

# 2015

# **Health Status Report**



Report Prepared by: Carolyn Richards March 2015

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For further information, please contact:

Carolyn Richards, Epidemiologist 1230 Talbot Street St. Thomas, ON, N5P 0A9 Phone: 519-631-9900, Ext. 1300 crichards@elginhealth.on.ca

## **Executive Summary**

#### **Population and Geography**

The total population of Elgin St. Thomas was 87,461 in the 2011 Census. Seniors made up 16% of the population and that proportion is increasing over time. Children and youth accounted for 13% of the population and that proportion is decreasing. The East end of Elgin County had a greater proportion of children and youth than the West or Central regions while the West end of the county had a greater proportion of seniors.

Elgin St. Thomas has a large rural population. 35% of residents lived in rural areas while the rest were in small and medium urban areas.

#### **Social Determinants of Health**

The median income of all households in Elgin St. Thomas was \$54,411. Most households earned between \$20,000-\$49,000 (29%) and \$50,000-\$79,000 (25%).

Many residents of Elgin St. Thomas were living in low income (16%) and 20% of children under the age of 18 as well as 10% of seniors.

In Elgin St. Thomas, 17% of the population had less than a high school diploma and 30% had only a high school diploma. Females were more likely than males to achieve a higher level of education such as completing college or university.

In Elgin St. Thomas, 20% of people who own their home and 42% of people who are currently renting are spending more than 30% of their household income on shelter costs.

It costs \$833 to feed a family of four in Elgin St. Thomas for a month in order to meet their nutritional needs based on Canada's Food Guide.

#### **General Health Status**

People living in Elgin St. Thomas consider themselves to be healthy overall. 90% rated their health as good or better, although more people reported better health when they had a higher income.

Elgin St. Thomas had higher rates of all-cause hospitalization compared to Ontario. The highest rates were among 0-4 year olds and those aged 40 years and older. Chronic diseases and injuries accounted for the majority of the leading causes of hospitalization.

Elgin St. Thomas also had higher rates of allcause mortality than Ontario. Of the top 10 leading causes of death, four are directly linked to the work of public health; heart disease, lung cancer, influenza and colorectal cancer.

Of the top 10 leading causes of potential years of life lost (PYLL), six have direct links to public health work; heart disease, lung cancer, motor vehicle collisions, suicide, liver disease and breast cancer. Motor vehicle collisions and suicide deaths were not among the leading causes of death, therefore their appearance among the leading causes of potential years of life lost implies they were common among younger people.

Many in Elgin St. Thomas are meeting the recommendations for cancer screening and

rates are increasing over time but there is still room for improvement. In 2011-2012 60% of women aged 50 to 74 in Elgin St. Thomas met the breast cancer screening recommendations. Just over 60% of women aged 20 to 69 met the recommendations for cervical cancer screening and 30% of people aged 50 to 74 years met the recommendation for colorectal cancer screening.

Residents of Elgin St. Thomas reported good overall mental health. There were significantly lower rates of hospitalization due to mental illness than Ontario over time and only 20% of people reported feeling quite a bit or extremely stressed at work and during their daily lives. 12% of respondents also said they consulted with a mental health professional in the past year.

## Lifestyle Behaviours and Risk Factors for Chronic Disease

More people in Elgin St. Thomas are smoking compared to the province and the peer health units and rates are not decreasing over time. In 2011-2012, 21% of respondents in Elgin St. Thomas were daily smokers, 6.7% were occasional smokers, and 29% were former smokers. Only 45% had never smoked including 64% of youth aged 19-24.

Marijuana use is relatively common in Elgin St. Thomas with 47% reporting use two or more times at some point in the past and 27% reporting use in the past year.

Youth in Elgin St. Thomas (aged 12-18) were less likely to report alcohol consumption in 2011-2012 than in previous years (31% in 2011-2012 vs. 69% in 2005).

Nearly half of adults in Elgin St. Thomas reported drinking in excess of the low risk

drinking guidelines. 20% were drinking in excess of guideline 1 which aims to prevent the long term risks of chronic disease due to alcohol consumption and 48% were drinking in excess of guideline 2 which aims to decrease the short-term risk of injury or acute illness due to the overconsumption of alcohol on a single occasion.

There has been a decrease in motor vehicle collisions in Elgin St. Thomas over time. There was a 43% decrease in total motor vehicle collisions between 2001 and 2011 and half as many collisions resulted in an injury or fatality.

More than half of adults in Elgin St. Thomas had a Body Mass Index (BMI) above the normal weight range but this was similar to the province and the peer health units. In 2011-2012, 38% of adults were overweight and 19% were obese. More than 60% of people in Elgin St. Thomas also reported eating fewer than the recommended 5 servings of fruits and vegetables on a daily basis.

During leisure time the residents of Elgin St. Thomas were not physically active and many were exceeding the recommended amount of screen time. Only 32% reported being physically active enough to receive cardiovascular benefit, 23% were only moderately active and 45% were not active at all. The proportion of the population spending 15 or more hours of leisure time each week on screen time rose from 50.8% in 2007-2008 to 64.3% in 2011-2012.

#### **Injuries and Injury Prevention**

Elgin St. Thomas had higher rates of emergency department visits due to all unintentional injuries than Ontario. The rates of hospitalization were also higher than Ontario for injuries due to sports and recreation, ATVs, falls and motor vehicle collisions. There were no significant differences in mortality rates due to injury between Elgin St. Thomas and Ontario.

Elgin St. Thomas had similar rates of emergency department visits, hospitalizations and mortality due to all intentional injuries when compared to Ontario and rates decreased over time.

Only 30% of people in Elgin St. Thomas wore a helmet while cycling always or most of the time compared to over 45% in Ontario.

#### **Maternal and Reproductive Health**

There were just over 1,000 births to women in Elgin St. Thomas each year. The birth rate in Elgin St. Thomas was similar to Ontario with no significant changes over time. The highest birth rates were among women aged 25-29 years old and the lowest birth rates were among women aged 40-44 years.

Teens aged 15-19 in Elgin St. Thomas did not have a significantly higher rate of pregnancy than teens in Ontario and teen pregnancy rates decreased over time. Teen in Elgin St. Thomas had significantly lower rates of therapeutic abortions than teens in Ontario and they also had higher rates of giving birth compared to Ontario although this rate decreased over time.

In Elgin St. Thomas approximately 7% of births were considered small for gestational age and about 12% were considered to be large for gestational age. Mothers in the oldest age

groups had the highest proportion of babies with a low birth weight.

#### **Oral Health**

During the 2013-2014 school year a total of 2,876 students from all grades across Elgin St. Thomas received an oral health screening. 23% of schools in 2013-2014 were classified as high risk based on dental decay among students in grade 2 which is much lower than the 63% of schools classified as high risk in 2010-2011.

Urgent dental care needs were identified in 11% of all students in grade 2 who were screened in Elgin St. Thomas. Urgent dental care needs increased over time in Central Elgin as well as the West of the county and decreased in the East.

#### **Communicable Diseases**

Chlamydia, Hepatitis C and Influenza were the most common reportable diseases in Elgin St. Thomas.

For diseases that are spread primarily through contaminated food and water,
Campylobacteriosis was the most commonly reported in Elgin-St. Thomas, followed by
Salmonellosis and Cryptosporidiosis.

There were only 4 confirmed cases of Tuberculosis reported in Elgin St. Thomas between 2005 and 2011. Rates were approximately 4 times lower than Ontario.

In 2011-2012 78% of healthcare workers in Elgin St. Thomas received a seasonal influenza vaccine. The average proportion has increased every year starting from 54% in 2008-2009.

#### **Sexual Health**

Residents of Elgin St. Thomas are engaging in risky sexual behaviour. 35% of teens aged 15-19 reported ever having sexual intercourse, 78% of people were under the age of 20 at their sexual debut, 13% of residents reported having 2 or more sexual partners in the past year and only 50% of the population in Elgin St. Thomas who were at a higher risk for a sexually transmitted infection reported using a condom during their most recent sexual encounter.

The most commonly reported sexually transmitted infections in Elgin St. Thomas were Chlamydia, Hepatitis C and Gonorrhoea. Elgin St. Thomas had lower rates of confirmed cases of Chlamydia than Ontario, but that difference is shrinking over time.

#### Vaccine Preventable Disease and Immunization

The most commonly reported vaccine preventable diseases in Elgin St. Thomas were Influenza, Pertussis and Streptococcal pneumoniae.

There was a large outbreak of Pertussis in Elgin St. Thomas in 2011-2012. The outbreak led to an increase in cases across Ontario in 2012-2013. Confirmed cases of Pertussis were highest in children under 5 years of age.

In Elgin St. Thomas, 60% of people reported ever receiving a flu shot at some point in the past and 42% got one in the past year. There was a significant decrease over time.

#### **Needle Exchange Program**

Needle exchange program is an important public health approach to reducing drug-related harm to individuals and the community. The Elgin St. Thomas Public Health Needle Exchange

program received an average of 27 client visits per month in 2013-2014. Over 30,000 clean needles were distributed and more than 20,000 used ones were returned for safe disposal.

#### **Environmental Health**

There were very few cases of reportable vectorborne and zoonotic disease in Elgin St. Thomas. There has only ever been one confirmed case of West Nile Virus in Elgin St. Thomas and that was in 2004 and no mosquitoes tested positive locally for the virus in 2013. There was only 1 confirmed case of Lyme disease in a resident of Elgin St. Thomas; however this case was travel-related.

The air quality for Elgin St. Thomas was either good or very good for the majority of days each year. There were never any days rated as having very poor air quality and only one day rated as poor each year. The number of smog alerts and smog alert days has been decreasing since 2007 in Elgin St. Thomas. There were no smog alerts issued in 2013 or 2014 compared to 13 in 2007 which was the year with the most advisories.

Between 2009 and 2014 there were 20 heat alerts issued in Elgin St. Thomas lasting an average of 4 days each time. Heat alerts were issued between May and September with 45% of the alerts being issued in July. Between 2009 and 2014 there were also 20 cold alerts issued and they lasted an average of 4 days each time. Cold alerts were issued between January and March with the most alerts issued in January and February.

#### **Tobacco Enforcement**

The most common charges and warnings issued in Elgin St. Thomas under the Smoke Free Ontario Act (SFOA) were for smoking in workplaces or public places. Charges and

warnings issued for the display handling and promotion of tobacco were the least common.

In Elgin St. Thomas there were an average of 27 charges and warnings issued each year for selling tobacco to someone under the age of 19. There was an increase in the number of charges and warnings issued between 2011 and 2013. There has also been an increase in vendor compliance between 2011 and 2013 indicating fewer sales to minors over time.

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## **Some Notes on Reading this Report**

## **Comparison Groups**

Throughout the report, Peer Group A or PeerA will appear as a comparison for Elgin St. Thomas in addition to comparisons to the province of Ontario as a whole. Peer Group A consists of our peer health units as defined by Statistics Canada<sup>1</sup> which include:

- Brant County Health Unit
- Elgin St. Thomas Public Health
- Eastern Ontario Health Unit
- Haldimand-Norfolk Health Unit
- Haliburton, Kawartha, Pine Ridge District Health Unit
- City of Hamilton Health Unit
- Hastings and Prince Edward Counties Health Unit
- Kingston, Frontenac and Lennox and Addington Health Unit
- Lambton Health Unit
- Leeds, Grenville and Lanark District Health Unit
- Middlesex-London Health Unit
- Niagara Regional Area Health Unit
- Oxford County Health Unit
- Peterborough County-City Health Unit
- Windsor-Essex County Health Unit.

Data may also be presented by geographic region within Elgin County; specifically, East, West and Central regions which include:

- East –Bayham, Aylmer and Malahide
- West –Dutton-Dunwich and West Elgin
- Central –Southwold, Central Elgin and St. Thomas

## **Statistics in the Report**

## Crude vs. Age-Specific vs. Age-Standardized Rates

A rate is a measure of the number of times an event occurs in a specific population over a defined period of time. In other words, take the number of falls divided by the population of Elgin St. Thomas in 2009. Rates are then usually multiplied by a larger number (per 1,000 or per 100,000) to make them easier to interpret. Using a rate instead of a count or a number makes it easier to compare across groups of the same population and between populations. So in the example of falls in Elgin St. Thomas using

<sup>&</sup>lt;sup>1</sup> Statistics Canada. Health Regions and Peer Groups <a href="http://www.statcan.gc.ca/pub/82-402-x/2013003/regions/hrpg-eng.htm">http://www.statcan.gc.ca/pub/82-402-x/2013003/regions/hrpg-eng.htm</a>

rates makes it easier to compare the rate falls over different years or between Elgin St. Thomas and Ontario. This type of rate is also known as a **crude rate** because it takes into account the entire population of interest and because it has not been adjusted for any other variables. Sometimes crude rates can be misleading, especially as they ignore the age makeup of the population and the effect that age can have on the outcome of interest. Thinking about the falls example again, if a population had more seniors than younger people, the crude rate of injury due to falls might be higher simply because there are more people at risk of falling and not because those people are falling more.

An **age-specific rate** is calculated the same way as a crude rate, but instead of using the entire population, the rate is only calculated for one age-group at a time. In other words the age-specific rate considers the number of falls in seniors aged 65+ divided by the number of seniors in the population. Comparing the age-specific rate of falls of seniors in Elgin St. Thomas to the same rate in Ontario means the comparison won't be affect by having a population with more or less seniors.

Often it's impractical to compare many age-specific rates or age isn't really a variable of interest, but it could still have a negative impact on the results of the comparison. This is when **age-standardized rates** are used. Age-standardizing is a statistical technique that mathematically adjusts for differences in age. It's the mathematical equivalent of pretending that two different populations have the same age structure thereby eliminating many of the potential effects of age on the outcome of interest.

Age-standardized rates are used throughout the report. It's important when looking at these numbers to understand that they are mathematically adjusted to make comparisons possible with Ontario and the peer health units. The rates do not represent the "real" numbers, but are best used to best highlight the differences between groups and trends over time.

## **Statistical Significance**

Throughout the report the findings will be discussed in terms of being "significant" or "statistically significant" where confidence intervals were used as the test of statistical significance.

Often when two numbers are compared it is obvious that one number is higher or lower than the other, but it isn't clear whether the difference is meaningful. Is a difference of 2% between Elgin St. Thomas and Ontario a big difference? Statistical significance is a mathematical way of answering this question. If the difference between two numbers is statistically significant then the numbers are considered truly different. If they are not significantly different, then the numbers are mathematically the same or in other words the difference isn't meaningful.

Confidence intervals, while not directly presented in the data of this report, were used to determine statistical significance throughout. A 95% confidence interval (CI) is the range of numbers we can be sure (with 95% confidence) contain the "true" population value. If a confidence interval is wide it suggests that the reported estimate or rate is less reliable, while a smaller range implies the data is more reliable or closer to the "true" number. To test statistical significance, the two confidence intervals must be compared for overlap. If the range of numbers overlaps between the two groups, then they are not statistically significantly (or significantly) different.

## **Small Counts**

The stability or reliability of a rate is directly affected by the number of events that occur in the population. Rates calculated for rare events or for small populations are often unstable because there is not enough data to get accurate statistics. When comparing trends over time for a small population like Elgin St. Thomas to a large population like the province of Ontario, the rates for Elgin St. Thomas will often fluctuate up and down or appear as a "jagged line" while the rates in Ontario appear as a "smooth line" over time. The jagged line does not necessarily indicate a change year over year so the effect of small numbers should be kept in mind when looking at the data for Elgin St. Thomas or other small populations.

#### **Data Sources**

#### Canadian Community Health Survey (CCHS)

The CCHS is a cross-sectional telephone survey that collects information related to health status, health care utilization and health determinants directly from the Canadian population.<sup>2</sup>

CCHS data used to be collected once every 2 years (Cycles 2001, 2003 and 2005). In 2007, the pattern of data collection changed to every year but the data was only for half of the sample size. For small geographies like Elgin St. Thomas, the half sample is too small to use, so cycles are reported as two years combined (Cycles 2007-2008, 2009-2010 and 2011-2012).

Survey respondents must be at least 12 years of age to participate. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces and the institutionalized (for example long term care homes).

#### IntelliHEALTH Ontario

The IntelliHEALTH database is managed by the Ontario Ministry of Health and Long-Term Care and it brings together health information from various different data sources within the Ministry of Health and Long Term Care. The following are data used this report:

- Ambulatory Visits (emergency department visits) from the National Ambulatory Care Report System (NACRS), developed and produced by the Canadian Institutes for Health Information (CIHI)
- Inpatient Discharges (hospitalizations) from the CIHI Discharge Abstract Database (DAD)
- Population Estimates from Statistics Canada, approved by the Ontario Ministry of Finance
- Vital Statistics (live births, stillbirths and deaths) from the Office of the Ontario Registrar General

<sup>&</sup>lt;sup>2</sup> Statistics Canada. Canadian Community Health Survey –Annual Component (CCHS) http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3226&lang=en&db=imdb&adm=8&dis=2

Keep in mind that this data links directly to an individual's home address. Hospitalizations for example are counted as being in Elgin St. Thomas if the patient's home address is in this area regardless of which hospital in Ontario they received treatment. The opposite is also true, a patient receiving care at the hospital in Elgin St. Thomas will not be included in the local numbers if they have a home address registered outside the region.

#### **Census 2011 and National Household Survey (NHS)**

Data from the most recent Canadian census (May, 2011) was provided by Statistics Canada. The census takes place every 5 years. As part of the census all households in Canada were asked to complete 10 questions on basic topics such as name, age, sex, marital status and languages spoken for all persons in the residence.

2011 was the first time that there was no mandatory long form portion of the census. The questions that were historically asked on this form were asked via the voluntary National Household Survey (NHS) that occurred approximately 4 weeks after the census. The NHS includes questions about citizenship and immigration, language, ethnicity, religion, education, housing, labour activities and income, among others.

Due to the change in methodology from mandatory to a voluntary survey, there are concerns about the data quality of the 2011 National Household Survey (NHS) estimates. Statistics Canada uses the global non-response rate (GNR) is used as an indicator of data quality. This indicator combines complete non-response (household) and partial non-response (question) into a single rate. A smaller GNR indicates a lower risk of non-response bias and as a result, lower risk of inaccuracy. The threshold used for estimate suppression is a GNR of 50% or more.<sup>3</sup> In other words if there is a non-response rate of 50% or more the data cannot be released. The GNR for Elgin St. Thomas is 26.1%<sup>4</sup> and the GNR for Ontario is 27.1%<sup>5</sup>.

#### **Integrated Public Health Information System (iPHIS)**

Communicable disease data was extracted from the Integrated Public Health Information System (iPHIS). This system is used for reportable cases of all communicable diseases locally and then for provincial and national disease surveillance. Each public health unit collects the information and does the follow-up for cases occurring within their boundaries.

<sup>&</sup>lt;sup>3</sup>Statistics Canada. NHS Profile 2011 –Global non-response rate (GNR) <a href="https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/help-aide/gnr-tgn.cfm?Lang=E">https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/help-aide/gnr-tgn.cfm?Lang=E</a>

<sup>&</sup>lt;sup>4</sup> Statistics Canada. NHS Profile, Elgin, CTY, Ontario, 2011. <a href="https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1=3534&Data=Count&SearchText=elgin&SearchType=Contains&SearchPR=35&A1=All&B1=All&Custom=&TABID=1</a>

<sup>&</sup>lt;sup>5</sup> Statistics Canada. NHS Profile, Ontario 2011 <a href="https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=35&Data=Count&SearchText=elgin&SearchType=Contains&SearchPR=35&A1=All&B1=All&Custom=</a>

#### Other Sources:

Many other data sources were used throughout this report including:

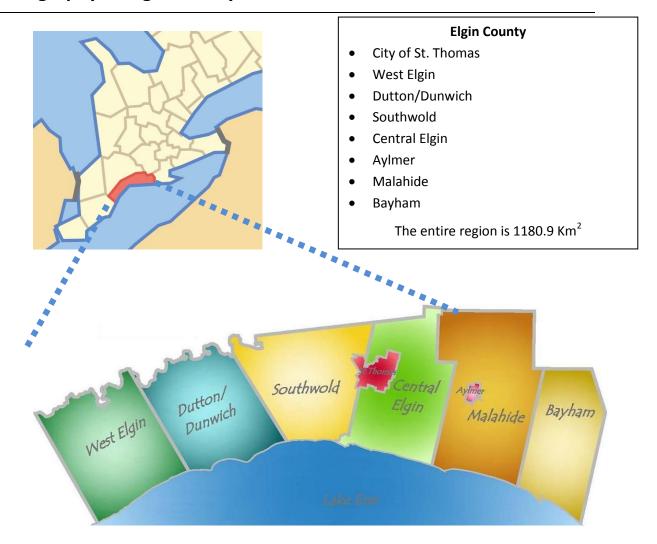
- ESTPH Internal Databases
  - Beach water testing
  - Cold alerts and heat alerts
  - o Food premise inspections and food handling certification
  - o Prenatal Class Attendance
  - Well water testing
  - o West Nile Virus surveillance
- Ministry of Transportation of Ontario (MTO) report on motor vehicle collisions
- Air Quality Data (poor air quality and smog advisories) was obtained through the Ministry of the Environment

# **Chapter 1: Population and Geography**

## **Summary**

- > The population of Elgin St. Thomas was 87,461 in 2011
- ➤ The population is aging. Seniors made up 16% of the population of Elgin St. Thomas and that proportion is increasing over time. Children accounted for 13% of the population and that proportion is decreasing
- > 35% of the residents of Elgin St. Thomas lived in a rural area. The rest lived in small and medium urban areas
- > The East end of Elgin County had a greater proportion of children and youth than the West or Central regions while the West end of the county had a greater proportion of seniors

# **Geography of Elgin County**



## **Population**

Throughout the report there will be data presented by geographic region in Elgin County; specifically, East, West and Central regions.

