7.0 CHRONIC CONDITIONS, HEALTHY LIFESTYLES AND INJURY PREVENTION

This section presents indicators which include long term risk behaviours or conditions which have an impact upon healthy lifestyles and injury prevention.

The information presented in this section incorporates broad and local information on health behaviours and incidence rates associated with chronic conditions, healthy lifestyles and injury prevention. This section examines health risk factors including prevention and early detection of cancer (cancer screening), mental health, healthy eating, healthy body weights, physical activity, substance use and alcohol consumption, rates of injury, tobacco-free living and oral health.

It is important to recognize the inter-related nature of these factors and their resulting impact on health outcomes. For instance, healthy eating and physical activity act through healthy body weights as a significant factor in the prevention of childhood and adult obesity. Among youth, factors such as stress, depression, increased alcohol consumption, and substance use are inter-related and collectively or individually increase risk of injury and premature death.

Health is influenced by broad social determinants, such as age, gender, socio-economic status, and cultural diversity. The ability to make healthy choices, and in turn reduce health risk behaviours, can directly or indirectly contribute to more positive population health outcomes in terms of both improved quality of life and decreased economic burden on the health care system.

To achieve more favourable health outcomes a variety of population health strategies are used. Broad and local public health programming include mass media, policy development, creating environmental supports, education and awareness initiatives, and advocating for healthy public policy. More targeted approaches directed toward “at-risk” or “high-risk” individuals in multiple settings need to be developed and implemented. All of these programs and approaches should work together to encourage, establish and sustain healthy environments that would support healthy lifestyle choices.

CHRONIC CONDITIONS – PEER COMPARATORS

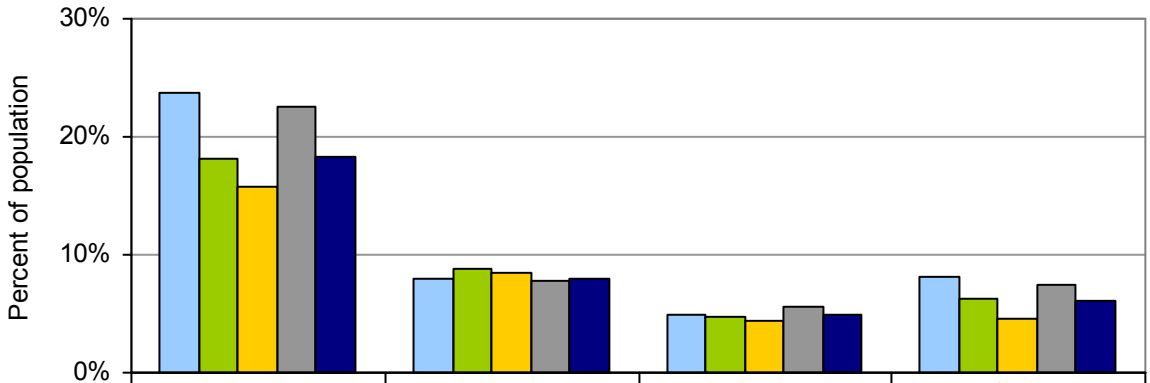
Description:

- Age-standardized prevalence of selected chronic conditions
- An age-standardized rate is a summary measure of a rate that a population would have if it had a standard age structure. Age-standardization is necessary for two reasons. Firstly, it minimizes the effects of varying age composition among different populations on the calculated rate. Secondly, age-standardization minimizes the effects of age as a risk factor for disease on the calculated rate.
- Cardiovascular disease (CVD) includes ischemic heart disease and stroke. It is a leading cause of death for both sexes in the City of Hamilton and Ontario.
- Diabetes Mellitus is a chronic debilitating health condition that continues to grow as a public health problem in Canada.
- Arthritis is a leading chronic degenerative condition which causes pain, impaired physical function and disability creating a notable burden on population health and impacting on overall quality-of-life.
- Asthma is a chronic respiratory disease that impacts on both health and daily functioning

Key Message:

- The proportion of the population in the City of Hamilton with arthritis/rheumatism or cardiovascular disease is significantly higher than the proportions reported in Middlesex-London, the City of Ottawa, and Windsor-Essex.
- The proportion of the population in the City of Hamilton with asthma is significantly higher than the proportion in Windsor-Essex, but significantly lower than the proportions in Middlesex-London and the City of Ottawa.
- The proportion of the population in the City of Hamilton with diabetes is significantly higher than that of Middlesex-London and the City of Ottawa, but significantly lower than that of Windsor-Essex.

Age-Standardized Prevalence of Chronic Conditions in the City of Hamilton, select cities and Ontario, 2003



	Arthritis/rheumatism	Asthma	Diabetes	CVD
City of Hamilton	23.7%	8.0%	4.9%	8.1%
Middlesex-London	18.2%	8.8%	4.7%	6.2%
City of Ottawa	15.8%	8.4%	4.4%	4.6%
Windsor-Essex	22.6%	7.8%	5.6%	7.4%
Ontario	18.4%	8.0%	4.9%	6.1%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) 2.1 (2003)

SELF-REPORTED ACTIVITY LIMITATIONS – PEER COMPARATORS

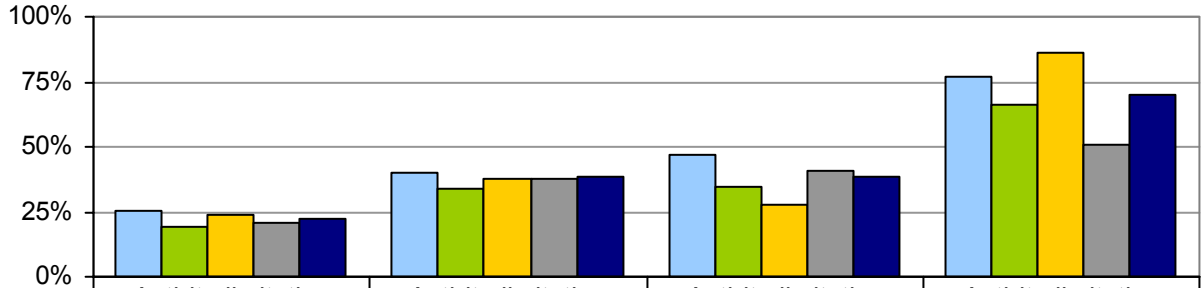
Description:

- Population age 12 years and over requiring help with at least one activity of daily living.
- Activities of daily living are activities related to personal care and include bathing, showering, dressing, getting in or out of bed or a chair, using the toilet and eating.
- Identifies populations that may have a greater need for health services.
- An outcome indicator of the impact of long-term health conditions and quality of life.
- People with cardiovascular disease, diabetes, asthma, or arthritis are significantly more likely to report needing assistance with at least one activity of daily living or personal care, than individuals not having a chronic condition.

Key Message:

- Almost 80% of the population in the City of Hamilton age 12 years and older who suffer from the effects of a stroke have at least one activity limitation that impacts on their quality of life. This percentage is significantly greater than the Ontario proportion of 70%.
- The proportion of the population in the City of Hamilton who have at least one activity limitation and diabetes is significantly greater than the Ontario proportion. In contrast, the proportion of the population in the City of Hamilton with at least one activity limitation and heart disease is significantly below the Ontario proportion.
- Twenty six percent of the population in the City of Hamilton who suffer from asthma have at least one activity limitation. This proportion is significantly higher than that of Ontario (22.2%).
- The City of Hamilton has a higher proportion of individuals who suffer from at least one activity limitation and also either diabetes, arthritis, and/or asthma compared with Middlesex-London, the City of Ottawa, and Windsor-Essex.
- The proportion of the population in the City of Hamilton who suffers from the effects of a stroke and has at least one activity limitation is significantly lower than that reported in the City of Ottawa and significantly lower than that reported in Middlesex-London and Windsor-Essex.

