



## Building Healthy and Supportive Communities

# A Glance at Physical and Mental Health in Selected Areas of Waterloo Region



This is one report in a series that highlight key findings from a Statistics Canada survey of selected areas in Waterloo Region.

This report and others are available on the **Region of Waterloo Public Health** website:

[www.region.waterloo.on.ca/ph](http://www.region.waterloo.on.ca/ph)  
(Resources/Reports and Factsheets)

### INTRODUCTION

Waterloo Region has a unique balance of urban and rural areas and as such, community sizes and characteristics (i.e. population density, land use, accessibility to services) vary considerably. Individuals choose their place of residence for a number of economic or social reasons. Research suggests that individuals migrate to rural settlement areas out of a desire for more space and to escape city noise and congestion, and that proximity to their job, school or amenities is not always a major factor in selection of neighbourhood (Fernandez, Brown, Marans, & Nassauer, 2005; Mitchell, 2003).

On behalf of Region of Waterloo Public Health, Statistics Canada collected data to explore differences in community size and composition as they relate to certain aspects of health (Statistics Canada, 2007). Selected residents (n=644) were surveyed in areas of Waterloo Region chosen for varying degrees of urbanization in May 2007. In addition to asking about physical and mental health, the survey asked residents about accessing amenities, how connected they feel to their community, commuting patterns, and use of public transportation. Data collected from residents were adjusted to reflect the population size in the respective community. Results denoted by “<sup>s</sup>” are to be interpreted with caution because the sample size was not large enough to ensure precise estimates; results denoted by “--” were not suitable for release.

### ABOUT THE SELECTED AREAS OF STUDY

Geographically small urbanized rural areas (Ayr and Wellesley), larger urbanized rural areas (Elmira and New Hamburg) and two urban neighbourhoods (Fairfield and Willowdale neighbourhoods, Kitchener/Waterloo) were surveyed in this study. Table 1 illustrates the demographic characteristics of the selected areas.

**Table 1.** Demographic Characteristics of Selected Areas of Study, Waterloo Region, 2007

	Ayr and Wellesley	Elmira and New Hamburg	Fairfield and Willowdale
<b>Total population</b>	4,647	10,744	8,579
<b>Age</b>			
18-34	25% <sup>§</sup>	27%	32%
35-49	43%	32%	18%
50-64	21%	23%	22%
65 and over	12% <sup>a§</sup>	17% <sup>b§</sup>	28% <sup>a,b§</sup>
<b>Household income</b>			
Less than \$30,000	5% <sup>§</sup>	9% <sup>§</sup>	15% <sup>§</sup>
\$30,000 to \$54,000	16% <sup>§</sup>	23% <sup>§</sup>	30%
\$55,000 to \$84,000	29%	34%	30%
\$85,000 and over	50% <sup>c,d</sup>	35% <sup>c</sup>	25% <sup>d§</sup>
<b>Children in the household</b>	51% <sup>e,f</sup>	36% <sup>e</sup>	22% <sup>f§</sup>
<b>Seniors only in the household</b>	9% <sup>g§</sup>	12% <sup>h</sup>	22% <sup>g,h§</sup>
<b>Residency less than five years</b>	25% <sup>§</sup>	15% <sup>§</sup>	17%

<sup>a, b, c, ...</sup>Represent statistically significant differences between two proportions (%) at  $p < 0.10$ , e.g. two proportions with an "a" next to them are statistically different from each other

### Table 1 Highlights

- More residents of Fairfield and Willowdale neighbourhoods were age 65 years and over (28%<sup>§</sup>) and were from seniors only households (22%<sup>§</sup>) as compared to Ayr and Wellesley, and Elmira and New Hamburg, respectively.
- More residents in Ayr and Wellesley had children in the household (51%) and had an annual income of \$85,000 or more (50%), as compared to Elmira and New Hamburg, and Fairfield and Willowdale neighbourhoods, respectively.

## COMPARISON OF COMMUNITIES SURVEYED

**Table 2.** Selected Health Characteristics of Residents, Waterloo Region, 2007

	Ayr and Wellesley	Elmira and New Hamburg	Fairfield and Willowdale
<b>Self-perceived physical health</b>			
Excellent	31%	33%	19%
Very good	41%	40%	37%
Good	17% <sup>§</sup>	22%	31%
Fair or poor	11% <sup>a§</sup>	6% <sup>b§</sup>	13% <sup>a,b</sup>
<b>Self-perceived mental health</b>			
Excellent	43%	46%	41%
Very good	39% <sup>§</sup>	33%	39%
Good	14% <sup>§</sup>	17%	16% <sup>§</sup>
Fair or poor	5% <sup>§</sup>	4% <sup>§</sup>	5% <sup>§</sup>
<b>Stress levels</b>			
Not at all stressful	9% <sup>§</sup>	11% <sup>§</sup>	13% <sup>§</sup>
Not very stressful	25%	33%	30%
A bit stressful	37%	40%	36%
Quite a bit stressful	26% <sup>§</sup>	14% <sup>§</sup>	16%
Extremely stressful	3% <sup>§</sup>	--	5% <sup>§</sup>
<b>Body mass index</b>			
Normal weight	39%	48%	47%
Overweight	38%	38%	32%
Obese	23% <sup>§</sup>	15%	21%

<sup>a, b, c, ...</sup>Represent statistically significant differences between two proportions (%) at  $p < 0.10$ , e.g. two proportions with an "a" next to them are statistically different from each other

## Table 2 Highlights

- Fewer residents from Elmira and New Hamburg reported fair or poor physical health than residents from the other two study areas.