- East –Bayham, Aylmer and Malahide
- West –Dutton-Dunwich and West Elgin
- Central –Southwold, Central Elgin and St. Thomas

## **Population by Geography**

Table 1.1 - Population of Elgin St. Thomas and Ontario, 2011

	Population
Elgin St. Thomas	87,461
Ontario	12,851,821

Source: Census 2011

Table 1.2 – Population of Elgin St. Thomas by East, West and Central Regions, 2011

East		West		Central		
Bayham	6,989	Dutton/Dunwich	3,876	Southwold	4,494	
Aylmer	7,151	West Elgin	5,157	Central Elgin	12,743	
Malahide	9,146			City of St. Thomas	37,905	
Total	23,286	Total	9,033	Total	55,142	

Source: Census 2011

- About 43% of the population lives in the City of St. Thomas and 57% live in the surrounding municipalities.
- Looking at Elgin St. Thomas as a whole, about 27% of the population live in the East, 10% in the West and 63% in the centre of the region.

## **Population Pyramid**

85+ 80-84 75-79 2021 70-74 65-69 60-64 55-59 50-54 45-49 40-44 35-39 30-34 25-29 20-24 15-19 10-14 5-9 0-4 3000 2000 1000 2000 4000 4000 1000 3000 **Population Count** 

Figure 1.1 - Population Distribution, Elgin St. Thomas, 2011 and 2021

Source: Ontario Ministry of Health and Long Term Care, IntelliHEALTH Ontario. Extracted May 15, 2014.

- The largest segment of the population is the Baby Boomers who are between 50 and 70 years old right now and are aging. In 2011, 16% of the population was aged 65+ and this will increase to 20% in 2021.
- There is a larger proportion of females compared to males in the older age groups. This is typically due to a lower mortality rate in females.

## **Population by Age Group**

Table 1.3 - Population by Age Group, Elgin St. Thomas and Ontario, 2011

	ESTPH		ON		
	#	%	#	%	
Total Population 87,4			11,410,046		
Children (<10)	10,945	12.5%	1,392,360	12.2%	
Youth (10-24)	16,515	18.9%	2,448,815	21.5%	
Adults (25-64)	45,950	52.5%	6,669,940	58.5%	
Seniors (65+)	13,655	15.6%	1,649,180	14.5%	

Source: Census 2011

## **Key Findings:**

• Seniors currently make up 16% of the population of Elgin St. Thomas and children account for 13%. This is very similar to Ontario.

Table 1.4 - Population by Age Group and by Geographic Region, Elgin St. Thomas, 2011

	East		West		Central	
	#	%	#	%	#	%
<b>Total Population</b>	23,280		9,045		55,150	
Children (<10)	3,635	15.6%	855	9.5%	6,460	11.7%
Youth (10-24)	5,200	22.3%	1,765	19.5%	9,945	18.0%
Adults (25-64)	11,300	48.5%	4,795	53.0%	29,860	54.1%
Seniors (65+)	3,145	13.5%	1,630	18.0%	8,885	16.1%

Source: Census 2011

- The East has a greater proportion of children and youth than the Central or West regions.
- The West has a greater proportion of seniors (aged 65+).

## **Population Growth and Projections**

160,000 16,000,000 140,000 14,000,000 **Solution of Elgin-St. Thomas**100,000
80,000
60,000
40,000 12,000,000 ESTPH Population of Ontario 8,000,000 6,000,000 4,000.000 Ontario 4,000,000 20,000 2,000,000 0 0 2006 1990 2004 2016 1996 1998 2000 2002 2008 2014 1992 2012 Year

Figure 1.2 -Estimated and Projected Populations of Elgin St. Thomas and Ontario over time, 1986-2022

Source: Population Estimates, County Municipalities and Population Estimates, Projections, MOHLTC, IntelliHEALTH ONTARIO, extracted Wednesday, September 3, 2014.

## **Key Findings:**

• The population of Ontario is growing more quickly over time than the population of Elgin St. Thomas.

## **Important Interpretation Note:**

• Notice that the line on the graph for Elgin St. Thomas and the line for Ontario are based on two different scales. Showing this data together on one graph, but with two different scales, allows for the visual comparison of the growth over time.

## **Dependency Ratios**

A dependency ratio is the ratio of the combined population between 0 and 19 years old and the population aged 65 years and over to the population between 20 to 64 years old.

In other words, it is the ratio of people who are economically dependent (less likely to employed full time) to those in the population who are of working age (20-64 year olds).

Table 1.5 - Dependency Ratios, Elgin St. Thomas and Ontario, 2001, 2006 and 2011

	Overa	all Depend Ratio	dency	Youth (0-19) D Ratio		ndency	Elderly (65+) Depe Ratio		ndency
	2001	2006	2011	2001	2006	2011	2001	2006	2011
ESTPH	71.9	67.8	68.5	28.5	26.9	25.8	13.3	13.5	14.9
ON	63.1	60.6	59.2	26.2	24.7	23.0	12.5	13.1	14.2

Sources: Census 2001, 2006 and 2011

## **Key Findings:**

- Dependency ratios for youth have been decreasing over time.
- Dependency ratios for the elderly have been increasing over time.
  - This follows the same trend seen earlier in the population pyramid (see Figure 1.1). The Baby Boomer generation has started to age and move into the category of seniors (aged 65+). This trend of increasing dependency will likely continue over the next decade.

#### **Important Interpretation Notes:**

- The dependency ratio can be used to make comparisons to other populations but it should be interpreted with caution. Some of the assumptions made in this indicator may not be true for the entire population.
  - o For example, the dependency ratio assumes that all elderly persons (aged 65+) and all youth (0-19 years old) are economically dependent on the working age population. This may not be true as there may be people over the age of 65 or under the age of 20 who are working and supporting themselves entirely. This indicator also doesn't take into account that there may be members of the population aged 20-64 who are unable to work, for example due to a disability.
- The definition of youth for the calculation of the dependency ratio has changed since the 2006 census. In previous, reports youth were defined as those between the ages of 0 and 14, and now the indicator defines youth as anyone under the age of 20.

## **Urban and Rural Populations**

Population density is represented as the number of people per square kilometre (km²). This is calculated by dividing the total population by the total land area.

A rural area is considered the area outside of the urban centres or anywhere with a population of less than 1,000 people.

Table 1.6 - Proportion of the Population of Elgin St. Thomas and Ontario living in Urban and Rural areas

Type of Population Centre	ESTPH	ON
Large urban population centres (pop. 100,000 +)	0.0%	69.3%
Medium population centres (pop. Between 30,000 and 99,999)	47.7%	7.4%
Small population centres (pop. Between 1,000 and 29,999)	17.4%	9.2%
Rural areas	35.0%	14.1%
Population Density (km²)	46.5	14.1

Source: Census 2011

- The population distribution of Elgin St. Thomas looks very different from the population distribution in Ontario.
- Elgin St. Thomas does not have any large urban centres, but the largest proportion of the population does live in the City of St. Thomas which is the only medium population centre in the region.
- More than double the proportion of residents in Elgin St. Thomas are living in rural areas compared to the province as a whole.

# **Chapter 2: Social Determinants of Health**

## Summary

## **Income**

- > The median household income in Elgin St. Thomas was \$54,411
- Most households earned between \$20,000-\$49,000 (29%) and \$50,000-\$79,000 (25%) per year
- > Incomes in Elgin St. Thomas were lower than in Ontario, especially for one-person households

#### Low Income

- ➤ 16% of residents of Elgin St. Thomas were living in low income households
- 20% of children under the age of 18 and 10% of seniors aged 65+ were in low income households
- ➤ More females were in low income households than males

#### Education

- In Elgin St. Thomas, 17% of the population had less than a high school diploma and 30% had a high school diploma
- Females were more likely than males to achieve higher levels of education such as completing college or university

## Unemployment

In 2012, the unemployment rate in Elgin St. Thomas was 8.6%

#### **Housing**

In Elgin St. Thomas, 20% of people who owned their home and 42% of people who were renting were spending more than 30% of their household income on shelter costs

## Immigration, Language and the Low German Speaking Mennonite Population

- > 7% of the population of Elgin St. Thomas were recent immigrants and the most common county of origin was Mexico
- The most commonly spoken language (other than English) was German (3.7%) and not Spanish
- ➤ It may be inferred that new immigrants from Mexico who are speaking German may be part of the Low German Speaking Mennonite Community. This is group that cannot directly be identified with Census data

## **Lone-Parent Families**

➤ 14% of families in Elgin St. Thomas were lone-parent families. While the majority of lone-parent families were headed by females, just over 20% were headed by males

## Nutritious Food Basket

- In Elgin St. Thomas, it cost \$833 to feed a family of four for a month in order to meet their nutritional needs based on Canada's Food Guide
- ➤ The cost of a nutritious food basket and rent would use up about 26% of the average monthly income for a family of four in Ontario and up to 107% of the monthly income for 1 person on Ontario Works

## **Social Determinants of Health**

The social determinants of health are important social and economic factors that contribute to the health of individuals and populations. Our health is shaped by many aspects of daily life long before we access the heath care system. This includes the work we do, our level of education and income, where we live, our experiences as children, and the physical and social environment that surrounds us. Together, these things are called the social determinants of health (SDOH).<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Elgin St. Thomas Public Health. Social Determinants of Health (SDOH) <a href="http://elginhealth.on.ca/index.asp?ParentID=3&MenuID=1907">http://elginhealth.on.ca/index.asp?ParentID=3&MenuID=1907</a>

## **Income**

## **Total Income**

The total income of a household as reported in the 2011 National Household Survey (NHS) is the sum of all incomes earned by all household members in 2010.

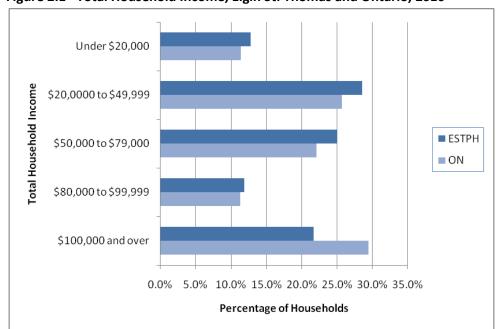


Figure 2.1 –Total Household Income, Elgin St. Thomas and Ontario, 2010

Source: National Household Survey, 2011

- In Elgin St. Thomas, the largest proportion of households earned a total income of between \$20,000 and \$49,000 a year (28.6%), followed by households who earned between \$50,000 and \$79,000 (25.1%) a year.
- In Ontario, the largest proportion of households earned a total income of \$100,000 or more per year (29.5%), followed by households who earned between \$20,000 and \$49,999 (25.7%) a year in 2010.
- The greatest difference between Elgin St. Thomas and Ontario was among households earning \$100,000 or more. Ontario had nearly 8% more households in this income category than Elgin St. Thomas.

### **Median After-Tax Income**

The median after-tax income for households refers to the mid-point of the population's family income levels. In other words, this measure shows that half of the population's household income is above this level and the other half is below it.

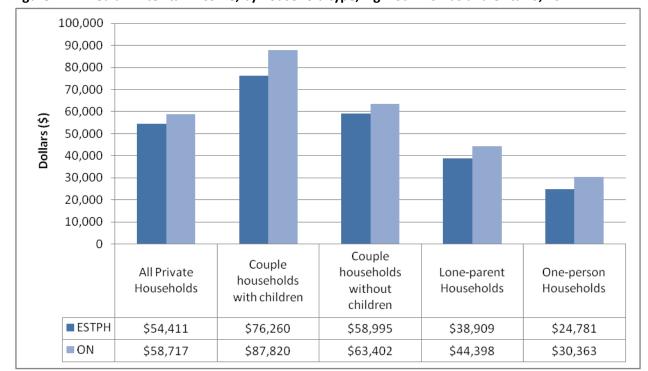


Figure 2.2 -Median After-tax income, by household type, Elgin St. Thomas and Ontario, 2011

Source: National Household Survey, 2011

- Incomes of all household types in Elgin St. Thomas were between 7.5% and 23% lower than for households in the rest of the province.
- The greatest difference between households in Elgin St. Thomas and households in Ontario was for one-person households. One-person households in Elgin St. Thomas had a median after-tax income that was 22% lower than the same type of household in Ontario.
- One-person households in Elgin St. Thomas also earned less than half of the income of two-person households (couple household without children).
- Households with children had the highest median income in both Elgin St. Thomas and Ontario.

## Low Income

The after-tax low-income measure (LIM-AT) is a relative measure of low income with an adjustment for household size. A household of one person is considered to be in low income if their after-tax income is \$19,460 or less, while a family of 4 is considered to be in low income if their after-tax income is \$38,920. To convert to other household sizes, the value of the one-person household is multiplied by the square root of the desired household size. Using the LIM-AT means that all households in Canada are compared using the same criteria, which makes it a good measure for comparability between groups, however this measure does not account for regional variations in prices or cost of living differences.

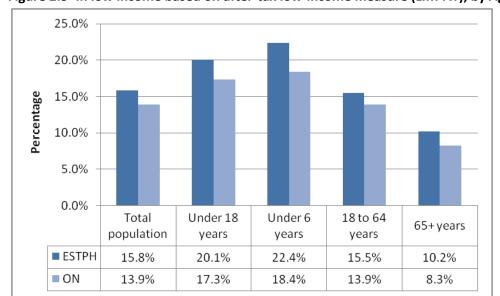


Figure 2.3 -In low income based on after-tax low-income measure (LIM-AT), by Age Group, 2010

Source: National Household Survey, 2011

- In 2010, approximately 16% of residents in Elgin St. Thomas were considered to be living in low income based on the LIM-AT.
- The highest proportion of the population living in low income was the youngest age group; 22% of children under the age of 6 in Elgin St. Thomas and 20% of children under the age of 18.

25.0% 20.0% Percentage 15.0% 10.0% 5.0% 0.0% Under 18 years 18 to 64 years 65+years ■ ESTPH Male 19.7% 14.1% 8.2% ESTPH Female 20.4% 16.9% 12.0%

Figure 2.4 –Living in Low Income based on after-tax low-income measure (LIM-AT), by Age and Gender, Elgin-St. Thomas, 2010

Source: National Household Survey, 2011

- A higher proportion of females in Elgin St. Thomas were living in low income than males across the lifespan.
- Differences between males and females living in low income were smallest among children under 18 years of age and largest among seniors aged 65 and older.

## **Education**

Please note that the data shown in the chart below refers to people aged 25 to 64 years old only. This means that we are measuring the highest level of education completed by individuals currently participating in the workforce. When individuals under the age of 25 are excluded, it helps to eliminate any bias created by students who are too young to have finished high school. Use caution when comparing to other reports of highest level of education completed.

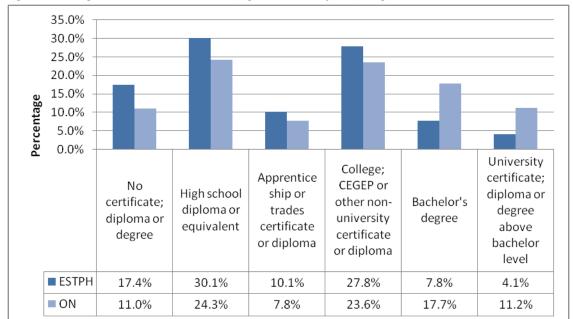


Figure 2.5 -Highest level of education (aged 25 to 64 years), Elgin St. Thomas and Ontario, 2011

Source: National Household Survey, 2011

- In Elgin St. Thomas, 17% of the population aged 25 to 64 years of age had less than a high school diploma and 31% had only a high school diploma. This is higher than the proportion of the population in Ontario where 11% had not completed high school and 29% had only a high school diploma.
- In Elgin St. Thomas, 39.6% of the population aged 25 to 64 had a college or university degree. This is much lower than Ontario where 52.5% had a college or university degree.

35.0% 30.0% 25.0% 20.0% Percentage 15.0% 10.0% 5.0% 0.0% University College; certificate; Apprentic No High CEGEP or eship or diploma or certificate; school other non-Bachelor's degree trades diploma or diploma or university degree certificate above degree equivalent certificate bachelor or diploma or diploma level ■ ESTPH Male 19.4% 31.3% 12.8% 23.8% 6.3% 3.5% ■ ESTPH Female 15.6% 28.9% 7.5% 31.6% 9.2% 4.6%

Figure 2.6 -Highest level of education (aged 25 to 64 years), by Gender, Elgin St. Thomas and Ontario, 2011

Source: National Household Survey, 2011

- Overall, females in Elgin St. Thomas were more likely than males to achieve higher levels of education such as completing a college or university degree. In total, 45.4% of females in Elgin St. Thomas had a college diploma or university degree compared to only 33.5% of males.
- Males were more likely than females to have achieved only a high school diploma or to have no certificate, diploma or degree.

# Unemployment

## Unemployment

The unemployment rate is a measure of people who were available to work and had looked for work in the past 4 weeks but who were not employed. It is important to remember when looking at unemployment numbers that labour force participation, or people actively seeking work, plays a big role in whether rates increase or decrease over time. If many people were to stop seeking work, the unemployment rate could drop without anyone new finding a job.

14.0% 12.0% 10.0% Percentage 8.0% 6.0% 4.0% 2.0% 0.0% 2006 2007 2008 2009 2010 2011 2012 -ESTPH 7.4% 5.7% 9.7% 13.1% 8.0% 8.0% 8.6% -PeerA 6.1% 5.8% 5.9% 7.7% 7.5% 7.2% 6.8% -ON 6.3% 6.4% 6.5% 9.0% 8.7% 7.8% 7.8%

Figure 2.7 -Unemployment Rate (aged 15+), Elgin-St. Thomas, Ontario, and Peer Health Units, 2006-2012

Source: Statistics Canada. Table 109-5324 - Unemployment rate, Canada, provinces, health regions (2013 boundaries) and peer groups, annual (percent).

- Overall, the unemployment rate for Elgin-St. Thomas, Ontario, and the peer health units increased between 2006 and 2012 and peaked for all groups in 2009.
- Approximately 13% of the workforce in Elgin St. Thomas was unemployed in 2009. This rate
  has since decreased but it has not yet returned to the low of 5.7% in 2007. The
  unemployment rate stayed steady near 8% between 2010 and 2012, which was similar to
  rates in Ontario.

# **Youth Unemployment**

25.0% 20.0% Percentage 15.0% 10.0% 5.0% 0.0% 2006 2007 2008 2009 2010 2011 2012 ESTPH 17.0% 22.6% -ON 13.3% 13.7% 13.0% 17.5% 17.2% 15.8% 16.9%

Figure 2.8 – Youth Unemployment Rate (15 to 24 years old), Elgin-St. Thomas and Ontario, 2006-2012

Source: Statistics Canada. Table 109-5324 - Unemployment rate, Canada, provinces, health regions (2013 boundaries) and peer groups, annual (percent).

# **Key Findings:**

• Unfortunately the youth unemployment data for Elgin St. Thomas was only reportable for 2008 and 2009 due to small numbers in the other years. The two years of available data indicate that rates of youth unemployment may be higher in Elgin-St. Thomas than Ontario over time.

## **Labour Force Participation by Industry**

Table 2.1 -Total Labour Force Participation by Industry (aged 15+), Elgin St. Thomas and Ontario, 2011

Industry	ESTPH	ON
Manufacturing	17.7%	10.4%
Health care and social assistance	12.6%	10.4%
Retail trade	10.2%	11.2%
Construction	6.9%	6.3%
Accommodation and food services	6.6%	6.3%

Source: National Household Survey, 2011

### **Key Findings**:

- Manufacturing was the leading industry in Elgin-St. Thomas compared to Retail in Ontario.
- The top 3 industries that made up the labour force in Elgin St. Thomas were the same three leading industries in Ontario, although the order was not the same.

Table 2.2 -Total Labour Force Participation by Industry (aged 15+), by Gender, Elgin St. Thomas and Ontario, 2011

Males	Males			Females		
	ESTPH	ON		ESTPH	ON	
			Health care and social			
Manufacturing	24.6%	14.3%	assistance	21.9%	17.7%	
Construction	11.9%	10.7%	Retail trade	12.1%	12.6%	
			Accommodation and food			
Retail trade	8.5%	10.0%	services	10.5%	7.4%	
Transportation and						
warehousing	8.4%	6.5%	Manufacturing	9.9%	6.3%	
Agriculture; forestry; fishing						
and hunting	8.0%	1.9%	Educational services	8.6%	10.4%	

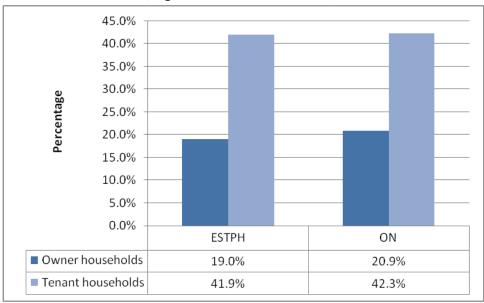
Source: National Household Survey, 2011

- The top 3 leading industries differed for males and females in both Elgin St. Thomas and Ontario. Retail was the one industry that was common for both.
- The leading employment industries for males were manufacturing, construction and retail. This was the same in Elgin St. Thomas and in all of Ontario.
- The leading industries for females in Elgin St. Thomas were slightly different than for Ontario. Females in Elgin St. Thomas were employed in health care and social assistance, retail and accommodation and food services. In Ontario, females were involved in Educational services more than accommodation and food services.