Activity limitation among populations with select chronic disease conditions, City of Hamilton, select cities and Ontario, 2003



	Activity limitation among those with	Activity limitation among those with	Activity limitation among those with	Activity limitation among those with
City of Hamilton	25.5%	39.9%	47.2%	77.3%
Middlesex-London	19.0%	33.9%	34.9%	66.0%
City of Ottawa	23.7%	37.7%	27.7%	85.9%
Windsor-Essex	20.9%	37.7%	40.8%	50.8%
Ontario	22.2%	38.6%	38.5%	70.0%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) Cycle 2.1, 2003

CANCER INCIDENCE – PEER COMPARATORS

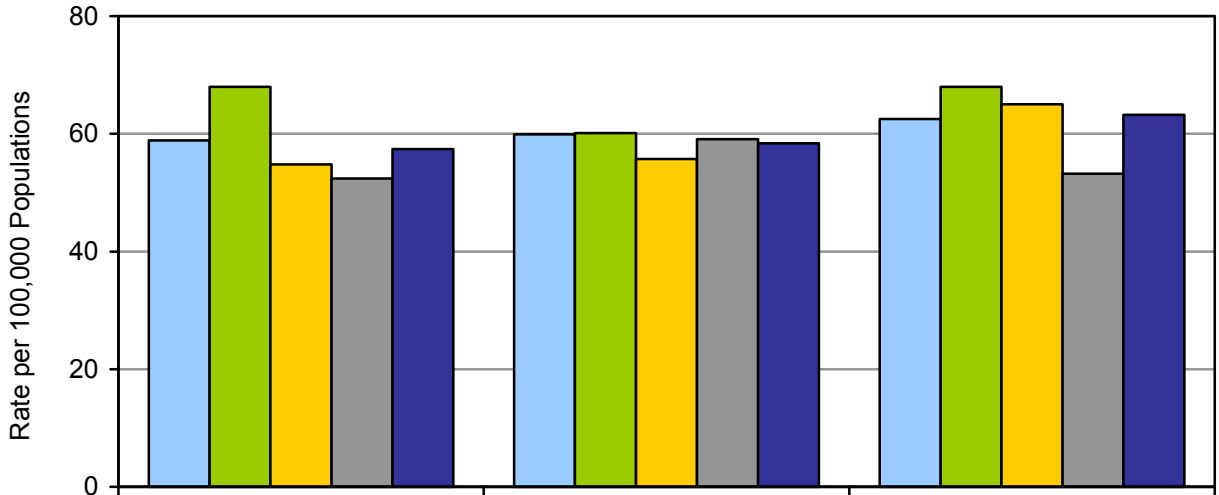
Description:

- The number of new cases of cancer reported in 2002, by cancer site.
- Cancer is primarily a disease of older Canadians. Among men, 75% of new cancer cases and 82% of deaths due to cancer occur among those who are at least 60 years of age. Among women, 63% of new cases and 78% of cancer deaths occur among those who are at least 60 years of age.
- In 2004, the most frequently diagnosed cancers in Canada were prostate cancer for men and breast cancer for women.
- Lung cancer remains the number one cause of cancer death in both sexes.

Key Message:

- In the City of Hamilton, the incidence of lung cancer and bronchial carcinoma is similar to the incidence rate of Ontario: 60 per 100,000 population in the City of Hamilton versus 58 per 100,000 population in Ontario.
- The incidence of prostate cancer in the City of Hamilton is significantly lower than that of Ontario (57 per 100,000 population versus 67 per 100,000 population).
- The rate of colon and rectum cancer in the City of Hamilton is comparable to that of the Ottawa-Carleton and Windsor-Essex, and significantly lower than the rate in Middlesex-London.
- The rates of lung cancer/bronchial carcinoma and breast cancer in the City of Hamilton are comparable to those of each of the select comparator cities.

Cancer Incidence Rates by Select Cancer Sites, City of Hamilton, select cities and Ontario, 2002



	Colon and Rectum	Lung and Bronchus	Breast
City of Hamilton	58.9	59.9	62.5
Middlesex-London	68	60.1	68
Ottawa-Carleton	54.8	55.7	65
Windsor-Essex	52.4	59.1	53.2
Ontario	57.4	58.4	63.2

Source: Cancer Care Ontario, 2002

USE OF CANCER SCREENING SERVICES – PEER COMPARATORS

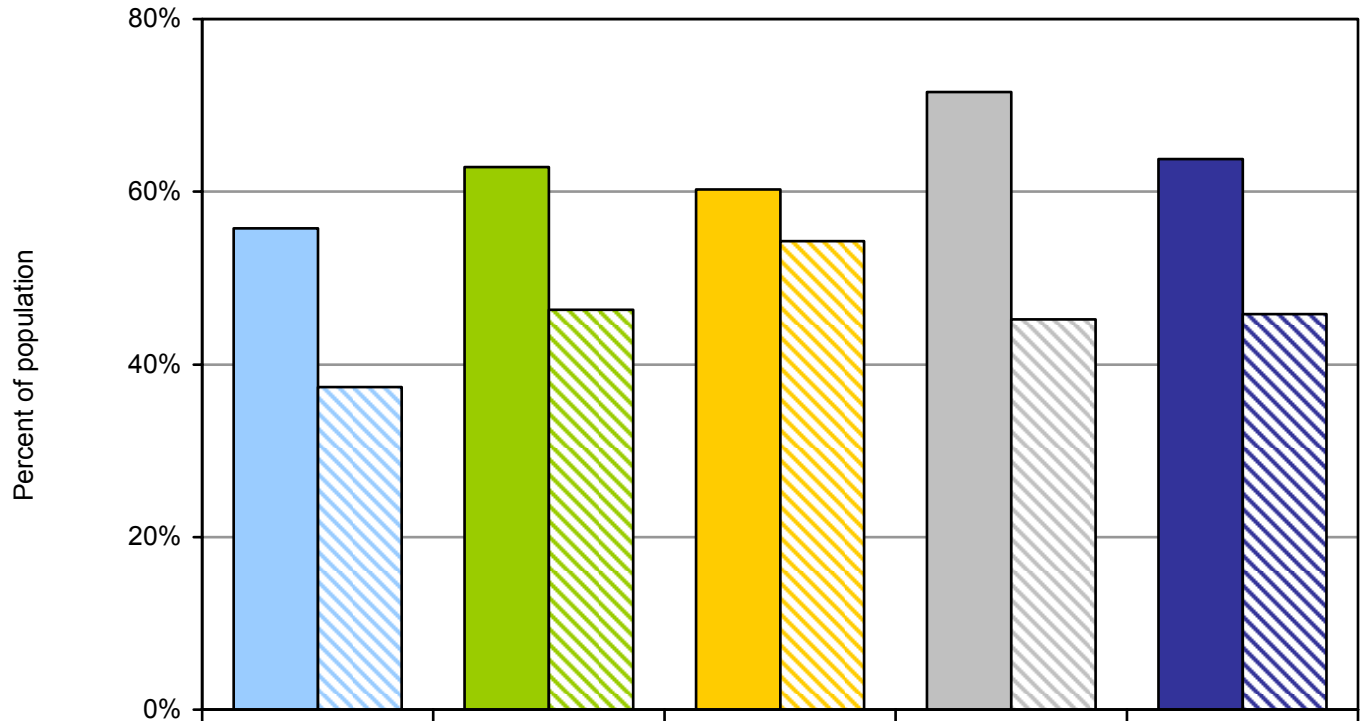
Description:

- Females age 18 years and over who have had a Pap smear test in the past 12 months that checks for infection, abnormal cells, or cancer.
- Females age 35 years and over who have ever had a mammogram.
- Use of PAP smears tests and mammograms have been shown to reduce mortality from cervical cancer and breast cancer.

