

# Population Health in Canada's Largest Cities: A Cancer System Performance Spotlight Report Technical Appendix

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# **Prevention**

#### **Smoking Prevalence**

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Definition:	Percentage of population aged 12 years and older reporting daily or
	occasional smoking
Numerator:	Number of daily or occasional smokers, aged 12 years and older
Denominator:	Total population, aged 12 years and older
Data Source:	Canadian Community Health Survey
Measurement	2010 – 2011 (CCHS 2010-2011)
Timeframe:	
CCHS Variables:	Have smoked 100 or more cigarettes during lifetime
	Ever smoked a whole cigarette
	Type of smoker at present time
	Ever smoked cigarettes daily
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	1. CCHS data are based on a representative sample which is then
	extrapolated to the overall population.



# **Smoking Cessation**

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Percentage of recent smokers aged 20 and older that quit smoking in the
previous 2 years
Recent quitters: former smokers who were no longer smoking at the time of
the survey who have quit in the last 2 years
Recent quitters plus current smokers (those who are currently daily or
occasional smokers), aged 20 years and older
Canadian Community Health Survey
2010 – 2011 (CCHS 2010-2011)
Current smoking status
Number of years stopped smoking daily
Number of years stopped smoking completely
Large metropolitan areas (top 20 CMAs and 29 CMA), core cities (Montreal,
Ottawa, Toronto, Vancouver), greater metropolitan areas (Montreal, Ottawa,
Toronto, Vancouver), urban PEI, other urban/rural, province/territory
All
1. When the coefficient of variation is between 16.6% and 33.3%
(denoted by E on the figure), there is a large amount of relative
variation; therefore, estimate should be interpreted with caution.
2. CCHS data are based on a representative sample which is then
extrapolated to the overall population.



#### **Second-Hand Smoke Exposure**

Definition:	Percentage of non-smokers aged 12 years and older regularly exposed to second-hand smoke at home, in vehicles, or in public spaces
Numerator:	<ul> <li>Number of non-smokers aged 12 years and older who reported someone smoking inside the home every day or almost every day</li> <li>Number of non-smokers aged 12 years and older who reported being exposed to second-hand smoke in private vehicles every day or almost every day in the past month</li> <li>Number of non-smokers aged 12 years and older who reported being exposed to second-hand smoke in public places every day or almost every day in the past month</li> </ul>
Denominator:	Non-smokers, aged 12 years and older
Data Sources:	Canadian Community Health Survey
Measurement	2010 – 2011 (CCHS 2010-2011)
Timeframe:	
CCHS Variables:	<ul> <li>Including both household members and regular visitors, does anyone smoke inside your home, every day or almost every day?</li> <li>In the past month, were you exposed to second-hand smoke every day or almost every day, in a car or other private vehicle?</li> <li>In the past month, were you exposed to second-hand smoke every day or almost every day, in public places?</li> </ul>
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural,
	province/territory
Provinces/Territories/ Large Metropolitan Areas with Data Available:	All
Notes:	<ol> <li>When the coefficient of variation is between 16.6% and 33.3% (denoted by E on the figure), there is a large amount of relative variation; therefore, estimate should be interpreted with caution.</li> <li>CCHS data are based on a representative sample which is then extrapolated to the overall population.</li> </ol>



#### Alcohol Consumption—Low-risk drinking guideline

Definition:	Percentage of adults aged 18 years and older that reported exceeding the low-risk drinking guideline as defined below:
	Low-Risk Drinking Guideline: An AVERAGE of no more than 2 drinks per day for males, and an AVERAGE of no more than 1 drink per day for females. The daily average was calculated based on the total number of drinks the respondent reported consuming in the week prior to the CCHS interview, divided by 7 days.
Numerator:	Number of adults (aged 18 years and older) who reported exceeding the low-risk drinking guideline
Denominator:	Total population (aged 18 years and older)
Data Source:	Canadian Community Health Survey
Measurement	2005 (CCHS Cycle 3.1); 2010 – 2011 (CCHS 2010-2011)
Timeframe:	
CCHS Variables:	During the past 12 months, have you had a drink of beer, wine, liquor or any other alcoholic beverage?
	<ul> <li>Thinking back over the past week, did you have a drink of beer, wine, liquor or any other alcoholic beverage?</li> <li>How many drinks did you have on each day during the past week?</li> </ul>
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural, province/territory
Provinces/Territories/	1. 2005: all except NB CMA (Moncton)
Large Metropolitan	2. 2010-2011: SK CMAs (Saskatoon, Regina), MB CMA (Winnipeg), QC
Areas with Data	CMAs (Montreal, Quebec, Sherbrooke), ON CMAs (Oshawa,
Available:	Toronto, Ottawa, Windsor, London, Kitchener-Cambridge-Waterloo,
	Hamilton, St. Catharines-Niagara), NL CMA (St. John's); other
	urban/rural, province/territory
Notes:	1. The word drink means: 1 bottle or can of beer or a glass of
	draft, 1 glass of wine or a wine cooler, or 1 drink or cocktail with 1 1/2 ounces of liquor.
	<ol><li>CCHS data are based on a representative sample which is then extrapolated to the overall population.</li></ol>



