

8.0 FAMILY HEALTH

One of the main goals of Family Health programs is to promote the health of children, youth and families. To effectively do so, it is important to monitor aspects of health at all stages of the lifecycle. This section of the report will focus on reproductive health, child/youth health, and seniors' health among residents of Hamilton.

Research has demonstrated that investing in all children at an early age is an investment in human and economic development, which benefits society as a whole. The City of Hamilton's Public Health and Community Services Department values families and children, and strive, through evidence based programs and services, to support infants, children, youth and their families to make informed choices about their health, thus providing the opportunity for optimal development and achievement of potential.

The indicators presented in this section are also important for monitoring protective factors, such as good prenatal care and breastfeeding, and reducing risk factors (for example, low birth weight, childhood obesity and childhood poverty), that have an impact on family functioning and on child growth and development. Knowing about protective and risk factors that are operational, or that need to be targeted, affords us the ability to influence factors that promote or hinder the development of resilience, that is, an individual's or family's ability to adapt to and recover from trauma or stress.

For example, information on:

- prevalence of childhood obesity will highlight the need for nutrition promotion and services to assist parents' choices for feeding their children and child care menu planning.
- poverty, homelessness and early development instrument (EDI) indicators highlights the need for resources and services to offset detrimental effects on child development.
- pre-term birth rates and low birth weight rates may be useful as predictors of children's health as they grow up.
- pre-natal care may be a good predictor of low birth weight and preterm births. Good early prenatal care can reduce the rates of preterm and low birth weight babies, which in turn promotes good child health.
- breastfeeding is of value, in that the higher the proportion of women initiating breastfeeding and the longer breastfeeding continues, the better the health status of young children.

In general, the effective monitoring of family health indicators is an important aspect of the evaluation of the social and physical health status of people within our population.



AGE OF WOMEN GIVING BIRTH

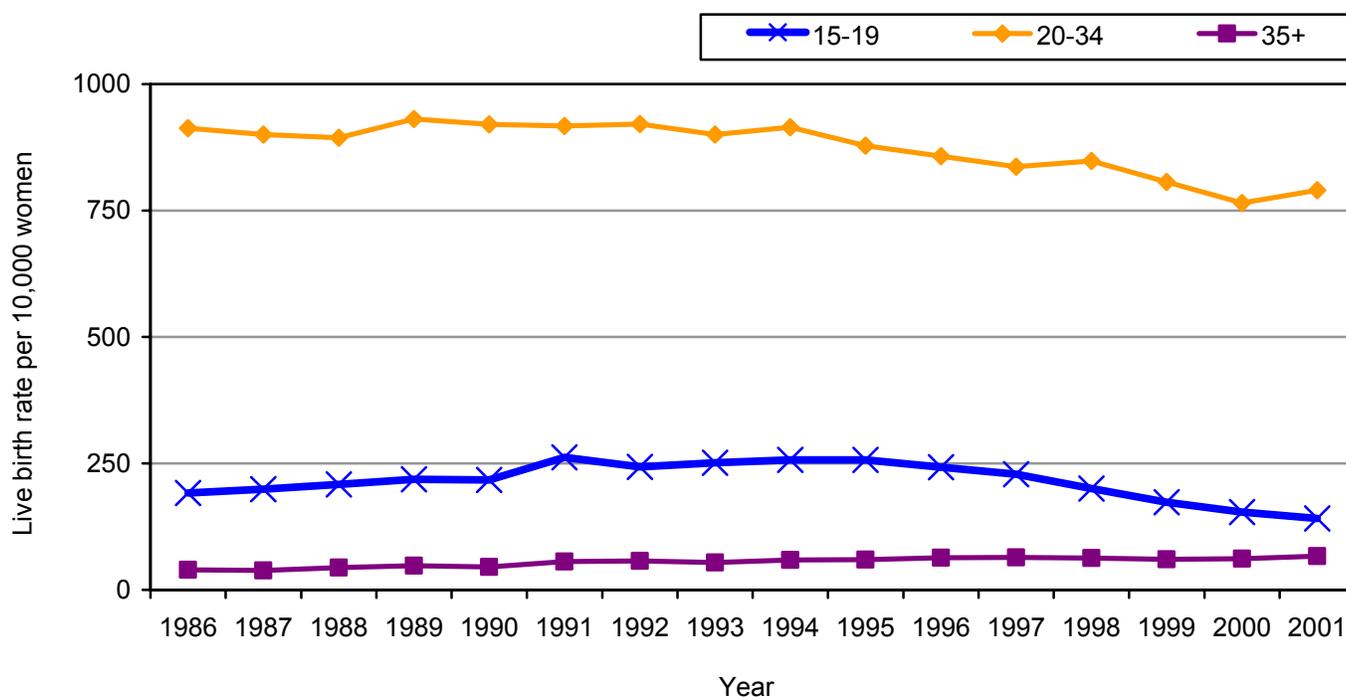
Description:

- The number of live births per 10,000 women by the following age groups: 15 to 19 years, 20 to 35 years, and 35+ years.
- Risks associated with pregnancy increase gradually with age. Women over 35 years of age have a slightly increased risk for complications during pregnancy.

Key Message:

- In the City of Hamilton, the live birth rate among teenage women has shown a steady decline since 1996. In 2001, the live birth rate for this age group was 141 per 10,000 women, down from 154 per 10,000 in 2000.
- Throughout the period 1986 to 2001, the live birth rate among women 20 to 34 years of age was higher than the rates among teenaged women and women 35 years of age and older.
- From 1986 to 2001, there was a steady but gradual increase in live birth rate among women 35 years of age and older.

Live birth rate (per 10,000 women) by age group of mother giving birth, City of Hamilton, 1986-2001



Source: Ontario Live Birth Database 1986-2001, Health Planning System, Ontario Ministry of Health and Long-term Care

Limitations:

- Live birth rates do not take into account stillbirths and miscarriages. However, they are useful for assessing population growth.