Key Message:

- During the past 12 months, 37% of the female population in the City of Hamilton age 18 years and over had a Pap smear test, compared with 46% of females of the same age group in Ontario.
- The proportion of females in the City of Hamilton age 35 years and older who have had at least one mammogram is significantly less than that of Ontario (56% versus 64% respectively).
- The proportion of the female population in the City of Hamilton age 35 years and over who have had a mammogram is comparable to the proportions in the City of Ottawa and Middlesex-London.
- The City of Hamilton has the lowest proportion of females age 18 years and over who have had a Pap smear test in the past year.

Use of screening services such as PAP smear testing and mammograms, City of Hamilton, select cities and Ontario, 2003



	City of Hamilton	Middlesex-London	City of Ottawa	Windsor-Essex	Ontario
Mammogram	55.8%	62.9%	60.3%	71.6%	63.8%
PAP	37.4%	46.3%	54.3%	45.2%	45.8%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) 2.1, 2003

LEADING CAUSES OF HOSPITALIZATIONS DUE TO INJURY – PEER COMPARATORS

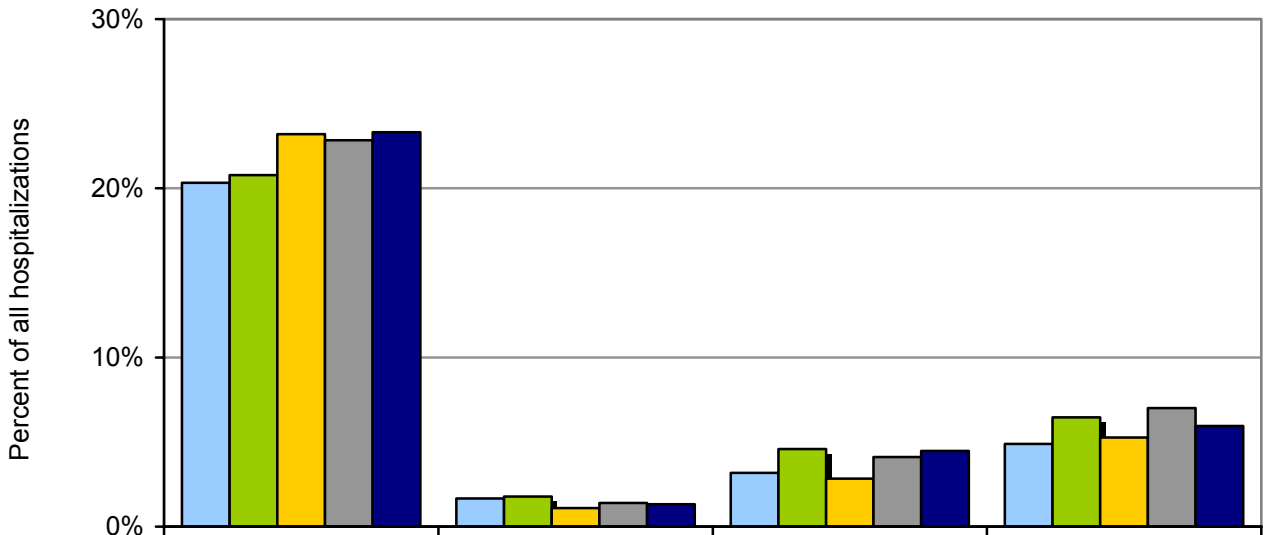
Description:

- Hospital separations due to select injury types. Hospital separations include formal admissions to acute care facilities for the purpose of an overnight stay or a day procedure. They also include separations due to death, discharge home, or transfer to another facility.
- The impact of injury is immense in terms of morbidity, mortality, personal costs and economic costs.
- The incidence and severity of injury can be reduced by intervention as most injuries are preventable. Many injuries due to falls can be reduced by

Key Message:

- Almost 25% of all hospital-related injuries are due to accidental falls in the province of Ontario.
- Hospitalization rates due to accidental falls are comparable between the City of Hamilton and the select comparator cities.
- Hospitalization rates due to suicide and self-inflicted injuries in the City of Hamilton are lower than rates in the select comparator cities and Ontario.
- Over three percent of all injury-related hospitalizations in the City of Hamilton are due to motor vehicle traffic crashes.

Hospitalizations due to select injury related causes, City of Hamilton, select cities and Ontario, 2003



	Accidental Fall	Assault	Motor Vehicle Traffic Crashes	Suicide & Self Inflicted
City of Hamilton	20.3%	1.7%	3.2%	4.9%
Middlesex-London	20.8%	1.8%	4.6%	6.5%
Ottawa	23.2%	1.1%	2.8%	5.3%
Windsor-Essex	22.8%	1.4%	4.1%	7.0%
Ontario	23.3%	1.3%	4.5%	6.0%

Source: Provincial Health Planning Database (PHPDB), 2003

PHYSICAL ACTIVITY – PEER COMPARATORS

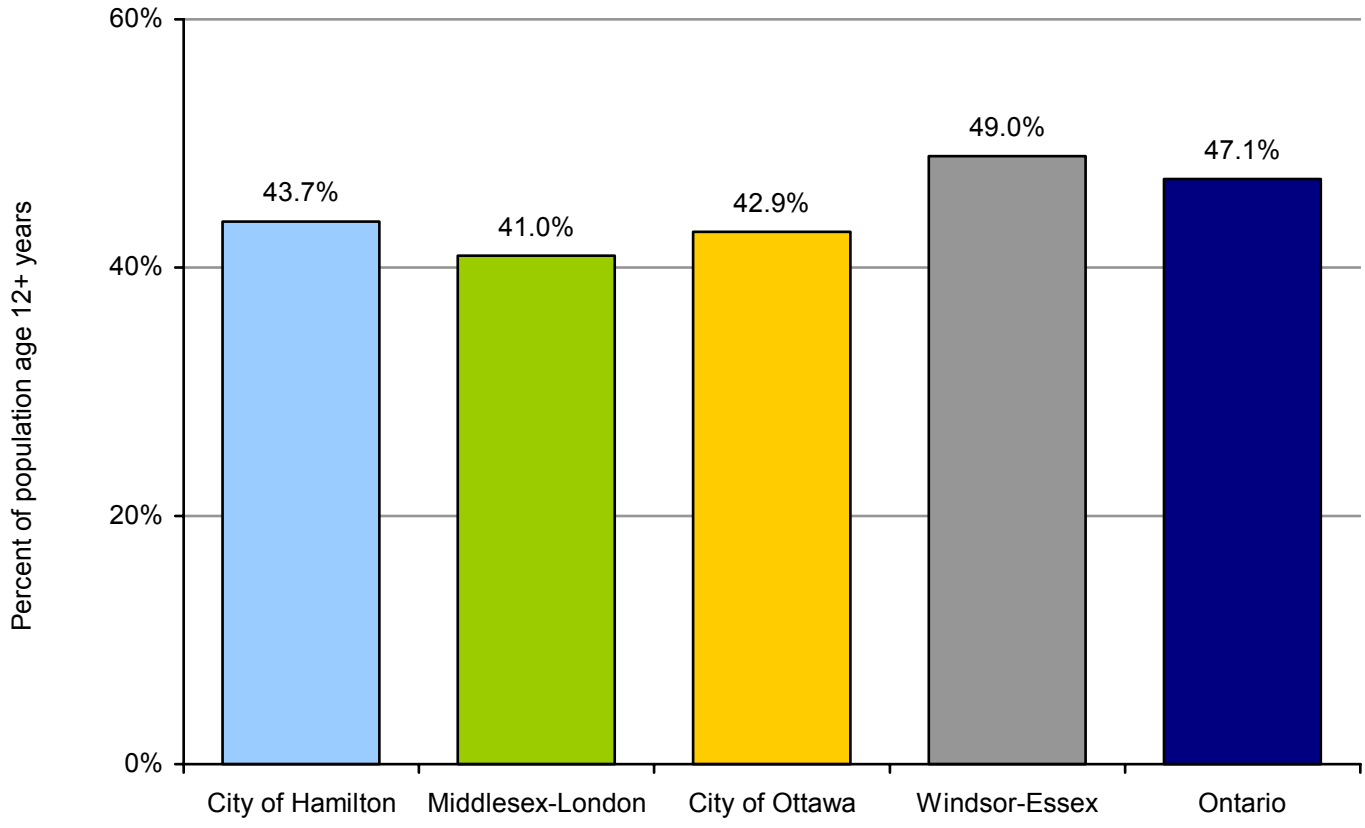
Description:

