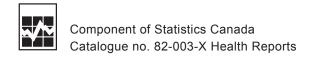
Screen time among Canadian adults: a profile

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June, 2008





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Substantial increases in the prevalence of obesity over the past 25 years underscore the importance of identifying and understanding behaviour correlates of obesity. A recent study of adults based on data from the 2007 Canadian Community Health Survey (CCHS) found evidence that screen time (time spent viewing television and using computers) was positively associated with obesity, inactive leisure time and a poor diet.¹ In that study, associations between screen time and obesity were independent of the effects of leisure-time physical activity and diet. Smaller-scale surveys, often based on specific sub-groups and occupations,² have yielded similar results.

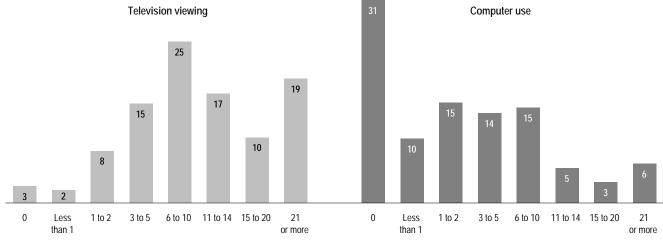
These findings highlight the importance of considering screen time as a distinct construct in the development of interventions to reduce obesity. An important first step is to gain a better understanding of the characteristics of people who report the most screen time.

Using data from the 2007 CCHS, this article profiles Canadian adults who, according to their self-reports, were frequent television viewers and leisure-time computer users. Frequent television viewing was defined as 15 or more hours per week, and frequent computer use as 11 or more hours per week. Trends in television viewing are examined with data from Statistics Canada's General Social Survey.³

Frequent television viewing more common

In 2007, a substantial proportion of Canadian adults were frequent television viewers (Figure 1). Close

Figure 1
Percentage distribution of hours per week viewing television and using computers, household population aged 20 years or older, Canada, 2007



Hours per week

Source: 2007 Canadian Community Health Survey.

to three in 10 (29%) reported that they averaged 15 or more hours per week (over 2 hours per day) watching television, and 19% reported 21 or more hours per week (an average of at least 3 hours per day).

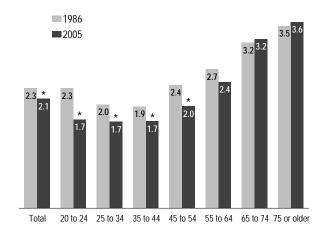
Frequent leisure-time computer use was less common. Approximately 15% of adults averaged 11 or more hours per week. Only 6% reported 21 or more hours per week, and close to one-third (31%) reported no leisure-time computer use.

One adult in 20 (5%) was both a frequent television viewer and a frequent computer user. The correlation between time spent watching television and using the computer was not significant (correlation coefficient=0.01).

Less television time

Estimates from Statistics Canada's General Social Survey³ indicate small declines in time spent watching television since the mid-1980s: from an average of 2.3 hours per day in 1986 to 2.1 hours per day in 2005 (Figure 2). Men's average daily viewing fell from 2.6 to 2.3 hours, a somewhat

Figure 2
Mean hours per day viewing television, by age group, household population aged 20 years or older, Canada excluding territories, 1986 and 2005



 ^{*} significantly lower than estimate for 1986
 Sources: 1986 and 2005 General Social Survey.

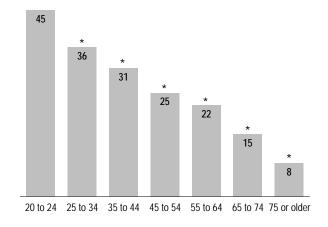
greater decline than for women, among whom viewing time fell from 2.1 to 2.0 hours (data not shown).

The largest drop in television viewing time—more than half an hour per day—was among 20- to 24-year-olds (Figure 2). Declines were more modest among people aged 25 to 54 years. And among those aged 55 years or older, changes since the mid-1980s were not significant.

The downturn in television viewing parallelled the introduction and rapid proliferation of home computers. By 2006, 75% of Canadian households had a home computer, up from 40% in 1997. During the same period, home access to the Internet increased from 17% to 68% of households.⁴

Data from the 2007 CCHS suggest that among younger age groups computer use may be replacing television as the screen time activity of choice (Figure 3). Close to half (45%) of all the screen hours reported by 20- to 24-year-olds were spent on a computer rather than watching television. Even middle-aged adults (45 to 54 years) spent one-quarter of their screen time using a computer.

Figure 3
Percentage of total weekly screen-time hours spent using computers, by age group, household population aged 20 years or older, Canada, 2007



^{*} significantly lower than estimate for previous category (p < 0.05) Source: 2007 Canadian Community Health Survey.

Among seniors, television viewing remained, by far, the preferred screen time activity.

Overall, men devoted 29% of their total screen time to computers, compared with 26% among women (data not shown).

Frequent television viewers

The likelihood of being a frequent television viewer rose steadily with age from 20% at ages 20 to 24 years to 52% at age 75 years or older (Table 1). Compared with those who were married, nevermarried individuals were somewhat more likely to be frequent television viewers.

Negative associations with socio-economic status were evident. Close to half (47%) of people with less than secondary graduation were frequent television viewers, compared with 24% of postsecondary graduates. As well, 39% of people in the lowest household income quintile were frequent viewers, compared with 22% of those in the highest income quintile.

Residents of highly populated urban areas (500,000 or more) were somewhat less likely to be frequent television viewers (26%) than were people in rural areas (31%). However, the figure was slightly higher (35%) among those in areas with populations of 30,000 to under 100,000. Only 19% of recent immigrants were frequent viewers, compared with 30% of the Canadian-born.

Among people of working age, employment status was strongly associated with television viewing. Only 21% of full-time workers were frequent viewers, compared with 37% of those who were not employed.