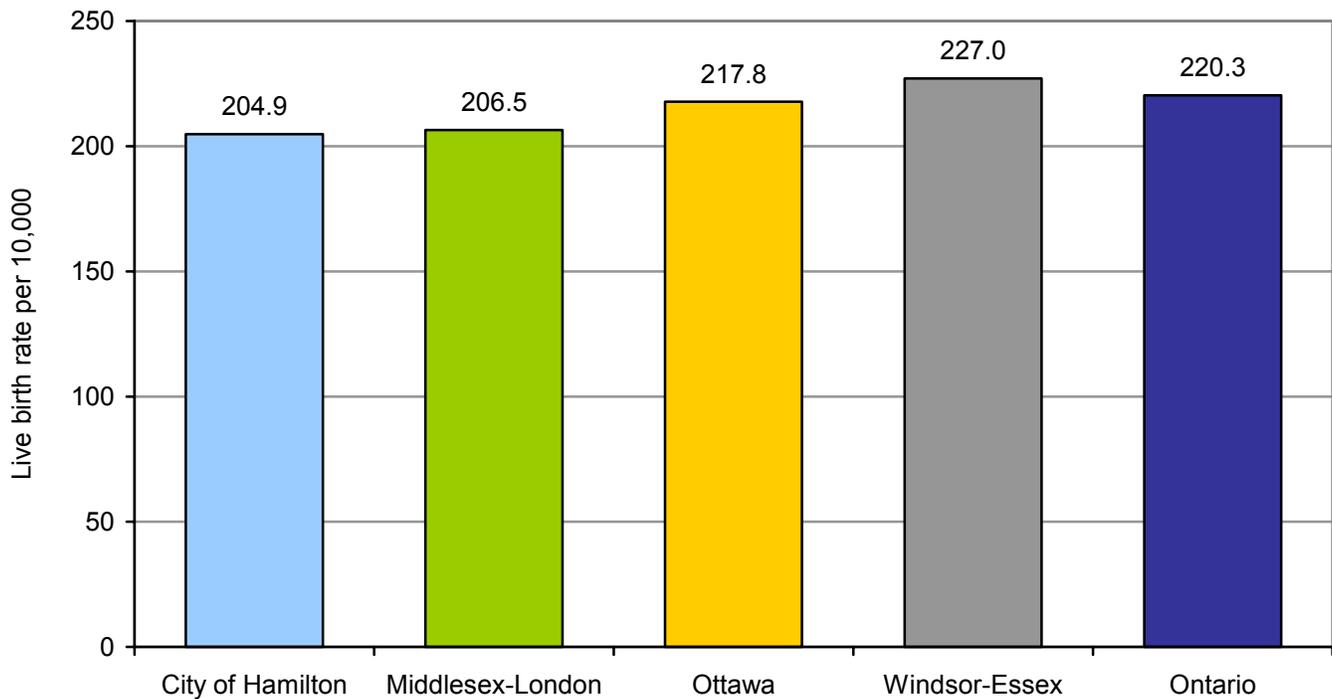


LIVE BIRTHS – PEER COMPARATORS

Description: ▪ The number of live births per 10,000 females in the population.

Key Message: ▪ In 2001, the live birth rate in the City of Hamilton was 204.9 per 100,000 females. This is approximately 5290 live births.
 ▪ The live birth rate in the City of Hamilton in 2001 was lower than the provincial average.
 ▪ In 2001, the live birth rate in the City of Hamilton was lower than the live birth rate in each of the select comparison cities.

Live birth rate (per 10,000 women), City of Hamilton, select cities and Ontario, 2001



Source: Ontario Live Birth Database 2001, Health Planning System, Ontario Ministry of Health and Long-term Care

Limitations: ▪ Live birth rates do not take into account stillbirths and miscarriages and, as such, they are useful for assessing population growth.

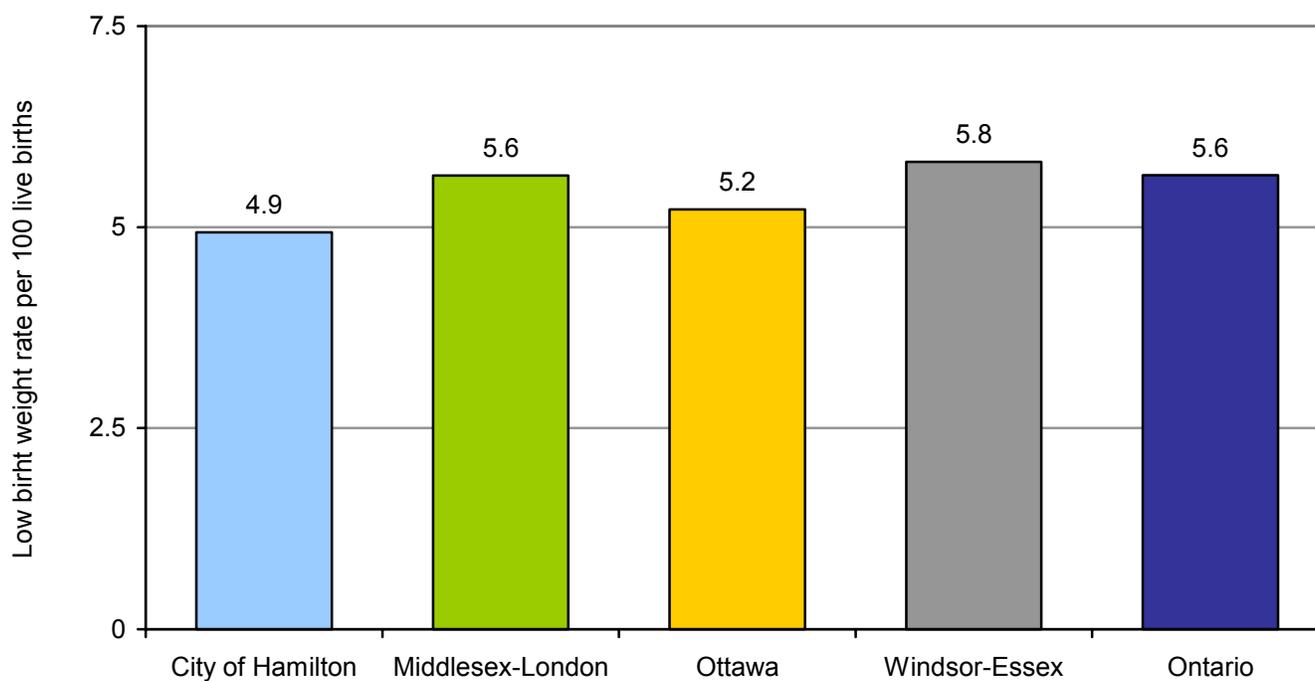


LOW BIRTH WEIGHT – PEER COMPARATORS

- Description:**
- The number of live births weighing less than 2,500 grams, expressed as a percentage of all live births.
 - Low birth weight is a key determinant of perinatal morbidity and mortality.
 - Low birth weight babies are at increased risk of having poor growth and health outcomes during infancy and childhood.

- Key Message:**
- There has been a gradual decline in low birth weight rates in the City of Hamilton from 1998 to 2001, while rates in Ontario remained relatively constant over the same time period.
 - In 2001, 4.9% of live births (or 261 live births) in the City of Hamilton weighed less than 2.5 kilograms compared to 5.6% of live births in Ontario.
 - The 2001 low birth weight rate in the City of Hamilton was lower than the rate in the select comparison cities.

Low birth weight rate, City of Hamilton, select cities and Ontario, 2001



Source: Ontario Live Birth Database 2001, Health Planning System, Ontario Ministry of Health and Long-term Care

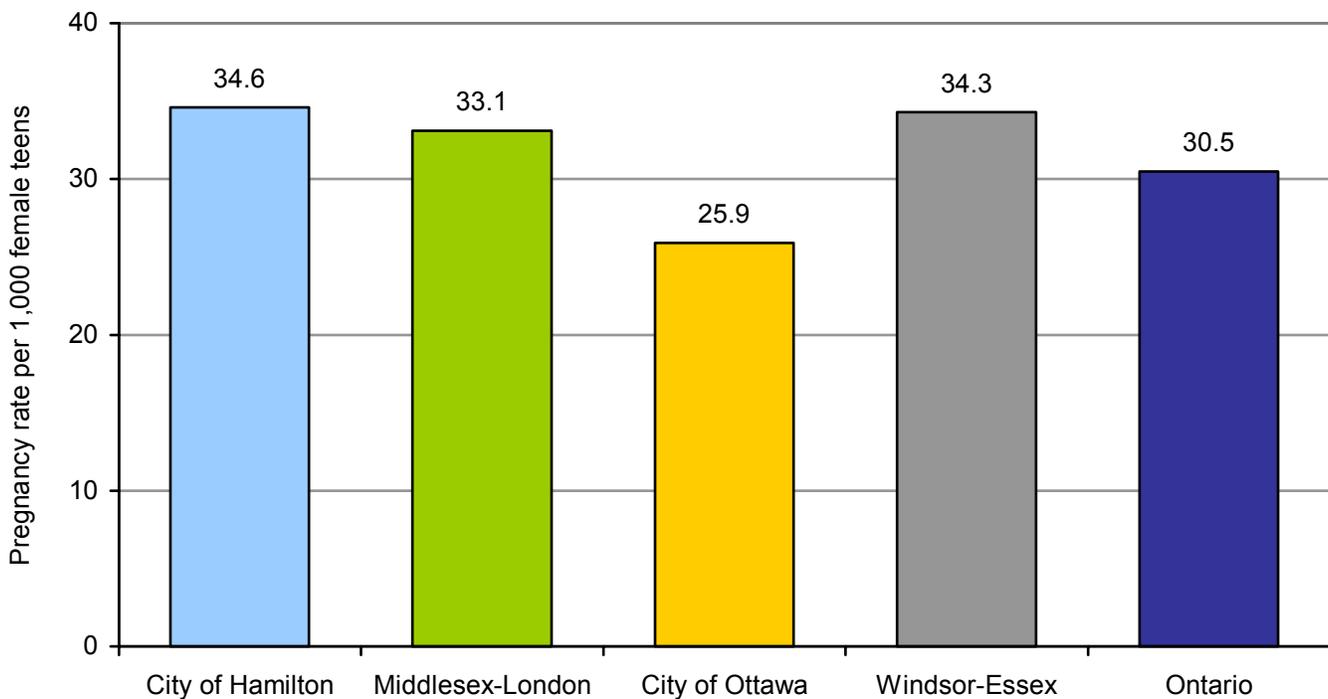
- Limitations:**
- Low birth weight does not take into account gestational age at birth, and therefore includes both full-term and premature births.



