample surveys are subject to various sources of error, such as sampling error. The term "error" does not refer to a mistake or a known error but to the fact there may be some difference between the survey statistic and the actual statistic for the entire population that the sample survey is meant to represent. For this reason, statistics produced from a sample are referred to as "estimates": they estimate what the actual statistics are for the entire population, or for any subgroup in the population.

Sampling error is a purely statistical phenomenon, resulting from the fact that the data are collected from a sample that represents the entire population, rather than from everyone in the population. As a technical term, sampling "error" refers to the fact that an estimate produced from a sample has some amount of uncertainty associated with it. It is possible to quantify the uncertainty of an estimate produced from survey sample data. There is no single number that can be assigned to every

survey statistic to indicate the uncertainty; rather, it depends on the type of statistic (percentage, count, etc.), the size of the sample used to calculate the estimate, and the effects of the survey weighting.

One common measure of uncertainty is the "confidence interval," which expresses the likely range of the actual value for the population, around the "point" estimate produced from the survey data. For example, the 2008 smoking prevalence among British Columbians as calculated from CHESS is 15.1 percent; the confidence interval half-width around this is ±1.1 percent, which means that the true value is expected to fall somewhere within the confidence interval ranging from 14.0 percent to 16.2 percent. The confidence interval is commonly expressed as a "half-width," plus or minus around the point estimate, as in this smoking prevalence example. As in nearly all sample surveys that present confidence intervals, this calculation uses the 95% confidence interval, which means that there is a 95% certainty that the interval for any given estimate contains the true value. The calculation also properly incorporates the effects of the survey weights.

Sometimes the confidence intervals can alter the interpretation of a table. Consider Table 4. In examining the results for ethnicity and Aboriginal/First Nations membership, it might be tempting to conclude that the South Asian group has the lowest percentage, at 2.9 percent, because the percentages for the other groups are higher. However, if the confidence intervals are applied, the determination of which group has the lowest percentage becomes more complex. The percentages and intervals for the three Asian/Pacific Islander groups are:

- South Asian 2.9 (±2.6%), a confidence interval from 0.3 to 5.5 percent
- Chinese group 5.4 (±3.8%), a confidence interval from 1.6 to 9.2 percent
- Other Asian/Pacific Islander group 6.6 (±4.2%), a confidence interval from 2.4 to 10.8 percent.

By comparing the three intervals, it can be seen that all three overlap. Therefore, it cannot be concluded with certainty that the South Asian group has the lowest percentage; any one of those three groups may in reality have the lowest percentage of the three.

The confidence intervals can further be used as a test of statistical significance. A significance test suggests whether the population values represented by the survey estimates are reliably different from one another, taking into account the margin of error. Significance tests often use thresholds, a point at which researchers commonly agree that the population values are mostly likely different from one another. All significance tests in this report compare one estimate to another, or to a series of others, and they all use the 95% confidence interval as the threshold.

To use confidence intervals as a test of statistical significance, it is necessary to calculate the entire confidence interval for a pair of estimates, then examine whether those intervals overlap. If they do not overlap, the difference between them can be considered statistically significant. If they do overlap, the difference between them is not statistically significant. This is a conservative test of significance, in that all significant differences identified by this means are indeed significant; however, it might miss a few statistically significant results that could otherwise be detected by tests that focus individually on relationships of interest between specific pairs of estimates. The latter

type of test has to be calculated and performed for each pair separately, an exercise that is beyond the scope of this report.

For an example of how statistical significance is calculated, consider Table 4. The percentage for the group with household incomes of $120,000 or more is 11.0 percent, with a half-width of 2.9 percent (displayed as 11.0±2.9%). If you calculate the confidence interval fully, the lower boundary for the population estimate is 8.1% (11.0% - 2.9% = 8.1%) and the upper boundary is 13.9% (11.0% + 2.9% = 13.9%). This means the estimate for those with household incomes of $120,000 or more is somewhere between 8.1% and 13.9%. Similarly, the percentage for the group with household incomes of less than $15,000 is 26.5 (±5.8) % and the confidence interval is 20.7% to 32.3%. Because the intervals for the two estimates (8.1% to 13.9% and 20.7% to 32.3%) do not overlap, they can be considered statistically significant.

Not all statistically significant differences are noted in the commentary that accompanies the tables. Only those statistically significant results that are of most interest substantively are noted. However, readers have the half-widths needed to make the necessary calculations themselves if more tests are of interest.

Margin of error is partially dependent on the size of the sample on which the estimate is based: all other things being equal, the larger the sample, the smaller the margin of error. When polls and surveys report a single "margin of error" for the survey as a whole, they are typically calculating it for the best-case situation, which is a statistic that applies the entire population and therefore is based on the entire survey sample. However, many statistics apply to smaller groups, such as the many statistics appearing in this report that apply only to smokers. Because these calculations use only part of the sample, the various margins of error for the resulting statistics will likely be greater than one reported for the entire survey population. When the tables further break out statistics by various subgroups – such as age groups or gender – the sample sizes become smaller still and the margin of error increases. For the tables breaking out statistics by the sixteen Health Service Delivery Areas, the sample sizes can become very small for each HSDA, and the margin of error correspondingly large.

It is also important to consider the size of the confidence interval in two ways: the absolute size and the relative size. A confidence interval half-width of 2.6 percent seems reasonable small, but when it is the half-width for a point estimate of 2.9 percent, as in the case of the South Asian smoking rate example above, it is large relative to the point estimate. Accordingly, in the commentary on each table, the report draws attention to estimates where the confidence interval is especially large in relation to the point estimate. Similarly, the tables do not present the estimates for a few items that have such small sample sizes that the confidence interval half-widths are in fact larger than the point estimates. Such items appear with the phrase "Sample size too small."

Tables and Commentary

Table 1. Cigarette smoking status among all British Columbians, age 15+, 2008

Smoking status	Percent of total population falling into smoking status	Number of people in each smoking status
Current cigarette smoker	**15.1** (± 1.1)%	**553,485**
Daily smoker	**11.2** (± 1.0)%	409,931
Occasional smoker	**3.9** (± 0.6)%	143,553
Former cigarette smoker	**28.3** (± 1.2)%	**1,036,271**
Never smoked cigarettes	**56.6** (± 1.4)%	**2,069,637**
Total	**100%**	**3,659,393**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those who did not respond to questions used to define smoking status.

Table 1

There remain over half a million cigarette smokers in British Columbia.

- 15.1 (±1.1) percent of British Columbians smoke cigarettes. This translates to slightly over a half-million cigarette smokers.
- 11.2 (±1.0) percent of British Columbians are daily smokers, while 3.9 (±0.6) percent smoke occasionally. Since occasional smokers may be on the path to becoming daily smokers, this is a particularly important group.

There are twice as many former smokers as there are current smokers in British Columbia.

- 28.3 (±1.2) percent of British Columbians are former cigarette smokers. This means that the number of smokers who have quit (over one million) is approximately double the number of current smokers.

Most British Columbians have never smoked.

- 56.6 (±1.4) percent of British Columbians have never smoked cigarettes.

Table 2. Cigarette smoking among all British Columbians, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent of HA/HSDA population who are current cigarette smokers	Number of current cigarette smokers in HA/HSDA
Overall	**15.1** (± 1.1)%	**553,485**
Interior	**17.0** (± 2.2)%	**106,581**
East Kootenay	**13.5** (± 5.6)%	**10,177**
Kootenay Boundary	**15.9** (± 6.7)%	**10,616**
Okanagan	**14.6** (± 3.3)%	**41,542**
Thompson Caribou Shuswap	**22.2** (± 4.2)%	**44,246**
Fraser	**14.9** (± 2.3)%	**181,850**
Fraser East	**20.5** (± 6.3)%	**43,475**
Fraser North	**14.0** (± 3.8)%	**64,811**
Fraser South	**13.5** (± 3.3)%	**73,564**
Vancouver Coastal	**12.3** (± 1.9)%	**113,423**
Richmond	**11.8** (± 4.4)%	**17,810**
Vancouver	**12.6** (± 2.6)%	**69,764**
North Shore/Coast Garibaldi	**11.7** (± 3.5)%	**25,849**
Vancouver Island	**14.8** (± 2.4)%	**94,520**
South Vancouver Island	**10.8** (± 3.0)%	**33,486**
Central Vancouver Island	**15.7** (± 3.6)%	**34,225**
North Vancouver Island	**24.5** (± 7.5)%	**26,809**
Northern	**22.8** (± 2.7)%	**57,112**
Northwest	**27.4** (± 6.0)%	**17,661**
Northern Interior	**18.3** (± 3.2)%	**22,820**
Northeast	**27.0** (± 6.2)%	**16,631**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those who did not respond to questions used to define smoking status.

Table 2

The distribution of smokers across the British Columbia Health Authorities and Health Service Delivery Areas can be viewed in two ways: by the percentage of smokers in each service area as a percentage of its population or by the absolute number of smokers in each area.

The two views address different issues. The percentage of smokers suggests the potential harm that smoking is causing in the area, relative to its population size. The absolute number of smokers suggests the size of the population that may benefit from targeted quit-smoking campaigns and programs. Both provide useful information.

Overall and Health Authorities

There is variability in both the smoking rate and the distribution of smokers across the British Columbia Health Authorities.

- While the overall smoking rate in British Columbia is 15.1 (±1.1) percent, the rate varies from a low of 12.3 (±1.9) percent in the Vancouver Coastal Health Authority to a high of 22.8 (±2.7) percent in the Northern Health Authority. When the confidence intervals are considered, Vancouver Island (14.8±2.4 percent) or Fraser (14.9±2.3 percent) may have lowest rate, but the Northern Health Authority has the highest rate even when considering the confidence intervals.

- Because of the difference in the size of the population in each Health Authority, the Health Authority with the highest smoking rate (Northern) has the smallest number of smokers (57,112) while the Health Authority with the lowest smoking rate (Vancouver Coastal) has the second-largest number of smokers (113,423).

- The Health Authority with the widest range in the percentage of Health Service Delivery Area populations that smoke is Vancouver Island, which varies from a low of 10.8 (±3.0) percent in South Vancouver Island to a high of 24.5 (±7.5) percent in North Vancouver Island, a range of 13.7 percentage points.

- The Health Authority with the smallest range in the percentage of Health Service Delivery Area populations that smoke is the Vancouver Coastal Health Authority, with a low of 11.7 (±3.5) percent in North Shore/Coast Garibaldi and a high of 12.6 (±2.6) percent in Vancouver, a range of 0.9 percentage points.

Health Service Delivery Areas

- The Health Service Delivery Areas with the lowest percentages of current smokers are South Vancouver Island (10.8±3.0 percent), in the Vancouver Island Health Authority, and North Shore/Coast Garibaldi (11.7±3.5 percent), in the Vancouver Coastal Health Authority.

Table 2 (continued)

- The Health Service Delivery Areas with the highest percentages of current smokers are Northwest (27.4±6.0 percent) and Northeast (27.0±6.2 percent), both in the Northern Health Authority.