# **Housing Affordability**

Housing affordability is an indicator that measures the proportion of total household income that is spent on shelter costs. A household spending more than 30% of their pre-tax household income on housing costs may have trouble affording other basic necessities.

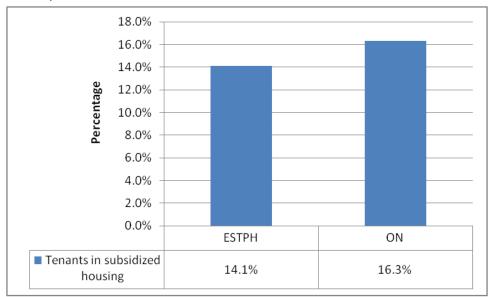
Figure 2.9 -Proportion of Home Owners and Tenants Spending 30% or more of their Household Income on Shelter Costs, Elgin St. Thomas and Ontario, 2011



Source: National Household Survey, 2011.

- The proportion of home owners and tenants spending 30% or more of their household income on shelter costs was slightly smaller in Elgin-St. Thomas compared to Ontario, but very similar.
- Home owners in Elgin-St. Thomas and Ontario were much less likely than tenants to be spending 30% or more of their household income on shelter costs.

Figure 2.10 -Proportion of Tenant Households currently in Subsidized Housing, Elgin St. Thomas and Ontario, 2011



Source: National Household Survey, 2011

### **Key Findings:**

Only 14% of tenant households in Elgin-St. Thomas and 16% of tenant households in Ontario
were in subsidized housing even though just over 40% of all tenant households are
overspending on shelter costs (see Figure 2.9).

#### **Data Interpretation Note:**

• This indicator does not provide information on what the picture of subsidized housing should be; whether it should be higher or lower. If there were more subsidized housing spots available in Elgin St. Thomas, it's possible that this proportion would be higher.

# **Living Arrangements for Seniors**

Table 2.3 -Living arrangements for Seniors (aged 65+) living in private households\*, Elgin St. Thomas and Ontario, 2011

Living Arrangements	ESTPH	ON
Living with Spouse, common-law partner or children	40.9%	40.4%
Living with relatives (other than spouse or children)	2.1%	3.6%
Living with non-relatives only	0.8%	1.0%
Living alone	15.4%	14.5%

Source: Census, 2011

<u>Data Note</u>:\*Private households only, does not include institutions such as long term care

# **Key Findings:**

• Living arrangements for seniors in Elgin St. Thomas were similar to those in Ontario. Approximately 15% of seniors were living alone both in Elgin St. Thomas and Ontario.

# **Ethnic and Cultural Origins**

## **Visible Minorities**

Visible Minorities are individuals, other than Aboriginal peoples, who are non-Caucasian or non-white in colour. Some categories of visible minority include South Asian (e.g. 'East Indian,' 'Pakistani,' 'Sri Lankan,' etc.), Chinese, Black, Filipino, Latin American, Arab, Southeast Asian (e.g. 'Vietnamese,' 'Cambodian,' 'Malaysian,' 'Laotian,' etc.), West Asian (e.g. 'Iranian,' 'Afghan,' etc.), Korean, Japanese or other visible minority groups.

Table 2.4 - Total Visible Minority Population in Elgin St. Thomas and Ontario, 2011

ESTPH			ON		
# %				#	%
% of total population	2,290	2.7%	% of total population	3,279,565	25.9%

Source: National Household Survey, 2011

### **Key Findings:**

• Less than 3% of the population of Elgin St. Thomas is comprised of visible minorities; this is compared to more than one-quarter of Ontario's population.

Table 2.5 – Top 5 Visible Minority Groups in Elgin St. Thomas and Ontario, 2011

ESTPH			ON		
	#	%		#	%
Southeast Asian	475	4.3%	South Asian	965,990	26.7%
Black	420	3.8%	Chinese	629,140	17.4%
South Asian	310	2.8%	Black	539,205	14.9%
Chinese	250	2.3%	Filipino	275,380	7.6%
Latin American	245	2.2%	Latin American	172,560	4.8%

Source: National Household Survey, 2011

#### **Key Findings:**

• Leading visible minority groups in Elgin St. Thomas are similar to Ontario.

# **Aboriginal Identity**

Aboriginal identity includes persons who identify with at least one Aboriginal group, that is, First Nations (North American Indian), Métis or Inuk (Inuit) and/or those who are Registered or Treaty Indian status, and/or those who reported membership in a First Nation or Indian band.

Responses to the question on Aboriginal identity are more affected than most by the incomplete enumeration of certain Indian reserves during data collection.

Table 2.6 – Aboriginal Identity Population, Elgin St. Thomas and Ontario, 2011

	ESTPH	ON
Aboriginal Identity	1.8%	24.0%

Source: National Household Survey, 2011

#### **Key Findings:**

• The Aboriginal population comprised of nearly 25% of the total population of Ontario and only about 2% of the population of Elgin St. Thomas.

# **Immigrant Populations**

## **Immigrants**

Immigrants are individuals who were born outside of Canada and who are now or have been landed immigrants. A landed immigrant is a person who has been granted the right to live in Canada permanently. Some immigrants have lived in Canada for many years while others are recent arrivals. This indicator includes all immigrants regardless of when they first came to Canada.

Table 2.7 -Proportion of the population of Elgin St. Thomas and Ontario considered an Immigrant, 2011

Elgin St. Thomas			Ontario		
	#	%		#	%
% of total population	10,930	12.7%	% of total population	3,611,365	28.5%

Source: National Household Survey, 2011

### **Key Findings:**

• Just over 12% of the population of Elgin St. Thomas has immigrated to Canada from another country. This is less than half of the 30% of the population of Ontario considered an immigrant.

Table 2.8 -Top 5 Countries of Origin of Immigrants currently in Elgin St. Thomas and Ontario, 2011.

Elgin St. Thomas			Ontario			
	#	%		#	%	
Mexico	3,705	33.9%	India	310,410	8.6%	
United Kingdom	1,525	14.0%	<b>United Kingdom</b>	291,935	8.1%	
Netherlands	1,195	10.9%	China	267,780	7.4%	
United States	765	7.0%	Philippines	204,035	5.6%	
Other places of birth in Europe	590	5.4%	Italy	170,710	4.7%	

Source: National Household Survey, 2011

#### **Key Findings:**

 Immigrants to Elgin St. Thomas came primarily from Mexico. Other leading countries included the United Kingdom, the Netherlands and the United States. This is different from Ontario, where immigrants came primarily from India, the United Kingdom, China and the Philippines.

## Recent Immigrants (2006-2011)

A recent immigrant is an individual who was born outside of Canada and is, or has been, a landed immigrant and has been granted permanent residence in Canada in the past five years. Looking at recent immigrants can help enhance the understanding of the profile of newcomers to this area.

Table 2.9 -Proportion of Immigrants who are Recent Immigrants (2006-2011) to Elgin St. Thomas and Ontario, 2011

Elgin St. Thomas			Ontario			
	#	%	#			
% of total immigrants	755	6.9%	% of total immigrants	501,060	13.9%	

Source: National Household Survey, 2011

#### **Key Findings:**

• The proportion of the immigrants who were recent immigrants to Elgin St. Thomas was just under 7%. Ontario had nearly twice the proportion of the population who arrived since 2006.

Table 2.10 -Top 5 Countries of Origin of Recent Immigrants (2006-2011), Elgin St. Thomas and Ontario, 2011

Elgin St. Thomas	Ontario				
# 9				#	%
Mexico	405	53.6%	India	67,170	13.4%
United States	85	11.3%	China	53,950	10.8%
Other places of birth in Americas	80	10.6%	Philippines	53,235	10.6%
United Kingdom	60	7.9%	Pakistan	23,370	4.7%
Other places of birth in Europe	25	3.3%	United States	20,675	4.1%

Source: National Household Survey, 2011

#### **Key Findings:**

• Recent immigrants to Elgin St. Thomas were different from newcomers to Ontario as a whole. The largest group of recent immigrants to Elgin St. Thomas were from Mexico. This group is likely made up of a large number of Low German Speaking Mennonites. As we can see in the section on languages spoken in Elgin St. Thomas (see Table 2.11 and Table 2.12), Spanish is not one of the leading languages (other than English) reported in the region despite Mexico appearing as a leading country for recent immigration.

# Language

# **Mother Tongue**

A mother tongue is a language that was learned in childhood and can still be understood at the time of the survey. This indicator aims to identify the language diversity that exists in the community, but it may not be representative of the languages currently being spoken at home which are identified in the following section (see Table 2.12).

Table 2.11 -Top 5 Mother Tongues, Elgin St. Thomas and Ontario, 2011

Elgin St. Thomas			Ontario			
	#	%		#	%	
English	73,440	85.9%	English	8,677,040	69.8%	
German	6,890	8.1%	French	493,300	4.0%	
Dutch	1,185	1.4%	Italian	251,330	2.0%	
French	880	1.0%	Chinese; n.o.s.	195,120	1.6%	
Portuguese	365	0.4%	Cantonese	186,870	1.5%	

Source: Census, 2011

Data Note: n.o.s. stands for not otherwise specified

- More than 85% of residents of Elgin St. Thomas spoke English as a first language. This is a much larger proportion of the population than for Ontario where 70% spoke English as a first language.
- While Germany never appears on the list of leading countries for immigration (see Table 2.8 and Table 2.10), the German language was the second most commonly reported mother tongue in the region.
  - We can infer that the immigrants from Mexico may be part of the Low German Speaking Mennonites community. This can't be confirmed with Census data however, as Low German is not a language option and Mennonite is not a response option available for the religion question in the National Household Survey (See Table 2.14).

# **Home Language**

Home language is the language that, despite other languages understood, is most commonly spoken at home.

Table 2.12 -Top 5 Languages Spoken most often at Home by Residents of Elgin St. Thomas and Ontario, 2011

Elgin St. Thomas			Ontario			
Language	#	%	Language	#	%	
English	80,495	93.3%	English	10,044,810	79.0%	
German	3,185	3.7%	English and a non- official language	509,105	4.0%	
English and a non- official language	1,145	1.3%	French	284,115	2.2%	
French	175	0.2%	Cantonese	147,795	1.2%	
Portuguese	130	0.2%	Chinese; n.o.s.	135,665	1.1%	

Source: Census, 2011

Data Note: n.o.s. stands for not otherwise specified

- English is the language spoken most often at home by residents of Elgin St. Thomas (98%) and Ontario (79%).
- German is the second language spoken most often at home by residents of Elgin St. Thomas.

# **Knowledge of Canada's Official Languages**

This indicator identifies the proportion of the population that can speak or understand at least one of Canada's two official languages (English and French). Despite mother tongue and languages spoken at home, this indicator can identify the portion of the population who are not able to communicate in either of Canada's official languages.

Table 2.13 -Proportion of the Population with Knowledge of Canada's Official Languages (English and French), Elgin St. Thomas and Ontario, 2011

	Elgin St. T	homas	Ontario			
Language	#	%	#	%		
English only	82,195	95.3%	10,984,360	86.3%		
French only	25	0.03%	42,980	0.3%		
English and French	3,270	3.8%	1,395,805	11.0%		
Neither English nor						
French	755	0.9%	298,920	2.3%		

Source: Census, 2011

## **Key Findings:**

 The vast majority of the population in Elgin St. Thomas is able to communicate in at least one of Canada's official languages. Less than one percent of the population cannot understand either English or French.

# **Religious Affiliation**

Table 2.14 – Most Common Religious Affiliations, Elgin St. Thomas and Ontario, 2011

Elgin			Ontario			
1	No religious affiliation	29.7%	1	Catholic	31.4%	
2	Other Christian	19.6%	2	No religious affiliation	23.1%	
3	Catholic	17.3%	3	Other Christian	9.7%	
4	United Church	13.7%	4	United Church	7.5%	
5	Anglican	6.1%	5	Anglican	6.1%	
6	Baptist	5.9%	6	Muslim	4.6%	

Source: National Household Survey, 2011

- The most common religious affiliations in Elgin St. Thomas differed from the leading religious affiliations in Ontario as a whole.
- Nearly 30% of the population in Elgin St. Thomas reported "No religious affiliation"; this was also the most commonly reported of all religious affiliations in Elgin-St. Thomas compared to Ontario where Catholic was the leading religious affiliation.
- The second most common religious affiliation in Elgin St. Thomas was "Other Christian". This also is the category that would include Mennonite, which was not available as a distinct option under Christian on the National House Survey questionnaire.

# **Marital Status**

60.0% 50.0% 40.0% Percentage 30.0% 20.0% 10.0% 0.0% Separated/ Living Married Single Widowed common law Divorced ■ ESTPH 53.8% 8.7% 22.8% 8.5% 6.3% ON 7.4% 50.3% 28.0% 8.6% 5.8%

Figure 2.11 –Total population (aged 15+), by Marital Status, Elgin St. Thomas and Ontario, 2011

Source: Census 2011

- Just over 62% of Elgin St. Thomas residents are living in 'couple' families; in other words they are either married or living common law.
- Elgin St. Thomas has a larger proportion of the population living as a 'couple' family and a smaller proportion of the population living as 'single' compared to Ontario.

# **Lone-Parent Families**

Lone parent or single parent families are defined in the census as families made up of a mother or a father, with no spouse or common-law partner present in the home, who are living with one or more child relative.

Table 2.15 – Number and Proportion of Two Parent and Lone-Parent Families, Elgin St. Thomas and Ontario, 2011

	Two Parent Families		Lone-Pare	nt Families	Female Lone-Parent Families		Male Lone-Parent Families	
	#	%	#	%	#	%	#	%
ESTPH	11,100	43.9%	3,505	13.9%	2,725	77.7%	780	22.3%
ON	1,680,810	46.5%	604,645	16.7%	486,470	80.5%	118,175	19.5%

Source: Census, 2011

- About 14% of families in Elgin St. Thomas are lone parent families compared to approximately 17% in Ontario.
- The majority of lone parent families are headed by females while just over 20% are headed by males; this is similar to Ontario.

# **Nutritious Food Basket**

The Nutritious Food Basket is a tool that measures the cost of basic healthy eating. It is calculated by determining the cost of food that reflects Canadian eating patterns and buying habits. It also takes into account the current nutrition recommendations from Canada's Food Guide.

\$900 \$800 \$800 \$800 \$700 \$600 \$500 \$300 \$300 \$100 \$
\$100 \$
2013 \$2014

Figure 2.12 -The Cost of Feeding a Family a Family of Four for a Month, Elgin St. Thomas, 2013-2014

Source: Nutritious Food Basket Data, Elgin St. Thomas Public Health, 2013, 2014

- In 2014 it cost an average of \$833 dollars a month to feed a family of four in Elgin St. Thomas in order to meet their nutritional needs based on Canada's Food Guide.
- The cost of a nutritious food basket increased by 4% from 2013, which is an additional \$7.39 per week.

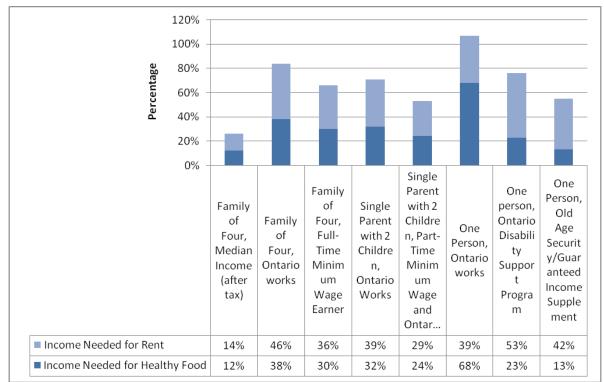


Figure 2.13 – Proportion of Income Required for Rent and to Purchase Healthy Food, Elgin St. Thomas, 2014

Source: Nutritious Food Basket Data, Elgin St. Thomas Public Health, 2014

#### **Key Findings:**

- A family of four, with an average Ontario income, would use approximately 26% of their monthly household income for rent and healthy food. This leaves 74% of their income for all other expenses including health, hydro, transportation, child care, clothing, etc.
- A single person on Ontario Works would be required to spend 107% of their monthly income on rent and healthy food.
- Recall that spending more than 30% of household income on housing is an indicator of overspending that would lead to a lack of space in the budget to afford other basic needs (see Figure 2.9).

#### **Data Interpretation:**

- The income of a minimum wage earner was calculated based on \$10.25/hr, the minimum wage in Ontario as of May 2014.
- The average monthly rent does not include heat or hydro.

# **Chapter 3: General Health Status**

# **Summary**

#### Self-Rated General Health

> 90% of people in Elgin St. Thomas reported their general health as good or better. More people reported better health when they had a higher income compared to those with a lower income

## **All-Cause Hospitalization**

- Elgin St. Thomas had higher rates of all-cause hospitalization than Ontario. There was a small decrease over time
- ➤ The highest rates of all-cause hospitalization were among 0-4 year olds and then those aged 40 years and older

#### **Leading Causes of Hospitalization**

Chronic diseases and injuries accounted for the majority of the leading causes of hospitalization

### **All-Cause Mortality**

- ➤ Elgin St. Thomas had higher rates of all-cause mortality than Ontario. There was a small but not statistically significant decrease over time
- ➤ Males had higher rates of all-cause mortality than females

#### **Leading Causes of Death**

➤ Of the top 10 leading causes of death, four had direct links to public health work; heart disease, lung cancer, influenza and colorectal cancer

#### Potential Years of Life Lost (PYLL)

- Six of the top 10 leading causes of potential years of life lost had direct links to public health work: heart disease, lung cancer, motor vehicle collisions, suicide, liver disease and breast cancer
- Motor vehicle collision and suicide deaths were not among the leading causes of death; therefore their appearance among the leading causes of potential years of life lost implies they were most common among younger people

#### Hospitalization and Mortality due to Chronic Conditions

#### Cardiovascular Disease

- Elgin St. Thomas had higher rates of hospitalization due to cardiovascular disease than
   Ontario, however these rates decreased over time
- Mortality rates due to cardiovascular disease increased over time in Elgin St. Thomas while rates decreased for Ontario and the peer health units

#### ➤ Ischemic Heart Disease

- Elgin St. Thomas had higher rates of hospitalization due to ischemic heart disease compared to Ontario. Rates in Elgin St. Thomas decreased between 2009 and 2012 but were still higher than they were in 2007
- Mortality rates due to ischemic heart disease increased over time in Elgin St. Thomas while rates decreased for Ontario and the peer health units

#### Respiratory Disease

- Elgin St. Thomas had higher rates of hospitalization due to respiratory disease compared to Ontario
- Mortality rates due to respiratory disease decreased over time

#### Chronic Obstructive Pulmonary Disease (COPD)

- Elgin St. Thomas had higher rates of hospitalization due to COPD than Ontario and these rates increased over time
- Mortality rates due to COPD decreased over time

#### Cancer

- Elgin St. Thomas had rates of hospitalization due to cancer that were similar to Ontario and these rates decreased over time
- Mortality rates due to cancer in Elgin St. Thomas were similar to Ontario and there was little change over time

#### Cancer Incidence and Mortality

#### Lung Cancer

- Elgin St. Thomas had similar incidence of lung cancer compared to Ontario
- Mortality rates due to lung cancer in Elgin St. Thomas were similar to Ontario over time

#### Breast Cancer

- Elgin St. Thomas had similar incidence rates of breast cancer to Ontario and rates did not change significantly over time
  - Mortality rates due to breast cancer in Elgin St. Thomas were similar to Ontario over time

#### Prostate Cancer

- Elgin St. Thomas had increasing incidence rates of prostate cancer over time. Rates were significantly higher compared to Ontario in 2007 and 2008. In 2009, rates dropped and were not significantly different from Ontario
- Mortality rates due to prostate cancer decreased over time. In Elgin St. Thomas, rates were statistically significantly lower than Ontario in 2009

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#### Colorectal Cancer

- Elgin St. Thomas had incidence rates of colorectal cancer that were similar to Ontario and rates did not change significantly over time
- Mortality rates due to colorectal cancer in Elgin St. Thomas were similar to Ontario and decreased over time

#### Melanoma Skin Cancer

- Elgin St. Thomas had higher incidence rates of melanoma skin cancer than Ontario and rates increased over time
- Mortality rates due to melanoma skin cancer were similar over time

#### Oral Cancer

- Elgin St. Thomas had lower incidence rates of oral cancer than Ontario and rates decreased over time
- Mortality rates due to oral cancer were similar over time

#### Cervical Cancer

- There were too few cases to report on the incidence of cervical cancer in Elgin St.
   Thomas
- There was an upward trend in mortality due to cervical cancer in Elgin St. Thomas and a downward trend in Ontario during the same time period

#### **Cancer Screening**

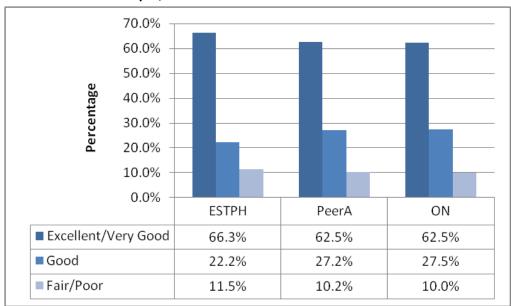
- ➤ 60% of women in Elgin St. Thomas aged 50 to 74 met the breast cancer screening recommendations. Rates were similar for Elgin St. Thomas and Ontario
- ➤ Just over 60% of women aged 20 to 69 in Elgin St. Thomas met the recommendations for cervical cancer screening. Elgin St. Thomas had lower rates than Ontario, but rates increased over time
- > 30% of people aged 50 to 74 in Elgin St. Thomas met the recommendations for colorectal cancer screening and rates increased over time

## Mental Health

- Elgin St. Thomas had significantly lower rates of hospitalization due to mental illness than Ontario over time
- > Just over 20% of people in Elgin St. Thomas reported feeling quite a bit or extremely stressed at work. This was significantly lower than Ontario
- Less than 20% of people in Elgin St. Thomas reported feeling quite a bit or extremely stressed during their daily lives. This was significantly lower than Ontario
- > 77% of people in Elgin St. Thomas reported their mental health as very good or excellent. This was significantly higher than Ontario
- 12% of people in Elgin St. Thomas consulted with a mental health professional in the past year

# **Self-Rated General Health**

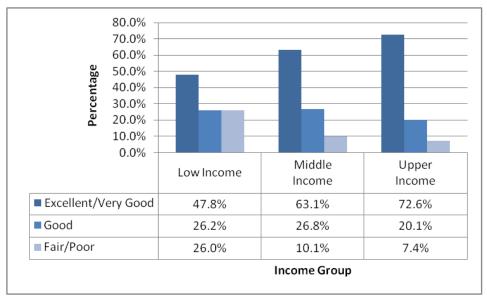
Figure 3.1 – Age-Standardized Proportion of the Population by Self-Rated Health, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012



Source: Canadian Community Health Survey, 2011-2012

- 88.5% of the population in Elgin St. Thomas reported being in Excellent, Very Good or Good Health.
- There were no significant differences between Elgin St. Thomas, Ontario or the peer health units.