TEENAGE PREGNANCY – PEER COMPARATORS

- Description:**
- The number of pregnancies among teenage women per 1,000 women in the population.
 - Teen pregnancy is defined as pregnancy resulting in a live birth, abortion or stillbirth to a female age 15 to 19 years.
 - A high rate of teen pregnancy is often seen as a cause for concern because teen mothers and their infants are at increased risk of poor health outcomes such as toxemia, premature birth and low birth weight.
- Key Message:**
- Teen pregnancy rates have steadily declined between 1995 and 2001 in both the City of Hamilton and Ontario; however the rates have been consistently higher in the City of Hamilton than Ontario.
 - In 2001, 34.6 per 1,000 female teenagers in the City of Hamilton became pregnant. This translates to approximately 584 teen pregnancies in the City of Hamilton in 2001.
 - The 2001 teenage pregnancy rate in the City of Hamilton was higher than the teenage pregnancy rate in Ontario, which was 30.5 per 1,000 teenage females.
 - In 2001, the teenage pregnancy rate in the City of Hamilton was higher than the rates of the select comparator cities.

Teenage pregnancy rate per 1,000 female teen population, City of Hamilton, select cities and Ontario, 2001



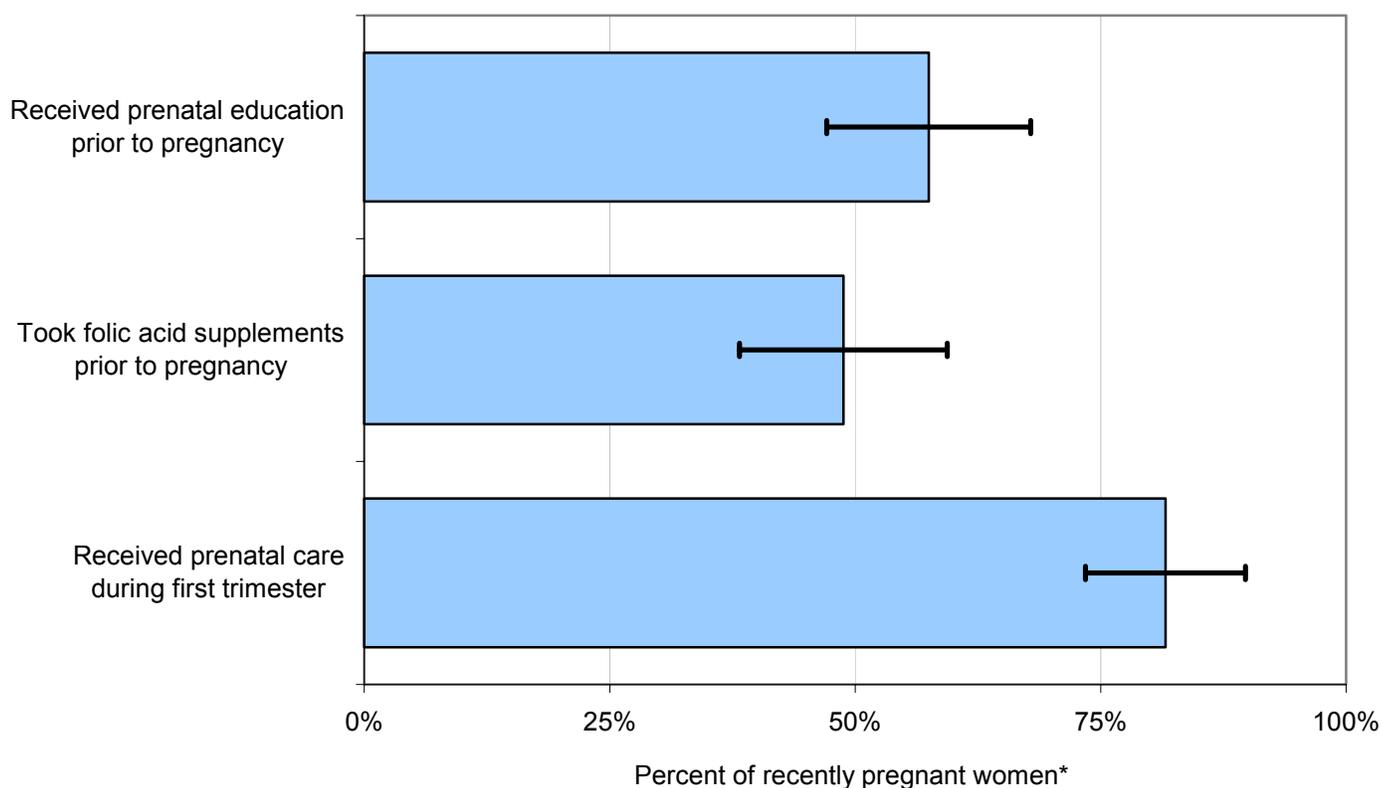
Source: Ontario Live Birth, Still Birth Database 2001, Health Planning System, Ontario Ministry of Health and Long-term Care



PRENATAL CARE

- Description:**
- Proportion of recently pregnant women who, prior to becoming pregnant, received prenatal education, took folic acid supplements or received prenatal care during the first trimester.
 - Recently pregnant women include: women pregnant at the time surveyed or, women who had been pregnant during the 5 years prior to being surveyed.
 - Prenatal care is often credited with improving pregnancy and birth outcomes.
- Key Message:**
- Fifty-eight percent of recently pregnant women visited a health care provider and received prenatal education prior to becoming pregnant.
 - Forty-nine percent of recently pregnant women took folic acid supplements prior to becoming pregnant.
 - Eighty-two percent of recently pregnant women received prenatal care during the first trimester of pregnancy

Proportion of recently pregnant women who received prenatal education, took folic acid supplements or received prenatal care during the first trimester, City of Hamilton, 2002



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, 2002

- Limitations:**
- Due to the nature of the survey, it is difficult to collect large samples of information on targeted populations (such as pregnant women or those who have given birth in the past 5 years). Hence, it should be noted that the statistics presented in the graph are based on a very small sample size.