- Population age 12 years and over classified as physically inactive based on an index of average daily physical activities.
- Regular physical activity is associated with well-being and reduces the risk of many chronic conditions, in addition to helping achieve and maintain a healthy weight. Being overweight is a significant risk factor for type 2 diabetes, heart disease, hypertension, and stroke.
- Levels of physical activity in the community are affected by how we design, build, and sustain our environment. A higher proportion of the physically active population may reflect a wider range of opportunities for physical activities available in the city.

Key Message:

- Forty-four percent of the population in the City of Hamilton age 12 years and older reported that they are physically inactive.
- The proportion of the population in the City of Hamilton who are physically inactive is significantly higher than that of Middlesex-London and Ottawa, and significantly lower than that of Windsor-Essex.

Population age 12 year and older who are physically inactive, City of Hamilton, select cities and Ontario, 2003



Source: Statistics Canada, Canadian Community Health Survey (CCHS) Cycle 2.1, 2003

USE OF RECREATIONAL FACILITIES

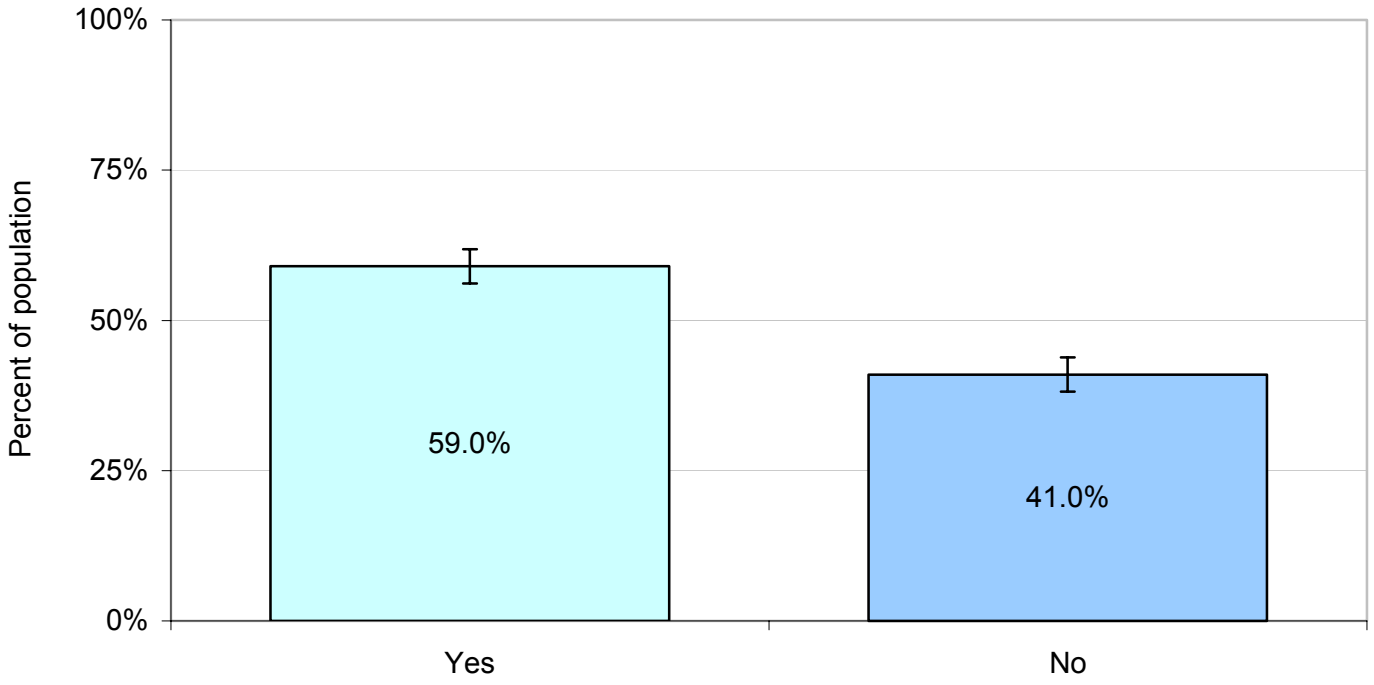
Description:

- Adults who have used local facilities in the City of Hamilton such as the local 'YMCA' or municipal facilities such as pools, rinks, playing fields, and parks in the past 12 months for physical activities, sport or other recreational activities.
- Access to recreational facilities is an important part of maintaining a healthy body weight and managing stress, and enhancing social and leadership skills.

Key Message:

- Fifty-nine percent of adults in the City of Hamilton have used facilities in the City of Hamilton for physical activities, sports or other recreational activities in the last 12 months.

Adults who have used facilities in the City of Hamilton for physical activities, sports, or other recreational activities in the last 12 months, 2004



I - represents the 95% confidence intervals. If the survey was expanded from this sample to a larger sample, the result would be expected to fall between the lower and upper limits 95% of the time.

Source: Rapid Risk Factor Surveillance System (RRFSS), City of Hamilton, 2004.

Limitations:

- These data are based on questions only asked of population in the City of Hamilton age 18 years and over. The results provided are based on self-reported behaviours elicited through a telephone survey which was administered only in the English language.

BODY MASS INDEX (BMI) – PEER COMPARATORS

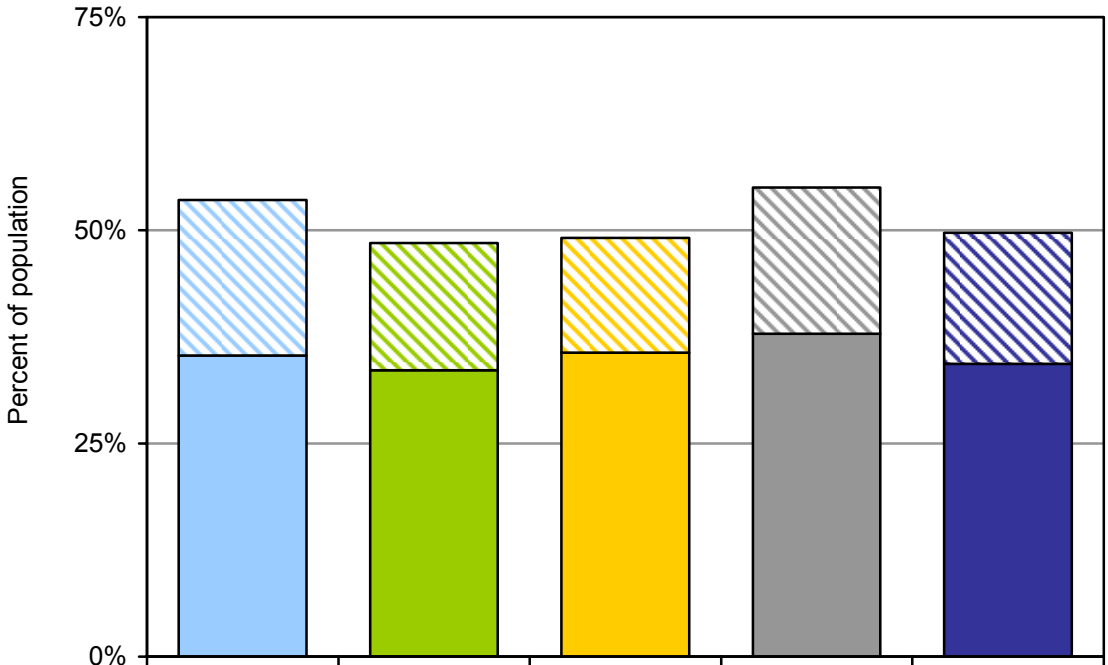
Description:

