

Population Health Profile: Erie St. Clair LHIN

Health System Intelligence Project (HSIP)

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Produced by HSIP for the Local Health Integration Networks (LHINs). HSIP is an independent, credible source of information and an initiative of the Health Results Team for Information Management (HRT-IM).

Executive Summary: This report provides an overview of the Erie St. Clair LHIN using the most recently available data on social and demographic characteristics, health status, health practices and outcomes of the population. Rates or proportions for Ontario are provided as a comparator.

Relative to the province, Erie St. Clair has a higher

- proportion of seniors
- prevalence of people who are overweight or obese
- prevalence of arthritis/rheumatism
- all-cause mortality, PYLL and hospitalization rates

and a lower

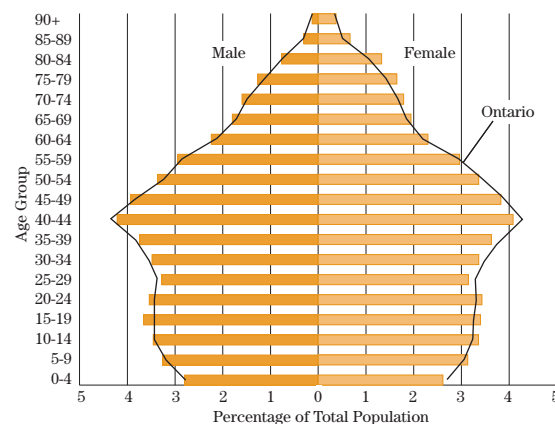
- proportion of immigrants, visible minorities and adults with post-secondary credentials
- life expectancy for males and females
- proportion of the population consuming fruits and vegetables five or more times per day
- proportion of adults reporting a lot of life stress
- proportion of the population who say their health is Very Good or Excellent

The Erie St. Clair LHIN is an area of relatively slow population growth, with a high proportion of seniors. The population has a higher prevalence of some unhealthy behaviours and, compared to Ontario, residents are less likely to have positive assessment of their health.

The Population: Erie St. Clair is home to 645,200 people; 5.2% of the population of Ontario. During the 1994-2004 time period the population of Erie St. Clair increased, on average, by 0.8% each year. The population of Ontario increased by 1.5% annually during this same time. Table 1 provides an overview of the social and demographic characteristics of this population. Compared to the provincial average, Erie St. Clair has a greater proportion of seniors and a much smaller proportion of immigrants and visible minorities. Almost 4% of the population is Francophone (i.e., claim French as their mother tongue). The unemployment rate in Erie St. Clair is slightly higher than the provincial rate and relative to the province a smaller proportion of the Erie St. Clair population is in low income. Forty-three percent of adults (age 20+) have attained post-secondary education credentials, and 28.2% have not completed high school.

Chart 1 shows the population structure of Erie St. Clair. The black line provides the Ontario population distribution for comparison. The population pyramid shows that the population structure of the Erie St. Clair area is similar to Ontario's, with a somewhat higher proportion of the population in the elderly age groups, and a lower proportion in the 25-39 age groups.

Chart 2: Health practices, population age 12+



Data Source: 2004 Population estimates, Statistics Canada

Table 1: Socio-demographic characteristics

	ERIE ST. CLAIR	ONTARIO	LHIN Range
Total population (2004)†	645,200	12,392,700	242,500 - 1,542,900
Senior population, age 65+ (2004)†	13.6%	12.8%	9.4 - 15.7%
Population with English mother tongue	80.0%	71.9%	55.7 - 92.2%
Population with French mother tongue	3.9%	4.7%	1.2 - 25.1%
Population who are immigrants	17.3%	26.8%	6.4 - 45.7%
Population who are recent immigrants (arrived between 1996-2001)	2.9%	4.8%	0.3 - 9.7%
Population who are visible minorities	8.1%	19.1%	1.3 - 38.8%
Population of Aboriginal identity	2.0%	1.7%	0.3 - 13.9%
Labour force participation rate (age 15+)	65.7%	67.3%	60.0 - 72.0%
Unemployment rate (age 15+)	6.5%	6.1%	5.0 - 9.8%
Population in low income	12.2%	14.4%	10.0 - 22.3%
Families (with children) headed by a lone parent	23.8%	23.4%	19.4 - 30.0%
Population (age 20+) with less than grade 9 education	9.5%	8.7%	6.3 - 12.0%
Population (age 20+) without high school graduation certificate	28.2%	25.7%	19.2 - 33.4%
Population (age 20+) with completed post-secondary education	43.0%	48.7%	42.4 - 55.8%

Data Source: †2004 Population estimates. Remaining indicators based on 2001 Census of Canada.