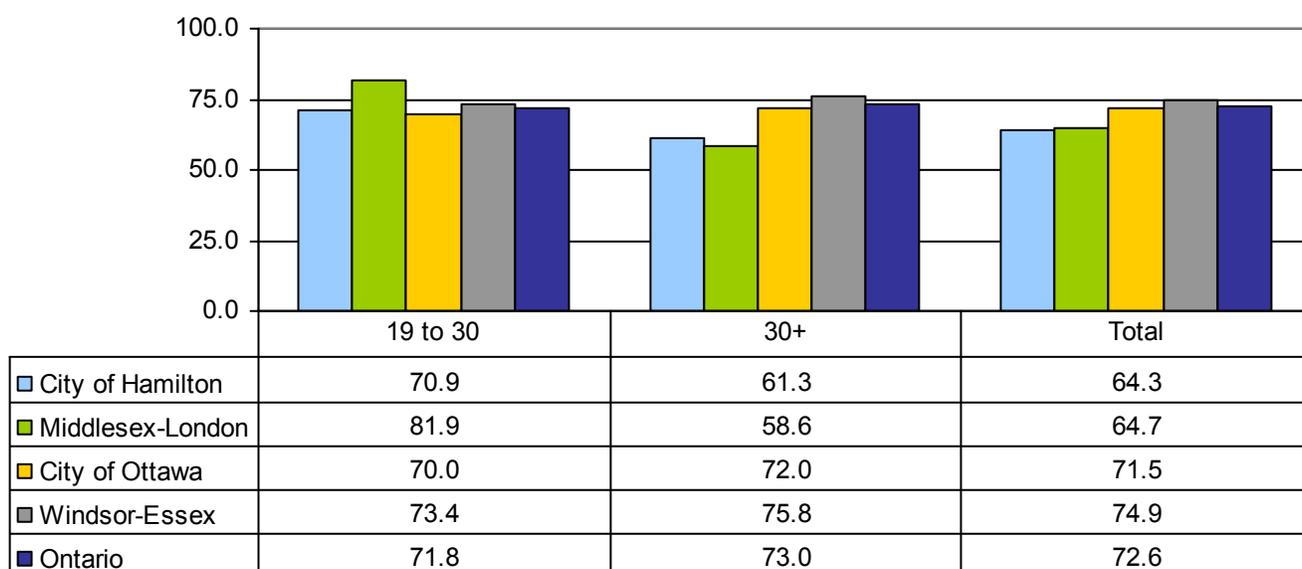


BREASTFEEDING – PEER COMPARATORS

- Description:**
- Proportion of recent mothers who have breastfed or tried to breastfeed the child to whom they had most recently given birth.
 - Recent mother refers to women who had given birth to a live newborn in the 5 years prior to being surveyed.
 - Breastfed babies have lower rates of infant morbidity and mortality.

- Key Message:**
- In total, 64% of recent mothers in the City of Hamilton surveyed had breastfed or had tried to breastfeed the child to whom they had most recently given birth. This represents a decrease from the 2000/01 proportion of 87%.
 - A higher proportion of recent mothers 19 to 30 years old had breastfed or had tried to breastfeed their child compared to recent mothers 30 years of age and older (71% compared to 61% respectively).
 - In both age groups the proportion of recent mothers who breastfed or attempted to breastfeed was lower in the City of Hamilton than Ontario.
 - For recent mothers age 19 to 30 years, the proportion who breastfed or tried to breastfeed their most recent child was slightly lower in the City of Hamilton than Middlesex-London and Windsor-Essex.
 - For recent mothers age 30 years and over, the proportion who breastfed or tried to breastfeed their most recent child was lower in the City of Hamilton than the City of Ottawa and Windsor-Essex.

Recent mothers who have breastfed or tried to breastfeed the child they most recently gave birth to, City of Hamilton, select cities and Ontario, 2003



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

- Limitations:**
- Due to the nature of the survey, it is difficult to collect large samples of information on targeted populations (such as pregnant women or those who have given birth in the past 5 years), hence it should be noted that the statistics presented in the graph are based on a limited sample size.
 - These data do not provide information on the duration of breast feeding



CHILD MORTALITY

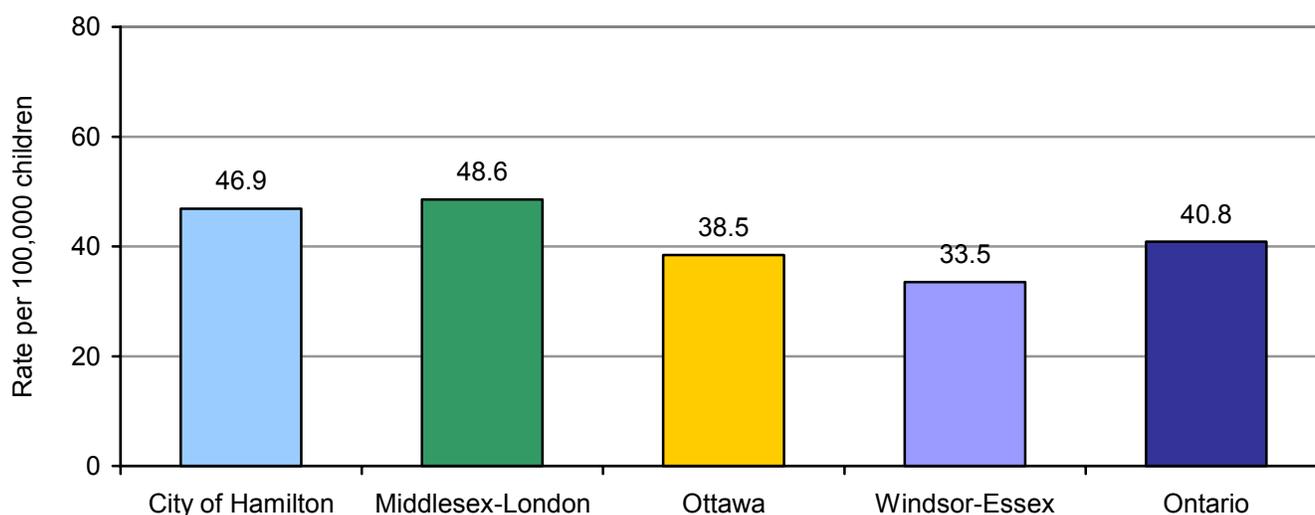
Description:

- The number of deaths per 100,000 children 19 years of age and younger.
- The rate of deaths among children is a general indicator of child health and welfare in the cities and regions described.

Key Message:

- In 2001, 47 per 100,000 children age 19 years and younger died from various causes in the City of Hamilton.
- The mortality rate among children 19 years of age and younger in 2001 was higher in the City of Hamilton than in Ottawa, Windsor-Essex and Ontario.

Mortality rate for children age 19 and under, City of Hamilton, select cities and Ontario, 2001



Source: Mortality data, HELPS, 2001

Limitations:

- These data do not reflect the distribution of mortality by age, and therefore do not indicate whether childhood mortality is high across all age groups or only in some age groups.