Figure 3.2 –Age-Standardized Proportion of Self-Rated Health, by Income, Elgin St. Thomas only, 2011-2012



Source: Canadian Community Health Survey, 2011-2012

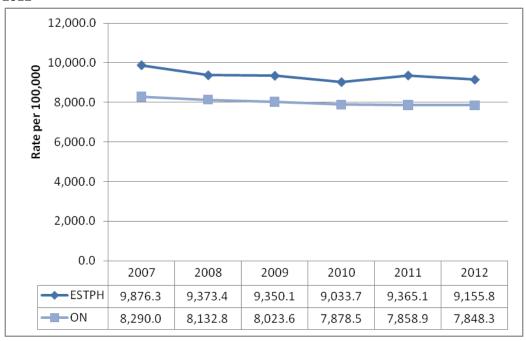
- Self-rated health has a clear pattern along income lines. Excellent and very good health was reported by a greater proportion of the population in the upper income group than the middle or lower income groups.
- Fair or poor health was also reported by a larger proportion of the population in the low income group than the middle or upper income groups.

# Hospitalizations

Hospitalizations are also referred to as "hospital discharges" or "hospital separations" because a hospitalization is not recorded when a patient is admitted to the hospital, but at the time of discharge, transfer to another institution (such as a long term care facility) or in the event of death.

## **All-Cause Hospitalization**

Figure 3.3 –Age-Standardized Rate of All-Cause Hospitalization\*, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 9, 2014

#### **Key Findings:**

- There were, on average, 9,300 hospitalizations per 100,000 people in Elgin St. Thomas for all causes each year. Elgin St. Thomas had statistically significantly more hospitalizations over time than Ontario.
- For both Elgin St. Thomas and Ontario, there was a small but statistically significant decline in all-cause hospitalizations over time.

#### **Important Interpretation Note:**

 Mental Disorders (ICD10 Chapter V) are excluded from all-cause hospitalization because of changes in the reporting of mental health disorders that started in 2006. As of that year, patients with mental health disorders who were in designated psychiatric beds in acute care hospitals were reported using a separate database (the Ontario Mental Health Reporting System (OHMRS)) and combining these different sources for reporting is not possible.

<sup>\*</sup>Note: Excludes mental disorders. See interpretation notes below for more details.

45,000 40,000 35,000 25,000 20,000 15,000 5,000 0-4 5-9 10-14 Age Groups

Figure 3.4 -Age-Specific Rates of All-Cause Hospitalization, Elgin St. Thomas only, 2007-2011 combined

Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 9, 2014

- Rates of all-cause hospitalization were highest for those aged 0 to 4 years.
- From the age of 40 onwards, hospitalization rates increased consistently with age.

# **Leading Causes of Hospitalization**

Although a person may be admitted to the hospital for multiple reasons at one time, when considering an analysis of the leading causes of hospitalization, the causes used in the analysis are based on the "most responsible diagnosis". The most responsible diagnosis is typically associated with the longest duration of treatment during each hospital stay.

Table 3.1 –The Top 10 Leading Causes of Hospitalization\*, Elgin St. Thomas and Ontario, 2010-2012 combined

Cause of Hospitalization	ESTPH Rank	ESTPH (%)	ON Rank	ON (%)
Diseases of the Circulatory System	1	13.9%	1	14.1%
Diseases of the Digestive System	2	11.0%	2	11.2%
Diseases of the Respiratory System	3	9.8%	4	8.4%
Injury, poisoning and other consequences of external causes	4	9.1%	3	8.5%
Diseases of the genitourinary system	5	7.5%	7	6.1%
Neoplasms (cancer)	6	6.7%	5	7.6%
Diseases of the musculoskeletal system and connective tissue	7	6.1%	6	6.4%
Conditions of the perinatal period	8	3.6%	8	4.8%
Endocrine, nutritional and metabolic diseases	9	3.2%	10	2.9%
Certain infectious and parasitic diseases	10	2.7%	9	3.0%

Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 9, 2014

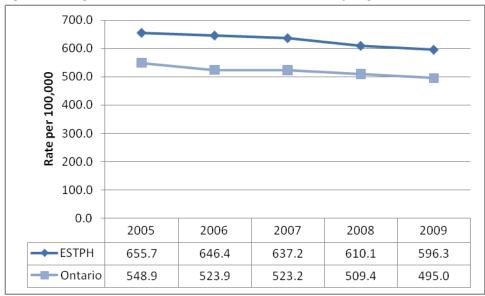
<u>Data Note</u>: \*The following causes of hospitalization were removed from the analysis: pregnancy, childbirth and symptoms, signs and abnormal findings (other).

- The top 10 leading causes of hospitalization were similar for Elgin St. Thomas and Ontario.
- Chronic diseases and Injuries accounted for a majority of the leading causes of hospitalization.

# **Mortality**

# **All-Cause Mortality**

Figure 3.5 – Age-Standardized Rate of All-Cause Mortality, Elgin St. Thomas and Ontario, 2005-2009

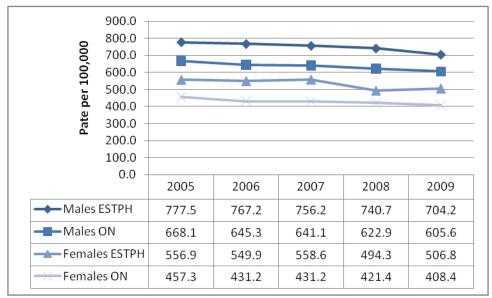


Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 12, 2014

- The all-cause mortality rate for Elgin St. Thomas was significantly higher than for Ontario over time.
- The all-cause mortality rate decreased over time, but the decrease was not statistically significant for Elgin St. Thomas or Ontario.

## By Gender

Figure 3.6 -Age-Standardized Rate of All-Cause Mortality, by Gender, Elgin St. Thomas and Ontario, 2005-2009



Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 12, 2014

- Males had higher rates of all-cause mortality than females.
- Over time, Elgin St. Thomas had consistently higher rates of all-cause mortality than Ontario for both males and females.

# **Leading Causes of Death**

Table 3.2 -Top 10 Leading Causes of Death\*, Elgin St. Thomas and Ontario, 2005-2009 combined

	ESTPH			ON			
Leading Causes of Death	Annual Average # of Deaths	%	Rank	Annual Average # of Deaths	%	Rank	
Ischemic heart disease	147.8	22.3%	1	14,394.8	16.7%	1	
Cerebrovascular diseases	56.4	8.6%	2	5,309.2	6.1%	4	
Dementia and Alzheimer Disease	50.2	8.1%	3	5,457.4	6.3%	3	
Chronic lower respiratory diseases	39.4	5.4%	4	3,560.4	4.1%	5	
Lung Cancer	38.2	4.1%	5	6,304.2	7.3%	2	
Diabetes	30.6	4.0%	6	3,021.6	3.5%	7	
Influenza and pneumonia	25.4	3.3%	7	1,992.4	2.3%	9	
Colorectal Cancer	22.8	3.2%	8	3,142.6	3.6%	6	
Diseases of the urinary system	19.6	3.1%	9	1,893.6	2.2%	11	
Lymphoma and Leukemia	19.2	2.6%	10	2,456.8	2.8%	8	

Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 12, 2014

<u>Data Note:</u>\*Rankings and proportions are based on all deaths; however only the top 10 causes are listed in the table above.

- Heart disease was the leading cause of death for both Elgin St. Thomas and Ontario. This disease accounted for more than twice the proportion of deaths than the second leading cause of death in both Elgin St. Thomas and Ontario.
- The ranking of the top 10 leading causes of death was very similar for Elgin St. Thomas and Ontario.
- Four of the leading causes of death have direct links to public health: ischemic heart disease, lung cancer, influenza and pneumonia and colorectal cancer.

# **Potential Years of Life Lost (PYLL)**

PYLL is a measure of premature mortality. It represents the number of years not lived by an individual from birth to age 75. This indicator places more weight on causes of early death than those causes of death at older ages.

There are two reasons that a specific cause of death can become a leading cause of potential years of life lost. Deaths either happen in younger people so that each death has a large number of years lost for each person or there are a large number of deaths regardless of age.

Table 3.3 –Potential Years of Life Lost (PYLL) by Becker's Leading Cause Group, Elgin St. Thomas and Ontario, 2005-2009 combined

	Average (2005-	ESTPH	ON Rank
Leading Cause of Death	2009)	Rank	
Ischemic Heart Disease	561.6	1	1
Lung Cancer	379.9	2	2
Motor Vehicle Collisions	242.9	3	5
Perinatal Conditions	214.3	4	4
Suicide	201.6	5	3
Lymphoma and Leukemia	156.0	6	8
Congenital Malformations	152.4	7	9
Cerebrovascular Diseases	143.1	8	13
Liver Diseases	129.1	9	11
Breast Cancer	128.4	10	6

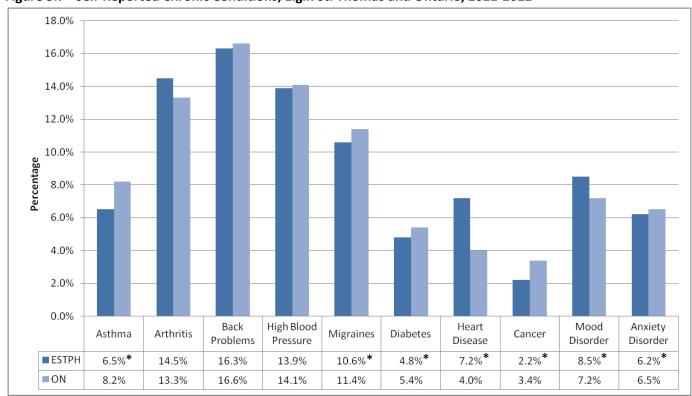
Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 12, 2014

- Ischemic heart disease was the leading cause of potential years of life lost both in Elgin St. Thomas and Ontario. This was due to the large number of deaths, as this was also the leading cause of death (see Table 3.2).
- It is notable that while motor vehicle collisions and intentional self-harm were not among the leading causes of death in Elgin St. Thomas (see Table 3.2), they were among the leading causes of Potential Years of life lost in the table above. This indicates that these deaths were among those in younger age groups, so a smaller number of deaths will have a much larger impact on PYLL.
- Six of the leading causes of potential years of life lost have direct links to public health: ischemic heart disease, lung cancer, motor vehicle collisions, suicide, liver disease and breast cancer.

# **Self-Reported Chronic Conditions**

# **Self-Reported Chronic Illness**

Figure 3.7 – Self-Reported Chronic Conditions, Elgin St. Thomas and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012

#### **Key Findings:**

Heart disease was the only self-reported chronic disease that was statistically significantly
different between Elgin St. Thomas and Ontario. Respondents from Elgin St. Thomas reported
nearly twice as much heart disease as respondents from Ontario.

<sup>\*</sup>Note: Data marked with an asterisk should be interpreted with caution due to high variability

# **Hospitalization and Mortality due to Chronic Conditions**

# **Summary of Chronic Conditions**

Table 3.4- Three-Year Average Rates of Hospitalization (2010-2012), Rates of Mortality (2007-2009) and Potential Years of Life Lost (PYLL) for Elgin St. Thomas and Ontario.

Chronic Conditions	Hospitalizations (per 100,000)		Mortality (per 100,000)		PYLL (75) (per 1,000)	
	ESTPH	ON	ESTPH	ON	ESTPH	ON
Cardiovascular Disease	850.1 <sup>§</sup>	737.8	175.0 <sup>§</sup>	131.0	353.1	252.0
Respiratory Disease	692.2 <sup>§</sup>	502.6	47.3	36.8	79.3	54.7
Ischemic Heart Disease	355.6 <sup>§</sup>	278.5	107.2 <sup>§</sup>	71.9	213.8	147.5
Cancer	366.3	334.1	173.2 <sup>§</sup>	144.6	642.9	485.6
Arthritis	297.0	269.7	NR	-	-	-
COPD	212.0 <sup>§</sup>	133.8	26.6	18.2	41.5	20.6
Cerebrovascular Disease	113.3	98.2	33.0	26.2	66.0	38.7
Diabetes	107.0 <sup>§</sup>	83.1	25.3	16.1	54.1	39.2
Stroke	97.3	79.3	23.8	19.9	42.2	30.9
Asthma	44.2	41.6	0.0	0.4	0.0	2.2

Source: Inpatient Discharges 2010-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 9, 2014; Ontario Mortality Data 2007-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 12, 2014

<u>Data Note</u>: § denotes a statistically significant differences based on the overlap of confidence intervals. NR denotes rates that were Not Reportable due to small numbers.

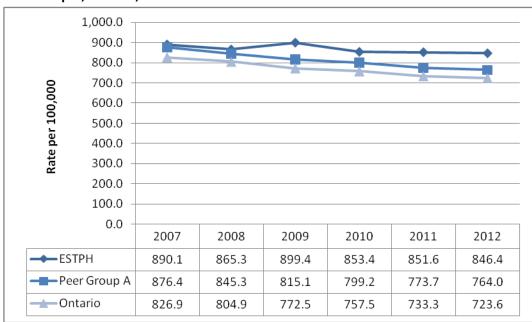
- Elgin St. Thomas had significantly higher rates of hospitalization due to cardiovascular disease, respiratory disease, ischemic heart disease, COPD and diabetes than Ontario.
- Cancer, which did not have the highest rates of hospitalization or mortality in the population, did represent the largest number of potential years of life lost in both Elgin St. Thomas and Ontario.

## **Cardiovascular Disease**

Cardiovascular refers to all diseases of the circulatory system including congenital and acquired diseases such as acute myocardial infarction (heart attack), ischemic heart disease, valvular heart disease, peripheral vascular disease, arrhythmias, high blood pressure, and stroke (Public Health Agency of Canada, 2009).

### Hospitalization

Figure 3.8 – Age-Standardized Rates of Hospitalization due to Cardiovascular Disease, Elgin St. Thomas, Peer Group A, Ontario, 2007-2012

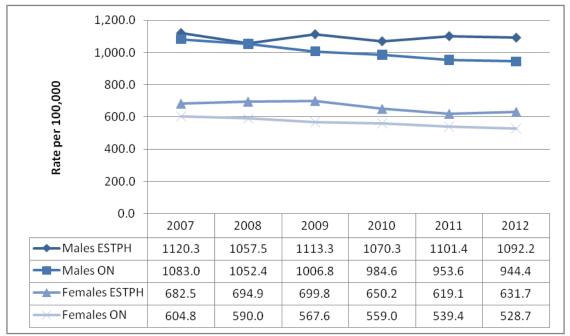


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- In 2012 Elgin St. Thomas had significantly higher rates of hospitalization due to cardiovascular disease than either Ontario or the peer health units.
- All three groups had decreasing rates over time.

## **Hospitalization -by Gender**

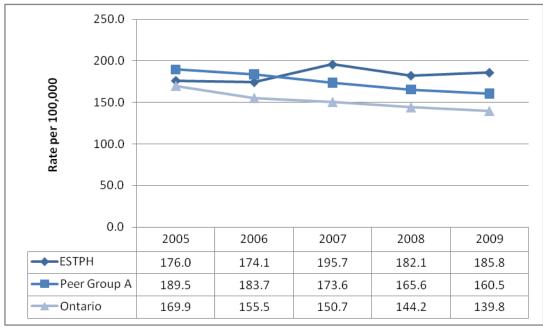
Figure 3.9 - Age-Standardized Rates of Hospitalization due to Cardiovascular Disease, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Males had higher rates of hospitalization due to cardiovascular disease than females.
- Rates decreased between 2007 and 2012 for all groups over time.

Figure 3.10 -Age-Standardized Rates of Mortality due to Cardiovascular Disease, Elgin St. Thomas, Peer Group A and Ontario, 2005-2009



Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

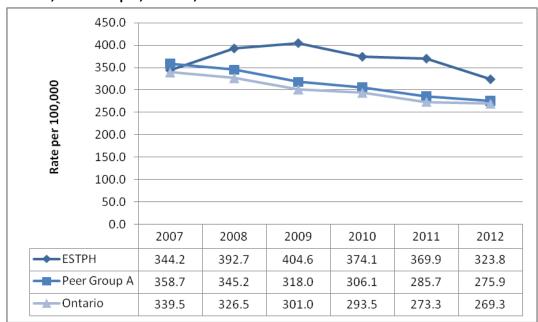
- The mortality rate due to cardiovascular disease for Elgin St. Thomas increased between 2005 and 2009, while the rates for Ontario and the peer health units decreased.
  - The increase for Elgin St. Thomas was not statistically significant although this is a trend that should be monitored over time.
- In 2009, Elgin St. Thomas had statistically significantly higher rates of cardiovascular mortality than Ontario. While the rate was also higher than our peer health units, the difference was not statistically significant.

### **Ischemic Heart Disease**

Ischemic heart disease is one type of cardiovascular disease and may also be known by other names including coronary artery disease. This disease develops when the coronary arteries, the major blood vessels that supply the heart with blood, oxygen and nutrients, become damaged or diseased. When plaques build up, the arteries are narrowed and there is decreased blood flow to the heart. Eventually, the decreased blood flow may cause chest pain (angina), shortness of breath, or other signs and symptoms of coronary artery disease. A complete blockage can cause a heart attack.

#### Hospitalization

Figure 3.11 – Age-Standardized Rates of Hospitalization due to Ischemic Heart Disease, Elgin St. Thomas, Peer Group A, Ontario, 2007-2012

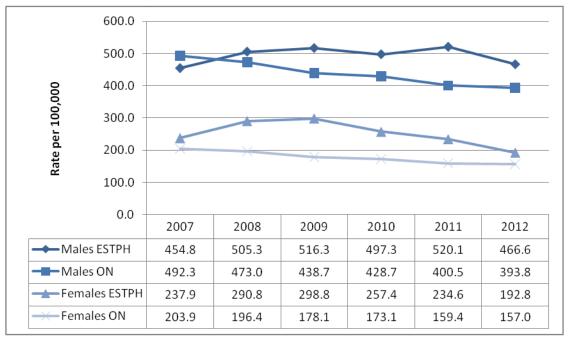


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Rates of hospitalization due to ischemic heart disease were similar for all groups in 2007; then in 2008, the rates for Elgin St. Thomas increased while rates in Ontario and peer health units decreased consistently over time.
- The rates in Elgin St. Thomas began to decrease from 2010 to 2012, but rates remained much higher than those for Ontario or peer health units.