- The Health Service Delivery Areas with the largest number of current smokers are Fraser South (73,564), in the Fraser Health Authority, and Vancouver (69,764), in the Vancouver Coastal Health Authority.

- The Health Service Delivery Areas with the smallest number of current smokers are East Kootenay (10,177) and Kootenay Boundary (10,616), both in the Interior Health authority.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for some of the individual HSDAs.

Table 3. Cigarette smoking among all British Columbians, age 15+, by age group and overall, 2008

Age group	Percent of age group who are current cigarette smokers	Number of current cigarette smokers in age group*
Overall	**15.1** (± 1.1)%	**553,485**
15 to 19	**10.7** (± 5.2)%	**22,332**
20 to 24	**18.0** (± 7.0)%	**36,013**
25 to 44	**16.6** (± 2.2)%	**220,209**
45 to 64	**17.2** (± 1.7)%	**197,555**
65 or older	**9.3** (± 1.6)%	**53,928**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those who did not respond to questions used to define smoking status.

*Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 3

There seems to be some difference in current cigarette smoking rates by age.

- The 15 to 19 and 65+ year-old age groups have the lowest smoking rates, around 10 percent each.
- More than 20,000 15 to19 year-olds, and more than 50,000 of those aged 65+, are smokers.
- The highest smoking rate is among 20 to 24 year-olds at 18.0 (±7.0); however, when the confidence intervals are considered, any of the age groups except the 65+ group may have the highest smoking rate.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and 20 to 24 year-old age groups.

Table 4. Cigarette smoking among all British Columbians, age 15+, by selected demographic characteristics and overall, 2008

Characteristics	Percent of group who are current cigarette smokers	Number of group who are current cigarette smokers*
Overall	**15.1** (± 1.1)%	**553,485**
Ethnicity and Aboriginal/First Nations		
White/Caucasian	**14.8** (± 1.3)%	**343,655**
Aboriginal/First Nation	**29.1** (± 6.1)%	**52,718**
Chinese	**5.4** (± 3.8)%	**9,455**
South Asian	**2.9** (± 2.6)%	**2,714**
Other Asian/Pacific Islander	**6.6** (± 4.2)%	**7,617**
Latin American/Hispanic	**14.4** (± 13.7)%	**3,487**
Black/African	Sample size too small	**2,076**
Other	Sample size too small	**809**
Household income		
Less than $15,000	**26.5** (± 5.8)%	**47,095**
$15,000 to less than $30,000	**24.1** (± 4.2)%	**71,567**
$30,000 to less than $45,000	**16.8** (± 3.4)%	**57,944**
$45,000 to less than $60,000	**18.4** (± 3.8)%	**72,384**
$60,000 to less than $80,000	**15.4** (± 3.6)%	**68,261**
$80,000 to less than $100,000	**11.6** (± 3.5)%	**39,050**
$100,000 to less than $120,000	**12.8** (± 5.1)%	**28,349**
$120,000 or more	**11.0** (± 2.9)%	**41,490**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those who did not respond to questions used to define smoking status.

*Totals of the subgroup numbers will vary across the groups because of missing data: individuals differed in whether they responded to each question needed to place them in one of the respective subgroups; those who did not respond to a given question cannot be assigned to a subgroup for that question.

Table 4

Noticeable differences in the smoking rates among the differing demographic groups and household income groups:

Aboriginal/First Nations and Ethnicity

- Aboriginal/First Nations members have a considerably higher smoking rate than the other ethnic background groups (29.1±6.1 percent, or more than 50,000). The difference between the Aboriginal/First Nations group and all the ethnic groups except for Latin American/Hispanic is statistically significant.
- Those of Asian ethnicity are consistently lower than the other groups, ranging from 2.9 (±2.6) percent of South Asians to 6.6 (±4.2) percent of Other Asian/Pacific Islanders.
- The rate for White/Caucasian is 14.8 (±1.3) percent.

Household Income

- There is a fairly distinct trend in the smoking rate by household income, tending to decrease as income rises, from a high of 26.5 (±5.8) percent of those whose household income is less than $15,000 to a low of 11.0 (±2.9) percent of those with incomes of $120,000 or more.
- When the confidence intervals are considered, the downward trend may not be as consistent from income group to income group as the point estimates suggest. However, even when the confidence intervals are considered, those with incomes below $15,000 have higher smoking rates than all but one of the groups with incomes of $30,000 or more, and those with incomes between 15,000 and $30,000 have higher rates than all the groups whose incomes are $60,000 or more.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for all of the ethnic groups other than White/Caucasian and Aboriginal/First Nations members.

Table 5. Households with or without children under the age of 18 by smoking status of British Columbians, age 18+, 2008

Presence / absence of children in household	Current cigarette smoker				Former cigarette smoker		Never smoked cigarettes		Total
	Daily smoker		Occasional smoker						
	Percent	Number*	Percent	Number*	Percent	Number*	Percent	Number*	Percent
Have children in household	**11.3** (± 1.8)%	**123,647**	**4.8** (± 1.4)%	**52,781**	**23.3** (± 2.3)%	**255,706**	**60.6** (± 2.8)%	**664,063**	**100%**
Do not have children in household	**11.2** (± 1.2)%	**232,993**	**3.6** (± 0.8)%	**75,794**	**32.5** (± 1.7)%	**679,265**	**52.7** (± 1.9)%	**1,100,100**	**100%**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Limited to adult smokers aged 18+

Excludes those who did not respond to questions used to define smoking status or number of children in household

* Numbers sum to less than overall totals of the various smoking statuses because of those who did not respond to questions about children in household and because of limiting table to adult smokers 18+.

Table 5

Table 5 looks at the smoking rates among adult British Columbians aged 18+, comparing those who live in households with children under the age of 18 with those who do not have children in the household. Unlike most other tables, Table 5 limits the analysis to those aged 18+; this was done to avoid potential confusion where young smokers aged 15 to 17 years old represent both the smokers and the basis for defining the presence of children in the household.

- There is no significant difference in smoking rate for those who have children in the household and those who do not. Among those who live in households with children, 11.3 (±1.8) percent are daily smokers and 4.8 (±1.4) percent are occasional smokers; for those living in households with no children, 11.2 (±1.2) percent are daily smokers and 3.6 (±0.8) percent are occasional smokers.

- There are over 176,000 smokers, including 124,000 daily smokers, who have children in the household. Note that this does not imply that these smokers smoke in the home or in the presence of the children.

- There is a statistically significant difference in the rate of former smokers between the two household groups. Somewhat counter-intuitively, there is a higher percentage of quitters and a lower percentage of never smokers among those who do not have minor children in the household (32.5±1.7 percent of them are former smokers, versus 23.3 (±2.3) percent of those who do have children in the household). More detailed analysis would be needed to determine if this is confounded by factors such as age, e.g., there is typically a higher percentage of former smokers among older people, and older people are less likely to have minor children in the household. The available data also do not address the timing of the quitting, e.g., older former smokers may have quit at a time in the past when they did have children in the household.

Table 6. Selected demographic characteristics of cigarette smokers, age 15+, 2008

Characteristics (Group/subgroup)	Percent of cigarette smokers falling into each subgroup	Number of cigarette smokers falling into each subgroup*
Age group		
15 to 19	**4.2** (± 1.6)%	**22,332**
20 to 24	**6.8** (± 2.4)%	**36,013**
25 to 44	**41.5** (± 2.7)%	**220,209**
45 to 64	**37.3** (± 0.0)%	**197,555**
65 or older	**10.2** (± 0.0)%	**53,928**
Total	**100%**	
Gender		
Male	**54.7** (± 0.0)%	**302,567**
Female	**45.3** (± 0.0)%	**250,918**
Total	**100%**	
Ethnicity and Aboriginal/First Nations		
White/Caucasian	**81.3** (± 2.9)%	**343,655**
Aboriginal/First Nation	**12.5** (± 2.7)%	**52,718**
Chinese	**2.2** (± 0.6)%	**9,455**
South Asian	**0.6** (± 0.5)%	**2,714**
Other Asian/Pacific Islander	**1.8** (± 0.9)%	**7,617**
Latin American/Hispanic	**0.8** (± 0.3)%	**3,487**
Black or African	**0.5** (± 0.3)%	**2,076**
Other	Sample size too small	**809**
Total	**100%**	
Household income		
Less than $15,000	**11.1** (± 2.2)%	**47,095**
$15,000 to less than $30,000	**16.8** (± 2.4)%	**71,567**
$30,000 to less than $45,000	**13.6** (± 2.0)%	**57,944**
$45,000 to less than $60,000	**17.0** (± 3.3)%	**72,384**
$60,000 to less than $80,000	**16.0** (± 3.0)%	**68,261**
$80,000 to less than $100,000	**9.2** (± 1.9)%	**39,050**
$100,000 to less than $120,000	**6.7** (± 2.0)%	**28,349**
$120,000 or more	**9.7** (± 2.0)%	**41,490**
Total	**100%**	
Highest educational level attained		
Less than secondary	**17.7** (± 2.4)%	**93,257**
Secondary graduation	**25.9** (± 3.4)%	**136,673**
Some post-secondary	**19.5** (± 2.8)%	**102,780**
Post-secondary graduation	**36.9** (± 3.4)%	**194,720**
Total	**100%**	
Children in household**		
No	**63.6** (± 3.3)%	**308,787**
Yes	**36.4** (± 3.2)%	**176,428**
Ages 0 to 5***	**15.4** (± 2.4)%	**74,793**
Ages 6 to 14***	**22.1** (± 2.4)%	**107,075**
Ages 15 to 17***	**10.9** (± 2.4)%	**53,047**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

* Totals of the subgroup numbers will vary across the groups because of missing data: individuals differed in whether they responded to each question needed to place them in one of the respective subgroups; those who did not respond to a given question cannot be assigned to a subgroup for that question.

** Limited to adult smokers aged 18+

*** Percentages and numbers of smokers living with children in each individual age group sum to greater than the overall number with children in household because the household may have children in more than one age group.

Table 6

Table 6 presents a profile of all smokers in British Columbia in 2008, using standard demographic groupings. Each panel of the table shows what percentage of, and how many, smokers fall into each subgroup. The table makes clear that smokers are very diverse, by gender, income, and education. By Aboriginal/First Nations and ethnicity membership, the large majority are White/Caucasian. Because the age groups are disproportionate in terms of the number of years in each group, the large percentages and numbers of the middle age groups are not telling in themselves; breaking out the smokers into equal-sized age groups would show much less difference across the groups, although the younger groups would still have lower percentages than the middle groups.

- There are over 52,000 members of the Aboriginal/First Nations group who are smokers.
- 17.7 (±2.4) percent of smokers (nearly 100,000) have less than a secondary education.
- There are 52,000 more male smokers (54.7±0.0% of all smokers) than female smokers (45.3±0.0%).
- Slightly more than a third of smokers over the age of 18 (36.4±3.2 percent of smokers in this age group) live in households with children under the age of 18. Note that this does not imply that these smokers smoke in the home or in the presence of the children. This works out to over 176,000 adult smokers living with minor children.