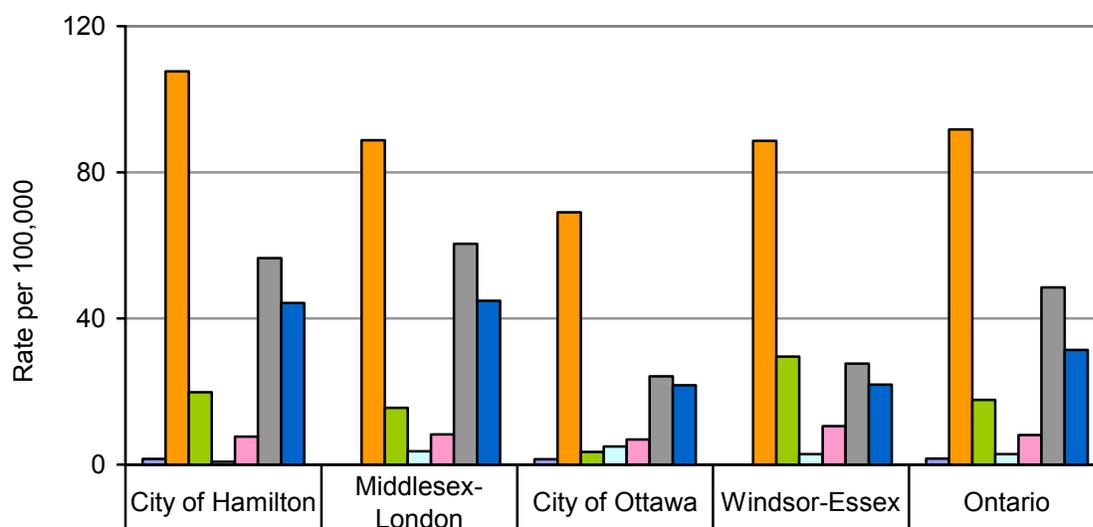


CHILD HOSPITALIZATION

- Description:**
- The rates of hospitalization due to selected causes among children age 19 years and younger.
 - Rates of hospitalization among children due to injury and trauma reflect the welfare and safety of children in various regions.

- Key Message:**
- In 2003, accidental falls were the most common cause of hospitalization among children age 19 years and under in the City of Hamilton, as well as in the select comparator cities and Ontario.
 - In the City of Hamilton in 2003, accidental suffocation was the least common cause of hospitalization among children 19 years old and younger. The rate of accidental suffocation was lower in the City of Hamilton than the select comparator cities and Ontario.
 - In 2003, the rate of hospitalization due to falls among children in the City of Hamilton was higher than the select comparator cities and Ontario.
 - The rate of hospitalization due to vehicular accidents among children in the City of Hamilton in 2003 was higher than the Ontario rate but was lower than the rate in the Middlesex-London area.

Hospitalization rate due to select causes for children less than 19 years of age, City of Hamilton, select cities and Ontario, 2003



	City of Hamilton	Middlesex-London	City of Ottawa	Windsor-Essex	Ontario
Accidental drowning	1.5	0.0	1.5	0.0	1.7
Accidental fall	107.7	88.8	69.1	88.6	91.8
Accidental poisoning	19.9	15.6	3.5	29.5	17.8
Accidental suffocation	0.8	3.7	4.9	2.9	2.9
External causes of burns	7.6	8.2	6.9	10.5	8.1
Motor vehicle traffic crashes	56.5	60.4	24.2	27.6	48.5
Sports injury	44.3	44.8	21.7	21.9	31.4

Source: Provincial Health Planning Database, June 2004

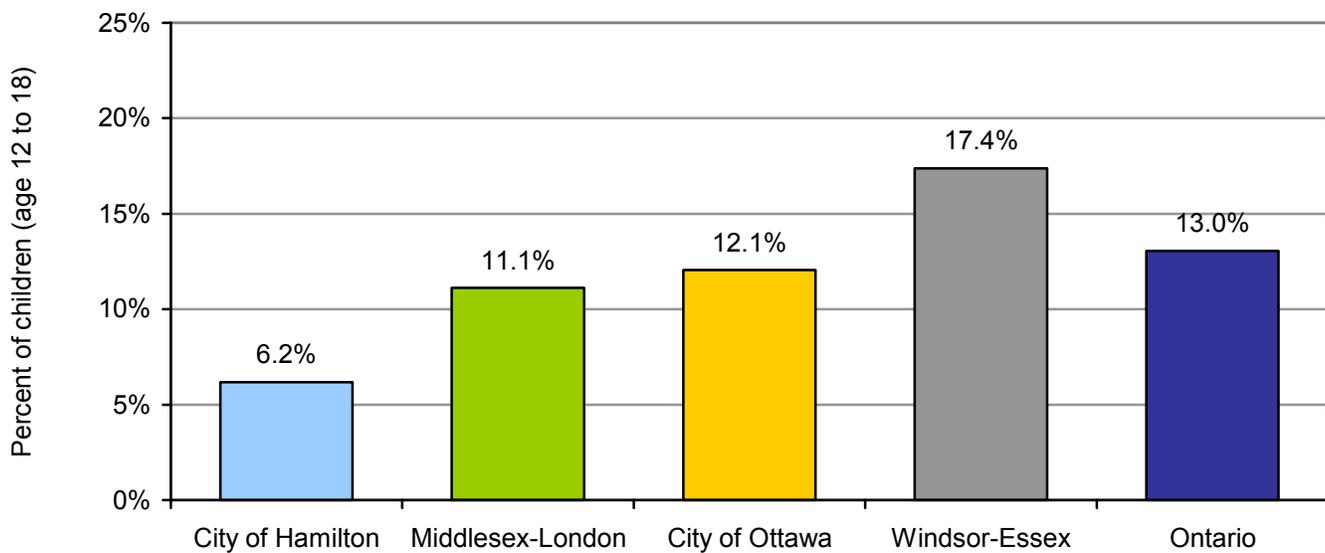
Limitations: These data do not reflect incidents of injury or trauma to children that do not lead to hospitalization.



CHILDREN WHO HAVE ASTHMA – PEER COMPARATORS

- Description:**
- Proportion of children age 12 to 18 years diagnosed with asthma.
 - Asthma is an chronic obstructive lung disease which may cause lung scarring and subsequent decline in lung function over time, resulting in possible hospitalization and/or death.
 - Asthma is the most common chronic condition in children less than 10 years of age
- Key Message:**
- The prevalence of children with asthma in the City of Hamilton in 2003 has decreased since 2000/2001. In 2003, 6.2% of children age 12 to 18 years in the City of Hamilton had been diagnosed with asthma, which is less than half the Ontario prevalence.
 - In 2003, the prevalence of asthma among children in the City of Hamilton was lower than in the select comparator cities.

Children age 12 to 18 years who have asthma; City of Hamilton, select cities and Ontario; 2003



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

- Limitations:**
- Participants in the Canadian Community Health Survey were 12 years of age and older, therefore, caution should be used when generalizing results to children under 12 years of age.



