

Population Health Profile: South West LHIN

Health System Intelligence Project (HSIP)

HSIP-PHP-01

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 South West 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, the South West has a higher

- proportion of seniors
- proportion of people who have received the flu shot in the past year
- prevalence of arthritis/rheumatism and high blood pressure
- all cause mortality and hospitalization rates (age-standardized)

and a lower

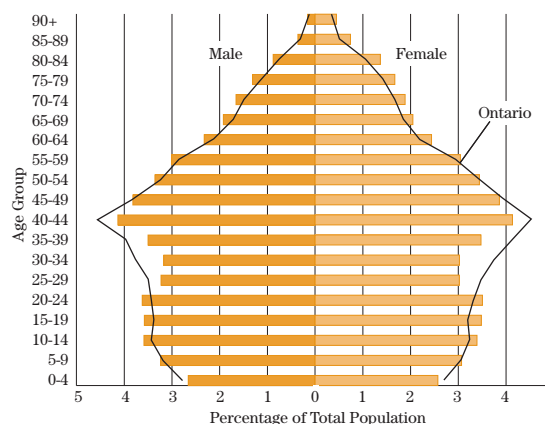
- proportion of immigrants, visible minorities and adults with post-secondary credentials
- life expectancy for males
- proportion of adults reporting a lot of life stress

The South West LHIN has a mixed urban and rural population with slow population growth and a relatively low proportion of immigrants and visible minorities. The health practices and health outcomes, in general, reflect the province.

The Population: The South West LHIN is home to 924,100 people; 7.5% of the population of Ontario. During the 1994-2004 time period the population of South West increased, on average, by 0.6% 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, the South West area has a greater proportion of seniors and a much smaller proportion of immigrants or visible minorities. Just over one percent of the population is Francophone (i.e., claim French as their mother tongue). The unemployment rate in South West is similar to the provincial rate and relative to the province, a smaller proportion of the South West population is in low income. Forty-five percent of adults (age 20+) have attained post-secondary education credentials, but 28.5% have not completed high school.

Chart 1 shows the population structure of South West. The black line provides the Ontario population distribution for comparison. The population pyramid shows that, compared to Ontario, the South West area has a higher proportion of people in the 50+ age groups but a notably lower proportion in the 25-39 age groups.

Chart 1: Age-sex population distribution



Data Source: 2004 Population estimates, Statistics Canada

Table 1: Socio-demographic characteristics

	SOUTH WEST	ONTARIO	LHIN Range
Total population (2004)†	924,100	12,392,700	242,500 - 1,542,900
Senior population, age 65+ (2004)†	14.4%	12.8%	9.4 - 15.7%
Population with English mother tongue	86.2%	71.9%	55.7 - 92.2%
Population with French mother tongue	1.2%	4.7%	1.2 - 25.1%
Population who are immigrants	14.5%	26.8%	6.4 - 45.7%
Population who are recent immigrants (arrived between 1996-2001)	1.6%	4.8%	0.3 - 9.7%
Population who are visible minorities	5.2%	19.1%	1.3 - 38.8%
Population of Aboriginal identity	1.2%	1.7%	0.3 - 13.9%
Labour force participation rate (age 15+)	67.5%	67.3%	60.0 - 72.0%
Unemployment rate (age 15+)	5.8%	6.1%	5.0 - 9.8%
Population in low income	12.0%	14.4%	10.0 - 22.3%
Families (with children) headed by a lone parent	22.3%	23.4%	19.4 - 30.0%
Population (age 20+) with less than grade 9 education	8.8%	8.7%	6.3 - 12.0%
Population (age 20+) without high school graduation certificate	28.5%	25.7%	19.2 - 33.4%
Population (age 20+) with completed post-secondary education	45.3%	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 in South West is significantly lower than life expectancy for Ontario males¹ (see Table 2). Low birthweight is an important determinant of infant morbidity and mortality. In South West 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 South West of 5.9 per 1000 livebirths is

higher than the provincial average but the difference is not statistically significant. 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 South West are just as likely as 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 the prevalence of daily smoking, exposure to ETS, heavy drinking, inactivity, and fruit & vegetable consumption in the South West is similar to the provincial average. Based on Body Mass Index 51.2% of the adult population of South West is considered either overweight or obese. Although this overall proportion is similar to the province, a significantly greater proportion of the South West population is categorized as obese (17.7% versus 15.0% in Ontario). Lastly, South West residents are significantly less likely to report that they have a lot of life stress.