Table 7. Quit attempted in past 12 months, among all current smokers, age 15+, by Health Service Delivery Area and Overall, 2008

Health Authority/ Health Service Delivery Area	Percent of smokers who made a quit attempt in past 12 months	Number of smokers who made a quit attempt in past 12 months
Overall	**48.5** (± 3.0)%	**263,850**
Interior	**57.8** (± 5.0)%	**60,990**
East Kootenay	**57.0** (± 20.0)%	**5,796**
Kootenay Boundary	**59.6** (± 19.9)%	**5,679**
Okanagan	**55.6** (± 8.6)%	**23,104**
Thompson Caribou Shuswap	**59.7** (± 8.6)%	**26,410**
Fraser	**45.1** (± 6.6)%	**80,462**
Fraser East	**63.3** (± 14.3)%	**27,094**
Fraser North	**31.7** (± 9.6)%	**20,552**
Fraser South	**46.2** (± 12.8)%	**32,816**
Vancouver Coastal	**45.5** (± 6.1)%	**50,631**
Richmond	**42.9** (± 13.7)%	**7,514**
Vancouver	**50.0** (± 7.3)%	**34,010**
North Shore/Coast Garibaldi	**35.2** (± 12.6)%	**9,107**
Vancouver Island	**50.5** (± 6.4)%	**46,635**
South Vancouver Island	**53.7** (± 9.5)%	**17,673**
Central Vancouver Island	**51.7** (± 9.5)%	**16,856**
North Vancouver Island	**45.2** (± 14.2)%	**12,106**
Northern	**44.8** (± 6.6)%	**25,133**
Northwest	**52.3** (± 12.0)%	**9,131**
Northern Interior	**41.0** (± 8.8)%	**9,051**
Northeast	**42.0** (± 10.7)%	**6,951**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008. Excludes those cigarette smokers who did not respond to question about quit attempt.

Table 7

Almost half (48.5±3.0 percent) of current smokers in British Columbia have tried to quit in the past 12 months. That amounts to 263,850 smokers who tried to quit and who are still smoking, either because their quit attempt failed or because they relapsed after some period of abstinence.

Health Authorities

- There is some variability in quit attempts by Health Authority, with the lowest percentage of quit attempts in the Northern Health Authority (44.8±6.6 percent) and the highest percentage of quit attempts in the Interior Health Authority (57.8± 5.0 percent).

Health Service Delivery Areas

- There is even greater variability in quit attempts by Health Service Delivery Area, with the lowest percentage of quit attempts occurring in Fraser North (31.7±9.6 percent) and the highest in Fraser East (63.3±14.3 percent). This difference is large and statistically significant, and it is worth noting that these two extremes occur within the same Health Authority, Fraser.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for many of the HSDAs.

Table 8. Quit attempted in past 12 months, among all current cigarette smokers, age 15+, by age group, gender, and overall, 2008

Characteristics	Percent with quit attempt in past 12 months	Number with quit attempt in past 12 months*
Overall	**48.5** (± 3.0)%	**263,850**
Age group		
15 to 19	**65.7** (± 15.8)%	**13,967**
20 to 24	**68.3** (± 12.8)%	**24,613**
25 to 44	**46.3** (± 5.0)%	**99,921**
45 to 64	**45.9** (± 4.6)%	**89,381**
65 or older	**52.0** (± 7.7)%	**27,892**
Gender		
Male	**48.5** (± 4.0)%	**145,560**
Female	**48.5** (± 4.5)%	**118,290**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008. Excludes those cigarette smokers who did not respond to question about quit attempt.

* Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 8

Almost half (48.5±3.0 percent) of current smokers in British Columbia have tried to quit in the past 12 months. That amounts to 263,850 smokers who tried to quit and who are still smoking, either because their quit attempt failed or because they relapsed after some period of abstinence.

Age Groups

- Smokers of every age tried to quit. The lowest rate of quit attempts is among 45 to 64 year-olds (45.9±4.6 percent), while the highest rate of quit attempts was among 20 to 24 year-olds (68.3±12.8 percent).

- The two youngest groups of smokers evidenced the highest rate of attempted quitting, suggesting that young smokers do want to quit. The higher rate for the 20 to 24 year-olds is statistically significant in its difference from the rates for those aged 25 to 44 and 45 to 64.

Gender

- There is no difference in the percentage of quit attempts by gender. Among males, 48.5±4.0 percent tried to quit, while about the same percent of females (48.5±4.5 percent) tried to quit. Because there are more male smokers than female smokers (see table 6), there were more males (about 146,000) than females (about 118,000) that tried to quit even though their propensity to quit, as measured by the percentages, is approximately equal.

Table 9. Attempted quitting without assistance, among current cigarette smokers with a quit attempt in past 12 months, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent of smokers attempting to quit without assistance	Number of smokers attempting to quit without assistance
Overall	**66.4** (± 4.2)%	**174,552**
Interior	**70.2** (± 6.9)%	**42,803**
East Kootenay	**56.9** (± 31.3)%	**3,296**
Kootenay Boundary	**53.2** (± 31.5)%	**3,023**
Okanagan	**73.0** (± 9.9)%	**16,858**
Thompson Caribou Shuswap	**74.3** (± 7.5)%	**19,627**
Fraser	**60.1** (± 10.9)%	**47,908**
Fraser East	**58.4** (± 16.6)%	**15,815**
Fraser North	**56.8** (± 16.6)%	**11,282**
Fraser South	**63.4** (± 13.3)%	**20,811**
Vancouver Coastal	**73.4** (± 6.5)%	**37,168**
Richmond	**88.0** (± 10.7)%	**6,614**
Vancouver	**72.6** (± 8.2)%	**24,688**
North Shore/Coast Garibaldi	**64.4** (± 17.7)%	**5,866**
Vancouver Island	**64.5** (± 7.4)%	**30,082**
South Vancouver Island	**61.4** (± 14.3)%	**10,858**
Central Vancouver Island	**65.0** (± 14.7)%	**10,951**
North Vancouver Island	**68.3** (± 9.7)%	**8,272**
Northern	**66.3** (± 8.4)%	**16,591**
Northwest	**69.3** (± 14.2)%	**6,261**
Northern Interior	**72.2** (± 13.0)%	**6,538**
Northeast	**54.5** (± 13.2)%	**3,792**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008, who had made at least one quit attempt in the 12 months prior to the interview. Excludes those cigarette smokers who did not respond to questions about quit attempt or quit assistance.

Table 9

Research shows that smokers are significantly more likely to quit successfully if they use an evidence-based counselling or medication treatment, such as behavioural counselling, nicotine replacement therapy (like the patch or gum), and other medications, than if they try to quit without such aids. (Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008.)

The table presents the data in same terms as it was obtained from the CHESS survey respondents, who were asked about quitting without assistance. Because of this phrasing, it is important to keep in mind that lower percentages are preferable to higher percentages in this table.

Over two-thirds (66.4±4.2 percent) of British Columbian smokers who tried to quit in the past 12 months did so without assistance. This is approximately 175,000 people.

Health Authorities

- There is very little difference in smokers' failure to use quitting assistance across the Health Authorities, with most percentages slightly higher or slightly lower than the overall estimate for the province. This is particularly evident when the confidence intervals are employed. The lowest percentage is for Fraser (60.1±10.9 percent) and the highest is for Vancouver Coastal (73.4±6.5 percent), but the confidence intervals do overlap, meaning that the difference is not statistically significant. All confidence intervals for the Health Authorities overlap.

Health Service Delivery Areas

- No Health Service Delivery Areas have statistically significant differences from other HSDAs within its same Health Authority.

- There are differences in smokers' failure to use quitting assistance across the Health Service Delivery Areas. The lowest percentage of failure to use quitting assistance is in Kootenay Boundary (53.2±31.5 percent) and the highest is in Richmond (88.0±10.7 percent).

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for East Kootenay and Kootenay Boundary.

Table 10. Attempted quitting without assistance, among current cigarette smokers with a quit attempt in past 12 months, age 15+, by age group, gender, and overall, 2008

Characteristics	Percent of smokers attempting to quit without assistance	Number of smokers attempting to quit without assistance*
Overall	**66.4** (± 4.2)%	**174,552**
Age group		
15 to 19	**98.6** (± 0.7)%	**13,772**
20 to 24	**72.3** (± 10.1)%	**17,789**
25 to 44	**60.8** (± 8.8)%	**60,785**
45 to 64	**65.6** (± 5.0)%	**58,593**
65 or older	**66.9** (± 9.4)%	**18,178**
Gender		
Male	**73.3** (± 5.0)%	**106,194**
Female	**57.8** (± 7.0)%	**68,357**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008, who had made at least one quit attempt in the 12 months prior to the interview. Excludes those cigarette smokers who did not respond to questions about quit attempt or quit assistance.

* Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 10

Age Groups

- Attempting to quit smoking without the use of assistance seems to decrease as age increases. Nearly all smokers aged 15 to19 (98.6±0.7 percent) tried to quit without assistance, while about two-thirds of older smokers (aged 45 to 64, and 65 and older) attempted to quit without assistance. The differences between the youngest group and all older groups are significant, suggesting that although not all age differences are significant, the trend is likely real and would be significant if the sample sizes were larger or if the ages were analyzed in different group combinations.

Gender

- Males (73.3±5.0 percent) are much more likely than females (57.8±7.0 percent) to attempt quitting without assistance. This difference is statistically significant.

Table 11. Attempted quitting without assistance, among current smokers with a quit attempt in last 12 months, age 15+, by education level, household income and overall, 2008

Characteristics	Percent of smokers attempting to quit without assistance	Number of smokers attempting to quit without assistance*
Overall	**66.4** (± 4.2)%	**174,552**
Highest educational level attained		
Less than secondary	**77.0** (± 8.8)%	**37,256**
Secondary graduation	**60.4** (± 8.2)%	**41,024**
Some post-secondary	**69.4** (± 10.3)%	**30,832**
Post-secondary graduation	**64.7** (± 6.6)%	**59,048**
Household income		
Less than $15,000	**58.7** (± 22.6)%	**13,744**
$15,000 to less than $30,000	**70.4** (± 8.4)%	**26,776**
$30,000 to less than $45,000	**62.6** (± 11.8)%	**15,512**
$45,000 to less than $60,000	**73.0** (± 8.5)%	**28,045**
$60,000 to less than $80,000	**47.4** (± 14.2)%	**14,801**
$80,000 to less than $100,000	**64.8** (± 8.8)%	**9,243**
$100,000 to less than $120,000	**81.5** (± 11.9)%	**13,359**
$120,000 or more	**60.5** (± 10.4)%	**10,669**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008, who had made at least one quit attempt in the 12 months prior to the interview. Excludes those cigarette smokers who did not respond to questions about quit attempt or quit assistance.