SUBSIDIZED DAYCARE SPACES - PEER COMPARATORS

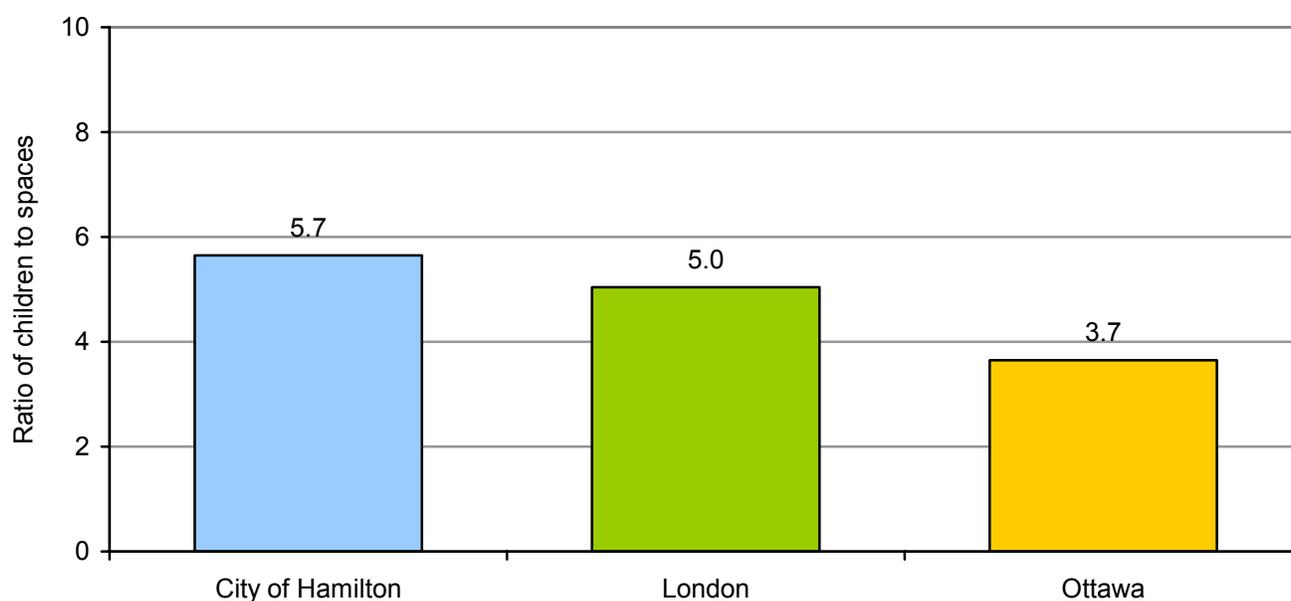
Description:

- The ratio of children age 0 to 12 years in families with incomes below the low income cut-off (LICO) to subsidized child care spaces.
- Availability of child care facilities to low-income families is one factor affecting quality of life and freedom to earn a living in many such families.

Key Message:

- In 2001, there were 5.6 children from families below LICO to each subsidized child care space in the City of Hamilton.
- In 2001, the ratio of children aged 0 to 12 years to child care spaces was higher in the City of Hamilton than in Ottawa or in London in 2002. This translates to a higher demand for subsidized child care spaces in the City of Hamilton than in Ottawa or London.

Ratio of children age 0 to 12 years in families with incomes below low income cut-off (LICO) to subsidized child care spaces, City of Hamilton and Ottawa 2001, London, 2002



Source: Federation of Canadian Municipalities Survey Database 2003, Statistics Canada, 2001 Census (London data are for 2002)

Limitations:

- The ratio of children to child care spaces as presented here may be influenced by the prevalence of low-income families in the population of any city.

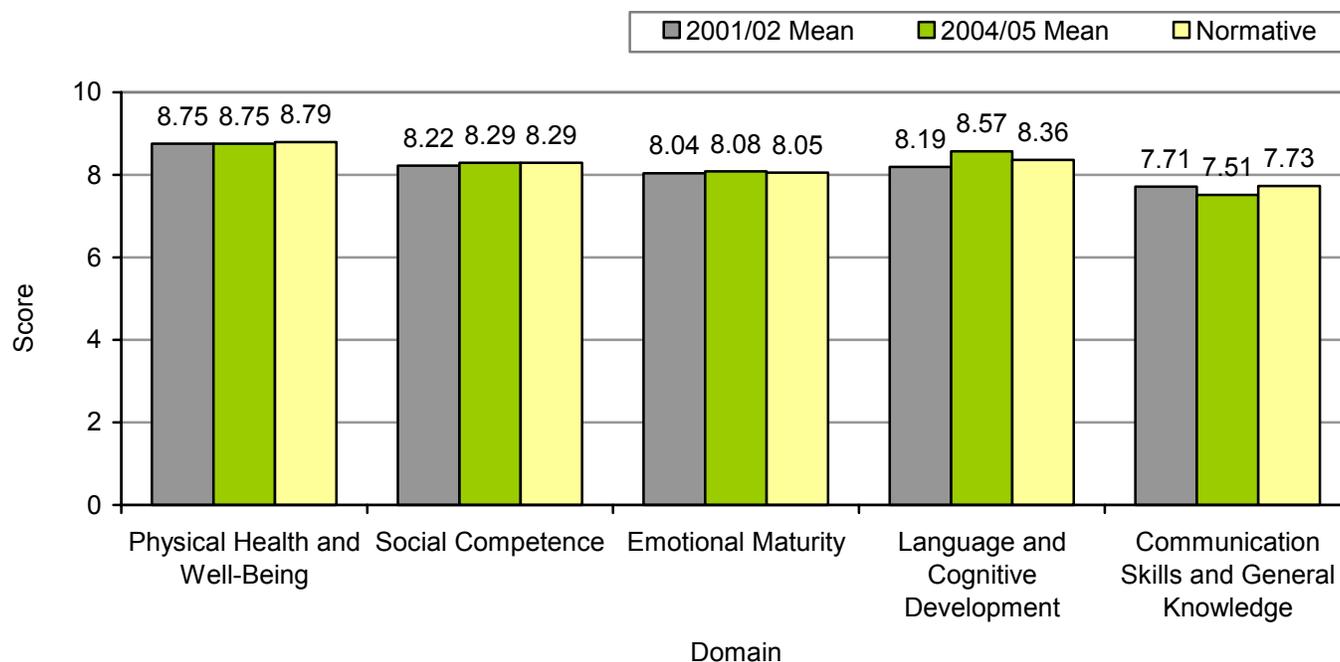


EARLY DEVELOPMENT INSTRUMENT (EDI)

- Description:**
- The Early Development Instrument (EDI) is a diagnostic tool developed to measure a child's school readiness to learn. The tool is a checklist about the behaviours and developmental characteristics of children within the classroom and summarizes information by five domains, expressed as the percentage of children scoring below Ontario's 10th percentile cut-offs for each domain. These domains include: Physical health and well-being; Social Competence; Emotional Maturity; Language and Cognitive Development; Communication Skills and General Knowledge.
 - The normative scores in the graph are derived from a "Gold Standard" sample of 116,860 children who do not have "Special Needs" or missing data in key categories. Children with "Special Needs" include children who need special assistance due to chronic medical, physical or mental disabling conditions.
 - Investments in early childhood development can help to support young children's school readiness to learn thereby positively affecting health, well-being and competence across the balance of the life course.

- Key Message:**
- When assessed using the EDI, children in the City of Hamilton score lower in Communication Skills & General Knowledge and higher in Language & Cognitive Development than the national normative scores for these domains.
 - The 2001/02 and 2004/05 Early Development Instrument (EDI) results provide reliable baseline scores for assessing how children in the City of Hamilton are doing before the implementation of the Best Start program. This baseline can be used as a comparison with future rounds of EDI to assess the success of interventions introduced that should better support young children's school readiness to learn.

Average Early Development Instrument (EDI) Scores for Children in the City of Hamilton, 2001/02, 2004/05



Source: Early Development Instrument (EDI), City of Hamilton, 2005

- Limitations:**
- Results from the EDI must be used in the context of other socio-economic and health measures.