- Body Mass Index (BMI) is an index of weight to height (kg/m^2) and is considered to be a useful indicator of health risks associated with being overweight and underweight.
- The BMI categories were adapted from the World Health Organization (WHO) and Health Canada's "Health Risk Classification According to Body Mass Index (BMI) for use with adults age 18 years and older. They are not for use with pregnant or lactating women and persons less than 3 feet tall or greater than 6 feet 11 inches tall.
- Health risks are often associated with underweight and overweight individuals.
- A useful health status indicator in monitoring health promotion and disease prevention strategies designed to achieve healthy body weight status.

Key Message:

- The proportion of obese adults in the City of Hamilton is greater than the proportion in Middlesex-London and the City of Ottawa, and approximately the same as the proportion in Windsor-Essex.
- The proportion of adults in the City of Hamilton who are overweight is greater than the proportions in Middlesex-London and the City of Ottawa, and lower than the proportion in Windsor-Essex.

Population who have some excess weight or are overweight, City of Hamilton, select cities and Ontario, 2003



	City of Hamilton	Middlesex-London	City of Ottawa	Windsor-Essex	Ontario
Obese (BMI>=30.0)	18.3%	14.9%	13.5%	17.2%	15.4%
Overweight (25.0<=BMI<30.0)	35.3%	33.6%	35.7%	37.9%	34.4%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) 2.1, 2003

FRUIT AND VEGETABLES CONSUMPTION – PEER COMPARATORS

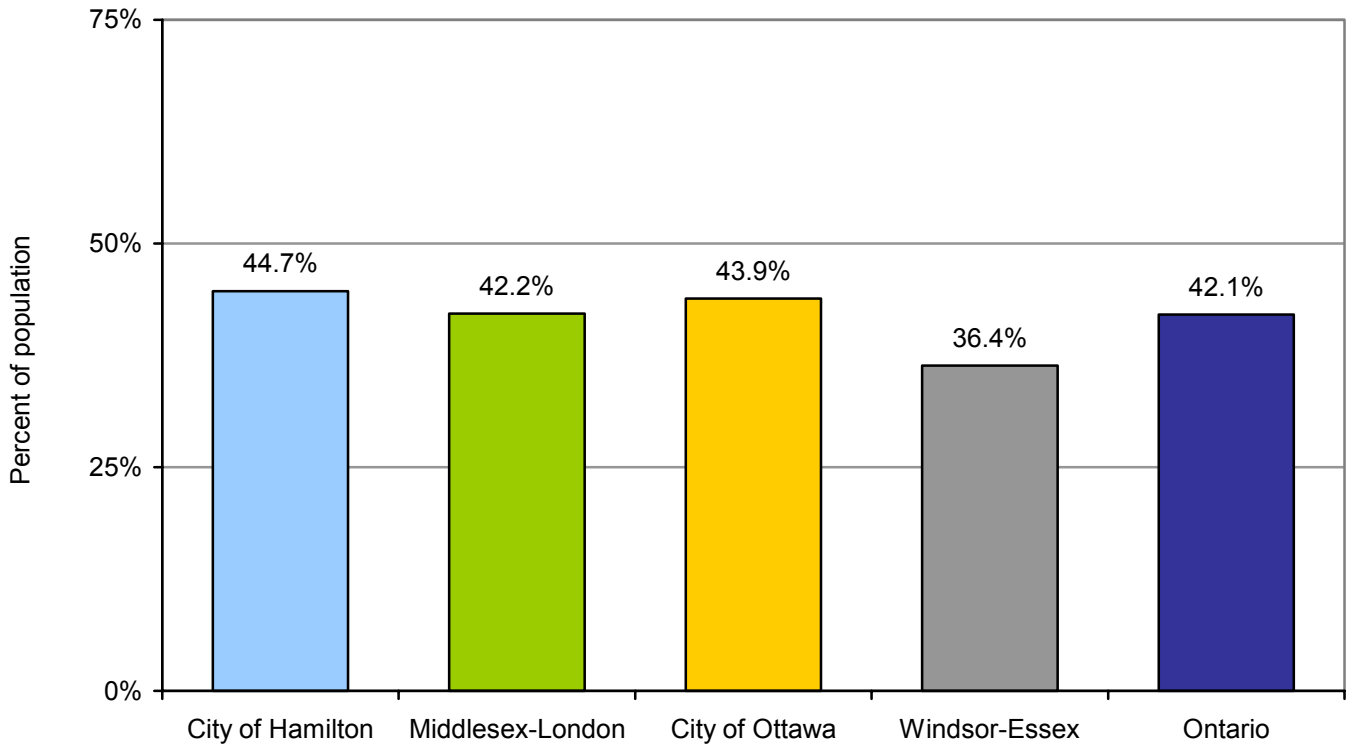
Description:

- Population age 12 years and older who consume at least 5 servings of fruit and vegetables per day.
- Unhealthy eating increases the risk of chronic disease conditions, such as obesity, hypertension, type II diabetes and heart disease

Key Message:

- The proportion of the population in the City of Hamilton age12 years and older who consume at least five servings of fruit and vegetables per day is significantly higher than that of Middlesex-London, the City of Ottawa, and Windsor-Essex.

Population age 12 and older that consume at least 5 servings of fruit and vegetable per day, City of Hamilton, select cities and Ontario, 2003