## Hospitalization -by Gender

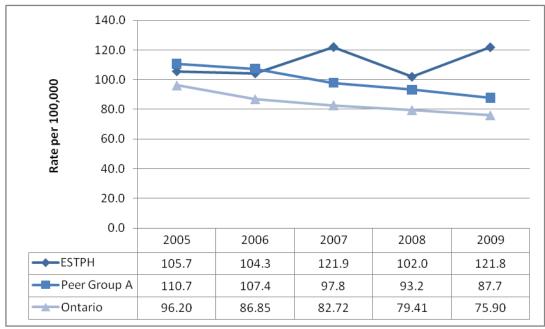
Figure 3.12 -Age-Standardized Rates of Hospitalization due to Ischemic Heart Disease, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Rates of hospitalization for males were much higher than for females over time.
- The rate of hospitalization for males in Elgin St. Thomas was lower than the provincial rate in 2007. After 2007, rates increased and Elgin St. Thomas had consistently more hospitalizations for males due to ischemic heart disease than Ontario.

Figure 3.13 -Age-Standardized Rates of Mortality due to Ischemic Heart Disease, Elgin St. Thomas and Ontario, 2005-2009



Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

## **Key Findings:**

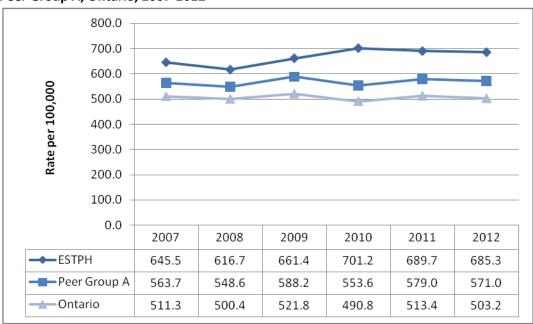
• Mortality rates due to ischemic heart disease increased in Elgin St. Thomas over time while rates decreased for Ontario and the peer health units.

# **Respiratory Disease**

Respiratory disease is a category of disease that includes both chronic and acute respiratory diseases. It includes diseases like influenza and pneumonia, bronchitis, asthma, emphysema and chronic obstructive pulmonary disease (COPD) among others. It is important to note that lung cancers are not included in this section.

### Hospitalization

Figure 3.14 – Age-Standardized Rates of Hospitalization due to Respiratory Disease, Elgin St. Thomas, Peer Group A, Ontario, 2007-2012

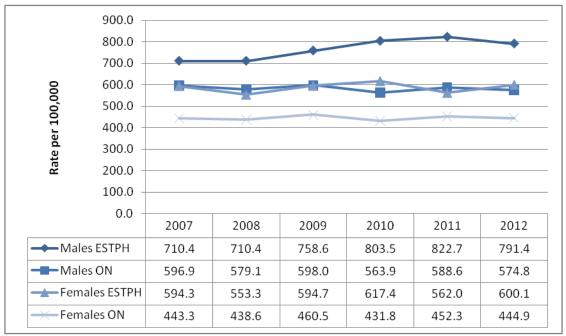


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Elgin St. Thomas had statistically significantly higher rates of hospitalization due to respiratory disease than Ontario or the peer health units over time.
- Elgin St. Thomas had increasing rates of hospitalization due to respiratory disease between 2007 and 2010. Rates started to decrease slightly in the last 3 years but the difference was not statistically significant. Ontario and the peer health units had minimal change over time.

#### **Hospitalization -by Gender**

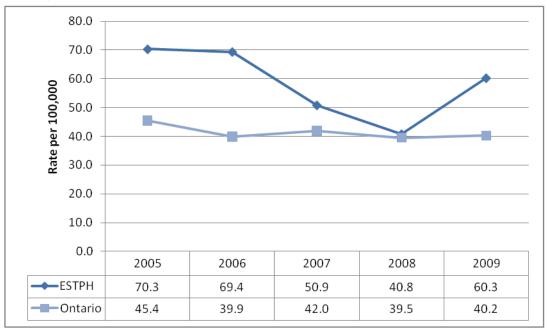
Figure 3.15 -Age-Standardized Rates of Hospitalization due to Respiratory Disease, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Males had higher rates of hospitalization due to respiratory disease than females over time.
- Rates among females in Elgin St. Thomas were than females in Ontario but similar to the rates for males in the province.

Figure 3.16 -Age-Standardized Rates of Mortality due to Respiratory Disease, Elgin St. Thomas and Ontario, 2005-2009



Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

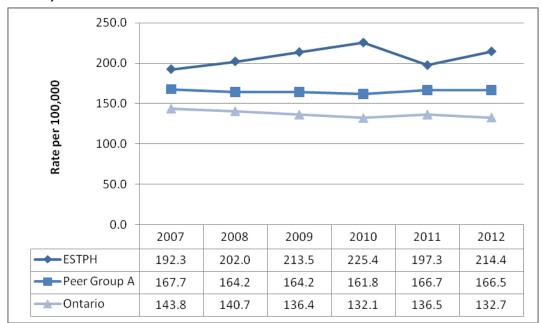
- In Elgin St. Thomas, there were about 70 deaths per year due to respiratory disease.
- In general, the trend was decreasing mortality rates over time but the rates were highly variable in Elgin St. Thomas due to small numbers.

# **Chronic Obstructive Pulmonary Disease (COPD)**

Chronic Obstructive Pulmonary Disease (COPD) is a type of respiratory disease that is characterized by shortness of breath, coughing and sputum production. It is also referred to as chronic bronchitis and emphysema.

## Hospitalization

Figure 3.17 -Age-Standardized Rates of Hospitalization due to COPD, Elgin St. Thomas, Peer Group A, Ontario, 2007-2012

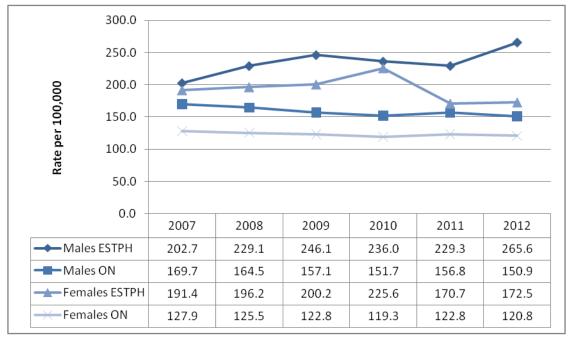


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Rates of hospitalization in Elgin St. Thomas due to COPD were significantly higher than in Ontario or the peer health units.
- While the rates of hospitalization due to COPD in Ontario and the peer health units either stayed the same or had a small decrease over time, the rates in Elgin St. Thomas increased from 2007 to 2010. In 2012, the rate was not significantly lower than in 2010.

#### **Hospitalization -by Gender**

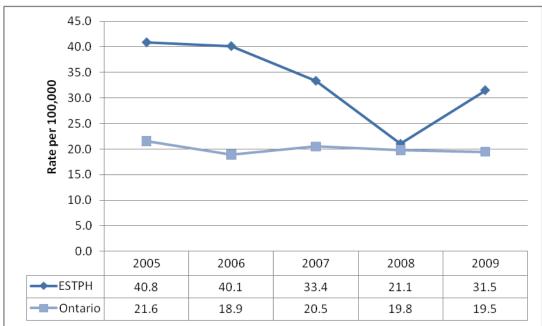
Figure 3.18 -Age-Standardized Rates of Hospitalization due to COPD, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Males had higher rates of hospitalization due to COPD than females
- Rates of hospitalization were much higher in Elgin St. Thomas than in Ontario for both males and females. Females in Elgin St. Thomas had higher rates of hospitalization due to COPD than males in Ontario.
- In Elgin St. Thomas, between 2010 and 2012, the rates of hospitalization due to COPD increased for males while they decreased for females during the same time period.

Figure 3.19 -Age-Standardized Rates of Mortality due to COPD, Elgin St. Thomas and Ontario, 2005-2009



Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- In 2009, the mortality rate due to COPD in Elgin St. Thomas was 62.0% higher than in Ontario.
- Mortality rates due to COPD in Elgin St. Thomas showed a downward trend over time while rates in Ontario stayed very similar over time.

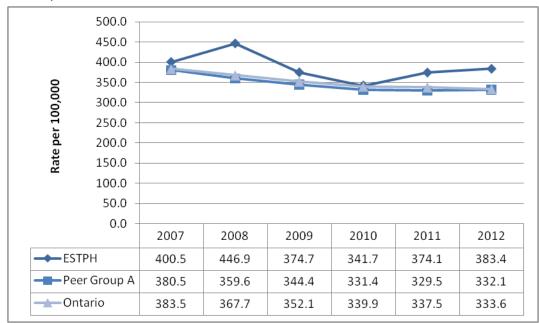
# Cancer

# **Cancer Hospitalization and Mortality**

This section includes rates of hospitalization and mortality due to all types of Cancer. The following sections will discuss some individual types of cancers in more detail.

## Hospitalization

Figure 3.20 -Age-Standardized Rates of Hospitalization due to Cancer, Elgin St. Thomas, Peer Group A, Ontario, 2007-2012

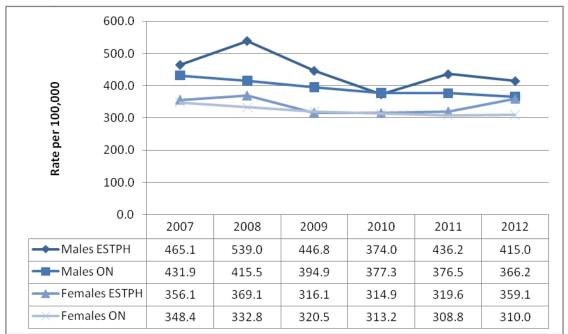


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

- Rates of cancer hospitalization decreased over time.
- Rates of hospitalization due to Cancer in Elgin St. Thomas were similar to rates in Ontario and for the peer health units. Twice however during the previous six years, in 2008 and in 2012, rates were statistically significantly higher than both Ontario and the peer health units.

## **Hospitalization -by Gender**

Figure 3.21 -Age-Standardized Rates of Hospitalization due to Cancer, by Gender, Elgin St. Thomas and Ontario, 2007-2012

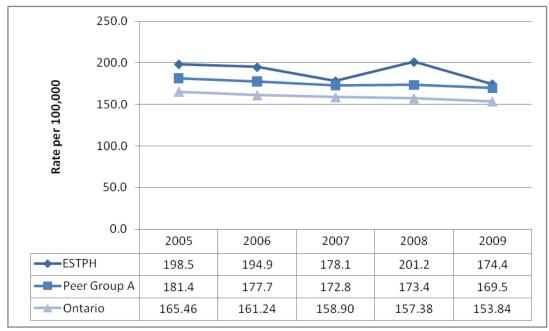


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

# **Key Findings:**

• Males had higher rates of hospitalization due to cancer than females over time.

Figure 3.22 -Age-Standardized Rates of Mortality due to Cancer, Elgin St. Thomas and Ontario, 2005-2009



Source: Ontario Mortality Data 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 6, 2014

## **Key Findings:**

• Rates of mortality due to cancer in Elgin St. Thomas showed a downward trend over time while rates in Ontario stayed very similar over time; however these differences were not statistically significant.

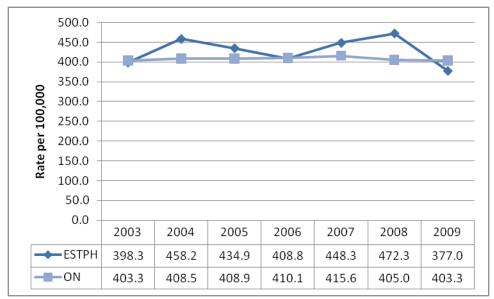
# **Cancer Incidence and Mortality**

## **All Cancers**

Cancer incidence represents the number of new cases of cancer occurring in a population in that year. This differs from cancer hospitalization which is measuring hospitalization due to cancer-related illness while cancer incidence is measuring the diagnosis or discovery of cancer in a patient.

#### Incidence

Figure 3.23 – Age-Standardized Incidence Rates of All Cancers, Elgin St. Thomas and Ontario, 2003-2009



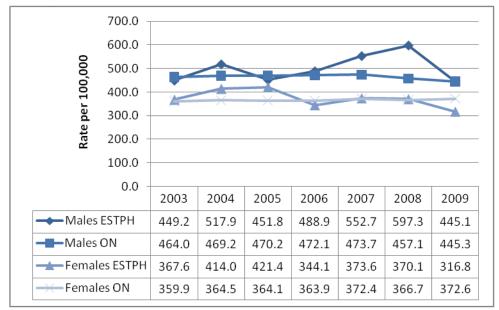
Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

# **Key Findings**:

• The incidence of all cancers was similar for Elgin St. Thomas and Ontario over time, however, Elgin St. Thomas had statistically significantly higher rates in 2004 and 2008.

#### By Gender

Figure 3.24 – Age-Standardized Incidence Rates of All Cancers, by Gender, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

- Males had a higher incidence of all cancers compared to females over time.
- Females in Elgin St. Thomas had a significantly lower incidence of all cancers compared to females in Ontario in 2009. This was the only year the rates were lower than Ontario.

#### By Age Group

3,500.0 3,000.0 2,500.0 Rate per 100,000 2,000.0 1,500.0 1,000.0 500.0 0.0 2003 2004 2005 2006 2007 2008 2009 → 30 to 49 yrs 223.0 198.6 174.5 195.9 209.6 212.7 168.7 **--**50 to 64 yrs 760.2 999.9 957.0 873.2 915.5 995.2 828.4 ★─ 65 to 79 yrs 1841.8 2170.0 2027.5 1889.0 2187.0 2131.2 1835.0 80+yrs 2304.6 2340.4 2540.1 2313.7 2693.8 2909.0 1812.1

Figure 3.25 -Age-Specific Incidence Rates of All Cancers, Elgin St. Thomas and Ontario, 2003-2009

Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

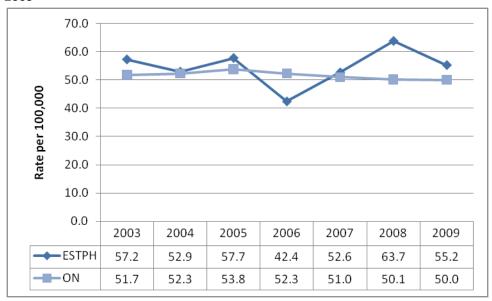
#### **Key Findings:**

• Under the age of 30, there were so few cases of cancer that many of the rates were not reportable. Incidence rates of all cancers increased with age.

# **Lung Cancer**

#### **Incidence**

Figure 3.26 – Age-Standardized Incidence Rates of Lung Cancer, Elgin St. Thomas and Ontario, 2003-2009



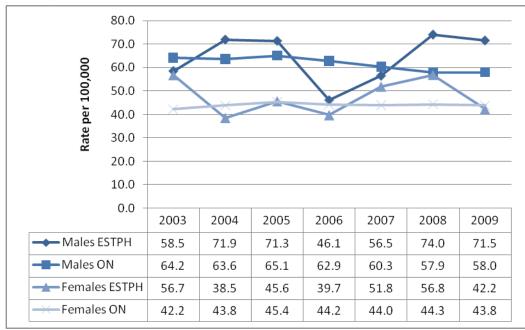
Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

# **Key Findings:**

• There were no significant differences in the incidence of lung cancer between Elgin St. Thomas and Ontario over time.

#### By Gender

Figure 3.27 –Age-Standardized Incidence Rates of Lung Cancer, by Gender, Elgin St. Thomas and Ontario, 2003-2009

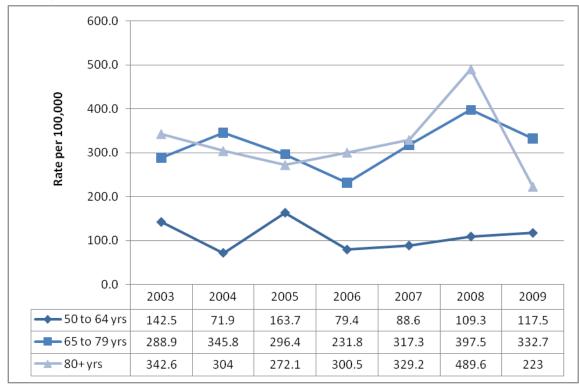


Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

- Males had a higher incidence of lung cancer than females.
- There were no significant differences between males and females in Elgin St. Thomas compared to Ontario.

# By Age Group

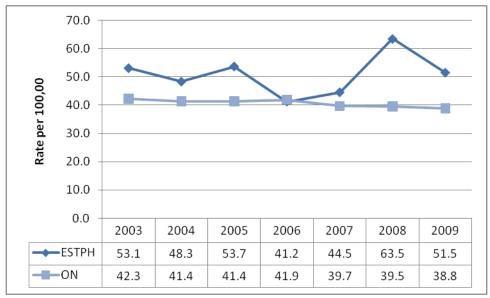
Figure 3.28 -Age-Standardized Incidence Rates of Lung Cancer, by Age Group, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

- Incidence rates of lung cancer were higher among those in the oldest age groups.
- Incidence increased after the age of 50, but rates were similar from the age of 65 and older over time.
- There were no cases of lung cancer among children 0 to 14 years of age and from 15 to 49 years of age the rates were too small to report (data not included in graph).

Figure 3.29 -Age-Standardized Rates of Mortality due to Lung Cancer, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014.

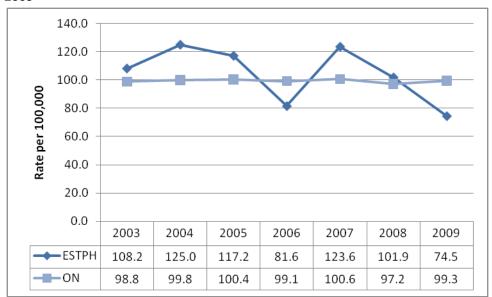
#### **Key Findings:**

• Elgin St. Thomas had a significantly higher rate of mortality due to lung cancer compared to Ontario in 2008. For other years, Elgin St. Thomas had higher rates but the differences were not statistically significant.

## **Breast Cancer**

#### Incidence

Figure 3.30 Age-Standardized Incidence Rates of Breast Cancer, Elgin St. Thomas and Ontario, 2003-2009

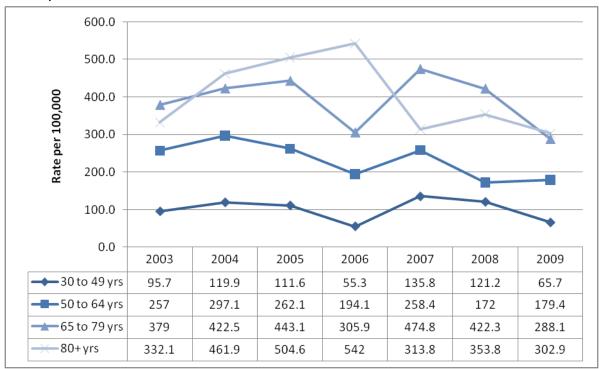


Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014. <u>Data Note</u>: The rates of breast cancer in this section are for female breast cancer only.

- The incidence rates of breast cancer in Elgin St. Thomas and Ontario have not changed significantly over time.
- For Elgin St. Thomas, breast cancer incidence in 2009 was significantly lower than Ontario. For all other years, the rates were similar with no significant differences.

#### By Age Group

Figure 3.31 – Age-Specific Incidence Rates of Breast Cancer, by Age Group, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014. <u>Data Note</u>: The rates of breast cancer in this section are for female breast cancer only.

- Incidence rates of breast cancer increased with age.
- There were no cases of breast cancer in females under the age of 15 and for 15 to 29 year olds there were no cases between 2006 and 2009 (data not included in the graph).

60.0 50.0 **3ate per 100,00** 40.0 30.0 20.0 10.0 0.0 2007 2003 2004 2006 2005 2008 2009 ESTPH 30.2 27.6 38.8 24.7 29.0 48.8 26.6 -ON 30.8 31.0 31.1 28.7 30.1 28.9 28.3

Figure 3.32- Crude Rates of Mortality due to Breast Cancer, Elgin St. Thomas and Ontario, 2003-2009

Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014. <u>Data Note</u>: The rates of breast cancer in this section are for female breast cancer only.

#### **Key Findings:**

- There were on average 14 deaths due to breast cancer in Elgin St. Thomas each year.
- Mortality rates due to breast cancer were similar over time. The small numbers used to calculate the rates for Elgin St. Thomas make them unstable and can cause the rates to vary over time.

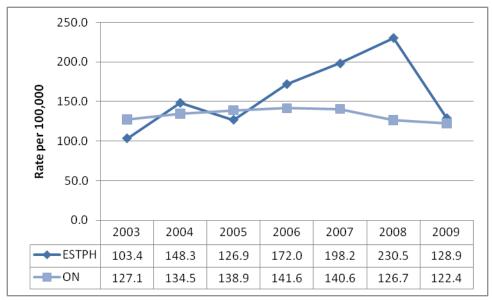
## **Data Interpretation Note:**

• This graph is based on crude mortality rates rather than age-standardized rates because of the small number of cases for Elgin St. Thomas.

## **Prostate Cancer**

#### Incidence

Figure 3.33 -Age-Standardized Incidence Rates of Prostate Cancer, Elgin St. Thomas and Ontario, 2003-2009



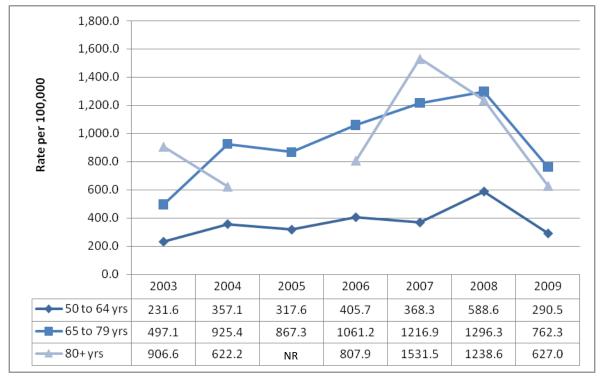
Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

#### **Key Findings:**

• The incidence of prostate cancer in Elgin St. Thomas increased from 2005 to 2008. In 2007 and 2008, rates were significantly higher than in Ontario. In 2009, the incidence dropped and was not significantly different from Ontario.