When examined in a multivariate model, these associations between socio-demographic characteristics and frequent television viewing generally persisted (Table 1).

While men and women were equally likely to be frequent television viewers, differences were evident for certain sub-populations (Appendix Table A). Notably, among people of working age who were not employed, women were less likely than men to be frequent television viewers: 34% versus 45%.

Table 1

Prevalence of and adjusted odds ratios for viewing television 15 or more hours per week, by selected characteristics, household population aged 20 years or older, Canada, 2007

	View television 15 or more hours per week				
	%	95% confidence interval	Adjusted odds ratio	95% confidence interval	
Total	29.2	28.6 to 29.8			
Sex Male Female [†]	29.5 28.9	28.6 to 30.3 28.1 to 29.7	1.1* 1.0	1.1 to 1.2	
Age group 20 to 24 25 to 34 35 to 44 45 to 54 [†] 55 to 64 65 to 74 75 or older	20.0* 22.4* 21.5* 26.1 36.1* 46.9* 52.1*	18.1 to 22.0 21.0 to 23.8 20.3 to 22.7 24.8 to 27.4 34.6 to 37.5 45.1 to 48.7 50.4 to 53.9	0.6* 0.8* 0.8* 1.0 1.6* 2.1*	0.7 to 0.9 0.7 to 0.9 1.4 to 1.7 1.9 to 2.4	
Marital status (aged 25 to 54 years) Married/Common-law¹ Divorced/Separated/Widowed Never married	22.3 24.6 26.9*	21.4 to 23.2 22.4 to 26.9 25.4 to 28.5	1.0 1.0 1.1*		
Education Less than secondary graduation Secondary graduation Some postsecondary Postsecondary graduation [†]	47.4* 33.8* 30.6* 23.6	45.9 to 48.8 32.2 to 35.3 28.1 to 33.1 22.9 to 24.4	1.8* 1.4* 1.3* 1.0	1.3 to 1.5	
Household income quintile 1 (lowest) 2 3 [†] 4 5 (highest)	39.2* 31.5* 28.1 25.1* 22.1*	37.7 to 40.7 30.1 to 32.9 26.7 to 29.4 23.8 to 26.4 20.8 to 23.4	1.4* 1.1 1.0 0.9* 0.8*	1.0 to 1.2 0.8 to 1.0	
Urban/Rural status Rural¹ Urban: population less than 30,000 Urban: population 30,000 to 99,999 Urban: population 100,000 to 499,999 Urban: population 500,000 or more	31.0 32.2 35.2* 32.0 26.1*	29.9 to 32.1 30.7 to 33.7 33.2 to 37.2 30.7 to 33.3 25.1 to 27.1	1.0 1.1 1.2* 1.1* 0.9*	1.1 to 1.3 1.0 to 1.2	
Immigrant status					
Immigrant: 0 to 9 years in Canada Immigrant: 10 to 19 years	18.9*	16.1 to 21.7	0.7*		
in Canada Immigrant: 20 or more years in Canada Canadian-born [†]	24.4* 31.5 30.1	21.4 to 27.4 29.6 to 33.4 29.4 to 30.8	0.9 0.8* 1.0	0.7 to 1.1 0.8 to 0.9	
Employment status (aged 25 to 54 years) Employment full-time Employment part-time Not employed [†]	20.8* 24.4* 37.4	20.0 to 21.6 21.8 to 27.0 35.2 to 39.5	0.5* 0.6* 1.0		

ence category
ficantly different from estimate for reference category (p < 0.05)
applicable
The odds ratios for employment status are based on a model including all varia
in the table for the population aged 25 to 54 years. All other odds ratios are b
on a model for the population aged 20 years or older and exclude employ
status

The data

The data are from the 2007 Canadian Community Health Survey (CCHS), which covers the household population aged 12 years or older. Residents of Indian reserves, institutions and some remote areas; full-time members of the Canadian Forces; and all residents (military and civilian) of Canadian Forces bases were excluded. Interviews were conducted from January through December, 2007. The overall response rate was 78%, yielding a sample of 65,946 respondents. More information about the CCHS is available in a published report⁵ and on Statistics Canada's Web site (www.statcan.ca).

This study was based on the population aged 20 years or older and represents 57,367 respondents who answered the question on television viewing, and 57,617 respondents who answered the question on leisure-time computer use.

All estimates were weighted to be representative of the household population aged 20 years or older in 2007. Cross-tabulations and logistic regression analysis were used to study associations between socio-demographic characteristics and self-reported screen time. To account for the survey design effect, standard errors, coefficients of variation and 95% confidence intervals were estimated using the bootstrap technique. $^{6.7}$ Differences between estimates were tested for statistical significance, which was established at p < 0.05.

Screen time was assessed by asking CCHS respondents the number of hours in a typical week over the past three months they spent watching television (including videos) and using a computer (including playing computer games and using the Internet). Respondents were instructed to report leisure-time hours only and to exclude time spent on these activities at work or school. For each behaviour, respondents reported their weekly hours in one of eight categories: none, less than 1 hour, 1 to 2 hours, 3 to 5 hours, 6 to 10 hours, 11 to 14 hours, 15 to 20 hours, or more than 20 hours. No guidelines have been proposed for adults, but the Canadian Paediatric Society recommends a maximum of two hours of television per day for children.⁸ Among adults, a variety of cut-points have been used in the literature to define frequent viewing. For this analysis, those who reported 15 or more hours per week were defined as frequent television viewers, and those who reported 11 or more hours of leisure-time computer use were defined as frequent computer users. To calculate the proportion of total screen time devoted to computers, continuous measures were derived for television viewing and computer use by assigning the midpoint of each response category (0, 0.5, 1.5, 4, 8, 12.5, 17.5, or 25 hours for the highest category).

Based on their highest level of education, respondents aged 25 years or older were grouped into four categories: postsecondary graduation, some postsecondary, secondary graduation, and less than secondary graduation. The same categories were used for those aged 20 to 24 years, but for these respondents, education was based on the highest level in the household.