#### Alcohol Consumption—No alcohol

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Definition:	Percentage of adults aged 18 years and older that reported no alcohol
	drinking in the past 12 months
Numerator:	Number of adults aged 18 years and older who reported drinking no
	alcohol in the past 12 months
Denominator:	Total population aged 18 years and older
Data Source:	Canadian Community Health Survey
Measurement	2010 – 2011 (CCHS 2010-2011)
Timeframe:	
CCHS Variables:	During the past 12 months, have you had a drink of beer, wine, liquor or
	any other alcoholic beverage?
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	1. The word drink means: 1 bottle or can of beer or a glass of
	draft, 1 glass of wine or a wine cooler, or 1 drink or cocktail with
	1 1/2 ounces of liquor.
	2. CCHS data are based on a representative sample which is then
	extrapolated to the overall population.



#### **Fruit and Vegetable Consumption**

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Definition:	Percentage of population age 12 and older in each level of fruits and
	vegetables consumptions: 5-10 times/servings daily or > 10
	times/servings daily
Numerator:	Number of population aged 12 and older reporting consuming fruits
	and vegetables 5 to 10 times/servings daily or > 10 times/servings daily
Denominator:	Total population, aged 12 and older
Data Source:	Canadian Community Health Survey
Measurement	2010 – 2011 (CCHS 2010-2011)
Timeframe:	
<b>CCHS Variables:</b>	This variable classifies the respondent based on the total number of
	times/servings per day he/she eats fruits and vegetables (derived from
	FVCGTOT); included daily consumption of fruit juice, fruit (excluding
	fruit juice), green salad, potatoes (excluding French fries, fried potatoes
	or potato chips), carrots and other vegetables (excluding carrots,
	potatoes or salad)
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	1. The CCHS measures the number of times (frequency), not the
	amount consumed.
	2. CCHS data are based on a representative sample which is then
	extrapolated to the overall population.



# **Physical Activity**

Definition:	<ul> <li>Percentage of population aged 15-75 years reporting being active (3.0 KKD&lt;=EE&lt;4.5 KKD) during their leisure, work and transportation time</li> </ul>
	b. Percentage of population aged 18 and older reporting being very active (EE>=4.5 KKD) during their leisure time
	Daily energy expenditure (EE) is calculated for each leisure physical
	activity and measured in kilocalories per day (KKD). The daily EE values
	from each activity are added up, resulting in an overall daily EE value
	for leisure, work and transportation time physical activity.
Numerator:	a. Number of people aged 15-75 years who are <b>active</b> during
	leisure, work and transportation time
	b. Number of people aged 18 and older who are <b>very active</b>
Denominator:	during leisure time
Denominator:	<ul><li>a. Total population, aged 15-75</li><li>b. Total population, aged 18 and older</li></ul>
Data Source:	b. Total population, aged 18 and older  Canadian Community Health Survey
Measurement	2005 (CCHS Cycle 3.1); 2010 – 2011 (CCHS 2010-2011)
Timeframe:	2003 (CC13 Cycle 3.1), 2010 – 2011 (CC13 2010-2011)
CCHS Variables:	Type of physical activities for leisure, transportation and work- related activities
	<ul> <li>Number of times spent on each physical activity for leisure,</li> </ul>
	transportation and work-related activities
	Amount of hours spent on each physical activity for leisure,
	transportation and work-related activities
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/ rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	If the respondent is unemployed or disabled, the occupation
	energy is zero.
	Examples of leisure activities include gardening, walking,  playing soccor, ckiing transportation activities include walking.
	playing soccer, skiing; transportation activities include walking or cycling; occupation-based activities include sitting, walking,
	lifting light loads, climbing and heavy work.
	inting light loads, climbing and fleavy work.