Source: Canadian Community Health Survey (CCHS) Cycle 2.1, 2003

SELF-PERCEIVED ORAL HEALTH – PEER COMPARATORS

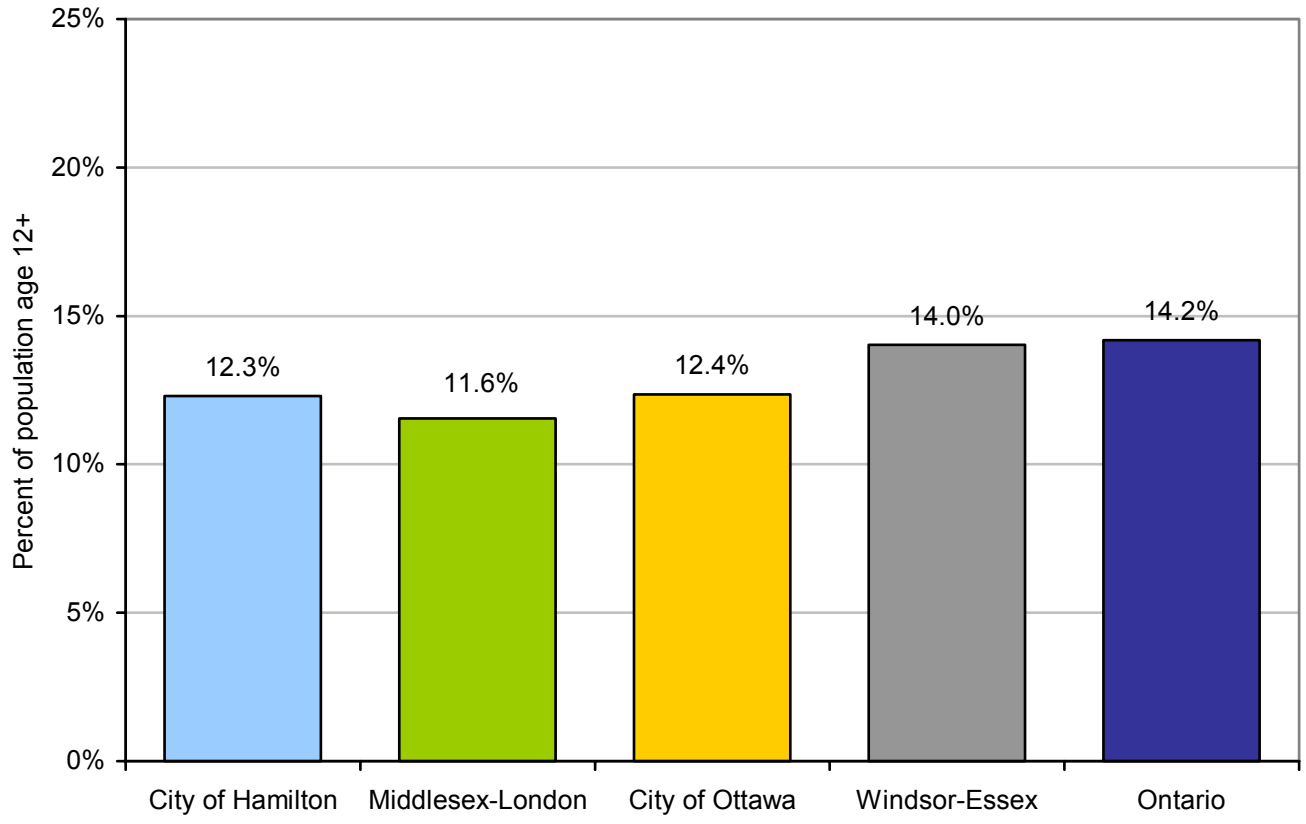
Description:

- Population age 12 years and over who perceive their oral health to be fair/poor.
- Dental health promotion has been shown to prevent chronic dental diseases such as gingivitis, and current evidence shows that it may also help prevent major chronic diseases, such as heart disease.

Key Message:

- A small proportion of the population in the City of Hamilton age 12 years and older indicated that their oral health is fair or poor (12%), which is slightly lower than the Ontario average (14%).
- The proportion of the population in the City of Hamilton that perceive their oral health as fair or poor is significantly higher than that reported in Middlesex-London and significantly lower than that reported in Windsor-Essex.

Adults who perceive their oral health to be fair or poor, City of Hamilton, select cities and Ontario, 2003



Source: Statistics Canada, Canadian Community Health Survey (CCHS) Cycle 2.1, 2003

REGULAR DENTAL CHECK-UPS – PEER COMPARATORS

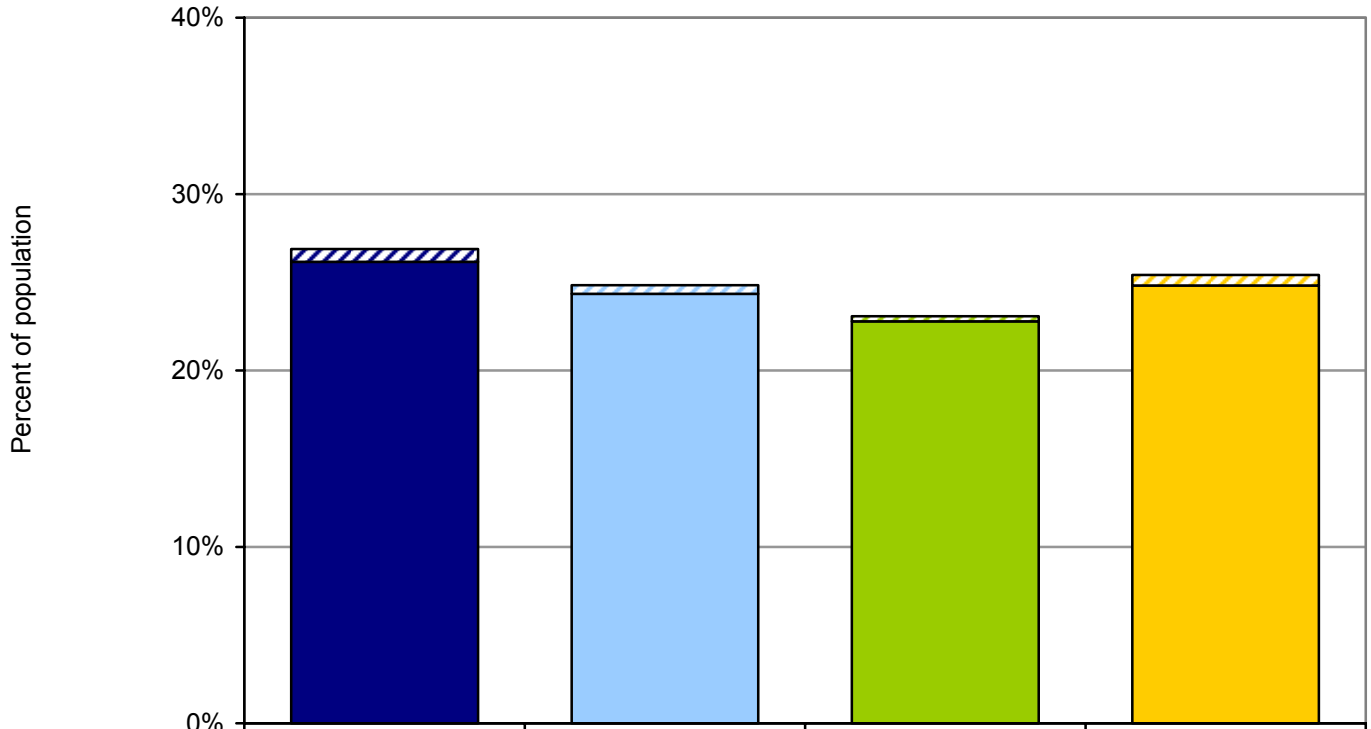
Description:

- Population age 18 years and older by the time since their last visit to the dentist.
- Dental health promotion has been shown to prevent chronic dental diseases such as gingivitis, and current evidence shows that it may also help prevent major chronic diseases, such as heart disease.

Key Message:

- The proportion the population in the City of Hamilton for which it has been more than 1 year since their last dental visit is significantly greater than for Middlesex-London and significantly lower than that for the City of Ottawa.
- The proportion the population in the City of Hamilton who have never visited a dentist in their lifetime is significantly higher than that reported in Middlesex-London and significantly lower than that reported in the City of Ottawa.

Time since last dental visit is more than 1 year or has never visited a dentist, City of Hamilton, select cities and Ontario, 2003



	Ontario	City of Hamilton	Middlesex-London	City of Ottawa
Never	0.7%	0.5%	0.3%	0.6%
More than 1 year	26.2%	24.3%	22.8%	24.8%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) Cycle 2.1, 2003

Limitations:

- Data not available for the Windsor-Essex health region.