Household income groups were derived by calculating the ratio between the total household income from all sources in the previous 12 months and Statistics Canada's low-income cutoff (LICO) specific to the number of people in the household, the size of the community, and the survey year. These adjusted income ratios were grouped into quintiles (five groups, each containing one-fifth of Canadians).

Trends in television viewing are from the General Social Survey (GSS) (1986 and 2005), which used a one-day time use diary to collect information on time spent on a wide variety of activities.³

CCHS estimates of screen time are based on self-reported data, which are subject to social desirability and recall biases. Single-item measures for the assessment of sedentary behaviours lack content validity and likely yield only crude estimates. Comparisons with GSS data suggest that television viewing time is underestimated in the CCHS; according to 2005 data from the GSS, the prevalence of frequent television viewing (15 or more hours per week) was 39%, substantially above the estimate of 29% from the 2007 CCHS.

Characteristics of frequent computer users

Men were more likely than women to report frequent leisure-time computer use (17% versus 12%) (Table 2). Frequent computer use fell with age from 30% among 20- to 24-year-olds to 6% among seniors aged 75 years or older. Frequent

computer use was much more common among people who were never married (24%) than among those who were married (13%).

Only 7% of people with less than secondary graduation were frequent computer users, compared with 17% of postsecondary graduates. On the other hand, proportions were similar across all household income levels.

Table 2

Prevalence of and adjusted odds ratios for using computers 11 or more hours per week, by selected characteristics, household population aged 20 years or older, Canada, 2007

	Use computers 11 or more hours per week					
	%	95% confidence interval	Adjusted odds ratio	95% confidence interval		
Total	14.8	14.3 to 15.3				
Sex Male Female [†]	17.4* 12.3	16.7 to 18.1 11.7 to 12.9	1.5* 1.0	1.4 to 1.6		
Age group 20 to 24 25 to 34 35 to 44 45 to 54 [†] 55 to 64 65 to 74 75 or older	29.9* 21.1* 13.8* 11.3 10.6 11.2 5.9*	27.6 to 32.3 19.8 to 22.4 12.8 to 14.8 10.3 to 12.3 9.7 to 11.5 10.2 to 12.3 5.1 to 6.8	2.1* 1.7* 1.1 1.0 1.0 1.3* 0.7*	1.5 to 1.9 1.0 to 1.3 0.9 to 1.2 1.1 to 1.5		
Marital status (aged 25 to 54 years) Married/Common-law [†] Divorced/Separated/Widowed Never married	12.9 14.1 23.9*	12.2 to 13.6 12.3 to 15.9 22.2 to 25.6	1.0 1.1* 1.7*			
Education Less than secondary graduation Secondary graduation Some postsecondary Postsecondary graduation ¹	6.8* 11.7* 18.1 17.1	6.1 to 7.5 10.6 to 12.8 16.3 to 19.9 16.4 to 17.7	0.5* 0.7* 1.0 1.0			
Household income quintile 1 (lowest) 2 3 ¹ 4 5 (highest)	15.7 15.3 14.0 15.9 14.1	14.6 to 16.9 14.0 to 16.5 13.0 to 15.1 14.7 to 17.0 12.9 to 15.3	1.2* 1.1 1.0 1.1 1.0	1.0 to 1.3 1.0 to 1.3 1.0 to 1.3 0.9 to 1.2		
Urban/Rural status Rural¹ Urban: population less than 30,000 Urban: population 30,000 to 99,999 Urban: population 100,000 to 499,999 Urban: population 500,000 or more	10.1 12.4* 15.0* 15.7* 16.6*	9.3 to 10.8 11.5 to 13.3 13.8 to 16.2 14.8 to 16.7 15.8 to 17.4	1.0 1.2* 1.4* 1.4* 1.4*	1.2 to 1.6 1.3 to 1.6		
Immigrant status Immigrant: 0 to 9 years in Canada Immigrant: 10 to 19 years	27.7*	24.9 to 30.5	2.0* 1.5*			
in Canada Immigrant: 20 or more years in Canada Canadian-born [†]	21.1* 10.5* 14.1	9.3 to 11.8 13.6 to 14.6	0.9 1.0	1.2 to 1.8 0.8 to 1.0		
Employment status (aged 25 to 54 years) Employment full-time Employment part-time Not employed [†]	13.8* 16.6* 22.5	13.1 to 14.5 14.1 to 19.1 20.5 to 24.4	0.5* 0.7* 1.0			

Residents of urban areas were more likely to be frequent computer users than were those in rural areas. The percentages ranged from 10% among rural residents to 17% among residents of urban areas with a population of 500,000 or more.

Recent immigrants were far more likely than those who were Canadian-born to be frequent computer users (28% versus 14%).

Among the working-age population, those who were not employed were appreciably more likely to be high leisure-time computer users (23%) than were full-time workers (14%).

When examined in a multivariate model, these associations between socio-demographic characteristics and frequent leisure-time computer use generally persisted.

Regional differences

Across the provinces, the proportion of adults who were frequent television viewers varied from the national level (29%). Frequent viewing was somewhat higher in New Brunswick (32%) and Quebec (31%) and somewhat lower in Alberta (26%) and British Columbia (27%) (Appendix Table B). As well, 44% of Nunavut residents were frequent television viewers.

Compared with the proportion for Canada (15%), high leisure-time computer use was slightly more common in Ontario (16%), British Columbia (18%) and Nunavut (20%,) and slightly less common in Newfoundland and Labrador (11%), Quebec (12%), Manitoba (13%) and Saskatchewan (12%) (Appendix Table C).