Health Status: Life expectancy at birth is the average years of life an individual could live on the assumption that current, cross-sectional age-specific mortality rates remain constant over the life span. Life expectancy among males and females in Erie St. Clair is significantly lower than life expectancy for Ontario overall (see Table 2). Low birthweight is an important determinant of infant morbidity and mortality. In Erie St. Clair 5.5% of infants born in 1999-2001 were of low birthweight. Infant mortality is a long-established measure, not only of child health, but also of the well-being of a society. The infant mortality rate in Erie St. Clair of 5.5

per 1000 livebirths is similar to the provincial experience. Self-reported health, an indicator of overall health status, can reflect aspects of health not captured in other measures, such as disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function. Residents of Erie St. Clair are significantly less likely than Ontarians overall to rate their health as “Excellent” or “Very Good”. One in four residents report being limited in their activities because of a physical or mental condition or health problem which has lasted or is expected to last longer than six months.

Health Practices and Preventive Care: Poor health practices are known to be related to increased risk of chronic disease, mortality and disability. Chart 2 shows that, relative to the province, those in Erie St. Clair are significantly more likely to be overweight/obese, and less likely to consume an adequate amount of fruits and vegetables. Based on Body Mass Index 35.9% of the adult population of Erie St. Clair is considered overweight and 17.0% are obese. Compared to the provincial average Erie St. Clair also has a slightly higher proportion of daily smokers, heavy drinkers, and inactive population but these differences are not statistically significant. However, Erie St. Clair residents are significantly less likely to report that they have a lot of life stress.

The use of preventive health care services can lead to early detection of disease, which ultimately results in reduced morbidity and mortality. Mammography and flu shot rates for Erie St. Clair are among the highest in the province, but the use of Pap smears (for cervical cancer screening) among women in Erie St. Clair is the lowest in the province (see Table 3). Early detection of cervical cancer improves chances of survival.

The point of access for most medical care is through a primary care physician. Medical doctors also play a key role in coordinating care and

Table 2: Health status

	ERIE ST. CLAIR	ONTARIO	LHIN Range
Female life expectancy at birth (years), 2001†	81.2* (±0.5)	82.1 (±0.1)	79.5 - 82.2
Male life expectancy at birth (years), 2001†	76.2* (±0.5)	77.5 (±0.1)	74.7 - 80.6
Low birth weight babies (1999-2001)‡	5.5%	5.6%	3.7 - 6.2%
Infant mortality rate per 1000 livebirths (1999-2001)†‡	5.5 (±1.1)	5.4	3.9 - 6.1
Population who say their health is Excellent or Very Good, 2003 (age 12+)#	53.7%* (±2.5)	57.4% (±0.7)	51.0 - 61.5%
Population with an activity limitation, 2003 (age 12+)#	24.7% (±2.2)	24.6% (±0.6)	19.3 - 30.0%

* Significantly different from provincial average based on assessment of 95% confidence intervals.

Data sources: † Ontario Vital Statistics, Mortality Database, ‡ Ontario Vital Statistics, Livebirths Database

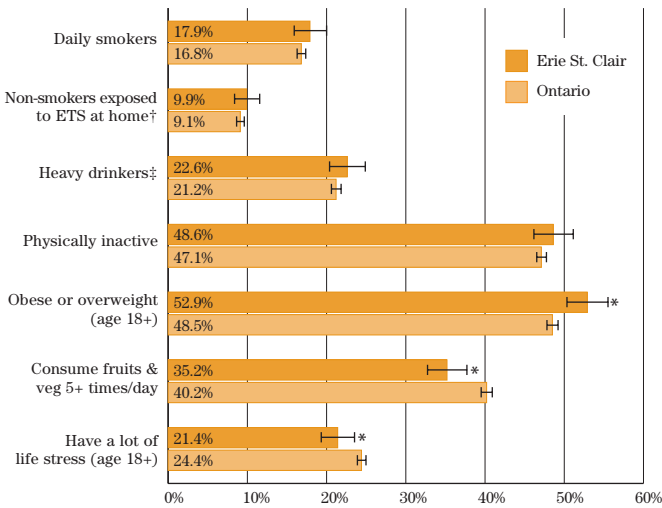
Canadian Community Health Survey, 2003

Table 3: Use of preventive care

	ERIE ST. CLAIR	ONTARIO	LHIN Range
Had mammogram in past 2 years (females age 50-69)	75.2% (±5.3)	70.6% (±1.9)	65.8 - 77.2%
Had Pap smear test in past 3 years (females age 18+)	65.4% (±3.3)	69.2% (±1.0)	65.4 - 75.5%
Had flu shot in past year (age 12+)	36.7% (±2.2)	34.2% (±0.7)	30.3 - 39.0%
Contact with Medical Doctor in past year (age 12+)	80.8% (±2.2)	81.4% (±0.6)	76.4 - 83.7%