CHILDREN ACHIEVING EDUCATIONAL STANDARDS

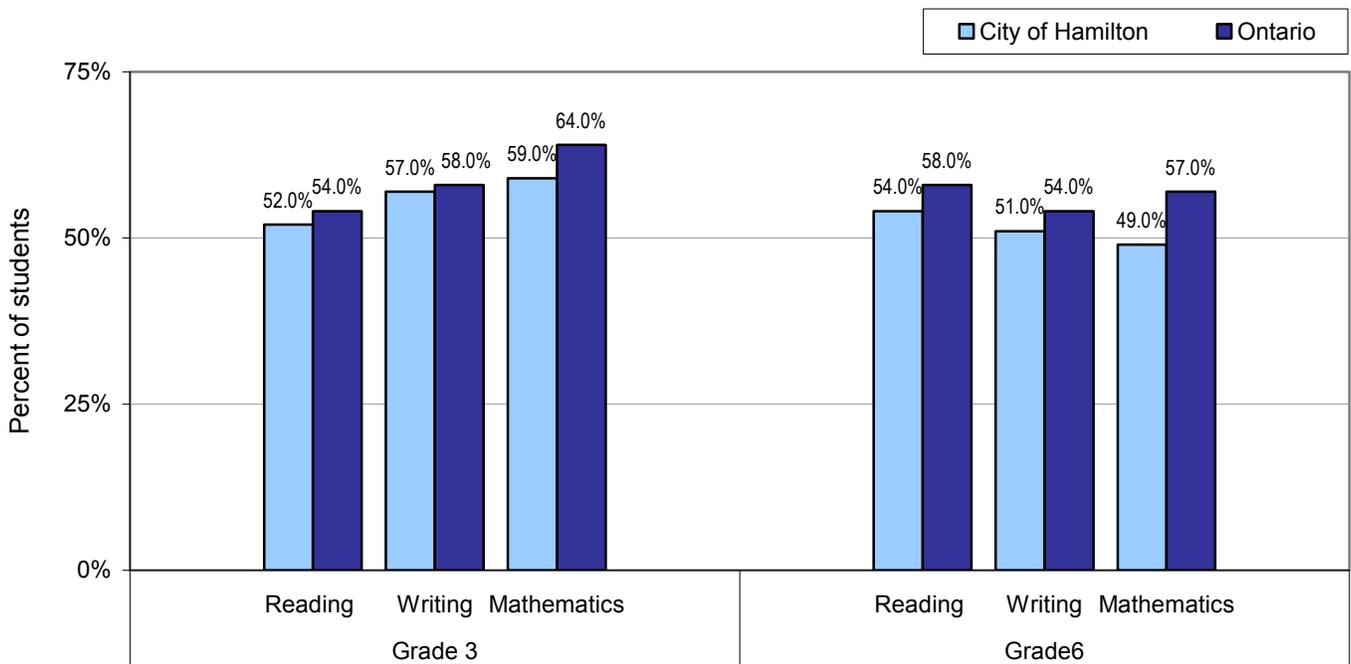
Description:

- The proportion of grade 3 and grade 6 students in the Hamilton-Wentworth district school boards performing at or above provincial Education Quality and Accountability Office (EQAO) target standards in the 2003-2004 school year examinations.
- The data represents the combined performance of the Hamilton-Wentworth District School Board and the Hamilton-Wentworth Catholic District School Board.

Key Message:

- In the Hamilton-Wentworth district school board area, a higher proportion of grade 3 students performed at or above the target standard in each of the three subject areas of reading, writing and mathematics than grade 6 students.
- The proportion of grade 3 and grade 6 students performing at or above the target standard in reading, writing and mathematics was lower in the Hamilton-Wentworth District School Board area than Ontario

Grade 3 and grade 6 students at or above EQAO standard, City of Hamilton and Ontario, 2003-04



Source: Data compiled from Education Quality and Accountability Office (EQAO) reports for Hamilton Wentworth Public and Catholic District School Boards, 2003-2004



CHILDREN HAVING DENTAL NEEDS

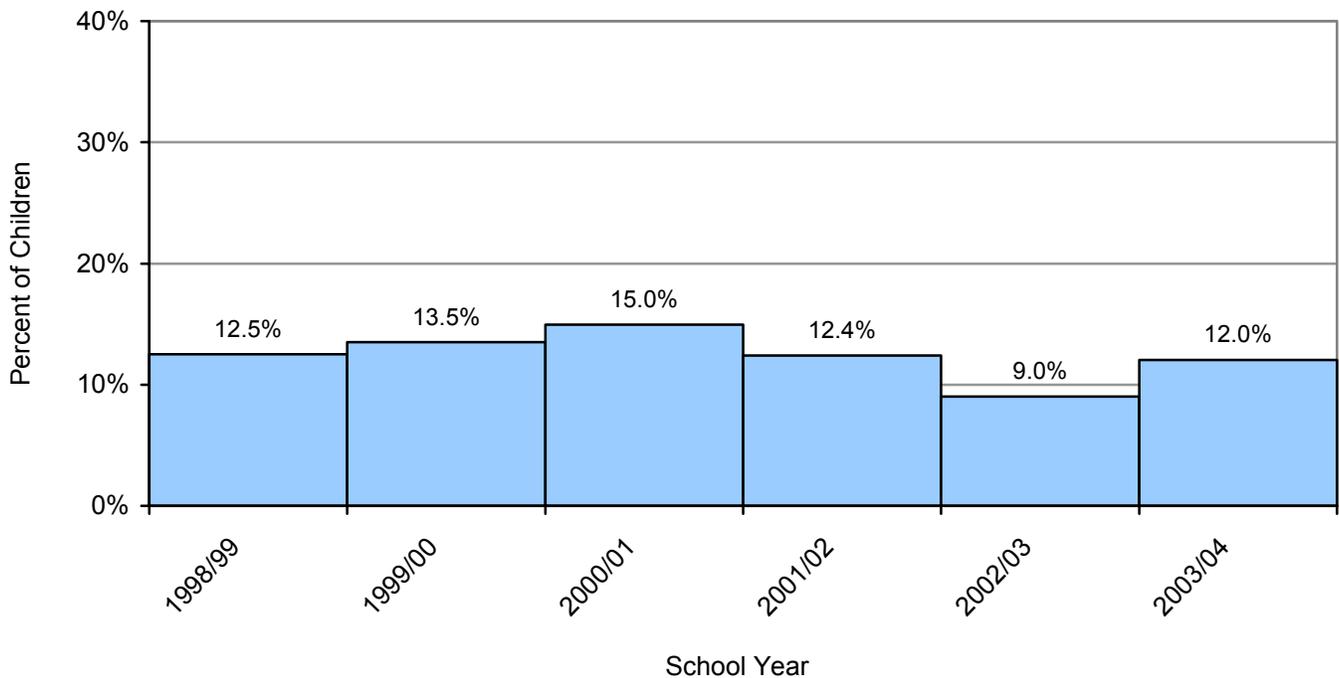
Description:

- The proportion of children 5 years of age who have been identified as eligible for the Child in Need of Treatment (CINOT) program which provides dental care to children of low income families. CINOT provides basic urgent dental care to children screened at school by dental professionals.
- Healthy baby teeth are important for eating, smiling, talking and keeping a place for adult teeth.
- All schools in the City of Hamilton were administered the survey.

Key Message:

- In 2003/04, 12.0% or 5 children 5 years of age were identified as eligible for the Child in Need of Treatment (CINOT) program.
- The proportion of 5 year olds identified as CINOT eligible increased in 2003/04, after having decreased for the previous two years.