A major strength of the CCHS is its large sample size. As a result, it was possible to produce estimates of frequent television viewing and computer use for health regions (Appendix Tables B and C).

different from estimate for reference category (p < 0.05)

e table for the population aged 25 to 54 years. All other odds ratios are by model for the population aged 20 years or older and exclude employ

Conclusion

In 2007, 29% of Canadian adults were classified as frequent television viewers, and 15% as frequent leisure-time computer users. Differences in sociodemographic characteristics were apparent, often in opposite directions for the two screen-time activities. Younger ages and higher levels of education were negatively associated with frequent television viewing, but positively associated with frequent computer use. Recent immigrants were less likely than people born in Canada to be frequent television viewers, but more likely to be frequent computer users. Among the working-age population, those

employed full-time were less likely to be frequent viewers of television or frequent leisure-time computer users than were people who were not employed.

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Table A

Percentage reporting frequent screen time, by sex and selected characteristics, household population aged 20 years or older, Canada, 2007

	View television 15 or more hours per week			mputers more er week
	Men	Women	Men	Women
		%		%
Total	29.5	28.9	17.4	12.3 [‡]
Age group 20 to 24 25 to 34 35 to 44 45 to 54 [†] 55 to 64 65 to 74 75 or older	19.8* 23.4* 24.0 27.4 36.6* 44.6* 50.2*	20.3* 21.4* 19.1*‡ 24.8 35.5* 49.1*‡ 53.4*	33.4* 25.3* 16.0* 12.7 11.5 14.0 9.1*	26.4*‡ 16.8*‡ 11.7‡ 9.9‡ 9.8‡ 8.7‡ 3.8*‡
Marital status (age 25 to 54 years) Married/Common-law¹ Divorced/Separated/Widowed Never married	23.5 28.0 28.7*	21.0 [‡] 22.5 [‡] 24.7 ^{*‡}	14.9 15.7 27.3*	10.9 [‡] 13.1 19.6* [‡]
Education Less than secondary graduation Secondary graduation Some postsecondary Postsecondary graduation [†]	45.4* 33.6* 29.9* 25.1	49.2* [‡] 33.9* 31.2* 22.2 [‡]	7.3* 14.0* 19.3 20.3	6.3* 9.8*‡ 17.0 13.9‡
Household income quintile 1 (lowest) 2 3 ¹ 4 5 (highest)	40.3* 31.4 29.3 26.4 24.1*	38.6* 31.5* 26.8 23.7 [‡] 19.4*‡	18.1 18.2 16.5 19.0 16.3	14.2 [‡] 12.6 [‡] 11.5 [‡] 12.3 [‡] 11.3 [‡]
Urban/Rural status Rural' Urban: population less than 30,000 Urban: population 30,000 to 99,999 Urban: population 100,000 to 499,999 Urban: population 500,000 or more	31.1 33.2 34.2 31.5 26.8*	30.8 31.3 36.1* 32.5 25.5*	10.8 12.7 16.9* 18.2* 20.6*	9.3 12.1* 13.3*‡ 13.3*‡ 12.9*‡
Immigrant status Immigrant: 0 to 9 years in Canada Immigrant: 10 to 19 years in Canada Immigrant: 20 or more years in Canada Canadian-born [†]	15.3* 25.1 32.0 30.6	22.0*‡ 23.8* 31.1 29.6	30.3* 29.1* 13.3* 16.4	25.3* 13.8 [‡] 7.9* [‡] 11.9 [‡]
Employment status (age 25 to 54 year Employment full-time Employment part-time Not employed [†]	rs) 22.6* 31.2* 44.7	18.4*‡ 22.7*‡ 33.9‡	16.4* 30.3 27.6	10.5*‡ 13.1*‡ 20.0‡

reference category
 significantly different from estimate for reference category (p < 0.05)
 significantly different from estimate for men (p < 0.05)
 not applicable
 Source: 2007 Canadian Community Health Survey.

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Table B

Percentage viewing television 15 or more hours per week, by province/territory and health region, household population aged 20 years or older, Canada, 2007