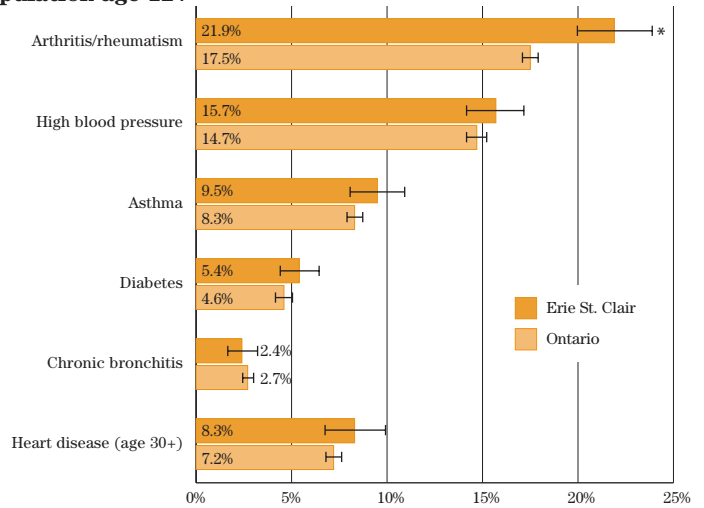
Data source: Canadian Community Health Survey, 2003

Chart 2: Health practices, population age 12+



† ETS-environmental tobacco smoke (second-hand smoke)
 ‡ as a proportion of current drinkers
 * Significantly different from provincial average based on assessment of 95% confidence interval.
 Data Source: Canadian Community Health Survey, 2003

Chart 3: Prevalence of selected chronic conditions, population age 12+



* Significantly different from provincial average based on assessment of 95% confidence interval.
 Data Source: Canadian Community Health Survey, 2003

managing chronic conditions. The majority of people (80.8%) in Erie St. Clair had at least one contact, either in person or by phone, with a medical doctor in the past year. This is similar to the Ontario average of 81.4%.

Morbidity and Mortality: Chronic conditions place a high burden on the health care system and reduce the quality of life of those who suffer from the condition. Chart 3 shows that, compared to Ontario, Erie St. Clair has a significantly

higher prevalence of arthritis/rheumatism and slightly higher rates of other chronic conditions such as asthma, diabetes, heart disease, and high blood pressure. Prevalence rates presented in Chart 3 are not age-standardized, and therefore areas with a high proportion of seniors will tend to have higher rates of chronic conditions.

Table 4: Mortality, PYLL and hospitalization rates by ICD-10 chapter

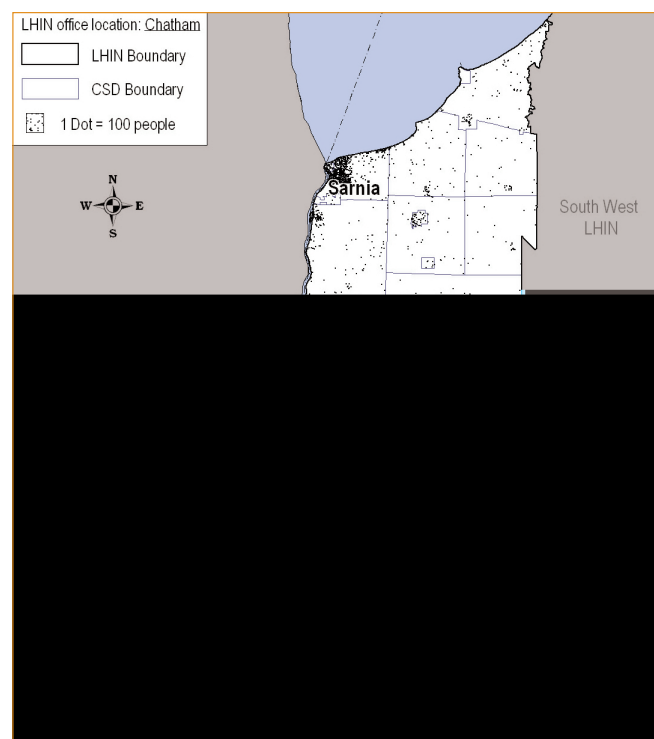
Cause (ICD-10 chapter)	Age-standardized mortality rate per 100,000 (avg. 2000-01)†		Potential Years of Life Lost rate per 100,000 (avg. 2000-01)†		Age-standardized hospitalization rate per 100,000 (2003-04)‡	
	ERIE ST. CLAIR	ONTARIO	ERIE ST. CLAIR	ONTARIO	ERIE ST. CLAIR	ONTARIO
ALL CAUSES	657.2	602.6	5,424	4,864	8,959.3	7,746.7
I. Infectious diseases	6.1	9.3	81.3	122.3	107.2	119.9
II. Neoplasms	194.0	181.4	1,763.9	1,590.3	636.8	549.6
III. Diseases of blood	1.6	2.1	17.1	18.4	84.1	76.2
IV. Endocrine/nutritional disorders	26.5	26.1	174.1	171.0	200.8	173.7
V. Mental & behavioural disorders	15.3	15.0	72.9	59.2	648.0	502.7
VI. Nervous system diseases	20.6	24.8	137.8	142.9	133.0	111.6
VII. Eye diseases	0	-	0	-	22.4	20.1
VIII. Ear diseases	0	-	0	1.1	31.5	20.7
IX. Circulatory system diseases	254.4	209.1	1,043.3	852.9	1,233.6	1,007.5
X. Respiratory system diseases	44.7	45.4	221.3	150.5	727.1	624.6
XI. Digestive system diseases	25.7	22.6	262.2	191.1	911.1	761.2
XII. Skin diseases	1.3	1.0	3.8	3.9	73.8	65.9
XIII. Musculoskeletal diseases	4.0	3.8	31.9	24.8	465.2	356.0
XIV. Genitourinary diseases	9.8	11.1	46.8	38.2	572.6	421.0
XV. Maternal conditions	-	0.1	6.3	4.6	1,326.8	1,367.8
XVI. Perinatal conditions	2.3	4.2	145.0	266.5	85.9	71.7
XVII. Congenital abnormalities	4.2	3.1	212.5	158.0	52.3	47.9
XVIII. Symptoms not elsewhere classified	13.7	10.8	285.4	234.0	543.2	457.9
XIX. Injury & poisoning	n/a	n/a	n/a	n/a	627.1	578.6
XX. External causes of mortality	32.8	32.6	916.6	834.3	n/a	n/a
XXI. Factors influencing use of services	n/a	n/a	n/a	n/a	476.6	408.6