Table 2: Health status

	SOUTH WEST	ONTARIO	LHIN Range
Female life expectancy at birth (years), 2001†	81.7 (±0.4)	82.1 (±0.1)	79.5 - 82.2
Male life expectancy at birth (years), 2001†	76.7* (±0.4)	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)†‡	5.9 (±1.0)	5.4 (±0.2)	3.9 - 6.1
Population who say their health is Excellent or Very Good, 2003 (age 12+)#	57.6% (±1.9)	57.4% (±0.7)	51.0 - 61.5%
Population with an activity limitation, 2003 (age 12+)#	25.7% (±1.6)	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

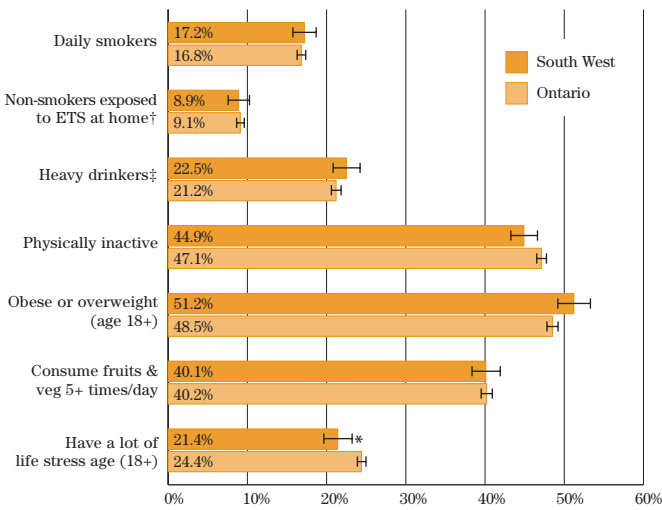
	SOUTH WEST	ONTARIO	LHIN Range
Had mammogram in past 2 years (females age 50-69)	67.4% (±5.0)	70.6% (±1.9)	65.8 - 77.2%
Had Pap smear test in past 3 years (females age 18+)	68.1% (±2.2)	69.2% (±1.0)	65.4 - 75.5%
Had flu shot in past year (age 12+)	38.4%* (±1.9)	34.2% (±0.7)	30.3 - 39.0%
Contact with Medical Doctor in past year (age 12+)	79.5% (±1.5)	81.4% (±0.6)	76.4 - 83.7%

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

The use of preventive health care services can lead to early detection of disease, which ultimately results in reduced morbidity and mortality. Mammography and cervical cancer screening (e.g. Pap smear) rates for South West females are similar to provincial rates (see Table 3). Early detection of cancer improves chances of survival. South West has a significantly higher influenza immunization; 38.4% of residents (age 12+) received the flu shot in the past year compared to 34.2% provincially.

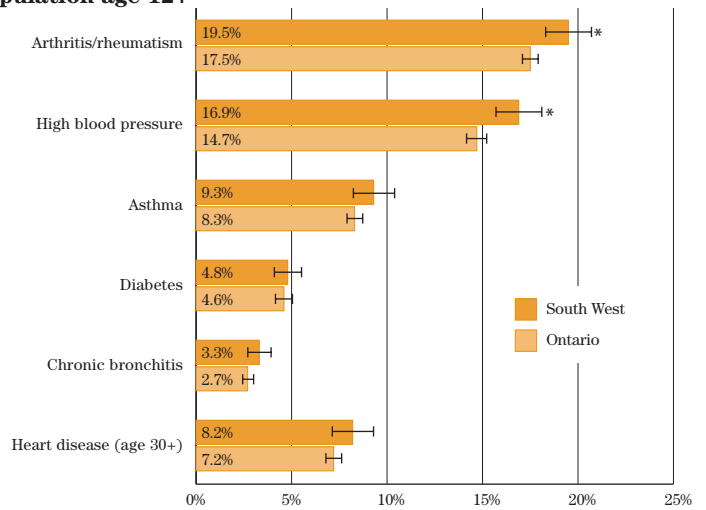
The point of access for most medical care is through a primary care physician. Medical doctors also play a key role in coordinating care and

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 (79.5%) in South West 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 the province, South West has a significantly