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3. Daily EE for each activity = (N x 4 x D x MET value)/365 Where N = the number of times a respondent engaged in an activity over a 3-month period (N is further multiplied by 4 in order to get the number of times responded engaged in the activity over a 12-month period)

D= the average duration in hours of the activity

MET value = the energy cost of the activity expressed as kilocalories expended per kilogram of body weight per hour of activity (kcal/kg per hour)/365 (to convert yearly data into daily data)

4. CCHS data are based on a representative sample which is then extrapolated to the overall population.



# Overweight & Obesity Rates—Adults

Definition:	Percentage of adults aged 18 years and older in the following BMI groups—overweight (BMI 25.00–29.99) or obese (BMI 30.00+)
Numerator:	
Numerator:	Number of adults aged 18 years and older in the following BMI groups -
	overweight or obese
Denominator:	Total number of adults aged 18 years and older with valid height and
	weight responses
Data Source:	Canadian Community Health Survey
Measurement	2010 – 2011 (CCHS 2010-2011)
Timeframe:	
CCHS Variables:	Self-reported weight (kg)
	Self-reported height (m)
	• Calculated BMI values: BMI=weight/(height) <sup>2</sup>
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/ rural,
	province/territory
	province, territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	Excludes pregnant women, lactating women, persons less than
110103.	3 feet tall or greater than 6 feet 11 inches.
	2. CCHS data are based on a representative sample which is then
	extrapolated to the overall population.



# **Screening**

#### **Colorectal Cancer Screening—Asymptomatic**

Definition:	Percentage of asymptomatic individuals aged 50-74 who reported upto-date colorectal cancer screening:
	Asymptomatic: Respondents who reported having a colorectal
	screening test for any of the following reasons:
	Family history; Part of routine check-up/screening; Age; Race
	And <u>not</u> for any of the following reasons
	<ul> <li>Follow-up of a problem; Follow-up of colorectal cancer treatment;</li> <li>Other Reason</li> </ul>
	Up-to-date colorectal screening: A FOBT within the past 2 years
	and/or colonoscopy/sigmoidoscopy within the past 5 years.
Numerator:	Number of asymptomatic individuals aged 50-74 reporting having had an FOBT within the past 2 years and/or a colonoscopy/sigmoidoscopy within the past 5 years
Denominator:	Total number of asymptomatic individuals aged 50-74
Data Sources:	Canadian Community Health Survey
Measurement	2008 (CCHS 2008)
Timeframe:	
Survey variables	<ul> <li>Have you ever had an FOBT test? When was the last time? Why did you have it?</li> </ul>
	<ul> <li>Have you ever had colonoscopy or sigmoidoscopy? When was the last time? Why did you have it?</li> </ul>
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/ rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	1. Fecal Occult Blood Test (FOBT) is used as an inclusive term to
	include both guaiac tests (gFOBT) and fecal immunochemical tests (FIT).
	2. Since the survey data does not distinguish between the time
	interval for colonoscopy and sigmoidoscopy, the 5-year time
	frame was used for both modalities.
	3. CCHS data are based on a representative sample which is then extrapolated to the overall population.



#### **Breast Cancer Screening—Asymptomatic**

Definition:	Percentage of asymptomatic females aged 50-69 who reported
	receiving a mammogram within the past 2 years
	Respondents who indicated going for a mammogram for any of the
	following reasons:
	Family history; Routine screen/check-up; Age; HRT
	And not for any of the following reasons:
	• Lump; Breast problem; Follow-up to breast cancer treatment; Other
Numerator:	Asymptomatic females aged 50-69 who indicated going for a
	mammogram within the past 2 years
Denominator:	Total number of asymptomatic females aged 50-69
Data Source:	Canadian Community Health Survey
Measurement	2008 (CCHS 2008)
Timeframe:	
CCHS Variables	Ever had a mammogram
	When was the last time?
	Why did you have it?
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	1. CCHS data are based on a representative sample which is then
	extrapolated to the overall population.

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Definition:	Percentage of women aged 18-69 who reported having had a
	Papanicolaou (PAP) smear in the past 3 years
Numerator:	Number of women (18-69) who reported having a PAP smear test in
	the past 3 years
Denominator:	Total number of women aged 18-69
Exclusions:	Women who had a hysterectomy
Data Source:	Canadian Community Health Survey
Measurement	2008 (CCHS 2008)
Timeframe:	
Survey variables	Have you ever had a PAP smear test?
	When was the last time?
	Have you had a hysterectomy?
Stratification	Large metropolitan areas (top 20 CMAs and 29 CMA), core cities
Variables:	(Montreal, Ottawa, Toronto, Vancouver), greater metropolitan areas
	(Montreal, Ottawa, Toronto, Vancouver), urban PEI, other urban/rural,
	province/territory
Provinces/Territories/	All
Large Metropolitan	
Areas with Data	
Available:	
Notes:	1. CCHS data are based on a representative sample which is then
	extrapolated to the overall population.