* Totals of the subgroup numbers will vary across the groups because of missing data: individuals differed in whether they responded to each question needed to place them in one of the respective subgroups; those who did not respond to a given question cannot be assigned to a subgroup for that question.

Table 11

Educational Level

- There is a large difference in attempted quitting without assistance between those who have less than a secondary education (77.0±8.8 percent) and those who have graduated from secondary school (60.4±8.2 percent), but the difference is not significant. None of the other education groups show statistically significant differences from each other, although it is worth noting that those who have graduated from post-secondary school constitute the largest group numerically (59,048 people).

Household Income

- There is no trend in the association of household income with attempted quitting without assistance, and there are no statistically significant differences.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as that for the less than $15,000 household income group.

Table 12. Quit rate for smokers within the past 12 months, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Quit rate in past 12 months for smokers	Number of smokers who quit in past 12 months
Overall	**16.4** (± 2.2)%	**108,501**
Interior	**15.1** (± 4.5)%	**19,022**
East Kootenay	Sample size too small	**1,064**
Kootenay Boundary	**21.3** (± 19.2)%	**2,872**
Okanagan	**15.1** (± 7.9)%	**7,386**
Thompson Caribou Shuswap	**14.8** (± 4.8)%	**7,699**
Fraser	**14.3** (± 4.5)%	**30,424**
Fraser East	Sample size too small	**4,184**
Fraser North	**18.6** (± 9.5)%	**14,832**
Fraser South	**13.4** (± 5.6)%	**11,408**
Vancouver Coastal	**21.8** (± 5.0)%	**31,645**
Richmond	Sample size too small	**1,110**
Vancouver	**24.1** (± 7.3)%	**22,118**
North Shore/Coast Garibaldi	**24.6** (± 15.6)%	**8,417**
Vancouver Island	**15.6** (± 4.5)%	**17,514**
South Vancouver Island	**20.2** (± 10.2)%	**8,482**
Central Vancouver Island	**15.3** (± 6.8)%	**6,183**
North Vancouver Island	**9.6** (± 7.2)%	**2,849**
Northern	**14.8** (± 4.1)%	**9,896**
Northwest	**9.8** (± 7.4)%	**1,918**
Northern Interior	**18.9** (± 5.9)%	**5,333**
Northeast	**13.7** (± 8.0)%	**2,644**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Quit rate over past 12 months is defined as former smokers who quit in past 12 months, as a percentage of all who were smoking at any time in the past 12 months (current smokers and those who quit in the past 12 months).

Excludes former smokers who did not respond to question about when they had their last cigarette.

Table 12

To understand the prevalence of quitting smoking, it is necessary to examine quitting among all those who might have quit. The 12-month quit rate is measured as the number of smokers who successfully quit, out of all who were smoking at any time in the past 12 months. These past-12-month smokers include all current smokers and all former smokers who quit smoking regularly some time within the past 12 months. This is not a perfect measure because some current smokers may have started smoking recently; however, it does provide an approximation of 12-month quitting incidence across the whole population of people who were smoking at any time in the past 12 months.

In the past 12 months, 16.4 (±2.2) percent of smokers quit smoking in British Columbia. This represents about 109,000 people.

Health Authorities

- There are no statistically significant differences in the 12-month quit rate across the Health Authorities. However, there are differences in the number of 12 month quitters. For example, Vancouver Coastal has the highest number of 12 month quitters (31,645) and Northern has the lowest (9,896). These differences likely reflect underlying differences in population size and numbers of smokers.

Health Service Delivery Areas

- As noted below, there are many relatively wide confidence intervals in this table, which is a particular problem for interpreting the differences among the Health Service Delivery Areas. The lowest 12-month quit rate is found in North Vancouver Island (9.6±7.2 percent) and the highest is found in North Shore/Coast Garibaldi (24.6±15.6 percent); however, both of these estimates have wide confidence intervals relative to the estimate size and furthermore, their confidence intervals overlap meaning that the difference is not statistically significant.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for many of the individual HSDAs.

Table 13. Plans to quit smoking in next 12 months, among all current cigarette smokers, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent of smokers who plan to quit in next 12 months	Number of smokers who plan to quit in next 12 months
Overall	**67.2** (± 3.2)%	**355,084**
Interior	**73.1** (± 6.2)%	**72,966**
East Kootenay	**68.6** (± 21.5)%	**6,056**
Kootenay Boundary	**64.2** (± 21.6)%	**5,738**
Okanagan	**76.7** (± 8.8)%	**30,604**
Thompson Caribou Shuswap	**72.5** (± 9.3)%	**30,569**
Fraser	**61.8** (± 7.6)%	**106,605**
Fraser East	**69.3** (± 14.8)%	**26,453**
Fraser North	**53.0** (± 11.5)%	**33,839**
Fraser South	**65.8** (± 13.0)%	**46,313**
Vancouver Coastal	**65.4** (± 5.4)%	**72,578**
Richmond	**68.7** (± 11.9)%	**12,031**
Vancouver	**69.3** (± 6.4)%	**47,338**
North Shore/Coast Garibaldi	**52.3** (± 12.8)%	**13,209**
Vancouver Island	**73.0** (± 5.7)%	**66,556**
South Vancouver Island	**65.1** (± 9.3)%	**21,014**
Central Vancouver Island	**77.0** (± 9.1)%	**24,875**
North Vancouver Island	**77.8** (± 13.4)%	**20,668**
Northern	**67.3** (± 4.7)%	**36,379**
Northwest	**72.9** (± 8.8)%	**12,650**
Northern Interior	**61.2** (± 8.3)%	**13,274**
Northeast	**69.8** (± 9.6)%	**10,456**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008. Excludes those cigarette smokers who did not respond to question about plans to quit smoking.

Table 13

There is a large, stated desire among smokers in British Columbia to quit. While almost half of all smokers reported a quit attempt in past 12 months (see table 8), two-thirds of smokers (67.2±3.2 percent), or over 350,000 people, plan to quit smoking in the next 12 months.

Health Authorities

- While there are no large percentage differences among the Health Authorities, smokers in the Interior (73.1±6.2 percent) and Vancouver Island (73.0±5.7 percent) Health Authorities have the highest rates of planning to quit in the next 12 months, while those in Fraser had the lowest rate (61.8±7.6 percent). However, the differences are not statistically significant.

Health Service Delivery Areas

- The Health Service Delivery Area with the highest percentage of smokers planning to quit in the next 12 months is North Vancouver Island, where 77.8±13.4 percent of smokers plan to quit. The lowest percentage occurs in North Shore/Coast Garibaldi. Where 52.3±12.8 percent plan to quit.

- There is little percentage variation among the HSDAs within each Health Authority, especially when confidence intervals are taken into account.

Typically, a smoker has to make multiple attempts to quit smoking before successfully quitting. In this light, it is encouraging that among those smokers who made a quit attempt in the past 12 months, approximately 84 percent of them intend to make another attempt in the next 12 months. In comparison, about half of those who did not make a quit attempt plan to do so (not shown in tables).

Table 14. Plans to quit smoking in next 12 months, among all current cigarette smokers, age 15+, by age group, gender, and overall, 2008

Characteristics	Percent of smokers who plan to quit in next 12 months	Number of smokers who plan to quit in next 12 months*
Overall	**67.2** (± 3.2)%	**355,084**
Age group		
15 to 19	**52.6** (± 19.0)%	**11,077**
20 to 24	**66.7** (± 15.7)%	**21,925**
25 to 44	**74.4** (± 5.5)%	**160,080**
45 to 64	**62.9** (± 4.6)%	**117,476**
65 or older	**60.9** (± 7.2)%	**31,982**
Gender		
Male	**64.2** (± 4.8)%	**184,191**
Female	**70.8** (± 3.9)%	**170,893**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008. Excludes those cigarette smokers who did not respond to question about plans to quit smoking.

* Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 14

There is a large, stated desire among smokers in British Columbia to quit. While almost half of all smokers reported a quit attempt in past 12 months, two-thirds of smokers (67.2±3.2 percent), or over 350,000 people, plan to quit smoking in the next 12 months.

Age Groups

- The highest percentage of smokers planning to quit in the next 12 months occurs among the 25 to 44 year-old age group: nearly three-quarters of them (74.4±5.5 percent) intend to make a quit attempt. This is also the largest group numerically, with about 160,000 people.

- Both the 45 to 64 year-olds (62.9±4.6 percent) and the 65 or older group (60.9±7.2 percent) are less likely to have plans to quit in the next 12 months than the 25 to 44 year-old group (74.4±5.5 percent). These differences are statistically significant.

- Even among the two oldest age groups, most of whom are likely to have been smoking for many years, over 60 percent still express an intention to make a quit attempt in the next 12 months.

- Only half (52.6±19.0 percent) of the youngest smokers, aged 15 to 19, plan to quit in the next 12 months.

- Nearly all of the 15 to 19 year-olds who attempted to quit in the past 12 months did so without assistance (98.6±0.7 percent, Table 10). Only half of this age group (52.6±19.0 percent) plans to quit in the next 12 months. While the available data do not address this issue, this large difference between past quit attempts and future intentions suggests the possibility that the difficulty of quitting, especially without assistance, had a particularly discouraging effect on this group of young smokers

Gender

- The difference in the percentage of males (64.2±4.8 percent) and females (70.8±3.9 percent) who plan to quit in the next 12 months is not statistically significant.

Typically, a smoker has to make multiple attempts to quit smoking before successfully quitting. In this light, it is encouraging that among those smokers who made a quit attempt in the past 12 months, approximately 84 percent of them intend to make another attempt in the next 12 months. In comparison, about half of those who did not make a quit attempt plan to do so (not shown in tables).

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.

Table 15. Plans to quit smoking in next 12 months, among all current smokers, age 15+, by smoking status and overall, 2008

Smoking status	Percent of smokers who plan to quit in next 12 months	Number of smokers who plan to quit in next 12 months
Overall	**67.2** (± 3.2)%	**355,084**
Current cigarette smoker		
Daily smoker	**67.5** (± 3.6)%	**268,993**
Occasional smoker	**66.3** (± 8.2)%	**86,091**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Includes all who were current cigarette smokers at the time of the CHESS interview in 2008. Excludes those cigarette smokers who did not respond to question about plans to quit smoking.

Table 15

There is a large, stated desire among smokers in British Columbia to quit. While almost half of all smokers reported a quit attempt in past 12 months, two-thirds of smokers (67.2±3.2 percent), or over 350,000 people, plan to quit smoking in the next 12 months.

- There is a small difference in the percentage of daily smokers (67.5±3.6 percent) and occasional smokers (66.3±8.2 percent) who plan to quit in the next 12 months, but it is not statistically significant.