Children 5 years of having CINOT Needs; City of Hamilton; School Years 1998/99 to 2003/04



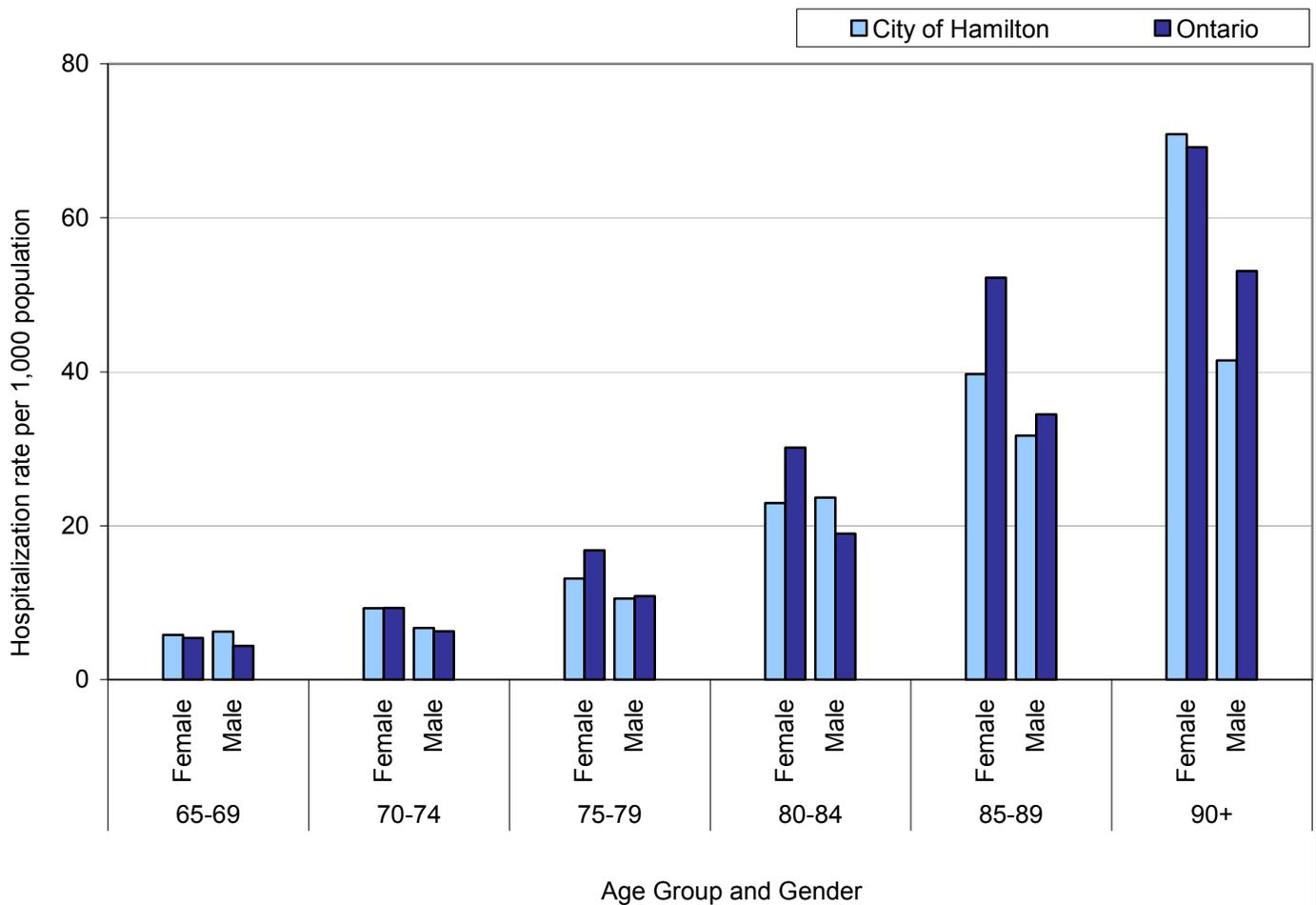
Source: City of Hamilton, Dental Indices Survey, 2003 and 2004.



HOSPITALIZATION DUE TO FALLS AMONG SENIORS

- Description:**
- The number of persons requiring hospitalization due to falls per 1,000 population.
 - Falls are a serious health concern for older people because they frequently result in injuries that require hospitalization and can lead to long-term activity limitation.
- Key Message:**
- The hospitalization rate for falls among seniors in the City of Hamilton increased with age for both males and females. However, in most age groups, rates for females were higher than for males.
 - Hospitalization rates for falls among females aged 75 to 89 years in the City of Hamilton were lower than the Ontario rate, while the rate for males aged 80 to 84 years in the City of Hamilton were higher than the Ontario rate.
 - Adults age 80 years and older had the highest risk of hospitalization due to falls.

Hospitalization rate per 1,000 due to falls, among seniors age 65 years and older, by age group and gender, City of Hamilton and Ontario, 2003/04



Source: Provincial Health Planning Database (PHPDB), Ministry of Health and Long-Term Care, 2005

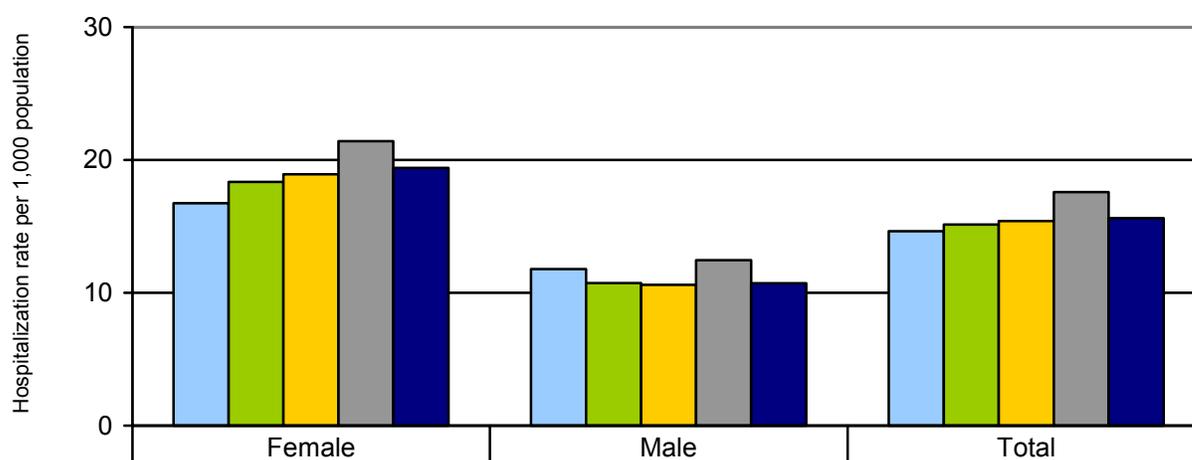


HOSPITALIZATION DUE TO FALLS AMONG SENIORS – PEER COMPARATORS

- Description:**
- The number of persons requiring hospitalization due to falls per 1,000 population.
 - Falls are a serious health concern for older people because they frequently result in injuries that require hospitalization and can lead to long-term activity limitation.

- Key Message:**
- There were fewer hospitalizations due to falls among females age 65 years and older in the City of Hamilton than in the select comparator cities and Ontario.
 - The hospitalization rate due to falls among males age 65 and older in the City of Hamilton was higher than Middlesex-London, Ottawa and Ontario.
 - The overall hospitalization rate due to falls among seniors age 65 and older in the City of Hamilton was lower than the select comparator cities and Ontario.

Hospitalization rate per 1,000 due to falls, among seniors age 65 years and older, by gender, City of Hamilton, select cities and Ontario, 2003/04



	Female	Male	Total
City of Hamilton	16.8	11.8	14.6
Middlesex-London	18.4	10.7	15.1
Ottawa	18.9	10.6	15.4
Windsor-Essex	21.4	12.5	17.6
Ontario	19.4	10.7	15.6

Source: Provincial Health Planning Database (PHPDB), Ministry of Health and Long-Term Care, 2005