#### By Age Group

Figure 3.34 -Age-Specific Incidence Rates of Prostate Cancer, by Age Group, Elgin St. Thomas only, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014. Note: NR=Not Reportable because there were fewer than 5 cases.

- Incidence rates of prostate cancer in Elgin St. Thomas were highest among seniors aged 65 and older.
- There were no cases of prostate cancer among anyone under the age of 30. For those aged 30 to 49, there were less than 5 cases each year, a number that is too small to report (data not included in graph).

30.0 25.0 Rate per 100,00 20.0 15.0 10.0 5.0 0.0 2003 2004 2005 2006 2007 2008 2009 ESTPH 21.1 25.5 25.2 27.2 20.2 22.3 11.1 -ON 22.7 22.5 20.9 22.2 21.3 22.2 21.6

Figure 3.35 - Crude Rates of Mortality due to Prostate Cancer, Elgin St. Thomas and Ontario, 2003-2009

Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014.

# **Key Findings:**

- There were on average 7 deaths due to prostate cancer per year in Elgin St. Thomas.
- The rate of mortality due to prostate cancer in Elgin St. Thomas was significantly lower than Ontario in 2009.

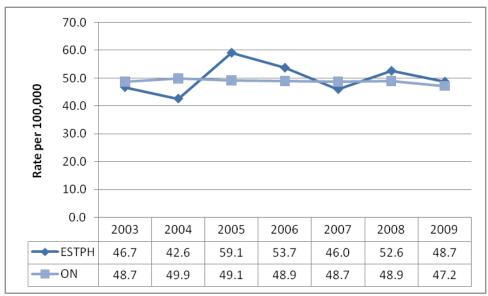
# **Data Interpretation Note:**

• This graph is based on crude mortality rates, rather than age-standardized rates, because the number of cases for Elgin St. Thomas was extremely small.

# **Colorectal Cancer**

#### **Incidence**

Figure 3.36 -Age-Standardized Incidence Rates of Colorectal Cancer, Elgin St. Thomas and Ontario, 2003-2009



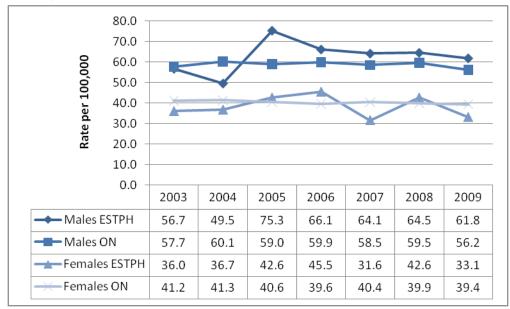
Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

# **Key Findings:**

• There were no significant differences in the incidence of colorectal cancer between Elgin St. Thomas and Ontario over time.

# By Gender

Figure 3.37 -Age-Standardized Incidence Rates of Colorectal Cancer, by Gender, Elgin St. Thomas and Ontario, 2003-2009



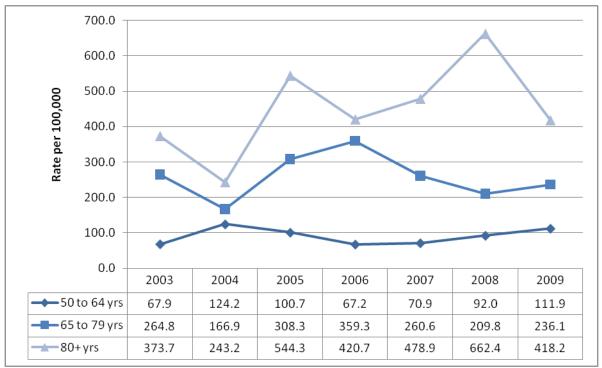
Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

# **Key Findings:**

• Males had higher incidence rates of colorectal cancer than females over time.

# By Age Group

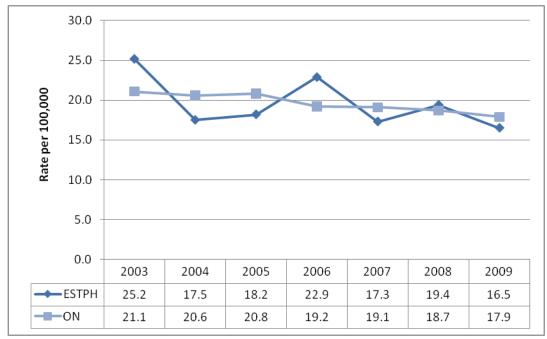
Figure 3.38 -Age-Specific Incidence Rates of Colorectal Cancer, by Age Group, Elgin St. Thomas only, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

- The incidence of colorectal cancer in Elgin St. Thomas increased with age.
- There were no cases of colorectal cancer among those in Elgin St. Thomas under the age of 30. From 30 to 49 there were less than 5 cases per year and the rates were not reportable (data not included in the graph).

Figure 3.39 -Crude Rates of Mortality due to Colorectal Cancer, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014.

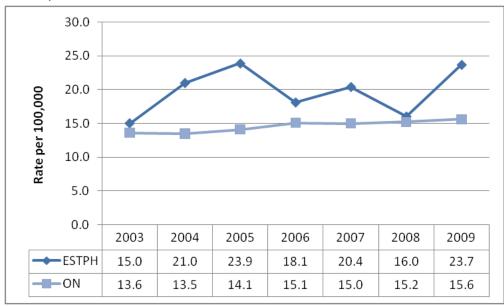
## **Key Findings:**

• There was an overall downward trend in mortality rates due to colorectal cancer in Elgin St. Thomas and Ontario over time.

# **Melanoma Skin Cancer**

#### Incidence

Figure 3.40 -Age-Standardized Incidence Rates of Melanoma Skin Cancer, Elgin St. Thomas and Ontario, 2003-2009

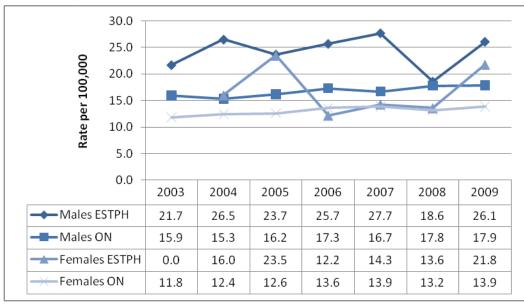


Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

- The incidence of melanoma skin cancer showed an increasing trend over time for both Elgin St. Thomas and Ontario.
- In 2005, Elgin St. Thomas had a statistically significantly higher incidence of melanoma skin cancer compared to Ontario. For all other years, the differences were not statistically significant.

#### By Gender

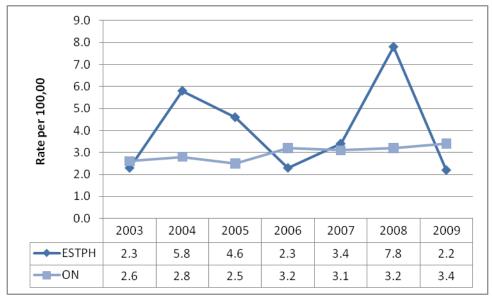
Figure 3.41 -Age-Standardized Incidence Rates of Melanoma Skin Cancer, by Gender, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

- In general, males had a higher incidence of melanoma skin cancer than females over time.
- The rates for Elgin St. Thomas are based on very small numbers which makes them unstable and the trends difficult to see over time. There were no significant differences between males and females in Elgin St. Thomas and males and females in Ontario.

Figure 3.42 -Crude Rates of Mortality due to Melanoma Skin Cancer, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014.

### **Key Findings:**

- There were on average 4 deaths due to melanoma skin cancer in Elgin St. Thomas each year.
- Mortality rates due to melanoma skin cancer were similar over time. The small numbers used to calculate the rates for Elgin St. Thomas make them unstable and can cause the rates to vary over time.

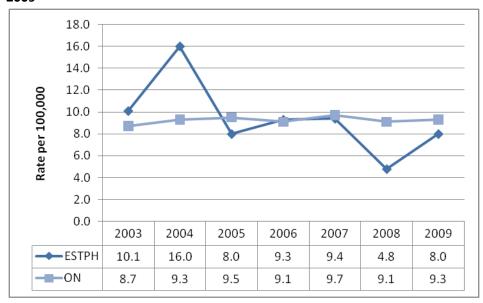
## **Data Interpretation Note:**

• This graph is based on crude mortality rates rather than age-standardized rates because the number of cases for Elgin St. Thomas was extremely small.

# **Oral Cancer**

#### **Incidence**

Figure 3.43 -Age-Standardized Incidence Rates of Oral Cancer, Elgin St. Thomas and Ontario, 2003-2009



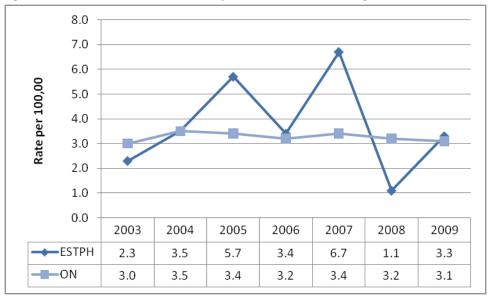
Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Incidence, September 4 2014.

# **Key Findings:**

• The incidence of oral cancer in Elgin St. Thomas was statistically significantly lower than Ontario in 2008. There were no other significant differences over time.

#### Mortality

Figure 3.44 -Crude Rates of Mortality due to Oral Cancer, Elgin St. Thomas and Ontario, 2003-2009



Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014.

# **Key Findings:**

- There were on average 3 deaths due to oral cancer in Elgin St. Thomas each year.
- Mortality rates due to oral cancer were similar over time. The small numbers used to calculate the rates for Elgin St. Thomas make them unstable and can cause the rates to vary over time.

# **Data Interpretation Note:**

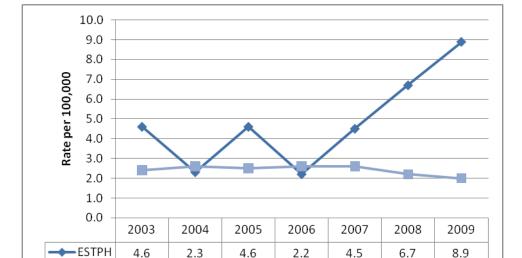
• This graph is based on crude mortality rates, rather than age-standardized rates because the number of cases for Elgin St. Thomas was extremely small.

#### **Cervical Cancer**

#### Incidence

- There were very few cases of cervical cancer in Elgin St. Thomas between 2003 and 2006 (data not shown).
  - The data is not shown because 2003 and 2006 were the only years with reportable data.
     For all other years, there were fewer than 5 cases and the data could not be reported.

#### Mortality



2.5

Figure 3.45 - Crude Rates of Mortality due to Cervical Cancer, Elgin St. Thomas and Ontario, 2003-2009

Source: Public Health Ontario. Snapshots: Elgin St. Thomas Public Health and Ontario. Cancer Mortality, September 4 2014.

2.6

2.6

2.2

2.0

# **Key Findings:**

-ON

2.4

2.6

- There were, on average, 2 deaths due to cervical cancer in Elgin St. Thomas each year.
- The upward trend in mortality due to cervical cancer in Elgin St. Thomas is concerning given the downward trend in Ontario during the same time period. However the small numbers used to calculate the rates for Elgin St. Thomas make them unstable and can cause the rates to vary over time. The effect of small numbers should be taken into consideration when interpreting this graph but this trend should continue to be monitored over time.

# **Data Interpretation Note:**

• This graph is based on crude mortality rates, rather than age-standardized rates because the number of cases for Elgin St. Thomas was extremely small.

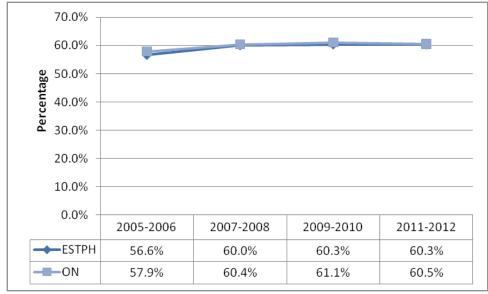
# **Cancer Screening**

Cancer screening helps to identify people in a healthy, asymptomatic population who may be at risk for disease. It is not a diagnostic test. The purpose of screening is to prevent cancer by identifying precancerous changes or by finding cancer at an early stage when it is easier to treat. Ontario operates screening programs for three types of cancers: breast, cervical and colorectal.

# **Breast Cancer Screening**

A mammogram is a test that uses low-dose X-rays to look for changes in the breast tissue that may indicate early signs of breast cancer, even when the changes are too small for a woman or her doctor to feel or see. Most women with an abnormal mammogram result will not have breast cancer. Breast cancer screening is recommended every two years for women aged 50-74.

Figure 3.46 –Age-Adjusted Proportion of Women (aged 50-74) who had at least 1 mammogram within a 2-year period, Elgin St. Thomas and Ontario, 2005-2012



Source: Cancer Screening Evaluation and Reporting, Cancer Care Ontario, December 2013

- 60% of women in Elgin St. Thomas between the ages of 50 and 74 met the breast cancer screening recommendations.
- The proportion of women who received a mammogram in the past two years increased significantly between 2005-2006 and 2007-2008 for both Elgin St. Thomas and Ontario and then stayed the same from 2007 to 2012.
- There were no significant differences in breast cancer screening rates between Elgin St. Thomas and Ontario over time.

# **Cervical Cancer Screening**

Changes in the cervix usually develop very slowly over many years; therefore there is a long period of time when abnormal cell changes can be detected before cervical cancer develops. These changes, called precursor lesions, can be found with a Pap test.

Cancer Care Ontario (CCO) updated its cervical cancer screening guidelines in 2012, recommending cervical cancer screening at least once every three years for women aged 21–69 if they are or have ever been sexually active. Screening can stop at age 70 in women who have had three or more normal tests in the previous 10 years.

70.0% 60.0% **Bercentage** 40.0% 30.0% 20.0% 10.0% 0.0% 2001-2003 2004-2006 2007-2009 2010-2012 **-**ESTPH 46.2% 57.9% 60.5% 62.0% -ON 61.7% 63.7% 64.6% 64.3%

Figure 3.47 – Age-Adjusted Proportion of Screen-Eligible Women (aged 20-69) who had at Least One Pap test in a 3-year period

Source: Cancer Screening Evaluation and Reporting, Cancer Care Ontario, December 2013

- 62% of women in Elgin St. Thomas between the ages of 20 and 69 met the cervical cancer screening recommendations.
- A significantly smaller proportion of screen-eligible women in Elgin St. Thomas received a pap test compared to women in Ontario each year.
- Rates of pap testing increased significantly over time for both Elgin St. Thomas and Ontario.

# **Colorectal Cancer Screening**

There are different types of colorectal cancer screening tests available. These tests range from at-home tests, such as the fecal occult blood test (FOBT), to visual inspection of the colon, such as a colonoscopy. FOBT screening has been shown to reduce death from colorectal cancer. Based on a 2001 guideline from the Canadian Task Force on Preventive Health, ColonCancerCheck (Ontario's colorectal cancer screening program) recommends that individuals aged 50-74 with an average level of risk for the disease be screened every two years with an FOBT.

An FOBT can detect the presence of trace amounts of blood in someone's stool that may indicate early cancer in the colon or rectum, even when there are no symptoms. An abnormal FOBT does not necessarily mean that someone has cancer, but it lets his or her healthcare provider know that follow-up with a colonoscopy is needed. During colonoscopy, cancer may be detected; in addition, pre-cancerous polyps may be identified and removed if present.

For people with an increased risk of colorectal cancer due to a family history (such as having a parent, sibling or child diagnosed with colorectal cancer), ColonCancerCheck recommends screening with a colonoscopy beginning at the age of 50 or 10 years earlier than the age at which their relative was diagnosed, whichever occurs first.

35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% 2005-2006 2007-2008 2009-2010 2011-2012

Figure 3.48 – Age-Adjusted Proportion of Individuals (aged 50-74) who received at least one FOBT test in a two-year period, 2005-2012

Source: Cancer Screening Evaluation and Reporting, Cancer Care Ontario, December 2013

23.1%

28.7%

#### **Key Findings:**

ESTPH

ON-

10.9%

18.8%

- 30% of people in Elgin St. Thomas between the ages of 50 and 74 met the colorectal cancer screening recommendations.
- Elgin St. Thomas had a significantly smaller proportion of the population who received an FOBT test compared to Ontario in 2005-2006 and 2007-2008. There were no differences in rates from 2009 on.

27.9%

28.1%

30.0%

29.9%

# **Mental Health**

# **Mental Illness Hospitalization**

The mental illnesses included in this indicator are substance-related disorders, like addictions, schizophrenia, delusional and non-organic psychotic disorders, mood/affective disorders, anxiety disorders and other selected adult personality and behaviour disorders. Hospitalizations refer to "hospital discharges" or "hospital separations" because a hospital visit is not recorded when a patient is admitted to hospital, but at the time of discharge, transfer to another institution like a long term care facility or in the event of death.

It is important to note that the indicator of hospitalizations due to mental illness captures only a small proportion of individuals with a mental illness, specifically those who are acutely ill and required inhospital treatment for their mental illness. This does not capture the much larger portion of the population that receives (or fails to receive) outpatient or community services. For these reasons, this indicator cannot be used to estimate the prevalence of mental illness in the general population.

500.0 450.0 400.0 350.0 Rate per 100,000 300.0 250.0 200.0 150.0 100.0 50.0 0.0 2009 2010 2011 ESTPH 95.0 98.0 131.0 -ON 392.0 409.0 442.0

Figure 3.49 – Age-Standardized Rates of Hospitalization due to Mental Illness (aged 15+), Elgin St. Thomas and Ontario, 2009-2011

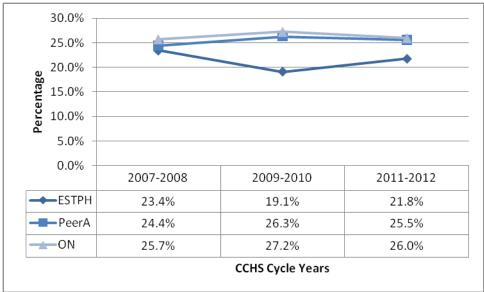
Source: Inpatient Discharges 2009-2011, Ontario Mental Health Reporting System (OMHRS), Sept. 5, 2014

- Elgin St. Thomas had a significantly lower rate of hospitalization due to mental illness than Ontario over time. The rate of hospitalization was nearly 4 times higher in Ontario compared to Elgin St. Thomas.
- The rate of hospitalization due to mental illness in Ontario increased significantly each year. In Elgin St. Thomas rates increased, but the changes were not statistically significant.

# **Work Stress**

Work stress results are based on the question in the Canadian Community Health Survey (CCHS) which asks respondents aged 15-75 who worked at a job in the past year whether they regularly felt quite a bit or extremely stressed at work.

Figure 3.50 – Age-Standardized Proportion of Respondents who were Quite a bit or Extremely stressed at Work (aged 15-75), Elgin St. Thomas Public Health, Peer Group A and Ontario, 2007-2012

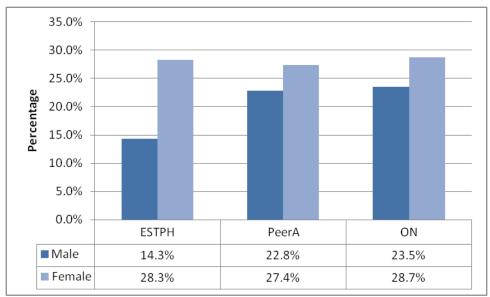


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012

- In Elgin St. Thomas in 2011-2012, 22% respondents reported experiencing work stress.
- Elgin St. Thomas had a significantly lower rate of work stress in 2009-2010 compared to Ontario. There were no other significant differences.

# By Gender

Figure 3.51 -Age-Standardized Proportion of Respondents who were Quite a bit or Extremely stressed at Work (aged 15-75), by Gender, Elgin St. Thomas Public Health, Peer Group A and Ontario, 2007-2012



Source: Canadian Community Health Survey, 2011-2012

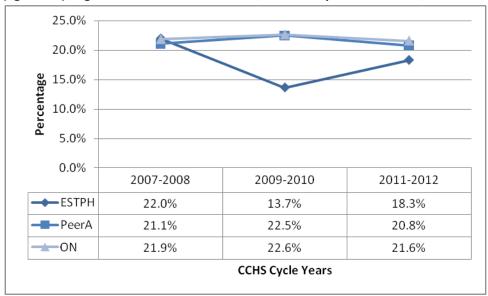
# **Key Findings:**

A larger proportion of females experienced work stress compared to males in Elgin St. Thomas,
 Ontario and the peer health units; however the difference was only statistically significant for
 Ontario.