Table 16. Awareness of QuitNow By Phone*, among current cigarette smokers, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent of smokers who are aware of QuitNow By Phone	Number of smokers who are aware of QuitNow By Phone
Overall	**22.1** (± 3.1)%	**122,160**
Interior	**33.2** (± 9.5)%	**35,362**
East Kootenay	**21.0** (± 19.6)%	**2,142**
Kootenay Boundary	**34.9** (± 24.2)%	**3,710**
Okanagan	**34.5** (± 10.0)%	**14,343**
Thompson Caribou Shuswap	**34.3** (± 19.2)%	**15,167**
Fraser	**15.7** (± 5.9)%	**28,489**
Fraser East	**27.2** (± 15.4)%	**11,835**
Fraser North	**4.2** (± 3.4)%	**2,744**
Fraser South	**18.9** (± 10.1)%	**13,910**
Vancouver Coastal	**18.1** (± 4.7)%	**20,478**
Richmond	**22.0** (± 14.3)%	**3,927**
Vancouver	**16.8** (± 5.7)%	**11,718**
North Shore/Coast Garibaldi	**18.7** (± 9.6)%	**4,832**
Vancouver Island	**24.0** (± 7.1)%	**22,686**
South Vancouver Island	**24.1** (± 10.9)%	**8,062**
Central Vancouver Island	**20.3** (± 9.9)%	**6,945**
North Vancouver Island	**28.6** (± 15.3)%	**7,678**
Northern	**26.5** (± 5.9)%	**15,146**
Northwest	**27.5** (± 13.1)%	**4,850**
Northern Interior	**28.7** (± 8.3)%	**6,549**
Northeast	**22.5** (± 9.5)%	**3,747**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those cigarette smokers who did not respond to questions about quitting resources.

* Awareness reflects both those who mentioned QuitNow by Phone when asked what quit smoking resources they were aware of, and those who responded affirmatively when asked if they had heard of QuitNow by Phone (unaided and aided recall).

Table 16

QuitNow Services is a smoking cessation program provided free of charge to all British Columbians. Operated by the BC Lung Association and funded by the Ministry of Healthy Living and Sport, British Columbians have access to QuitNow.ca, an internet-based quit-smoking service, and QuitNow By Phone, a helpline available 24 hours a day, with help from specially trained staff.

- Overall, slightly more than one-fifth (22.1±3.1 percent) of smokers are aware of QuitNow By Phone, or about 120,000 smokers.

Health Authorities

- Across the Health Authorities, awareness of QuitNow By Phone ranges from one-third of smokers in the Interior Authority (33.2±9.5 percent) to less than half of that among those in the Fraser Authority (15.7±5.9 percent).

- While the association is not exact, smokers in Health Authorities with higher smoking rates tend to show higher awareness of QuitNow By Phone (comparison with Table 2).

Health Service Delivery Areas

- Across the Health Service Delivery Areas, there is a sizable range of awareness of QuitNow By Phone, from the Kootenay Boundary HSDA, where 34.9±24.2 percent of smokers are aware of QuitNow By Phone, to the Fraser North HSDA, where few are aware of it (4.2±3.4 percent). However, because of the large confidence intervals around these two estimates, and those for nearly all of the HSDAs, any explicit ranking or comparison of awareness in the individual HSDAs would be inexact.

- In Vancouver Coastal, Vancouver Island, and Northern Health Authorities, the awareness of QuitNow By Phone in their respective HSDAs seems to be cluster around the overall awareness level for the Health Authority. The Interior and Fraser Health Authorities show more variability across their respective HSDAs, although in the case of the Interior Health Authority this is due one HSDA (East Kootenay, 21.0±19.6 percent) varying considerably from the other three HSDAs, all of which have an awareness rate around 34 percent.

- Within the various Health Authorities, there is only one HSDA whose difference from the other HSDAs in its Health Authority is statistically significant: Fraser North, whose 4.2 (±3.4) percent awareness rate is lower than the rates of the other two HSDAs.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for many of the individual HSDAs.

Table 17. Awareness of QuitNow By Phone*, among current cigarette smokers, age 15+, by age group, gender and overall, 2008

Characteristics	Percent of smokers who are aware of QuitNow By Phone	Number of smokers who are aware of QuitNow By Phone**
Overall	**22.1** (± 3.1)%	**122,160**
Age group		
15 to 19	**35.9** (± 17.3)%	**8,022**
20 to 24	**35.0** (± 17.4)%	**12,587**
25 to 44	**22.5** (± 6.2)%	**49,504**
45 to 64	**17.6** (± 3.3)%	**34,693**
65 or older	**24.7** (± 5.8)%	**13,342**
Gender		
Male	**19.4** (± 4.8)%	**58,802**
Female	**25.3** (± 3.9)%	**63,358**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those cigarette smokers who did not respond to questions about quitting resources.

* Awareness reflects both those who mentioned QuitNow by Phone when asked what quit smoking resources they were aware of, and those who responded affirmatively when asked if they had heard of QuitNow by Phone (unaided and aided recall).

** Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 17

Overall, slightly more than one-fifth (22.1±3.1 percent) of smokers are aware of QuitNow By Phone, or about 120,000 smokers.

Age Groups

- The two youngest groups of smokers show the highest awareness, both at around 35 percent, ranging down to the 45 to 64 year-olds, whose awareness is about half of the younger group, at 17.6 (±3.3) percent. However, none of the differences between age groups reach the level of statistical significance.

Gender

- Women (25.3±3.9 percent) are somewhat more aware of QuitNow By Phone than are men (19.4±4.8 percent). The confidence intervals indicate that the difference is not statistically significant, so it is possible that the relationship is actually the reversed of that indicated by the point estimates.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.

Table 18. Awareness of QuitNow.ca, among current cigarette smokers, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent of smokers who are aware of QuitNow.ca	Number of smokers who are aware of QuitNow.ca
Overall	**41.8** (± 3.2)%	**231,082**
Interior	**49.4** (± 6.0)%	**52,662**
East Kootenay	**31.4** (± 17.8)%	**3,198**
Kootenay Boundary	**45.4** (± 24.0)%	**4,824**
Okanagan	**45.1** (± 9.1)%	**18,723**
Thompson Caribou Shuswap	**58.6** (± 8.9)%	**25,917**
Fraser	**39.2** (± 7.5)%	**71,274**
Fraser East	**49.5** (± 15.1)%	**21,519**
Fraser North	**23.8** (± 9.9)%	**15,433**
Fraser South	**46.7** (± 12.3)%	**34,322**
Vancouver Coastal	**36.9** (± 5.8)%	**41,852**
Richmond	**38.4** (± 13.0)%	**6,843**
Vancouver	**37.6** (± 7.0)%	**26,231**
North Shore/Coast Garibaldi	**34.0** (± 12.7)%	**8,778**
Vancouver Island	**47.0** (± 5.6)%	**44,461**
South Vancouver Island	**52.8** (± 10.9)%	**17,670**
Central Vancouver Island	**50.0** (± 9.1)%	**17,107**
North Vancouver Island	**36.1** (± 14.2)%	**9,685**
Northern	**36.5** (± 5.5)%	**20,833**
Northwest	**37.0** (± 12.5)%	**6,526**
Northern Interior	**38.3** (± 8.2)%	**8,745**
Northeast	**33.4** (± 10.1)%	**5,561**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those cigarette smokers who did not respond to questions about quitting resources.

* Awareness reflects both those who mentioned QuitNow.ca when asked what quit smoking resources they were aware of, and those who responded affirmatively when asked if they had heard of QuitNow.ca (unaided and aided recall).

Table 18

Overall, 41.8 (±3.2) percent of smokers are aware of QuitNow.ca, or about 230,000 smokers. This is approximately double the rate and number of smokers who are aware of QuitNow By Phone.

Health Authorities

- Across the Health Authorities, awareness of QuitNow.ca ranges from half of smokers in the Interior Authority (49.4±6.0 percent) to 36.5 (±5.5) percent in the Northern Authority.
- Unlike QuitNow by Phone, there does not seem to be an association of Health Authority smoking rates with awareness of QuitNow.ca (comparison with Table 2).

Health Service Delivery Areas

- Across the Health Service Delivery Areas, there is a sizable range of awareness of QuitNow By Phone, from the Thompson Caribou Shuswap HSDA, where 58.6±8.9 percent of smokers are aware of QuitNow.ca, to the Fraser North HSDA, where 23.8±9.9 percent are aware of it. Because of the large confidence intervals around the estimates for nearly all of the HSDAs, any explicit ranking or comparison of awareness in the individual HSDAs would be inexact.
- The HSDAs with the highest awareness of the two Quit Services programs both come under the Interior Health Authority: Kootenay Boundary HSDA has the highest awareness of QuitNow By Phone (Table 16) and Thompson Caribou Shuswap has the highest awareness of QuitNow.ca, as noted above. Fraser North HSDA has the lowest awareness of both QuitNow By Phone (Table 16) and QuitNow.ca.
- In Vancouver Coastal and Northern Health Authorities, the awareness of QuitNow.ca in their respective HSDAs seems to be cluster around the overall awareness level for the Health Authority. The Interior, Vancouver Island, and Fraser Health Authorities show more variability across their respective HSDAs. In the case of the Interior Health Authority, Kootenay Boundary and Okanagan HSDAs both have awareness rates of 45.4±24.0 percent and 45.1±9.1 percent, respectively, while East Kootenay HSDA is on the low end at 31.4±17.8 percent and Thompson Caribou Shuswap HSDA is on the high end at 58.6±8.9 percent. In the case of the Vancouver Island Health Authority, this is due to one HSDA (North Vancouver Island, 36.1±14.2 percent) varying considerably from the other two HSDAs, both of which have an awareness rate around 50 percent.
- Within the various Health Authorities, there is one HSDA whose difference from the other HSDAs in its Health Authority is statistically significant: Fraser North, whose 23.8±9.9 percent awareness rate is lower than the rates of the other two HSDAs. The difference between two extreme HSDAs in the Interior Health Authority, East Kootenay (31.4±17.8 percent) and Thompson Caribou Shuswap (58.6±8.9 percent) is marginally statistically significant.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for many of the individual HSDAs.

Table 19. Awareness of QuitNow.ca, among current cigarette smokers, age 15+, by age group, gender and overall, 2008

Characteristics	Percent of smokers who are aware of QuitNow.ca	Number of smokers who are aware of QuitNow.ca**
Overall	**41.8** (± 3.2)%	**231,082**
Age group		
15 to 19	**39.6** (± 19.1)%	**8,847**
20 to 24	**57.4** (± 17.8)%	**20,679**
25 to 44	**46.9** (± 6.2)%	**103,349**
45 to 64	**37.8** (± 4.5)%	**74,593**
65 or older	**28.8** (± 6.6)%	**15,526**
Gender		
Male	**37.5** (± 4.9)%	**113,436**
Female	**46.9** (± 3.6)%	**117,646**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those cigarette smokers who did not respond to questions about quitting resources.

* Awareness reflects both those who mentioned QuitNow.ca when asked what quit smoking resources they were aware of, and those who responded affirmatively when asked if they had heard of QuitNow.ca (unaided and aided recall).

** Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 19

Overall, 41.8 (±3.2) percent of smokers are aware of QuitNow.ca, or about 230,000 smokers.

Age Groups

- The 20 to 24 year old age group of smokers shows the highest awareness, at 57.4 (±17.8) percent, ranging down to those 65 or older, whose awareness is about half of the younger group, at 28.8 (±6.6) percent. The difference between these two age groups is statistically significant.

- There is an apparent trend of awareness of QuitNow.ca decreasing with age, except that the youngest group shows a lower awareness (39.6±19.1 percent) than some of the older groups. However, because of the large confidence intervals around the estimates, any explicit ranking or comparison of awareness in the individual age groups would be inexact.

Gender

- Women (46.9±3.6 percent) are somewhat more aware of QuitNow.ca than are men (37.5±4.9 percent), similar to the relationship of their respective awareness of QuitNow By Phone. In the case of QuitNow.ca, however, the difference is statistically significant, by a small margin.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.

Table 20. Selected beliefs about smoking, among current cigarette smokers, age 15+, by Health Authority, age group and overall, 2008

Characteristics	Percent agreeing that smoking is extremely dangerous to his/her health	Percent agreeing that smoking is ruining his/her health	Percent agreeing that his/her cigarette smoke leaves an unpleasant smell	Percent agreeing that smoking gives him/her very bad breath
Overall	**82.1** (± 2.8)%	**64.0** (± 3.0)%	**76.1** (± 2.9)%	**69.8** (± 3.2)%
Health Authority				
Interior	**77.3** (± 8.8)%	**66.3** (± 5.8)%	**72.0** (± 9.3)%	**69.7** (± 9.4)%
Fraser	**83.3** (± 5.5)%	**69.7** (± 6.9)%	**76.8** (± 5.5)%	**70.8** (± 6.2)%
Vancouver Coastal	**82.8** (± 4.4)%	**54.9** (± 6.0)%	**77.0** (± 5.2)%	**63.8** (± 6.0)%
Vancouver Island	**86.2** (± 4.6)%	**61.6** (± 6.0)%	**79.5** (± 4.5)%	**74.1** (± 6.2)%
Northern	**78.5** (± 5.7)%	**62.7** (± 5.7)%	**74.2** (± 5.4)%	**71.7** (± 6.1)%
Age group				
15 to 19	**80.3** (± 16.0)%	**81.9** (± 12.7)%	**87.3** (± 13.1)%	**75.5** (± 19.8)%
20 to 24	**86.8** (± 7.8)%	**81.4** (± 10.8)%	**81.4** (± 13.0)%	**75.4** (± 13.9)%
25 to 44	**85.6** (± 5.3)%	**71.1** (± 5.6)%	**78.9** (± 4.7)%	**72.6** (± 5.5)%
45 to 64	**80.6** (± 3.7)%	**57.9** (± 4.4)%	**72.9** (± 4.1)%	**68.5** (± 4.3)%
65 or older	**72.1** (± 7.5)%	**44.1** (± 7.9)%	**70.3** (± 7.1)%	**60.6** (± 7.8)%

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Each column excludes those cigarette smokers who did not respond to the question presented at the top of the column.

Table 20

Reducing the health and societal effects of smoking by helping smokers to quit is supported by bringing about changes in individual attitudes and societal norms about smoking. CHESS asks smokers about their beliefs regarding a number of aspects related to smoking. This report presents the results for three of them: the belief that smoking is dangerous to their own health, that their smoking bothers others, and that their second-hand smoke is dangerous to others. Belief that smoking is dangerous to health predictably shows a high rate of agreement among smokers. They are evenly divided in their views that their smoking bothers others, while a small majority concurs that their second-hand smoke is dangerous to others.

- As expected, a large majority of smokers agree that smoking is extremely dangerous to their health (82.1±2.8 percent).
- Only one-half of smokers believe that their cigarette smoker bothers others (49.2±3.4 percent), while somewhat more (61.3±3.4 percent) believe that their smoke is dangerous to others who are around them.
- Even with a large percentage of smokers agreeing that smoking is extremely dangerous to themselves, nearly one-fifth of the smokers are unaware of or choose to deny the overwhelming evidence of the health consequences of smoking.

Age Groups

- Across the age groups, there are no large differences for the concepts of danger to one's own health and one's smoke bothering others. There does seem to be a demarcation between younger and older smokers in regard to their beliefs about the dangers of second-hand smoke. The three youngest age groups range from about 65 percent to slightly over 70 percent in their agreement that second-hand smoke is dangerous, while the rates for the two oldest ages decline to 54.2 (±4.4) percent for those 45 to 64 years and further still to 43.4 (±8.4) percent for those 65 and older.

Health Authorities

- There are no large differences for any of these three concepts across the Health Authorities. Smokers living in the Interior Health Authority area appear to be consistently on the low end of agreement with these concepts, although those in the Vancouver Coastal Health Authority show a marginally lower agreement that second-hand smoke is dangerous to others.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.

Table 20. Selected beliefs about smoking, among current cigarette smokers, age 15+, by Health Authority, age group and overall, 2008 (continued)

Characteristics	Percent agreeing that he/she spends too much money on cigarettes	Percent agreeing that his/her cigarette smoke bothers other people a great deal	Percent agreeing that his/her second-hand smoke is dangerous to those around them	Percent agreeing that smoking is bad for his/her skin
Overall	**72.7** (± 2.8)%	**49.2** (± 3.4)%	**61.3** (± 3.4)%	**55.8** (± 3.5)%
Health Authority				
Interior	**74.9** (± 5.4)%	**43.6** (± 6.3)%	**55.7** (± 9.6)%	**49.8** (± 6.5)%
Fraser	**72.9** (± 6.1)%	**51.5** (± 7.9)%	**62.1** (± 7.1)%	**59.3** (± 8.0)%
Vancouver Coastal	**61.2** (± 6.3)%	**49.6** (± 5.7)%	**55.2** (± 5.7)%	**52.4** (± 5.7)%
Vancouver Island	**80.3** (± 4.6)%	**51.4** (± 6.6)%	**69.7** (± 4.7)%	**59.6** (± 7.3)%
Northern	**78.2** (± 5.5)%	**47.4** (± 6.7)%	**67.6** (± 6.3)%	**56.4** (± 5.6)%
Age group				
15 to 19	**58.5** (± 20.3)%	**50.1** (± 18.7)%	**65.3** (± 16.9)%	**52.3** (± 18.9)%
20 to 24	**79.4** (± 9.4)%	**54.7** (± 19.2)%	**67.9** (± 14.9)%	**50.1** (± 21.0)%
25 to 44	**78.2** (± 5.2)%	**50.0** (± 6.0)%	**71.0** (± 6.0)%	**61.2** (± 6.5)%
45 to 64	**67.9** (± 4.2)%	**46.8** (± 4.5)%	**54.2** (± 4.4)%	**55.4** (± 4.7)%
65 or older	**65.7** (± 7.7)%	**51.6** (± 7.3)%	**43.4** (± 8.4)%	**42.2** (± 7.1)%

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Each column excludes those cigarette smokers who did not respond to the question presented at the top of the column.

Table 21. Awareness of quit-smoking media*, among cigarette smokers and non-smokers, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent aware of quit-smoking media		
	Smokers	Non-smokers**	All
Overall	**66.7** (± 3.6)%	**59.7** (± 1.6)%	**60.8** (± 1.5)%
Interior	**74.5** (± 6.3)%	**66.2** (± 3.0)%	**67.7** (± 2.7)%
East Kootenay	**65.9** (± 20.4)%	**69.7** (± 5.3)%	**69.2** (± 8.0)%
Kootenay Boundary	**66.4** (± 10.0)%	**65.0** (± 6.7)%	**65.2** (± 8.7)%
Okanagan	**67.8** (± 11.5)%	**65.3** (± 4.4)%	**65.7** (± 4.2)%
Thompson Caribou Shuswap	**84.7** (± 6.6)%	**66.7** (± 5.0)%	**70.7** (± 5.0)%
Fraser	**63.7** (± 8.0)%	**57.1** (± 3.5)%	**58.1** (± 3.2)%
Fraser East	**81.1** (± 14.2)%	**63.9** (± 7.4)%	**67.4** (± 7.1)%
Fraser North	**47.8** (± 13.0)%	**53.4** (± 5.6)%	**52.6** (± 5.3)%
Fraser South	**67.4** (± 11.2)%	**57.8** (± 5.1)%	**59.1** (± 4.9)%
Vancouver Coastal	**60.7** (± 8.0)%	**58.1** (± 3.1)%	**58.4** (± 2.9)%
Richmond	**46.4** (± 18.5)%	**59.9** (± 7.7)%	**58.4** (± 7.5)%
Vancouver	**62.5** (± 10.4)%	**58.0** (± 3.9)%	**58.6** (± 3.7)%
North Shore/Coast Garibaldi	**65.7** (± 14.7)%	**57.0** (± 6.2)%	**58.0** (± 5.9)%
Vancouver Island	**70.9** (± 7.3)%	**59.4** (± 3.2)%	**61.2** (± 2.9)%
South Vancouver Island	**64.8** (± 12.9)%	**56.4** (± 4.2)%	**57.4** (± 4.4)%
Central Vancouver Island	**67.2** (± 11.7)%	**64.4** (± 4.7)%	**64.8** (± 4.7)%
North Vancouver Island	**83.4** (± 7.6)%	**58.3** (± 6.3)%	**64.4** (± 7.8)%
Northern	**66.3** (± 6.7)%	**63.5** (± 3.5)%	**64.1** (± 3.1)%
Northwest	**68.5** (± 12.0)%	**66.0** (± 6.1)%	**66.6** (± 6.3)%
Northern Interior	**66.2** (± 8.8)%	**62.2** (± 4.7)%	**62.9** (± 4.4)%
Northeast	**64.2** (± 12.6)%	**63.9** (± 5.8)%	**64.0** (± 6.5)%

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those cigarette smokers who did not respond to questions about quit-smoking media.

* Awareness is defined by those who had seen, read or heard any advertisement or communication material about quitting smoking, over the past few weeks preceding the CHESS interview.

** Non-smokers include former cigarette smokers and those who never smoked cigarettes.

Table 21

Awareness of quit-smoking media is defined by those who had seen, read or heard any advertisement or communication material about quitting smoking over the past few weeks preceding the CHESS interview. This is a very broad measure of media awareness and can include all kinds of ads, regardless of content, medium, or sponsorship.

- Overall, 60.8 (±1.5) percent of the population is aware of quit-smoking advertisements and communications. Smokers seem to be more aware than non-smokers, but the difference is not large: 66.7 (±3.6) percent vs. 59.7 (±1.6) percent, a small but statistically significant difference.

Health Authorities

- This relationship between smokers and non-smokers is consistent across the Health Authorities, although the differences between smokers and non-smokers are not statistically significant within any given Health Authority.