			95%	Significantly higher or lower (p < 0.05) than:	
	Region code	%	confidence interval	Canada	Province or Territory
Canada		29.2	28.6 to 29.8		
Newfoundland and Labrador Eastern Regional Integrated Health Authority Central Regional Integrated Health Authority Western Regional Integrated Health Authority Labrador-Grenfell Regional Integrated Health Authority	10 1011 1012 1013 1014	31.6 30.2 37.0 31.4 28.9	28.6 to 34.6 26.0 to 34.5 32.5 to 41.6 23.4 to 39.4 22.8 to 34.9	Same Same Higher Same Same	 Same Higher Same Same
Prince Edward Island Kings County Queens County Prince County	11 1101 1102 1103	29.0 41.2 24.3 31.5	25.9 to 32.1 28.9 to 53.5 20.7 to 28.0 26.5 to 36.5	Same Same Lower Same	 Higher Lower Same
Nova Scotia Zone 1 Zone 2 Zone 3 Zone 4 Zone 5 Zone 6	12 1201 1202 1203 1204 1205 1206	31.3 37.0 30.5 32.9 36.3 42.3 24.7	28.8 to 33.7 31.2 to 42.8 23.1 to 37.9 27.4 to 38.5 29.6 to 43.1 35.6 to 48.9 20.4 to 29.0	Same Higher Same Same Higher Higher Lower	 Higher Same Same Higher Lower
New Brunswick Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	13 1301 1302 1303 1304 1305 1306 1307	32.4 35.3 25.4 31.5 33.7 48.3 32.9 39.2	30.1 to 34.8 30.2 to 40.4 20.2 to 30.6 26.3 to 36.7 27.2 to 40.2 40.5 to 56.0 28.1 to 37.6 32.7 to 45.7	Higher Higher Same Same Higher Same Higher	Same Lower Same Same Higher Same Higher
Quebec Région du Bas-Saint-Laurent Région du Saguenay - Lac-Saint-Jean Région de la Capitale Nationale Région de la Mauricie et du Centre-du-Québec Région de l'Estrie Région de Montréal Région de l'Outaouais Région de l'Abitibi-Témiscamingue Région de la Côte-Nord Région de la Gaspésie - Îles-de-la-Madeleine Région de la Chaudière-Appalaches Région de Laval Région de Lanaudière Région des Laurentides Région de la Montérégie	24 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416	31.1 29.2 38.1 36.1 39.1 37.3 29.0 33.1 38.4 37.1 25.0 36.8 24.3 24.9 28.6 32.4 28.3	29.8 to 32.4 25.3 to 33.2 31.7 to 44.5 31.6 to 40.5 32.6 to 45.6 32.0 to 42.6 25.9 to 32.2 28.0 to 38.1 33.1 to 43.8 30.0 to 44.2 19.9 to 30.1 31.2 to 42.4 20.3 to 28.3 21.1 to 28.7 24.3 to 37.5 24.4 to 37.5	Higher Same Higher Higher Higher Same Same Higher Higher Same Higher Same Higher Lower Lower Same Same	Same Higher Higher Higher Same Same Higher Same Lower Lower Lower Same Same
Ontario District of Algoma Health Unit Brant County Health Unit Durham Regional Health Unit Elgin-St Thomas Health Unit Grey Bruce Health Unit Haldimand-Norfolk Health Unit Halliburton, Kawartha, Pine Ridge District Health Unit Halton Regional Health Unit City of Hamilton Health Unit Hastings and Prince Edward Counties Health Unit Huron County Health Unit Chatham-Kent Health Unit	35 3526 3527 3530 3531 3533 3534 3535 3536 3537 3538 3539 3540	29.1 36.3 39.3 30.6 31.8 36.7 34.3 38.5 24.8 30.4 43.9 37.4 38.6	28.1 to 30.1 31.1 to 41.5 33.0 to 45.5 25.7 to 35.5 23.6 to 40.0 30.7 to 42.7 27.1 to 41.6 32.0 to 45.1 20.2 to 29.3 25.9 to 34.8 36.2 to 51.5 31.0 to 43.8 31.3 to 46.0	Same Higher Higher Same Higher Same Higher Same Higher Higher Higher Higher	Higher Higher Same Same Higher Same Higher Same Higher Higher Higher Higher

Table B Percentage viewing television 15 or more hours per week, by province/territory and health region, household population aged 20 years or older, Canada, 2007 continued

	95%			antly higher p < 0.05) than:	
	Region code	%	confidence interval	Canada	Province or Territory
Warner French and Language Addition to Health Link	2541	22.2	20.04-27.0	C	C
Kingston, Frontenac and Lennox and Addington Health Unit Lambton Health Unit	t 3541 3542	33.3 40.4	28.8 to 37.9 34.1 to 46.7	Same Higher	Same Higher
Leeds, Grenville and Lanark District Health Unit	3542	36.5	31.6 to 41.3	Higher	Higher
Middlesex-London Health Unit	3544	30.6	26.0 to 35.2	Same	Same
Niagara Regional Area Health Unit	3546	34.3	29.1 to 39.5	Higher	Higher
North Bay Parry Sound District Health Unit	3547	35.1	30.0 to 40.2	Higher	Higher
Northwestern Health Unit	3549	35.3	26.4 to 44.2	Same	Same
City of Ottawa Health Unit	3551	23.0	19.4 to 26.7	Lower	Lower
Oxford County Health Unit	3552	30.7	23.9 to 37.6	Same	Same
Peel Regional Health Unit	3553	24.4	20.7 to 28.1	Lower	Lower
Perth District Health Unit	3554	26.9	20.7 to 33.2	Same	Same
Peterborough County-City Health Unit	3555	35.5	30.0 to 41.1	Higher	Higher
Porcupine Health Unit	3556 3557	35.7 41.5	28.2 to 43.1	Same	Same Higher
Renfrew County and District Health Unit Eastern Ontario Health Unit	3558	37.5	34.4 to 48.6 31.5 to 43.6	Higher Higher	Higher
Simcoe Muskoka District Health Unit	3560	36.3	32.2 to 40.3	Higher	Higher
Sudbury and District Health Unit	3561	30.8	26.0 to 35.6	Same	Same
Thunder Bay District Health Unit	3562	33.6	27.9 to 39.3	Same	Same
Timiskaming Health Unit	3563	33.2	26.1 to 40.2	Same	Same
Waterloo Health Unit	3565	30.6	25.6 to 35.7	Same	Same
Wellington-Dufferin-Guelph Health Unit	3566	25.6	21.7 to 29.5	Same	Same
Windsor-Essex County Health Unit	3568	32.0	27.5 to 36.4	Same	Same
York Regional Health Unit	3570	26.9	23.1 to 30.8	Same	Same
City of Toronto Health Unit	3595	24.0	21.4 to 26.5	Lower	Lower
Manitoba	46	30.7	28.0 to 33.4	Same	
Winnipeg Regional Health Authority	4610	33.3	29.1 to 37.4	Same	Higher
Brandon Regional Health Authority	4615	36.5	29.3 to 43.7	Higher	Same
North Eastman Regional Health Authority	4620	27.0	18.8 to 35.1	Same	Same
South Eastman Regional Health Authority	4625	23.0 31.2	16.9 to 29.1	Lower	Lower
Interlake Regional Health Authority Central Regional Health Authority	4630 4640	19.6	25.4 to 37.0 14.8 to 24.5	Same Lower	Same Lower
Assiniboine Regional Health Authority	4645	27.3	21.5 to 33.1	Same	Same
Parkland Regional Health Authority	4660	22.1	16.2 to 28.1	Lower	Lower
Norman Regional Health Authority	4670	38.8	29.2 to 48.5	Higher	Same
Burntwood/Churchill	4685	28.7	21.5 to 35.9	Same	Same
Saskatchewan	47	29.8	27.7 to 32.0	Same	
Sun Country Regional Health Authority	4701	32.9	25.6 to 40.2	Same	Same
Five Hills Regional Health Authority	4702	30.6	23.7 to 37.4	Same	Same
Cypress Regional Health Authority	4703	38.9	28.9 to 48.9	Same	Same
Regina Qu'Appelle Regional Health Authority	4704	31.6	27.1 to 36.0	Same	Same
Sunrise Regional Health Authority	4705	29.5	23.1 to 35.9	Same	Same
Saskatoon Regional Health Authority	4706	25.2	20.7 to 29.7	Same	Lower
Heartland Regional Health Authority	4707	25.3	17.4 to 33.2 20.7 to 33.8	Same	Same
Kelsey Trail Regional Health Authority Prince Albert Parkland Regional Health Authority	4708 4709	27.2 38.4	30.0 to 46.8	Same Higher	Same Higher
Prairie North Regional Health Authority	4709	30.3	24.0 to 36.6	Same	Same
Mamawetan/Keewatin/Athabasca	4714	35.9	25.2 to 46.5	Same	Same
Alberta	48	25.7	23.7 to 27.6	Lower	
Chinook Regional Health Authority	4821	26.2	20.0 to 32.4	Same	Same
Palliser Health Region	4822	25.9	21.0 to 32.4	Same	Same
Calgary Health Region	4823	26.2	22.4 to 29.9	Same	Same
David Thompson Regional Health Authority	4824	26.7	22.3 to 31.0	Same	Same
East Central Health	4825	25.3	21.2 to 29.4	Same	Same
Capital Health	4826	24.8	20.9 to 28.7	Lower	Same
Aspen Regional Health Authority	4827	27.3	21.7 to 32.8	Same	Same
Peace Country Health	4828	25.9	20.5 to 31.3	Same	Same
Northern Lights Health Region	4829	20.1 ^E	12.0 to 28.2	Lower	Same