- Data suppressed due to small numbers
 Data sources: † Ontario Vital Statistics, Mortality Database ‡ Ontario Hospital Inpatient Database

Table 4 provides age-standardized mortality and hospitalization rates as well as rates for potential years of life lost (PYLL) by ICD-10 chapter. In Erie St. Clair 20.7% of deaths occur before the age of 65, and 41.0% occur before the age of 75 (the Ontario percentages are 21.3% and 41.2% respectively). All-cause mortality, PYLL and hospitalization rates in Erie St. Clair are higher than provincial rates. This appears to be due primarily to higher rates of circulatory disease, the leading cause of mortality and morbidity. PYLL rates are useful for quantifying the number of years of life “lost” from deaths that occur “prematurely” (i.e., before age 75). Table 4 shows that, in Erie St. Clair, neoplasms contribute to more years of potential life lost than any other cause, followed by circulatory system diseases, and external causes (i.e., injuries).

Map 1 shows the 2001 population distribution (mapped by dissemination areas) within the Erie St. Clair LHIN area. Census subdivision (CSD) boundaries (analogous to municipal boundaries in most areas) and the names of selected communities are shown for reference. One third of the Erie St. Clair population resides in the Windsor CSD (population of approximately 208,400), with Chatham-Kent (107,300) and Sarnia CSDs (70,900) following as the next most populous areas (18% and 12% of the population respectively). The remainder of Erie St. Clair is made up of CSDs ranging in population size from 260 people (Peelee Island) to approximately 29,000 (Lakeshore).

Map 1: Population distribution in Erie St. Clair



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Glossary

Age-standardization: adjustment for variations in population age distributions over time and place. Mortality and hospitalization rates are adjusted using the Direct Method and the 1991 Canadian population.

Body Mass Index (BMI): a measure of body weight adjusted for height which is correlated with body fat. BMI is defined as weight in kilograms divided by height in meters squared. A BMI of 30 or more is classified as obese.

Census subdivision: area that is a municipality or an area that is deemed to be equivalent to a municipality for statistical reporting purposes (e.g., as an Indian reserve or an unorganized territory). Municipal status is defined by laws in effect in each province and territory in Canada.

Confidence intervals: indicate the degree of variability associated with an estimate. A 95% confidence interval indicates that estimates are accurate within the upper and lower confidence interval 19 times out of 20. Upper and lower bounds are shown as \pm values in tables and error bars in charts.

Dissemination areas (DAs): the smallest standard geographic area for which census data are disseminated. DAs are composed of one or more neighbouring blocks, with a population of 400 to 700 persons.

Hospitalization rate: refers to the hospital separation rate for all hospital inpatients excluding newborns and stillbirths. A separation may be due to death, discharge home, or transfer to another facility.

ICD-10: refers to the International Classification of Diseases, 10th revision. The ICD is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and hospital records. ICD chapters are broad classifications which are subdivided into more specific conditions.

Potential Years of Life Lost: represents the number of years not lived by an individual from birth to age 75 due to premature death. The PYLL rate provides the total years of life lost before age 75 to the total population under 75.

Statistical significance: an inference that a result is unlikely to have occurred due to chance alone.