# **Life Stress**

Information about life stress is based on the question in the Canadian Community Health Survey (CCHS) which asks all respondents aged 15 and older about the amount of stress they experience on most days.

Figure 3.52 -Age-Standardized Proportion of Respondents who were Quite a bit or Extremely stressed (aged 15+), Elgin St. Thomas Public Health, Peer Group A and Ontario, 2007-2012

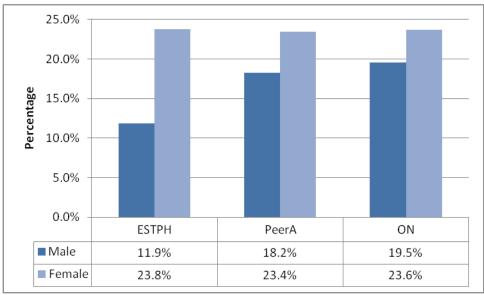


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012

- About 18% of respondents in Elgin St. Thomas experienced stress during their daily lives in 2011-2012.
- Elgin St. Thomas had a significantly lower rate of self-reported life stress in 2009-2010 compared to Ontario and the peer health units. There were no other statistically significant differences.

# **By Gender**

Figure 3.53 -Age-Standardized Proportion of Respondents who were Quite a bit or Extremely stressed (aged 15+), by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012

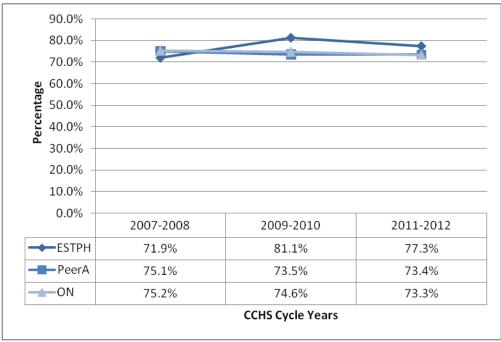
# **Key Findings:**

A larger proportion of females experienced life stress compared to males in Elgin St. Thomas,
 Ontario and the peer health units; however the differences were only statistically significant for
 Ontario and the peer health units and not for Elgin St. Thomas.

# **Self-Perceived Mental Health**

Self-perceived mental health is determined by asking all respondents to the Canadian Community Health Survey to rate their mental health from poor to excellent.

Figure 3.54 – Age-Standardized Proportion of Respondents with Very Good or Excellent Self-Perceived Mental Health, Elgin St. Thomas, Ontario and Peer Health Units, 2007-2012

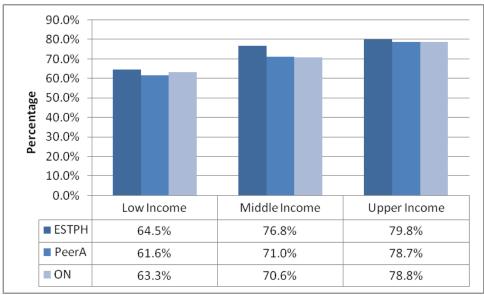


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012

- In Elgin St. Thomas 77% of respondents reported that their mental health was either very good or excellent in 2011-2012.
- In 2009-2010 respondents in Elgin St. Thomas reported significantly higher rates of very good or excellent mental health than Ontario or the peer health units. There were no other significant differences.

#### By Income

Figure 3.55 - Age-Standardized Proportion of Respondents with Very Good or Excellent Self-Perceived Mental Health, by Income, Elgin St. Thomas, Ontario and Peer Health Units, 2011-2012



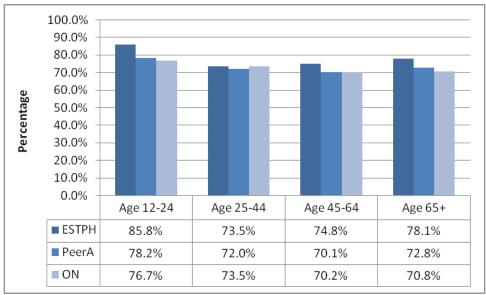
Source: Canadian Community Health Survey, 2011-2012

#### **Key Findings:**

 Overall the proportion of respondents whose self-reported mental health was very good or excellent was higher among those in higher income groups compared to those in the lower income groups. The differences were statistically significant for Ontario, but not for Elgin St. Thomas or the peer health units.

# By Age Group

Figure 3.56 - Weighted Age-Specific Proportion of Respondents with Very Good or Excellent Self-Perceived Mental Health, by Age Group, Elgin St. Thomas, Ontario and Peer Health Units, 2011-2012



Source: Canadian Community Health Survey, 2011-2012

- The highest rate of self-reported mental health was among respondents in the youngest age group, those between 12 and 24 years of age.
- In general, rates of very good or excellent mental health decreased with age.

# **Consulted with a Mental Health Professional**

The indictor about consultation with a mental health professional is based on whether survey respondents had seen or talked to a health professional about their emotional or mental health in the past 12 months.

14.0% 12.0% 10.0% Percentage 8.0% 6.0% 4.0% 2.0% 0.0% 2007-2008 2009-2010 2011-2012 **←**ESTPH 10.6% 9.2% 12.1% --- PeerA 11.4% 11.1% 12.1% **★**ON 10.8% 10.5% 12.6% **CCHS Cycle Years** 

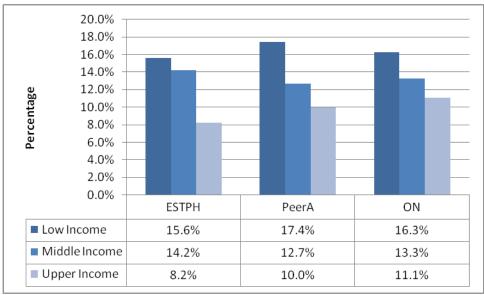
Figure 3.57 – Age-Standardized Proportion of Respondents who Consulted with a Mental Health Professional in the Past Year, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012

- In 2011-2012, just over 12% of respondents said they consulted with a mental health professional in the past year.
- While there was a slight upward trend in the proportion of the population who consulted with a
  mental health professional in the past year, there were no statistically significant differences
  over time.

#### By Income

Figure 3.58 -Age-Standardized Proportion of Respondents who Consulted with a Mental Health Professional in the Past Year, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012

- The proportion of the population who consulted with a mental health professional in the past year was higher for those in the low income group compared to those in the higher income group.
- For Ontario, there was a statistically significant difference between all three income groups. The trend was the same for Elgin St. Thomas and the peer health units, although the difference was not statistically significant.

# Chapter 4: Lifestyle Behaviours and Risk Factors for Chronic Disease

# Summary

#### Tobacco Use

- In 2011-2012, 21% of respondents in Elgin St. Thomas were self-reported daily smokers, 6.7% were occasional smokers, and 29% were former smokers
- ➤ Approximately 30% of respondents from Elgin St. Thomas were former smokers. The proportion of former smokers in Elgin St. Thomas was statistically significantly lower than for Ontario in 2011-2012
- ➤ 45% of respondents in Elgin St. Thomas have never been smokers. This proportion was statistically significantly lower than Ontario
- Only 63.5% of youth aged 19-24 in Elgin St. Thomas reported never smoking

#### Second-hand Smoke Exposure

- > In 2011-2012, nearly 93% of homes in Elgin St. Thomas were reportedly smoke-free
- In Elgin St. Thomas, 13% of respondents were reportedly exposed to second-hand smoke in a public place in the past month

### **Illicit Drug Use**

- ➤ 47% of respondents in Elgin St. Thomas reported using marijuana two or more times at some point in the past. This was significantly higher than Ontario or the peer health units
- ➤ 27% of respondents in Elgin St. Thomas reported using marijuana in the past year. This was similar to Ontario and the peer health units
- ➤ 43% of respondents in Elgin St. Thomas said they used an illicit drug at some point in the past and 12.5% reported using an illicit drug in the past year. This was not significantly different from Ontario or the peer health units.

#### <u>Alcohol</u>

- ➤ In Elgin St. Thomas, 31% of 12-18 year olds and 65% of 19-24 year olds reported drinking alcohol in the past year
- ➤ Alcohol use among 12-18 year olds decreased significantly over time. Youth in Elgin St. Thomas went from 69% reporting alcohol consumption in 2005 to 30.9% in 2011-2012 which was significantly lower than for youth in Ontario or the peer health units

# Elgin St. Thomas Public Health Health Status Report 2015

- Low Risk Drinking Guidelines (LRDG)
  - 23% of respondents in Elgin St. Thomas were drinking alcohol in excess of LRDG #1
     which aims to prevent long-term risk of chronic disease caused by alcohol consumption
  - 48% of respondents in Elgin St. Thomas were drinking alcohol in excess of LRDG #2 which aims to prevent short term risk of injury or acute illness due to alcohol consumption
  - Considering both guidelines together, 50% of the population of Elgin St. Thomas were in excess of the LRDGs

#### **Motor Vehicle Collisions**

➤ There was a 43% decrease in total motor vehicle collisions in Elgin St. Thomas between 2001 and 2011 and there were half as many motor vehicle collisions that involved an injury or a fatality in 2011 compared to 2001

#### **Body Weight**

- > In 2011-2012, Elgin St. Thomas 37.6% of residents were overweight and 18.8% were obese
- ➤ Respondents in the youngest age group (18-40 years) were the most likely to be classified with a Body Mass Index (BMI) in the normal weight range. Respondents in the middle age group (41-64 years) were the mostly likely to be obese and respondents in the oldest age group (65+ years) were the most likely to be overweight

#### Nutrition

More than 60% of respondents in Elgin St. Thomas reported eating fewer than the recommended 5 servings of fruits and vegetables on a daily basis

#### **Physical Activity**

> 32% of the population reported being physically active enough to receive cardiovascular benefit from the activity, 23% were only moderately active and 45% were not active at all.

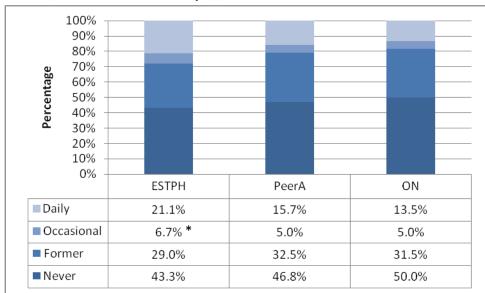
#### **Sedentary Activities**

- For Elgin St. Thomas there was a statistically significant increase in the proportion of the population spending 15+ hours of leisure time each week on screen time from 50.8% in 2007-2008 to 64.3% in 2011-2012
- In general, the very youngest and very oldest age groups were the most likely to spend leisure time on screen time

# **Tobacco Use**

# **Smoking Status**

Figure 4.1-Age-Standardized Proportion of the Population (aged 12+) by Smoking Status, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012



Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

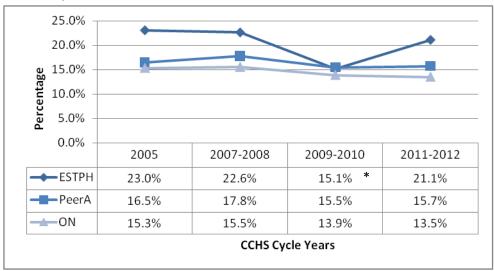
# **Key Findings:**

• In 2011-2012, 21% of respondents in Elgin St. Thomas were self-reported daily smokers, 6.7% were occasional smokers, and 29% were former smokers.

# **Smoking Status -Daily Smoker**

A daily smoker is someone who is a current smoker and smokes every day.

Figure 4.2 -Age-Standardized Proportion of Daily Smokers (aged 12+), Elgin St. Thomas, Ontario and Peer Group A, 2005-2012



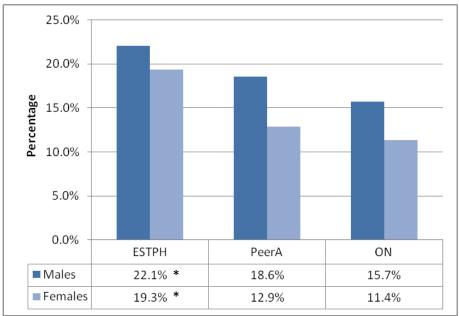
Source: Canadian Community Health Survey 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

Note: \* Estimate should be interpreted with caution due to high variability.

- 21% of respondents in Elgin St. Thomas were self-reported daily smokers in 2011-2012. This was higher than Ontario and the peer health units.
- The proportion of daily smokers in Ontario decreased significantly from 2005 to 2011-2012. There was no significant change for Elgin St. Thomas over time.

# By Gender

Figure 4.3 -Age-Standardized Proportion of Daily Smokers (aged 12+), by Gender, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012 only

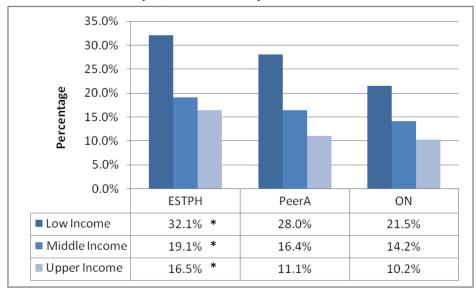


Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

- 22% of males and 19% of females in Elgin St. Thomas were daily smokers.
- For Ontario and the peer health units, males had statistically significantly higher rates of daily smoking than females. However, there was no significant difference between smoking rates among males and females in Elgin St. Thomas.

#### By Income

Figure 4.4 – Age-Standardized Proportion of Daily Smokers (aged 12+), by Income, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012 only



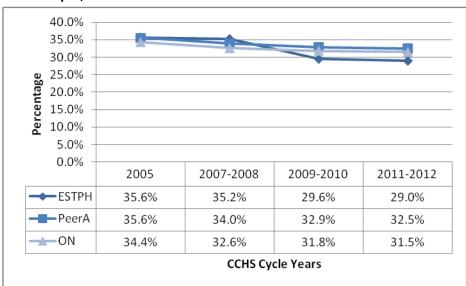
Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

- Elgin St. Thomas had the highest proportion of daily smokers for each income group, compared to Ontario and the peer health units.
- For Ontario and the peer health units, the proportion of daily smokers was statistically significantly different for all income groups. In other words, people with a lower income were more likely to be daily smokers than people in the middle or upper income groups. For Elgin St. Thomas, the data followed the same trend but the difference was not statistically significant.

# **Smoking Status -Former Smoker**

A former smoker is someone who reported having previously smoked daily or occasionally and no longer smokes.

Figure 4.5 –Age-Standardized Proportion of Former Smokers (aged 12+), Elgin St. Thomas, Ontario and Peer Group A, 2005-2012

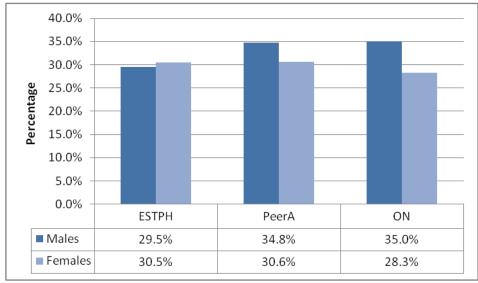


Source: Canadian Community Health Survey 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In 2011-2012, Elgin St. Thomas had a statistically significantly lower rate of former smokers than Ontario, but rates were not different from the peer health units.
- There was no statistically significant change over time for Elgin St. Thomas.

# By Gender

Figure 4.6 –Age-Standardized Proportion of Former Smokers (aged 12+), by Gender, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012 only



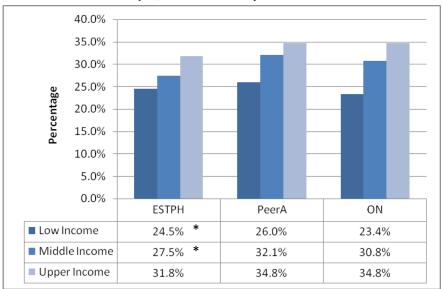
Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

# **Key Findings:**

• Males in Ontario and the peer health units were significantly more likely than females to be former smokers. There was no significant difference between male and female former smokers in Elgin St. Thomas.

#### By Income

Figure 4.7 – Age-Standardized Proportion of Former Smokers (aged 12+), by Income, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012 only



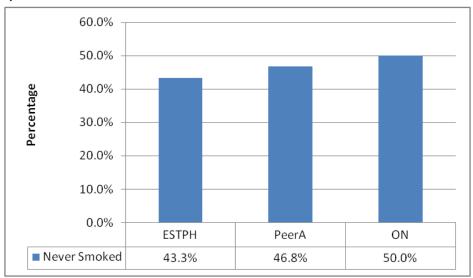
Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

- In Ontario, there were statistically significantly more former smokers in the upper and middle income groups compared to the lower income group.
- For the peer health units, the proportion of former smokers in the middle-income group was significantly different from the upper income group, but similar to the low income group.
- There were no statistically significant differences in the proportion of former smokers by income group for Elgin St. Thomas, but the pattern was similar to Ontario and for the peer health units where some of the differences were significant.

# **Smoking Status –Never Smoker**

A never smoker is defined in the Canadian Community Health Survey as someone who has never smoked a whole cigarette.

Figure 4.8 – Age-Standardized Proportion of Never Smokers, Elgin St. Thomas, Ontario and Peer Group A, 2011-2012

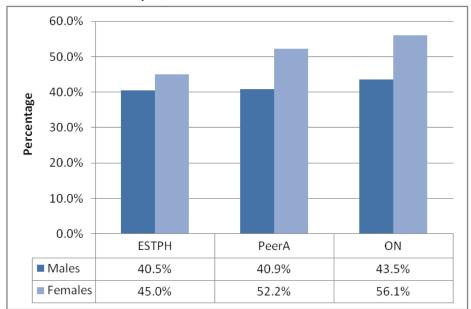


Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin St. Thomas, 43% of respondents reported never smoking a whole cigarette.
- A statistically significantly smaller proportion of the population in Elgin St. Thomas never smoked compared to Ontario; results were similar to the peer health units.

# By Gender

Figure 4.9 -Age-Standardized Proportion of Never Smokers, by Gender, Elgin St. Thomas Public Health, Ontario and Peer Group A, 2011-2012

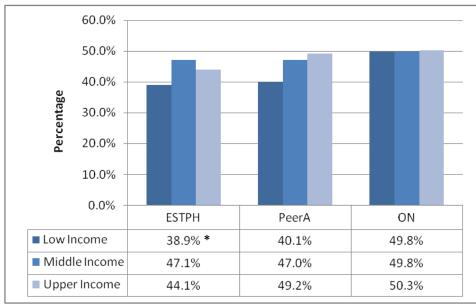


Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Females were more likely than males to have never smoked a whole cigarette.
- The proportion of females in Elgin St. Thomas who have never smoked was statistically significantly lower than for the peer health units or Ontario.

#### By Income

Figure 4.10 -Age-Standardized Proportion of Never Smokers, by Income, Elgin St. Thomas Public Health, Ontario and Peer Group A, 2011-2012

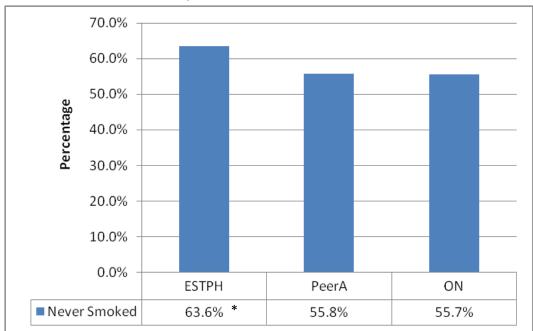


Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

- Although the differences were not statistically significant, the largest proportion of never smokers was among those in the upper income group for Ontario and the peer health units, but not for Elgin St. Thomas.
- Unlike for daily smoking and former smokers, where there were significant associations between smoking and income, a link between never smokers and income groups is not clear.

# **Never Smoking - Youth (19-24)**

Figure 4.11 – Weighted Rates of Never Smoking among Youth (aged 19-24), Elgin St. Thomas Public Health, Ontario and Peer Group A, 2011-2012



Source: Canadian Community Health Survey 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

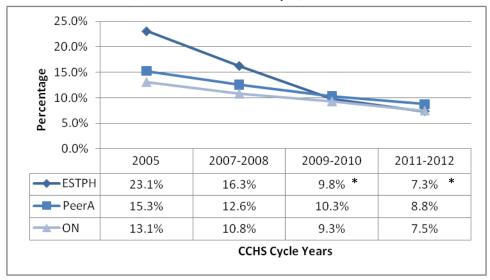
Note: \* Estimate should be interpreted with caution due to high variability.

- In Elgin St. Thomas, 64% of youth aged 19-24 reported never smoking a whole cigarette.
- There were no statistically significant differences in the proportion of individuals who had not smoked, between Elgin-St. Thomas, Ontario and the peer health units.

# **Second-hand Smoke Exposure in Homes**

A smoke-free home means that household members or regular visitors are not permitted to smoke inside the home every day or almost every day.

Figure 4.12 – Proportion of Respondents where there was Regular Smoking Inside their Home, Elgin St. Thomas Public Health, Ontario and Peer Group A, 2005-2012



Source: Canadian Community Health Survey 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

Note: \* Estimate should be interpreted with caution due to high variability.

- The proportion of homes where smoking was permitted inside decreased over time. In Elgin St. Thomas, the decrease was from 23% of homes in 2005 down to 7% in 2011-2012. In other words, in Elgin St. Thomas in 2011-2012, nearly 93% of homes were smoke-free.
- During this same time period, the number of daily smokers in Elgin St. Thomas also decreased, but the decrease was not statistically significant. 23% of residents were daily smokers in 2005 which decreased to 21% in 2011-12. Refer to the section Smoking Status -Daily Smoker on page 104 for more details.