SMOKING STATUS– PEER COMPARATORS

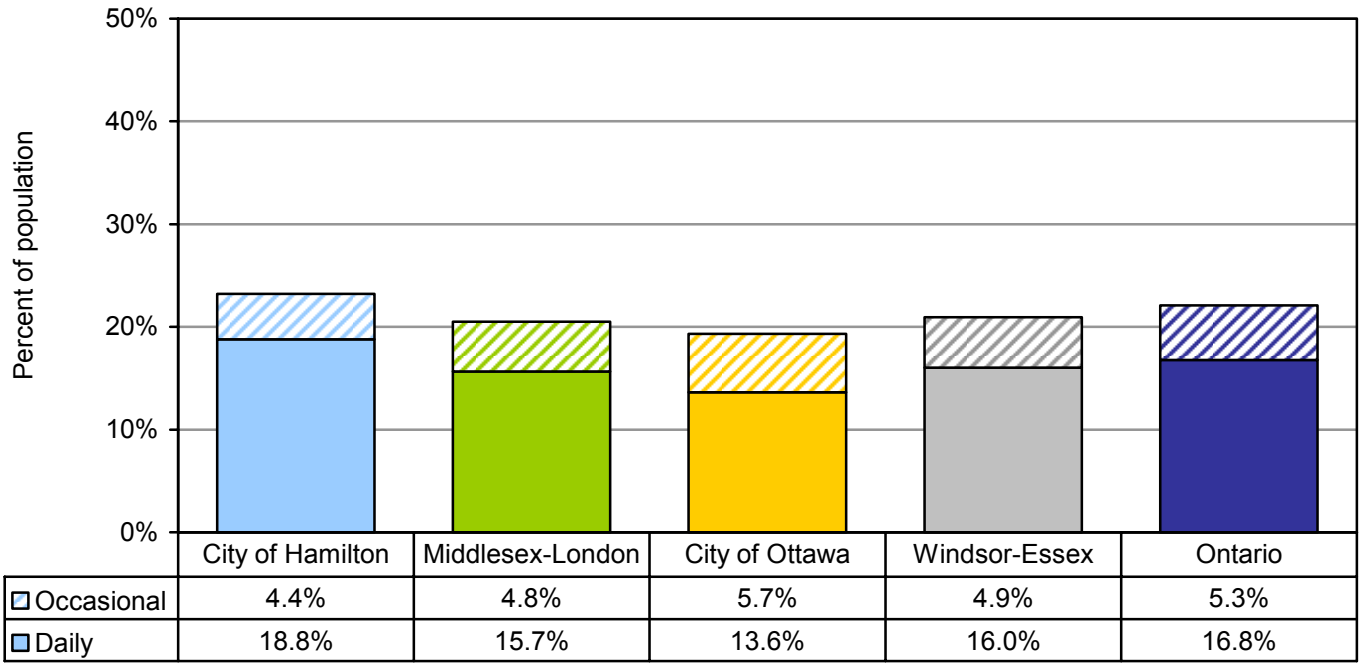
Description:

- Population age 12 and over who reported being either a smoker (daily or occasional) or a non-smoker (former smoker or never smoked).
- Tobacco use is the leading preventable cause of illness and premature death in Canada.
- Smoking is a major risk factor for developing lung cancer and cardiovascular disease, and is also a risk factor for other cancers and diabetes complications.
- Population smoking rates predict higher death and disease rates for the future.

Key Message:

- The proportion of the population age 12 years and older who are daily smokers in the City of Hamilton is significantly greater than the proportions in Middlesex-London, City of Ottawa and Windsor-Essex.
- The proportion of occasional smokers in the City of Hamilton is significantly higher than that of Middlesex-London, City of Ottawa and Windsor-Essex.

Daily and occasional smokers, City of Hamilton, select cities and Ontario, 2003



	City of Hamilton	Middlesex-London	City of Ottawa	Windsor-Essex	Ontario
Occasional	4.4%	4.8%	5.7%	4.9%	5.3%
Daily	18.8%	15.7%	13.6%	16.0%	16.8%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) Cycle 2.1, 2003

DRINKING BEHAVIOUR – PEER COMPARATORS

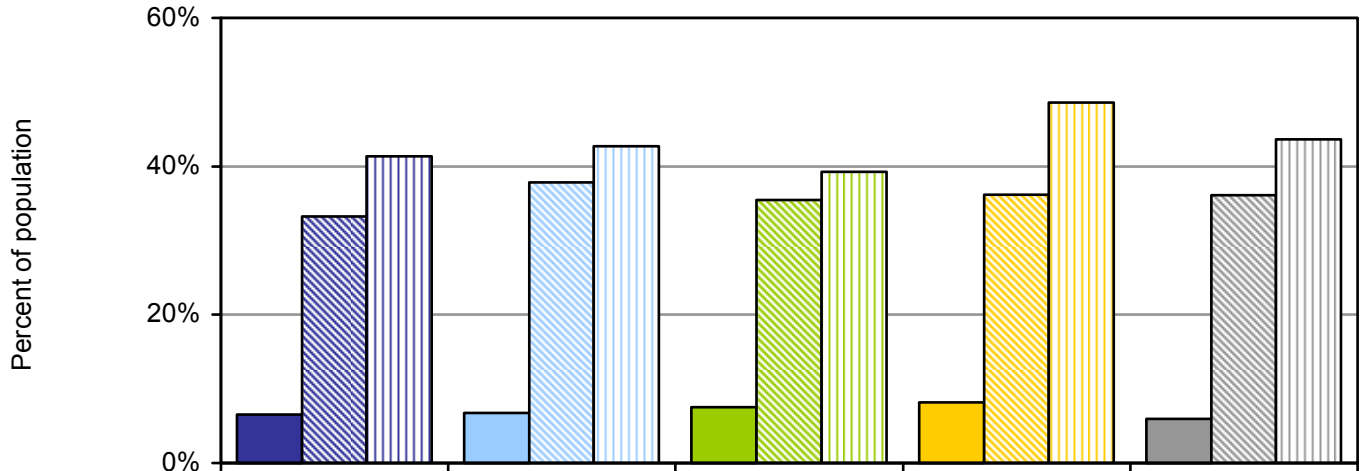
Description:

- Population classified by drinking behaviour, based on self-reported alcohol consumption in the past 12 months.
- Binge drinking is defined as consumption of more than 5 drinks on one occasion; problem drinking is defined as consumption of greater than 14 drinks per week for males and greater than 9 drinks per week for females; and youth drinking is defined as regular or occasional consumption of alcohol by those less than 19 years of age.
- Alcohol abuse is a risk factor for injury-related hospitalizations and is a risk factor for several health conditions and death.
- Prevalence of alcohol abuse can be an indicator of overall community well-being.

Key Message:

- Forty-three percent of the City of Hamilton's youth (age 12 to 18 years) reported that they drink alcohol on a regular or occasional basis.
- Thirty-eight percent of the population in the City of Hamilton reported binge drinking and 6.8% reported problem drinking behaviour.
- The proportion of the population in the City of Hamilton who binge drink is significantly greater than the proportion in Ontario.
- Like the City of Hamilton, more than one-third of the population in London, Ottawa, and Windsor engage in binge drinking.
- The proportions of the population that problem drink and binge drink are comparable in the City of Hamilton, Middlesex-London, Ottawa, and Windsor-Essex.
- The proportion of youth under 19 years of age that drink in the City of Hamilton is significantly higher than the proportion in Middlesex-London, but significantly lower than the proportion in Ottawa and Windsor-Essex.