Table B

Percentage viewing television 15 or more hours per week, by province/territory and health region, household population aged 20 years or older, Canada, 2007 continued

	95%			Significantly higher or lower (p < 0.05) than:	
	Region code	%	confidence interval	Canada	Province or Territory
British Columbia	59	26.7	25.3 to 28.1	Lower	
East Kootenay Health Service Delivery Area	5911	31.7	25.5 to 37.9	Same	Same
Kootenay-Boundary Health Service Delivery Area	5912	28.0	20.6 to 35.4	Same	Same
Okanagan Health Service Delivery Area	5913	31.5	26.7 to 36.3	Same	Higher
Thompson/Cariboo Health Service Delivery Area	5914	34.4	28.9 to 39.9	Same	Higher
Fraser East Health Service Delivery Area	5921	25.4	21.1 to 29.7	Same	Same
Fraser North Health Service Delivery Area	5922	19.7	15.8 to 23.6	Lower	Lower
Fraser South Health Service Delivery Area	5923	26.2	21.9 to 30.5	Same	Same
Richmond Health Service Delivery Area	5931	27.8	22.2 to 33.5	Same	Same
Vancouver Health Service Delivery Area	5932	23.2	19.0 to 27.4	Lower	Same
North Shore/Coast Garibaldi Health Service Delivery Area	5933	21.0	15.5 to 26.5	Lower	Lower
South Vancouver Island Health Service Delivery Area	5941	31.3	26.4 to 36.2	Same	Same
Central Vancouver Island Health Service Delivery Area	5942	32.0	26.2 to 37.8	Same	Same
North Vancouver Island Health Service Delivery Area	5943	34.8	28.5 to 41.0	Same	Higher
Northwest Health Service Delivery Area	5951 5952	34.7 28.2	25.9 to 43.5 22.4 to 34.0	Same Same	Same
Northern Interior Health Service Delivery Area	5952 5953	20.2	15.0 to 27.3	Lower	Same Same
Northeast Health Service Delivery Area	3933	21.2	13.0 (0 27.3	Lowei	Sallie
Yukon Territory	6001	35.4	28.5 to 42.3	Same	
Northwest Territories	6101	33.2	27.2 to 39.3	Same	
Nunavut - 10 largest communities ¹	6201	43.8	34.2 to 53.4	Higher	

not applicable

E coefficient of variation between 16.6% and 33.3% (interpret with caution)
 The Canadian Community Health Survey is administered in the 10 largest communities in Nunavut, using an alternative methodology that accommodates some of the operational difficulties inherent to remote locales. The 10 largest communities are Iqaluit, Cambridge Bay, Baker Lake, Arviat, Rankin Inlet, Kugluktuk, Pond Inlet, Cape Dorset, Pangnirtung, Igloolik.
 Source: 2007 Canadian Community Health Survey.

Table C Percentage using computers 11 or more hours per week, by province/territory and health region, household population aged 20 years or older, Canada, 2007