## CROSS COMPARISONS WITH MEASURES OF COMMUNITY CONNECTEDNESS

### Stress Level

- The results did not show a strong relationship between people's stress levels and either their sense of belonging or the number of family and close friends that they had within the community, contradicting research indicating that social support can positively affect health (PHAC, 2004).
- Previous research shows that in the rural communities, the privacy and pride which characterize rural culture in this area may lead people to handle difficulty themselves rather than seek help from others (Region of Waterloo Public Health, 2004).

### Self-perceived Mental and Physical Health

- The survey did not reveal a strong relationship between people's self-perceived mental health and either their sense of belonging or the number of family and close friends within the community.
- There was also not a strong relationship between people's self-perceived physical health and either their sense of belonging or the number of family and friends they had within the community.
- These findings are somewhat surprising as there is other evidence to show that social support (or lack of it) contributes to a person's physical and mental health (PHAC, 2004).

### Cross Comparisons with Measures of Commuting

The relationship between time spent in a motor vehicle and Body Mass Index was explored; Table 3 presents the findings.

**Table 3.** Typical Weekday Minutes in a Motor Vehicle and Body Mass Index, Waterloo Region Study Areas, 2007

	Body Mass Index Classification		
	Normal Weight	Overweight	Obese
<b>Weekday minutes in a motor vehicle</b>			
<i>Less than 30 minutes</i>	46%	34%	18% <sup>§</sup>
<i>30 to less than 60 minutes</i>	42%	34%	22%
<i>60 to less than 90 minutes</i>	52% <sup>§</sup>	33% <sup>§</sup>	16% <sup>§</sup>
<i>90 minutes or more</i>	39% <sup>§</sup>	46%	15% <sup>§</sup>
<i>Do not have access to a motor vehicle</i>	54% <sup>§</sup>	31% <sup>§</sup>	--

## Table 3 Highlights

- Body Mass Index did not differ significantly according to weekday minutes spent in a motor vehicle, contrasting the 2005 Waterloo Region findings indicating that those who drive more than 30 minutes a day were 1.64 times more likely to report being overweight or obese than those who drive less than 30 minutes a day (Fisher, 2005).

## SOCIAL DETERMINANTS

A wealth of evidence suggests that sociodemographic circumstances contribute to personal health behaviours. The following sociodemographic variables were measured: age, children in the household, education, gender, household income, length of residency, and seniors only household. Statistically significant relationships ( $p < 0.10$ ) are reported where found.

### Age

- The percentage of residents categorized as obese is almost double in the 35-49 age group (21%) compared to the 18-34 age group (11%).

- 25% of adults aged 35 to 49 years reported their lives to be quite a bit stressful while only 6%<sup>s</sup> of adults aged 65 and over reported similar stress levels.

### Education

- More residents with less than high school education reported fair or poor mental health (12 %<sup>s</sup>) as compared to those who completed more schooling (a range of 2% to 3%<sup>s</sup>).

### Gender

- More males categorized as overweight and obese than females (overweight: 42% versus 30%; obese: 22% versus 15%).

## IMPLICATIONS

- Many variables contribute to mental and physical health, and measuring the impacts of social support networks on health is complex. A more in-depth study involving both qualitative and quantitative measures would be required to make strong conclusions in this area.
- Lengthy commuting behaviour, especially in motor vehicles, is associated with many adverse health outcomes. Lengthy commutes may be related to an increased risk of overweight and obesity, which has implications for heart disease, high blood pressure and other chronic diseases. Commuting behaviour has implications for air quality and the health of the population. In fact, Toronto Public Health (2007) estimates that traffic pollution gives rise to about 440 premature deaths and 1,700 hospitalizations per year in Toronto.

The technical report, *Urbanization and Health within Waterloo Region: Survey Report* (Statistics Canada, 2007), can be obtained from the Region of Waterloo Public Health Resource Centre 519-883-2256 and website: [www.region.waterloo.on.ca/ph](http://www.region.waterloo.on.ca/ph) (Resources/Reports and Fact Sheets).

Additional reports in this series glance at accessing amenities, commuting, use of public transportation, community connectedness, and are also available on the website.

For questions, please contact Health Determinants, Planning and Evaluation Division, at 519-883-2004.

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