Youth drinking, binge drinking and problem drinking, City of Hamilton, select cities and Ontario, 2003



	Ontario	City of Hamilton	Middlesex-London	City of Ottawa	Windsor-Essex
Problem drinking	6.5%	6.8%	7.5%	8.2%	5.9%
Binge drinking	33.2%	37.8%	35.5%	36.2%	36.1%
Youth drinking	41.3%	42.7%	39.3%	48.6%	43.6%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) 2.1, 2003

STRESS – PEER COMPARATORS

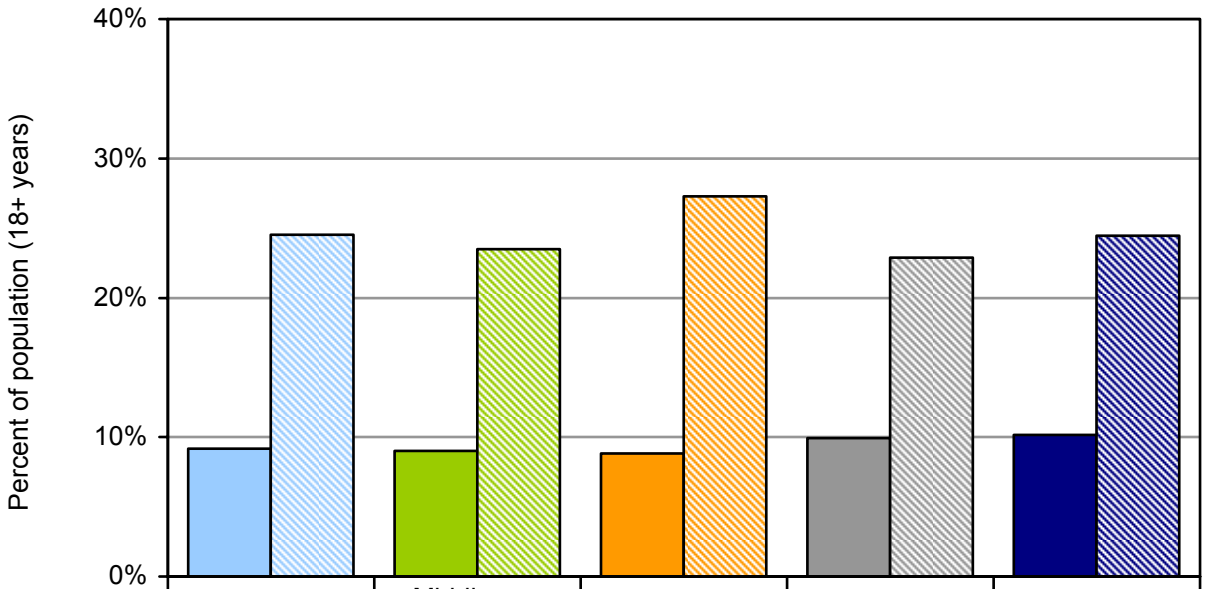
Description:

- Population age 18 years and older by self-reported level of stress in own life on most days.
- Stress is linked to an increased risk of chronic diseases, such as heart disease and associated risk factors (e.g., smoking, alcohol consumption, and overweight/obesity).
- Stress is a general measure of individual wellness.

Key Message:

- Nine percent of the population in the City of Hamilton reported that most days in their own life are not at all stressful.
- The proportion of the population in the City of Hamilton who reported that the level of stress on most days in their life is quite a bit or extremely stressful is significantly lower than the proportion in Ottawa and significantly higher than the proportions in Middlesex-London and Windsor-Essex .
- The proportion of the population age 18 years and older who reported that they do not experience any level of stress on most days of the week are comparable between the City of Hamilton and the select comparator cities.

Level of self-reported stress, City of Hamilton, select cities and Ontario, 2003



	City of Hamilton	Middlesex-London	City of Ottawa	Windsor-Essex	Ontario
Not at all	9.2%	9.0%	8.8%	9.9%	10.2%
Quite a bit or extremely	24.5%	23.5%	27.3%	22.9%	24.4%

Source: Statistics Canada, Canadian Community Health Survey (CCHS) 2.1, 2003

SUICIDE DEATHS – PEER COMPARATORS

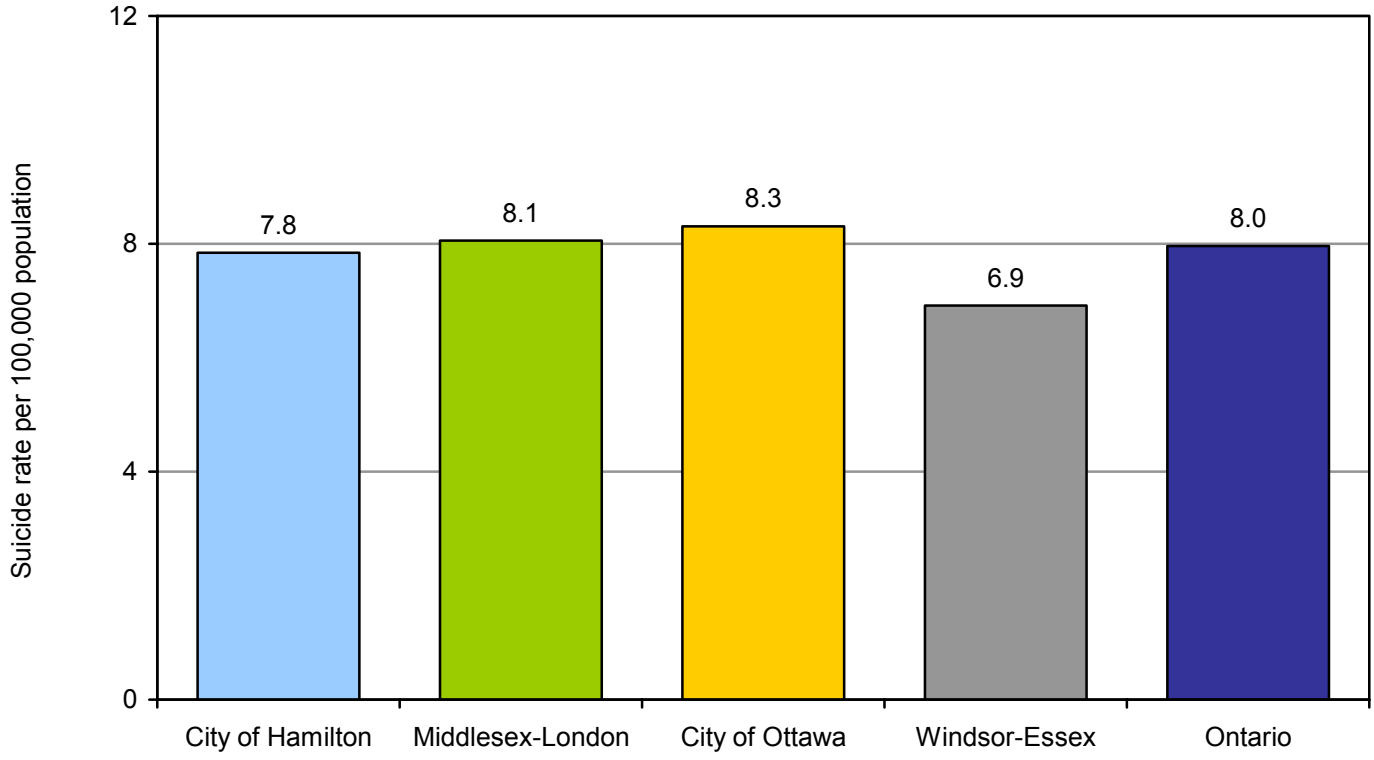
Description:

- The number of suicide deaths per 100,000 population per year.
- Suicide is defined as the "the intentional self-infliction of death" and is an important cause of morbidity and mortality
- Suicide mortality rates are useful indicators for planning preventive initiatives as well as treatment programs and services.

Key Message:

- From 1992 to 2001, the overall trend of suicide-related death rates has shown a decline in the City of Hamilton.
- During this time period, the overall rate of suicide deaths in the City of Hamilton has mostly been below the provincial average.
- In 2001, there were almost 8 suicide deaths per 100,000 population in the City of Hamilton. This translates to 40 suicide related deaths in the City of Hamilton.
- The 2001 suicide rate in the City of Hamilton is similar to the Ontario rate.
- Suicide-related death rates for the City of Hamilton, Middlesex-London, and the City of Ottawa are similar at approximately 8 per 100,000 population.

Rate of death due to suicide, City of Hamilton, select cities and Ontario, 2001



Source: Provincial Health Planning Database(PHPDB) MOHLTC, 2005