			95%		antly higher o < 0.05) than:
	Region code	%	confidence interval	Canada	Province or Territory
Canada		14.8	14.3 to 15.3		
Newfoundland and Labrador Eastern Regional Integrated Health Authority Central Regional Integrated Health Authority Western Regional Integrated Health Authority Labrador-Grenfell Regional Integrated Health Authority	10 1011 1012 1013 1014	11.0 11.5 9.1 ^E 9.6 15.1	9.0 to 13.0 8.4 to 14.7 5.5 to 12.6 6.5 to 12.7 10.6 to 19.5	Lower Lower Lower Lower Same	Same Same Same Same
Prince Edward Island Kings County Queens County Prince County	11 1101 1102 1103	13.0 21.7 ^E 11.6 11.5 ^E	10.7 to 15.3 10.9 to 32.5 9.0 to 14.1 7.1 to 15.8	Same Same Lower Same	Same Same Same
Nova Scotia Zone 1 Zone 2 Zone 3 Zone 4 Zone 5 Zone 6	12 1201 1202 1203 1204 1205 1206	14.7 11.8 ^E 13.4 13.3 ^E 15.7 ^E 13.0 16.6	12.8 to 16.7 7.5 to 16.1 9.5 to 17.3 8.9 to 17.7 9.8 to 21.7 9.4 to 16.6 13.0 to 20.3	Same Same Same Same Same Same Same	Same Same Same Same Same Same Same
New Brunswick Region 1 Region 2 Region 3 Region 4 Region 5 Region 6 Region 7	13 1301 1302 1303 1304 1305 1306 1307	13.0 15.4 14.9 12.1 ^E 8.4 ^E 11.1 ^E 9.9 ^E	11.1 to 14.8 11.1 to 19.6 10.3 to 19.5 8.0 to 16.1 4.9 to 11.9 5.3 to 16.8 6.0 to 13.8 6.1 to 15.6	Same Same Same Same Lower Same Lower Same	Same Same Same Lower Same Same Same
Quebec Région du Bas-Saint-Laurent Région du Saguenay - Lac-Saint-Jean Région de la Capitale Nationale Région de la Mauricie et du Centre-du-Québec Région de l'Estrie Région de Montréal Région de l'Outaouais Région de l'Abitibi-Témiscamingue Région de la Côte-Nord Région de la Gaspésie - Îles-de-la-Madeleine Région de la Chaudière-Appalaches Région de Laval Région de Lanaudière Région des Laurentides Région de la Montérégie	24 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416	11.9 4.5 ^E 11.9 15.0 12.1 9.0 ^E 17.5 10.9 6.7 ^E 6.3 ^E 7.8 ^E 7.1 ^E 6.2 ^E 10.9 ^E 8.6 ^E 9.7	11.0 to 12.8 2.6 to 6.3 8.7 to 15.2 11.4 to 18.7 8.2 to 16.0 6.0 to 12.1 15.2 to 19.9 7.8 to 14.0 4.2 to 8.4 4.5 to 11.1 4.3 to 9.9 4.1 to 8.3 7.2 to 14.6 5.8 to 11.4 6.6 to 12.8 7.3 to 11.3	Lower Lower Same Same Same Lower Higher Lower	Lower Same Same Same Same Higher Same Lower Lower Lower Lower Lower Same Lower Same
Ontario District of Algoma Health Unit Brant County Health Unit Durham Regional Health Unit Elgin-St Thomas Health Unit Grey Bruce Health Unit Haldimand-Norfolk Health Unit Haliburton, Kawartha, Pine Ridge District Health Unit Halton Regional Health Unit City of Hamilton Health Unit Hastings and Prince Edward Counties Health Unit Huron County Health Unit Chatham-Kent Health Unit	35 3526 3527 3530 3531 3533 3534 3535 3536 3537 3538 3539 3540	16.1 17.1 14.4 18.3 15.5 16.3 10.0 ^E 13.6 17.4 14.7 17.2 ^E 11.1 ^E	15.3 to 17.0 12.9 to 21.4 10.1 to 18.6 13.8 to 22.7 10.8 to 20.2 11.6 to 21.0 5.5 to 14.5 9.9 to 17.3 13.1 to 21.8 10.7 to 18.8 11.4 to 23.1 7.1 to 15.1 7.1 to 14.7	Higher Same Same Same Same Lower Same Same Same Same Same Same Lower	Same Same Same Same Same Lower Same Same Same Same Lower Lower Lower



Table C

Percentage using computers 11 or more hours per week, by province/territory and health region, household population aged 20 years or older, Canada, 2007 continued