- Those served by the Interior Health Authority have the highest overall awareness (67.7 ±2.7 percent), a rate of awareness that is statistically significantly higher by a small margin than that of all the other Health Authorities except the Northern Health Authority.

Health Service Delivery Areas

- Among the Health Service Delivery Areas, the highest awareness among smokers occurs in the Thompson Caribou Shuswap HSDA (84.7±6.6 percent) and the lowest in the Richmond HSDA (46.4±18.5 percent). Among non-smokers, the highest awareness occurs in Kootenay Boundary HSDA (69.7±5.3 percent) and the lowest in the Fraser North HSDA (53.4±5.6 percent).

- Within each Health Authority, there is consistently a greater range and more variability of awareness across the HSDAs among the smokers than among the non-smokers.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for some of the individual HSDAs.

Table 22. Awareness of quit-smoking media*, among cigarette smokers and non-smokers, age 15+, by age group, gender and overall, 2008

Characteristics	Percent aware of quit-smoking media		
	Smokers	Non-smokers**	All
Overall	**66.7** (± 3.6)%	**59.7** (± 1.6)%	**60.8** (± 1.5)%
Age group			
15 to 19	**63.3** (± 23.0)%	**67.7** (± 8.3)%	**67.2** (± 8.5)%
20 to 24	**78.0** (± 12.1)%	**71.0** (± 7.5)%	**72.3** (± 7.6)%
25 to 44	**67.5** (± 6.3)%	**60.6** (± 3.1)%	**61.8** (± 2.9)%
45 to 64	**64.5** (± 5.2)%	**58.2** (± 2.4)%	**59.3** (± 2.1)%
65 or older	**62.2** (± 9.1)%	**56.4** (± 3.1)%	**57.0** (± 2.9)%
Gender			
Male	**68.9** (± 5.1)%	**59.0** (± 2.7)%	**60.7** (± 2.4)%
Female	**64.0** (± 5.0)%	**60.4** (± 2.0)%	**60.9** (± 1.8)%

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those cigarette smokers who did not respond to question about quit-smoking media.

* Awareness is defined by those who had seen, read or heard any advertisement or communication material about quitting smoking, over the past few weeks preceding the CHESS interview.

** Non-smokers include former cigarette smokers and those who never smoked cigarettes

Table 22

Overall, 60.8 (±1.5) percent of the population is aware of quit-smoking advertisements and communications. Smokers seem to be more aware than non-smokers: 66.7 (±3.6) percent vs. 59.7 (±1.6) percent, a small but statistically significant difference.

Age Groups

- This relationship is consistent across the age groups, with the exception of the 15 to 19 year-olds, where non-smokers show a slightly higher awareness. However, the differences between smokers and non-smokers are not statistically significant within any given age group, and the confidence interval for the 15 to 19 year-old smokers is particularly large.

- The highest awareness occurs among the 20 to 24 year-olds, for both smokers and non-smokers; however, the same caution about sample size applies to this age group as to the 15 to 19 year-olds.

- For those 20 or more years old, there is an apparent trend of awareness decreasing with age. When the confidence intervals are considered, the downward trend may not be as consistent from age group to age group as the point estimates suggest. However, even when the confidence intervals are considered, those aged 20 to 24 have higher awareness than those 45 or older and at least equal to that of those aged 25 to 44.

Gender

- There are only small differences in media awareness between males and females, none of them significant.

- Male smokers are somewhat more aware of quit-smoking media than male non-smokers, by a statistically significant difference of 68.9 (±5.1) percent versus 59.0 (±2.7) percent.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.

Table 23. Exposure to second-hand smoke* in past month, in various settings: non-smokers, age 15+, by Health Authority, age group and overall, 2008

Characteristics	Exposed anywhere		Exposed anywhere outside of own household	
	Percent	Number**	Percent	Number**
Overall	**29.0** (± 1.5)%	**879,816**	**27.5** (± 1.5)%	**832,930**
Health Authority				
Interior	**25.1** (± 3.1)%	**127,123**	**23.2** (± 3.0)%	**117,431**
Fraser	**30.2** (± 3.2)%	**305,177**	**29.0** (± 3.1)%	**294,412**
Vancouver Coastal	**31.4** (± 2.9)%	**247,512**	**29.6** (± 2.9)%	**233,773**
Vancouver Island	**27.1** (± 3.1)%	**144,905**	**25.8** (± 3.1)%	**137,471**
Northern	**29.1** (± 3.5)%	**55,099**	**26.4** (± 3.4)%	**49,843**
Age group				
15 to 19	**52.5** (± 9.8)%	**97,560**	**50.1** (± 9.8)%	**93,115**
20 to 24	**54.0** (± 9.3)%	**87,146**	**51.4** (± 9.3)%	**82,968**
25 to 44	**33.1** (± 3.1)%	**359,287**	**32.3** (± 3.1)%	**350,435**
45 to 64	**24.4** (± 2.0)%	**226,017**	**23.0** (± 2.0)%	**212,420**
65 or older	**13.2** (± 2.2)%	**66,936**	**10.5** (± 2.0)%	**53,254**

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those non-smokers who did not provide sufficient information to determine second-hand smoke exposure.

* Second-hand smoke refers to the smoke generated from the burning end of a cigarette or other smoked tobacco product and to the exhaled smoke from the smoker. For this table, exposure to second-hand smoke is defined by those who reported they were frequently exposed to such smoke in the past month, in one or more of the following settings: own household, at work, a car or other private vehicle, an enclosed public place, or an outdoor public place.

** Age group numbers sum to less than overall total because of those who did not respond to question about age.

Table 23

Exposure to second-hand smoke carries significant health impacts with it. CHESS measures the exposure of non-smokers to second-hand smoke in a variety of settings.

- Overall, about 30 percent (29.0±1.5 percent) of non-smokers in British Columbia were frequently exposed to second-hand in one or more settings smoke in the past month.
- 27.5 (±1.5) percent of non-smoking British Columbians were exposed to second-hand smoke outside of their own household in the past month. This includes exposure at work, in a car or other private vehicle, an enclosed public place, or an outdoor public place.

Age Groups

- There appears to be a distinct trend in second-hand smoke exposure by age. Around 50 percent of the two youngest age groups of non-smokers were exposed to second-hand smoke outside of their own household in the past month, compared to the three oldest age groups, which range between 10 percent and 32 percent.
- While the confidence intervals for the two younger age groups are fairly large, the sizable difference between each of these two groups and each of the three older age groups makes all of the differences statistically significant, both for exposure anywhere and for anywhere outside the household.

Health Authorities

- Across the Health Authorities, there is not much variation in the percentage of non-smokers exposed to second-hand smoke, whether defined as outside the home or as anywhere including the home.
- Exposure outside the home ranges from a low of 23.2 (±3.0) percent in the Interior Health Authority to a high of 29.6 (±2.9) percent in the Vancouver Coastal Health Authority. The difference between these two is small but marginally statistically significant.
- Other than this difference between the Interior and Vancouver Health Authorities for exposure outside the home, there are no statistically significant difference in exposure among the Health Authorities for either setting.
- Exposure anywhere including the home ranges from a low of 25.1 (±3.1) percent for the Interior Health Authority to a high of 31.4 (±2.9) percent for the Vancouver Coastal Health Authority.

Table 23 (continued)

- When exposure anywhere is compared to exposure anywhere except the household, the overall exposure is not increase much by including household exposure. The age trend remains about the same, as does the apparent absence of differences among the Health Authorities. This suggests that encouraging households to adopt non-smoking policies may be important in terms of individual exposure, especially when there are children present in the household, but that reducing second-hand smoke exposure in the population must rely on policies affecting public spaces, a phenomenon further illustrated in Tables 24 and 25.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.

Table 24. Exposure to second-hand smoke* in past month, in specific settings: non-smokers, age 15+, by Health Authority, Health Service Delivery Area and overall, 2008

Health Authority/ Health Service Delivery Area	Percent exposed				
	Setting of exposure to second-hand smoke				
	Own household	At work	Car or other private vehicle	Enclosed public place	Outdoor public place
Overall	**4.7** (± 0.8)%	**6.9** (± 1.0)%	**4.4** (± 0.8)%	**9.8** (± 1.1)%	**17.6** (± 1.4)%
Interior	**6.1** (± 1.8)%	**6.8** (± 1.9)%	**5.7** (± 1.9)%	**8.1** (± 2.1)%	**12.3** (± 2.4)%
East Kootenay	**6.7** (± 3.9)%	**7.9** (± 5.1)%	**3.1** (± 2.8)%	**6.1** (± 5.9)%	**11.3** (± 6.7)%
Kootenay Boundary	Sample size too small	**1.8** (± 1.9)%	**11.0** (± 7.3)%	Sample size too small	**10.4** (± 7.3)%
Okanagan	**4.6** (± 1.8)%	**8.4** (± 3.1)%	**3.2** (± 2.1)%	**8.6** (± 3.1)%	**13.8** (± 3.8)%
Thompson Caribou Shuswap	**8.2** (± 4.2)%	**5.7** (± 3.4)%	**8.7** (± 4.4)%	**9.9** (± 4.6)%	**11.0** (± 4.2)%
Fraser	**4.3** (± 1.4)%	**6.8** (± 2.0)%	**4.7** (± 1.7)%	**12.5** (± 2.3)%	**19.9** (± 3.0)%
Fraser East	**5.5** (± 3.3)%	**6.1** (± 4.2)%	**6.1** (± 4.4)%	**11.0** (± 5.2)%	**17.7** (± 6.9)%
Fraser North	**4.2** (± 2.5)%	**5.8** (± 2.9)%	**5.5** (± 3.2)%	**13.9** (± 4.5)%	**19.6** (± 4.7)%
Fraser South	**3.9** (± 2.0)%	**7.9** (± 3.6)%	**3.6** (± 2.0)%	**11.9** (± 3.4)%	**21.0** (± 4.8)%
Vancouver Coastal	**4.3** (± 1.4)%	**6.0** (± 1.6)%	**3.1** (± 1.2)%	**9.7** (± 2.0)%	**21.0** (± 2.6)%
Richmond	**2.4** (± 2.0)%	**7.6** (± 4.4)%	Sample size too small	**8.7** (± 5.0)%	**21.9** (± 6.8)%
Vancouver	**4.7** (± 1.9)%	**6.7** (± 2.3)%	**3.6** (± 1.7)%	**11.3** (± 2.9)%	**22.8** (± 3.6)%
North Shore/Coast Garibaldi	**4.5** (± 2.6)%	**3.2** (± 2.7)%	**2.2** (± 1.9)%	**6.6** (± 2.8)%	**15.9** (± 4.5)%
Vancouver Island	**4.4** (± 2.1)%	**7.4** (± 2.4)%	**3.7** (± 2.0)%	**7.8** (± 2.1)%	**14.8** (± 2.7)%
South Vancouver Island	**4.0** (± 3.0)%	**6.5** (± 3.5)%	**3.1** (± 2.9)%	**7.3** (± 3.1)%	**14.8** (± 3.8)%
Central Vancouver Island	**3.4** (± 2.5)%	**6.7** (± 3.3)%	**3.1** (± 2.7)%	**8.1** (± 3.2)%	**14.5** (± 4.5)%
North Vancouver Island	**7.6** (± 6.6)%	**12.0** (± 7.1)%	**6.9** (± 6.3)%	**8.9** (± 5.4)%	**15.5** (± 7.0)%
Northern	**5.8** (± 1.7)%	**10.2** (± 2.2)%	**6.0** (± 1.9)%	**6.3** (± 1.9)%	**13.8** (± 2.6)%
Northwest	**4.8** (± 3.2)%	**2.9** (± 1.9)%	**6.0** (± 3.7)%	**7.5** (± 4.4)%	**12.9** (± 4.7)%
Northern Interior	**5.2** (± 2.0)%	**12.5** (± 3.5)%	**4.7** (± 2.4)%	**6.7** (± 2.4)%	**13.6** (± 3.8)%
Northeast	**8.1** (± 4.8)%	**12.5** (± 5.6)%	**9.2** (± 5.1)%	**4.1** (± 4.0)%	**15.2** (± 5.6)%

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those non-smokers who did not provide sufficient information to determine second-hand smoke exposure.