higher prevalence of arthritis/rheumatism and high blood pressure. The prevalence of other chronic conditions such as asthma, diabetes, bronchitis and heart disease is slightly higher than provincial rates, but these differences are not statistically significant. 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)‡	
	SOUTH WEST	ONTARIO	SOUTH WEST	ONTARIO	SOUTH WEST	ONTARIO
ALL CAUSES	634.4	602.6	5,341	4,864	8,536.3	7,746.7
I. Infectious diseases	9.1	9.3	113.3	122.3	122.4	119.9
II. Neoplasms	185.0	181.4	1,694.7	1,590.3	566.8	549.6
III. Diseases of blood	2.3	2.1	10.1	18.4	76.7	76.2
IV. Endocrine/nutritional disorders	28.6	26.1	213.6	171.0	194.9	173.7
V. Mental & behavioural disorders	14.5	15.0	36.2	59.2	666.3	502.7
VI. Nervous system diseases	26.9	24.8	138.6	142.9	130.6	111.6
VII. Eye diseases	0	-	0	-	26.7	20.1
VIII. Ear diseases	0	-	0	1.1	25.5	20.7
IX. Circulatory system diseases	221.9	209.1	961.7	852.9	957.8	1,007.5
X. Respiratory system diseases	49.7	45.4	153.0	150.5	671.2	624.6
XI. Digestive system diseases	25.9	22.6	236.6	191.1	877.0	761.2
XII. Skin diseases	1.2	1.0	2.0	3.9	74.4	65.9
XIII. Musculoskeletal diseases	4.0	3.8	19.6	24.8	420.7	356.0
XIV. Genitourinary diseases	11.5	11.1	40.6	38.2	468.0	421.0
XV. Maternal conditions	-	0.1	5.6	4.6	1,383.4	1,367.8
XVI. Perinatal conditions	4.3	4.2	257.4	266.5	51.2	71.7
XVII. Congenital abnormalities	5.6	3.1	294.0	158.0	49.2	47.9
XVIII. Symptoms not elsewhere classified	7.2	10.8	167.2	234.0	481.4	457.9
XIX. Injury & poisoning	n/a	n/a	n/a	n/a	745.7	578.6
XX. External causes of mortality	38.7	32.6	997.1	834.3	n/a	n/a
XXI. Factors influencing use of services	n/a	n/a	n/a	n/a	546.2	408.6

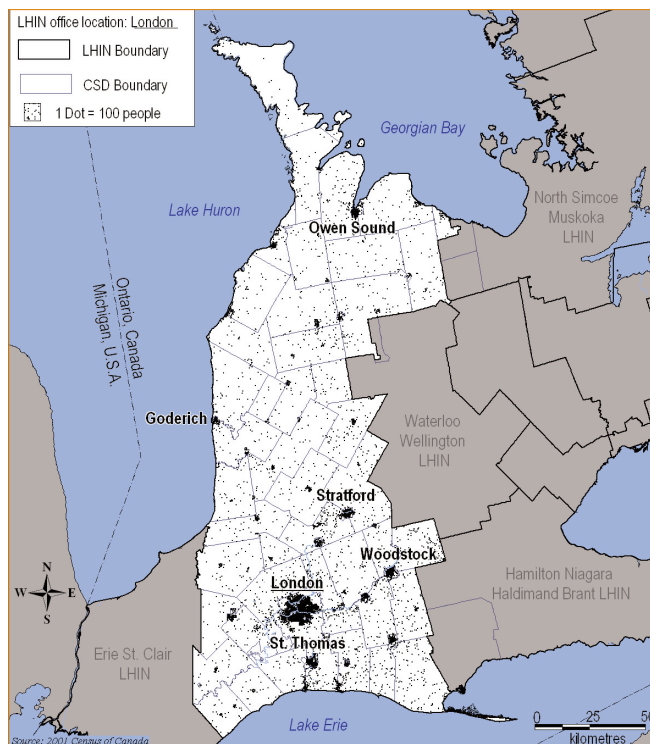
- Data suppressed due to small numbers
 Data sources: † Ontario Vital Statistics, Mortality Database ‡ Ontario Hospital Inpatient Database

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 South West 19.2% of deaths occur before the age of 65, and 37.4% occur before the age of 75. This compares favourably with the Ontario percentages of 21.3% and 41.2% respectively. All-cause mortality and hospitalization rates in South West however are higher than provincial rates. This appears to be primarily due to higher rates of circulatory disease and external causes (for mortality) and injuries and mental disorders (for hospitalizations).

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 the South West, neoplasms contribute to more years of potential life lost than any other cause, followed by external causes (i.e., injuries) and circulatory system diseases.

Map 1 shows the 2001 population distribution (mapped by dissemination areas) within the South West LHN area. Census subdivision (CSD) boundaries (analogous to municipal boundaries in most areas) and the names of selected communities are shown for reference. Almost forty percent of the South West population resides in the London CSD (population of approximately 336,500), with St. Thomas (33,200) and Woodstock CSDs (33,100) following as the next most populous areas (4% of the population each). The remainder of South West is made up of CSDs ranging in population size from 400 people (Newbury) to approximately 29,700 (Stratford).

Map 1: Population distribution in South West



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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.

¹ Deaths occurring within communities crossing LHN boundaries cannot be allocated to the correct region if their postal codes are not usable. The result is that estimates for South West based on mortality data (including life expectancies, infant mortality, mortality and PYLL rates) in this report are subject to a small degree of error and thus must be interpreted with some caution. More information on these data quality issues can be found in the HSIP Research Note “Mortality Geographic Data Quality, 2000-2001”.