			OE9/		cantly higher (p < 0.05) than:
	Region code	%	95% confidence interval	Canada	Province or Territory
Kingston, Frontenac and Lennox and Addington Health Unit	3541	22.5	17.9 to 27.2	Higher	Higher
Lambton Health Unit	3542	18.6	13.6 to 23.6	Same	Same
Leeds, Grenville and Lanark District Health Unit	3543	16.3	12.2 to 20.3	Same	Same
Middlesex-London Health Unit	3544	19.1	15.1 to 23.2	Higher	Same
Niagara Regional Area Health Unit	3546	14.4	11.4 to 17.3	Same	Same
North Bay Parry Sound District Health Unit	3547 3549	15.1 ^E 13.5 ^E	8.8 to 21.4	Same	Same
Northwestern Health Unit City of Ottawa Health Unit	3549 3551	18.9	8.4 to 18.6 16.0 to 21.9	Same Higher	Same Same
Oxford County Health Unit	3552	11.1 ^E	6.5 to 15.8	Same	Lower
Peel Regional Health Unit	3553	16.8	13.9 to 19.6	Same	Same
Perth District Health Unit	3554	13.3 ^E	8.7 to 17.9	Same	Same
Peterborough County-City Health Unit	3555	10.4 ^E	6.5 to 14.3	Lower	Lower
Porcupine Health Unit	3556	14.2	10.1 to 18.4	Same	Same
Renfrew County and District Health Unit Eastern Ontario Health Unit	3557 3558	10.7 ^E 11.6	6.7 to 14.8 7.9 to 15.3	Same Same	Lower Lower
Simcoe Muskoka District Health Unit	3560	14.2	11.5 to 16.9	Same	Same
Sudbury and District Health Unit	3561	12.9	9.3 to 16.4	Same	Same
Thunder Bay District Health Unit	3562	13.1	9.7 to 16.5	Same	Same
Timiskaming Health Unit	3563	8.6 ^E	4.8 to 12.4	Lower	Lower
Waterloo Health Unit	3565	15.3	11.7 to 18.8	Same	Same
Wellington-Dufferin-Guelph Health Unit	3566	11.0 12.9	7.8 to 14.2	Lower	Lower
Windsor-Essex County Health Unit York Regional Health Unit	3568 3570	17.5	9.5 to 16.2 14.0 to 21.0	Same Same	Same Same
City of Toronto Health Unit	3595	17.2	14.8 to 19.6	Higher	Same
Manitoba	46	12.6	10.9 to 14.3	Lower	
Winnipeg Regional Health Authority	4610	14.8	12.2 to 17.5	Same	Higher
Brandon Regional Health Authority	4615	13.5 ^E	8.6 to 18.5	Same	Same
North Eastman Regional Health Authority	4620	6.6 ^E	3.0 to 10.2	Lower	Lower
South Eastman Regional Health Authority Interlake Regional Health Authority	4625 4630	6.6 ^E 11.9 ^E	3.8 to 9.5 6.1 to 17.7	Lower Same	Lower Same
Central Regional Health Authority	4640	10.1 ^E	6.1 to 14.1	Lower	Same
Assiniboine Regional Health Authority	4645	7.1 ^E	3.5 to 10.7	Lower	Lower
Parkland Regional Health Authority	4660	F			
Norman Regional Health Authority	4670	12.9 ^E	7.0 to 18.7	Same	Same
Burntwood/Churchill	4685	15.4 ^E	8.6 to 22.2	Same	Same
Saskatchewan	47	12.4	11.0 to 13.9	Lower	 Como
Sun Country Regional Health Authority Five Hills Regional Health Authority	4701 4702	13.0 ^E 12.8 ^E	7.9 to 18.0 8.5 to 17.1	Same Same	Same Same
Cypress Regional Health Authority	4703	12.5 ^E	6.6 to 18.4	Same	Same
Regina Qu'Appelle Regional Health Authority	4704	16.0	12.4 to 19.7	Same	Higher
Sunrise Regional Health Authority	4705	4.3 ^E	1.6 to 7.0	Lower	Lower
Saskatoon Regional Health Authority	4706	13.9	10.6 to 17.2	Same	Same
Heartland Regional Health Authority	4707	8.1 ^E	4.0 to 12.1	Lower	Lower
Kelsey Trail Regional Health Authority Prince Albert Parkland Regional Health Authority	4708 4709	3.7 ^E 13.3 ^E	1.3 to 6.0 7.8 to 18.8	Lower Same	Lower Same
Prairie North Regional Health Authority	4709	5.7 ^E	2.8 to 8.6	Lower	Lower
Mamawetan/Keewatin/Athabasca	4714	7.8 ^E	3.7 to 12.0	Lower	Lower
Alberta	48	15.2	13.8 to 16.7	Same	
Chinook Regional Health Authority	4821	15.6	11.5 to 19.6	Same	Same
Palliser Health Region	4822	16.6	12.6 to 20.7	Same	Same
Calgary Health Region	4823	14.8	12.4 to 17.2	Same	Same
David Thompson Regional Health Authority	4824	12.8 6.0E	9.2 to 16.4	Same	Same
East Central Health Capital Health	4825 4826	6.0 ^E 18.2	3.6 to 8.3 14.9 to 21.5	Lower Higher	Lower Higher
Aspen Regional Health Authority	4827	11.6 ^E	7.7 to 15.5	Same	Same
Peace Country Health	4828	11.4	8.3 to 14.4	Lower	Lower
Northern Lights Health Region	4829	16.8 ^E	11.1 to 22.4	Same	Same

Table C Percentage using computers 11 or more hours per week, by province/territory and health region, household population aged 20 years or older, Canada, 2007 continued

	95%				Significantly higher or lower (p < 0.05) than:	
	Region code	%	confidence interval	Canada	Province or Territory	
British Columbia East Kootenay Health Service Delivery Area Kootenay-Boundary Health Service Delivery Area Okanagan Health Service Delivery Area Thompson/Cariboo Health Service Delivery Area Fraser East Health Service Delivery Area Fraser North Health Service Delivery Area Fraser South Health Service Delivery Area Richmond Health Service Delivery Area Vancouver Health Service Delivery Area North Shore/Coast Garibaldi Health Service Delivery Area South Vancouver Island Health Service Delivery Area North Vancouver Island Health Service Delivery Area North Vancouver Island Health Service Delivery Area Northwest Health Service Delivery Area Northern Interior Health Service Delivery Area Northeast Health Service Delivery Area	59 5911 5912 5913 5914 5921 5922 5923 5931 5932 5933 5941 5942 5943 5951 5952 5953	17.6 12.8 ^E 11.0 ^E 13.0 14.4 15.2 18.0 18.7 21.7 21.9 17.9 17.7 18.7 13.5 ^E 20.5 ^E 11.9 ^E 16.3 ^E	16.2 to 19.0 6.8 to 18.8 6.9 to 15.1 10.0 to 16.1 10.5 to 18.2 10.6 to 19.9 14.5 to 21.6 14.0 to 23.5 16.6 to 26.9 17.5 to 26.4 12.3 to 23.4 13.8 to 21.7 13.5 to 23.9 7.8 to 19.2 12.5 to 28.6 8.0 to 15.9 8.4 to 24.3	Higher Same Same Same Same Same Same Higher Higher Same Same Same Same Same Same	Same Lower Same Same Same Same Same Same Same Same	
Yukon Territory	6001	14.1	10.9 to 17.4	Same	•••	
Northwest Territories	6101	16.1	11.5 to 20.6	Same	•••	
Nunavut - 10 largest communities ¹	6201	20.1	15.6 to 24.6	Higher		

Intrapplicable
 Coefficient of variation between 16.6% and 33.3% (interpret with caution)
 F coefficient of variation greater than 33.3% (too unreliable to be published)
 The Canadian Community Health Survey is administered in the 10 largest communities in Nunavut, using an alternative methodology that accommodates some of the operational difficulties inherent to remote locales. The 10 largest communities are Iqaluit, Cambridge Bay, Baker Lake, Arviat, Rankin Inlet, Kugluktuk, Pond Inlet, Cape Dorset, Pangnirtung, Igloolik.
 Source: 2007 Canadian Community Health Survey.