* Second-hand smoke refers to the smoke generated from the burning end of a cigarette or other smoked tobacco product and to the exhaled smoke from the smoker. For this table, exposure to second-hand smoke is defined by those who reported they were frequently exposed to such smoke in the past month, in one or more of the following settings: own household, at work, a car or other private vehicle, an enclosed public place, or an outdoor public place.

Table 24

Table 24 breaks out the individual components of the overall measures of non-smokers' exposure to second-hand smoke that were presented in Table 23. The specific settings where CHESS measures exposure to second-hand smoke are: within one's own household, at one's place of work, in a car or other private vehicle, in enclosed public places (such as bars, restaurants, arenas, bingo halls, bowling alleys and shopping malls) and in outdoor public places (such as outdoor stadiums, fields, and events).

Overall and Health Authorities

- The highest exposure to second-hand smoke occurred in outdoor public places. Overall, 17.6 (±1.4) percent of non-smokers were exposed in such settings in the past month. Outdoor settings consistently have the highest rate of exposure for all of the Health Authorities. Non-smokers in Fraser and Vancouver Coastal Health Authorities have higher rates of exposure outdoors (each around 20 percent) than those in the other Health Authorities, and the differences between each of these two and each of the other three Health Authorities are statistically significant.

- Enclosed public places constitute the setting in which non-smokers were exposed to second-hand smoke at the second-highest rate. Overall, 9.8 (±1.1) percent of non-smokers were exposed in such settings in the past month. Parallel to the pattern for outdoor places, enclosed public settings consistently have the second-highest rate of exposure for all of the Health Authorities, except for the Northern Health Authority. Fraser and Vancouver Coastal Health Authorities likewise have the two highest rates of indoor public exposure, but the differences between them and the other Authorities are not so pronounced as for outdoor settings. Only the differences between Fraser and the Interior, Vancouver Island, and Northern Health Authorities are statistically significant.

- Exposure in the home, at work and in a car shows roughly comparable overall rates, with exposure at work being slightly higher, at 6.9 percent.

- With the exception of the higher 10.2 (±2.2) percent exposure to second-hand smoke at work found in the Northern Health Authority, there is little difference in the exposure rates across the Health Authorities for exposure in the home, at work, or in a car. Despite the relatively large difference between the 10.2 (±2.2) percent point estimate for work exposure in the Northern Health Authority and that of the other Health Authorities, it is statistically significantly higher only than the 6.0 (±1.6) percent work exposure rate in the Vancouver Coastal Health Authority.

Table 24 (continued)

Health Service Delivery Areas

- The general second-hand smoke exposure patterns found for British Columbia overall and across the Health Authorities are largely the same within each Health Service Delivery Areas, namely, outdoor public places have the highest exposure rate, followed by enclosed public places, work places, household, and car. The small size of the various point estimates for the individual Health Service Delivery Areas and their relatively large confidence intervals render many seeming differences not significant.

- For the setting with the highest overall exposure rate (outdoor public places at 17.6 ±1.4 percent), the Health Service Delivery Area with the highest rate is Vancouver HSDA, at 22.8±3.6 percent and the lowest is Kootenay Boundary at 10.4±7.3 percent. As noted, the confidence intervals mean that other areas may really have higher or lower rates than these.

- For the setting with the second highest overall exposure rate (enclosed public places at 9.8±1.1 percent), the Health Service Delivery Area with the highest rate is Fraser North at 13.9±4.5 percent and the lowest reportable rate is Northeast at 4.1 (±4.0) percent. The point estimates are smaller than for outdoor exposure, so the relatively larger confidence intervals make the ranking of the HSDAs for indoor public exposure even less certain than for outdoor exposure.

- Two of the three of the HSDAs in the Northern Health Authority have the highest exposure rate at work: Northwest Interior (12.5±3.5 percent) and Northeast (12.5±5.6 percent), while the third HSDA in this Health Authority, Northwest HSDA, has the lowest rate for exposure at work (2.9±1.9 percent), which is also the lowest point estimate for exposure in any of the settings in any of the HSDAs.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for many of the individual HSDAs.

Table 25. Exposure to second-hand smoke* in past month, in specific settings: non-smokers, age 15+, by age group, gender and overall, 2008

Characteristics	Percent exposed Setting of exposure to second-hand smoke Own household	At work	Car or other private vehicle	Enclosed public place	Outdoor public place
Overall	**4.7** (± 0.8)%	**6.9** (± 1.0)%	**4.4** (± 0.8)%	**9.8** (± 1.1)%	**17.6** (± 1.4)%
Age group					
15 to 19	**15.0** (± 6.9)%	**6.1** (± 4.0)%	**17.6** (± 7.6)%	**22.1** (± 7.7)%	**35.3** (± 9.4)%
20 to 24	**11.7** (± 6.5)%	**10.8** (± 5.9)%	**13.4** (± 6.7)%	**26.8** (± 8.6)%	**36.3** (± 9.6)%
25 to 44	**3.5** (± 1.1)%	**10.6** (± 2.2)%	**3.6** (± 1.3)%	**11.0** (± 2.1)%	**20.3** (± 2.7)%
45 to 64	**3.4** (± 0.8)%	**6.1** (± 1.2)%	**2.8** (± 0.7)%	**7.0** (± 1.3)%	**13.9** (± 1.6)%
65 or older	**4.3** (± 1.3)%	**0.5** (± 0.4)%	**1.9** (± 0.9)%	**3.3** (± 1.2)%	**6.6** (± 1.5)%
Gender					
Male	**4.6** (± 1.2)%	**9.2** (± 1.7)%	**4.7** (± 1.4)%	**10.9** (± 1.7)%	**18.9** (± 2.2)%
Female	**4.8** (± 0.9)%	**4.8** (± 1.0)%	**4.0** (± 0.9)%	**8.9** (± 1.3)%	**16.5** (± 1.6)%

Source: BC Stats Community Health, Education and Social Services (CHESS) Omnibus Survey 2008

Excludes those non-smokers who did not provide sufficient information to determine second-hand smoke exposure.

* Second-hand smoke refers to the smoke generated from the burning end of a cigarette or other smoked tobacco product and to the exhaled smoke from the smoker.

Table 25

Table 25 breaks out the same individual components of the overall measures of non-smokers' second-hand smoke exposure as presented in Table 24, but by age and gender rather than Health Authority.

Age Groups

- As noted in Table 24, the highest overall exposure to second-hand smoke occurs in outdoor public places (17.6±1.4 percent). Outdoor settings consistently have the highest rate of exposure for all of the age groups. Among the age groups, the two youngest have the highest rate of exposure outdoors, at slightly more than 35% for each of them. The oldest group has markedly lower exposure in such outdoor settings (6.6±1.5 percent). The rates for each of these two younger groups are statistically significantly higher than the rates for each of the three older groups. The highest rate of exposure for any age group in any setting is the 36.3 (±9.6) percent for the 20 to 24 year-old group in outdoor public places, although the rate for 15 to 19 year-olds is nearly identical at 35.3 (±9.4) percent, and with the wide confidence intervals either may be truly the highest, possibly over 45 percent at the high end.

- Enclosed public places constitute the setting in which non-smokers were exposed to second-hand smoke at the second-highest rate. Overall, 9.8 (±1.1) percent of non-smokers were exposed in such settings in the past month. Parallel to the pattern for outdoor places, enclosed public places consistently have the second-highest rate of exposure for all of the age groups, with the exception of the 65 or older group, where exposure in the household is the second-highest. Once again, the two youngest have the highest rate of exposure in enclosed public places, at approximately one-quarter of each group and their rates are statistically significantly higher than those of the three older groups.

- Exposure in the home, at work and in a car show roughly comparable overall rates, with exposure at work being slightly higher, at 6.9 (±1.0) percent. The youngest two age groups continue to evidence the highest rate of exposure in each of these settings, except that the youngest group (at 6.1±4.0 percent) does not have as high exposure at work as do the 20 to 24 year-olds and the 25 to 44 year-olds (around 10 percent each). (Since those who do not work for pay outside the home are, by definition, not exposed at work, the statistics are affected by the lower employment for 15 to 19 year-olds. The same applies to the near-zero exposure at work (0.5±0.4 percent) for the 65+ age group.)

- The rank ordering of the exposure rates by setting within each age group is similar to the overall order, with a few exceptions. Notably, exposure in a car is the lowest rate overall (4.4±0.8 percent), but for the two younger age groups it is the third highest source of exposure, and significantly much higher than for the three older age groups, at 17.6 (±7.6) percent for the 15 to 19 year-olds and 13.4 (±6.7) percent for the 20 to 24 year-olds.

Table 25 (continued)

- It may be tempting to attribute the higher overall exposure rates for the two youngest age groups shown in Table 24 to their tendency to frequent settings where smoking is more common and to associate with others in their age group who smoke. The highest percentages of exposures for this group are found in outdoor and enclosed public places, with somewhat lower rates in cars. While this pattern may seem to lend some indirect support to the hypothesis, the fact that the youngest groups also show the highest rates for exposure in the home suggests that other factors may be at play for these two groups.

Gender

- The rank ordering of exposure rates in each setting are similar for men and women.
- While men show higher rates of exposure in every setting but in the household, the only statistically significant difference is for the workplace, where 9.2 (±1.7) percent of men were exposed and 4.8 (±1.0) percent of women. This may reflect differences in the nature of the work performed and a lower percentage of women in the workforce. Further investigation and analysis would be needed to identify the basis for the difference.

When interpreting the data in this table, readers should be careful when employing any estimates with relatively wide confidence intervals, such as those for the 15 to 19 and the 20 to 24 year-old age groups.