# **Second-hand Smoke Exposure in Public Places**

Exposure to second-hand smoke in public refers to being exposed to smoking every day or almost every day during the past month in a public place such as bars, restaurants, shopping malls, arenas, bingo halls, bowling alleys, etc.

20.0% 18.0% 16.0% 14.0% 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% 2005 2007-2008 2009-2010 2011-2012 15.7% \* 13.2% \* ESTPH 18.3% 16.4% -PeerA 11.7% 13.8% 11.0% 12.9% ON-13.5% 12.2% 13.1% 14.4% **CCHS Cycle Years** 

Figure 4.13 – Proportion of Respondents Exposed to Smoking in a Public Place, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012

Source: Canadian Community Health Survey 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

Note: \* Estimate should be interpreted with caution due to high variability.

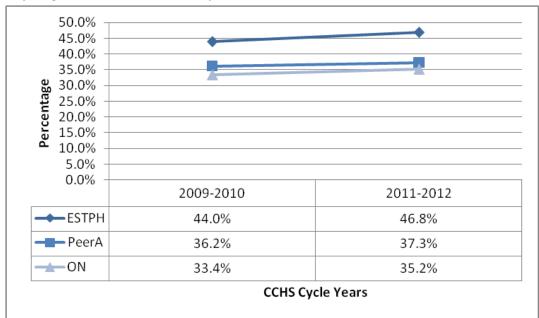
- Self-reported exposure to second-hand smoke in public places has shown a downward trend in Elgin St. Thomas over time from 18% in 2005 to 13% in 2011-2012; however the differences over time were not statistically significant.
- During this same time period, the number of daily smokers and the number of homes that
  permitted smoking indoors in Elgin St. Thomas also decreased. Refer to the section Smoking
  Status -Daily Smoker on page 104 and to section Second-hand Smoke Exposure in Homes on
  page 114 for more details.

# Marijuana Use

# Marijuana Use Ever

The indicator "marijuana use ever" reflects the survey respondents who reported using marijuana, cannabis or hashish two or more times at any point during their lifetime. This type of sensitive question may result in under-reporting and the results should be interpreted with caution.

Figure 4.14 – Age-Standardized Proportion of Marijuana Use Ever in the Past (excludes one time use only), Elgin St. Thomas, Peer Group A and Ontario, 2009-2012

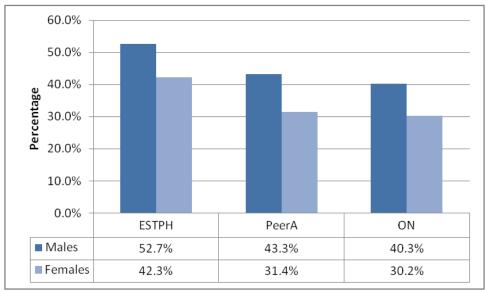


Source: Canadian Community Health Survey, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin-St. Thomas, 47% of respondents reported marijuana use two or more times in their lifetime. This was statistically significantly higher than Ontario or the peer health units for both time periods.
- All three groups showed an increase in lifetime marijuana use between 2009-2010 and 2011-2012.

# **By Gender**

Figure 4.15 -Age-Standardized Proportion of Marijuana Use Ever in the Past (excludes one time use only), by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

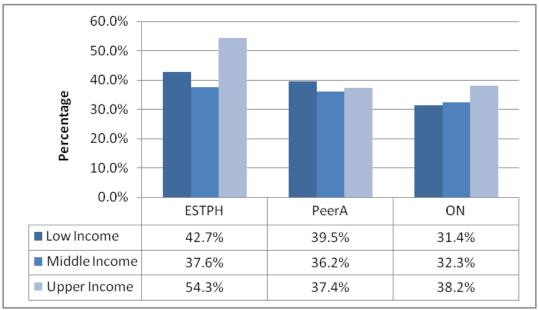


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- A greater proportion of males reported ever using marijuana compared to females.
- There was a significantly higher proportion of both male and female marijuana users in Elgin St. Thomas compared to Ontario and the peer health units.

#### By Income

Figure 4.16-Age-Standardized Proportion of Marijuana Use Ever in the Past (excludes one time use only), by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

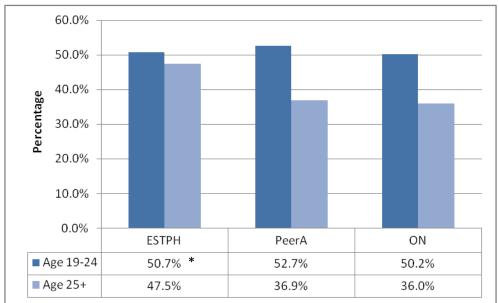


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- There were significantly more respondents in the upper income group in Elgin St. Thomas who reported using marijuana two or more times in the past than for Ontario or the peer health units.
- Ontario, as a whole, had significantly fewer lifetime marijuana users in the lower income group than Elgin St. Thomas or the peer health units.

# By Age Group

Figure 4.17 – Weighted Proportions of Lifetime Marijuana Use (excludes one time use only), by Age Groups, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

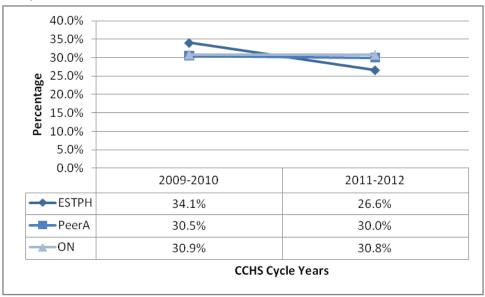
# **Key Findings:**

• Youth aged 19 to 24 were more likely to self-report marijuana use during their lifetime than those aged 25 and older.

# Marijuana Use in the Past Year

The indicator "marijuana use in the past year" reflects the survey respondents who reported using marijuana, cannabis or hashish at any time in the past 12 months. This type of sensitive question may lead to under-reporting and results should be interpreted with caution.

Figure 4.18 – Age-Standardized Proportion of Marijuana Use in the Past Year, Elgin St. Thomas, Peer Group A and Ontario, 2009-2012

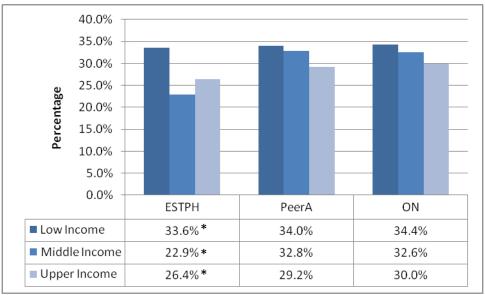


Source: Canadian Community Health Survey, 2009-2012, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- The proportion of respondents from Elgin St. Thomas who reported using marijuana in the past year decreased from 34% in 2009-2010 to 27% in 2011-2012.
- There was no significant difference in the proportion of people who reported marijuana use in the past year, between Elgin-St. Thomas, Ontario or our peer health units over time.

#### By Income

Figure 4.19 -Age-Standardized Proportion of Marijuana Use in the Past Year, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

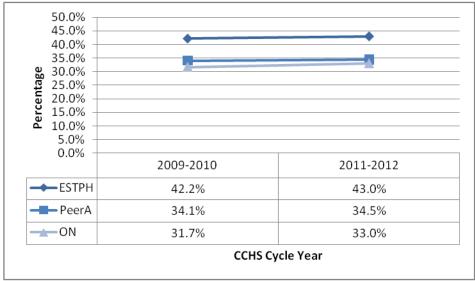
- Marijuana use in the past year did not differ significantly by income group for Elgin-St. Thomas,
   Ontario or the peer health units.
- This is different from the trend seen in lifetime marijuana use where the upper income group reported higher rates of marijuana use than the lower income group. Refer to section Marijuana Use Ever on page 116 for more details.

# **Illicit Drug Use**

## **Illicit Drug Use Ever**

Illicit drug use ever reflects the survey respondents who reported using an illicit substance at least once during their lifetime. The only exception is for marijuana where respondents were also included if they reported using marijuana two or more times during their lifetime. Responses are based on specific questions about many different drugs including cocaine, speed, ecstasy, hallucinogens, heroin and steroids among others. This type of sensitive question topic may lead to under-reporting and the results should be interpreted with caution.

Figure 4.20 – Age-Standardized Illicit Drug Use Ever in the Past, Elgin St. Thomas, Peer Group A and Ontario, 2009-2012

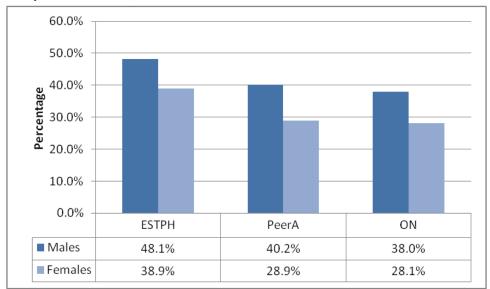


Source: Canadian Community Health Survey, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin St. Thomas, 43% of respondents reported using an illicit drug including marijuana ever during their lifetime.
- While Elgin St. Thomas had the highest proportion of illicit drug users in both time periods, the
  differences were not statistically significant and there was no significant change over time for
  any of the groups.

## By Gender

Figure 4.21 -Age-Standardized Illicit Drug Use Ever in the Past, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

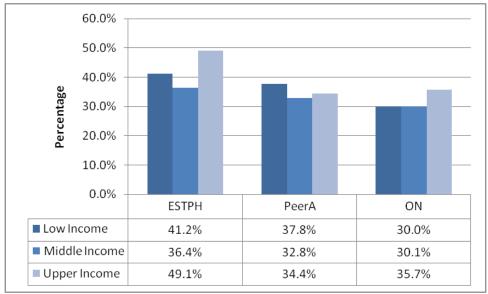


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In all three groups, a higher proportion of illicit drug users were males than females.
- There was a significantly higher proportion of female illicit drug users in Elgin-St. Thomas than in Ontario or the peer health units.

#### By Income

Figure 4.22 - Age-Standardized Illicit Drug Use Ever in the Past, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Ontario, respondents in the upper income group reported a statistically significantly higher rate of illicit drug use than those in the middle and lower income groups. The differences between income groups were not significant for Elgin St. Thomas or the peer health units.
- In Elgin St. Thomas, statistically significantly more people in the upper income group reported illicit drug use than in Ontario or the peer health units.

## Illicit Drug Use in the Past Year

Illicit drug use in the past year reflects the survey respondents who reported using an illicit substance at least once in the past 12 months. Responses are based on specific questions about multiple different drugs including cocaine, speed, ecstasy, hallucinogens, heroin and steroids among others. This type of sensitive question may lead to under-reporting and results should be interpreted with caution.

16.0% 14.0% 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% 2009-2010 2011-2012 **→**ESTPH 12.5% \* 14.3% ----PeerA 12.5% 12.2% -ON 11.8% 11.9% **CCHS Cycle Years** 

Figure 4.23 -Age-Standardized Illicit Drug Use in the Past Year, Elgin St. Thomas, Peer Group A and Ontario, 2009-2012

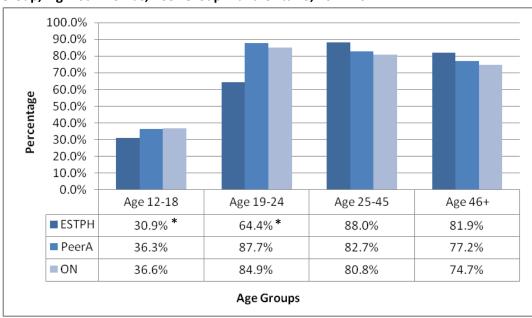
Source: Canadian Community Health Survey, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

- In Elgin-St. Thomas, 13% of respondents reported using an illicit drug in the past year.
- Although Elgin St. Thomas had the highest proportion of respondents reporting illicit drug use, there were no statistically significant differences between groups or over time.

## **Alcohol**

#### **Alcohol**

Figure 4.24 – Weighted Proportion of the Population who Drank Alcohol in the Past Year, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

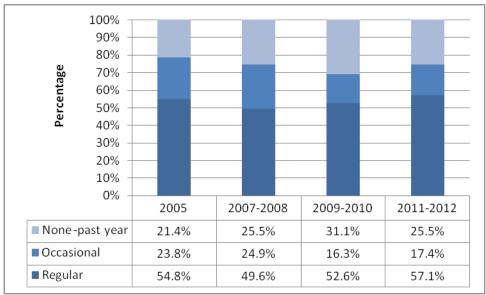
- In Elgin St. Thomas, 31% of respondents who were under the legal drinking age reported drinking alcohol in the past year. 65% of youth between the ages of 19 and 24 also reported consuming alcohol in the past year.
- There were no statistically significant differences between Elgin St. Thomas, Ontario or the peer health units in the proportion of people who drank alcohol in the past year for any of the age groups.

## **Type of Drinker**

The type of drinker refers to the respondent's drinking habits over the past 12 months.

- Regular Drinker –drank alcohol at least once per month or more in the past year
- Occasional Drinker –drank alcohol less than once per month in the past year
- Did not drink –did not drink alcohol in the past 12 months

Figure 4.25 – Age-Standardized Proportion of the Population by Type of Drinker in the Past Year, Elgin St. Thomas only, 2005-2012

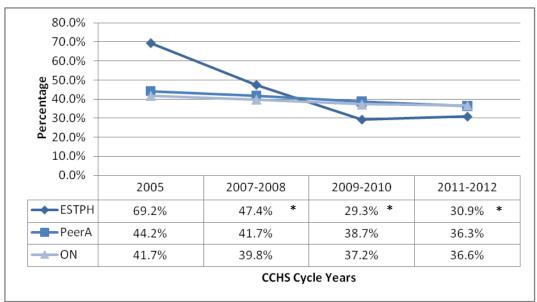


Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Nearly 60% of respondents from Elgin-St. Thomas drank alcohol on a regular basis in 2011-2012 and fewer than 20% were occasional drinkers in the past year.
- There were no significant differences over time.

## **Underage Alcohol Consumption**

Figure 4.26 –Weighted Proportion of Youth (aged 12-18) who Consumed Alcohol in the Past Year, 2005-2012



Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

Note: \* Estimate should be interpreted with caution due to high variability.

- In 2005, Elgin-St. Thomas had a significantly higher proportion of youth (aged 12-18) who
  reported drinking alcohol in the past year compared to Ontario and the peer health units.
- Alcohol use dropped among 12- 18 year olds in all three groups over time to an overall low in 2011-2012.
- In Elgin-St. Thomas, in 2011-2012, 31% of 12-18 year olds drank alcohol which was significantly lower than the proportion in 2005.

# Drinking in Excess of the Low-Risk Alcohol Drinking Guidelines (LRDG)

Canada's Low Risk Alcohol Drinking Guidelines (LRDG) are intended for Canadians of legal drinking age who choose to drink alcohol. The guidelines were informed by the most recent research and the best scientific evidence. They are intended to provide consistent information across the country to help Canadians moderate their alcohol consumption and reduce their risk of immediate and long-term alcohol-related harm.

Five specific guidelines were created that address three distinct types of risk from drinking. Guideline 1 was created to help prevent the long-term risk of chronic diseases caused by the consumption of alcohol over a number of years (e.g., liver disease, some cancers). Guideline 2 aims to decrease the short-term risk of injury or acute illness due to the overconsumption of alcohol on a single occasion. Guidelines 3 to 5 address risks associated with specific situations or individual circumstances that are particularly hazardous, such as women who are pregnant or planning to become pregnant, teenagers, persons on medication and other situations for which abstinence or only occasional light alcohol intake is advised.

This report focuses on guidelines 1 and 2. Respondents were considered to have exceeded the low risk drinking guidelines 1 and 2 if they met any of the following criteria:

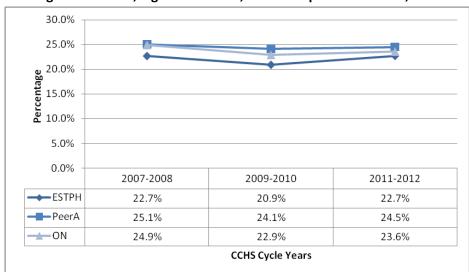
- Males who regularly drank more than 3 standard drinks per day or more than 15 standard drinks per week, OR
- Females who regularly drank more than 2 standard drinks per day or more than 10 standard drinks per week OR
- Males or females with less than 2 non-drinking days in a week OR
- Males who drank more than 4 standard drinks in one 3-hour period OR
- Females who drank more than 3 standard drinks in one 3-hour period.

## **Exceeds Low Risk Alcohol Drinking Guideline #1**

Respondents were considered to have exceeded the low risk drinking guideline #1 if they met any of the following criteria:

- Males who regularly drank more than 3 standard drinks per day or more than 15 standard drinks per week, OR
- Females who regularly drank more than 2 standard drinks per day or more than 10 standard drinks per week OR
- Males or females with less than 2 non-drinking days in a week

Figure 4.27 – Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #1, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012



Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Just over 20% of the population of Elgin St. Thomas consumed alcohol in excess of the low risk drinking guideline 1.
- There were no significant differences between groups over time.

#### By Gender

Figure 4.28 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #1, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



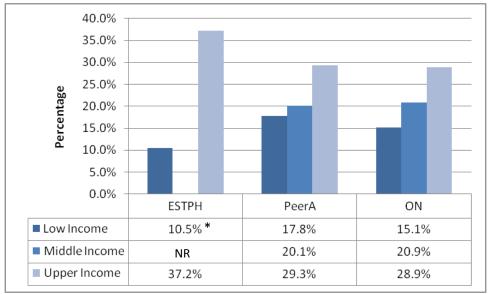
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

#### **Key Findings:**

• A larger proportion of males than females drank alcohol in excess of the low risk drinking guideline 1. The difference was statistically significant for Ontario and our peer health units, but not for Elgin St. Thomas.

#### By Income

Figure 4.29 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #1, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



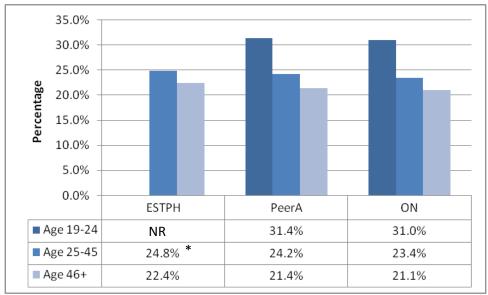
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability and NR = Not reportable due to extreme data variability

#### **Key Findings:**

• The proportion of the population exceeding the low risk alcohol drinking guideline 1 was highest among the upper income group and lowest among those in the low income group for Elgin St. Thomas, Ontario and the peer health units.

#### By Age Group

Figure 4.30 - Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #1, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability and NR =Not reportable due to extreme data variability

#### **Key Findings:**

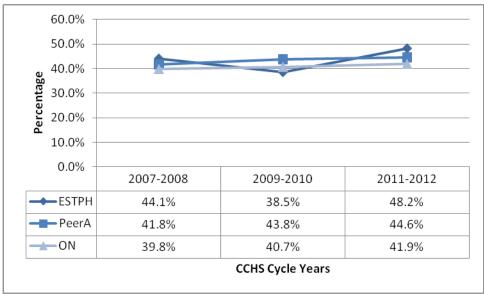
• In general, the proportion of the population exceeding the low risk drinking guideline 1 was significantly higher for those in the youngest age group compared to those in the oldest age group.

## **Exceeds Low Risk Alcohol Drinking Guideline #2**

Respondents were considered to have exceeded low risk drinking guideline 2 if they met any of the following criteria:

- Males who drank more than 4 standard drinks in one 3-hour period OR
- Females who drank more than 3 standard drinks in one 3-hour period.

Figure 4.31- Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #2, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

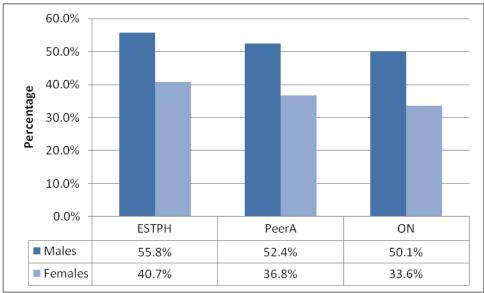


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In 2011-2012, approximately 48% of the population of Elgin St. Thomas consumed alcohol in excess of the low risk drinking guideline 2.
- There were no significant differences between groups over time.

#### **By Gender**

Figure 4.32 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #2, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



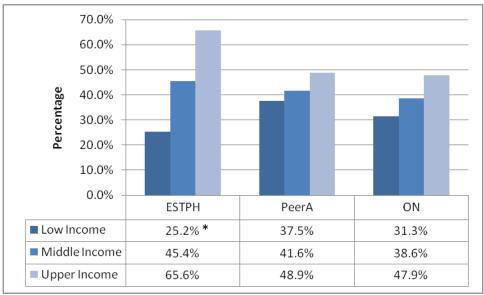
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

#### **Key Findings:**

• A larger proportion of males than females drank alcohol in excess of the low risk drinking guideline 2. The difference was statistically significant for Ontario and the peer health units, but not for Elgin St. Thomas.

#### By Income

Figure 4.33 - Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #2, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

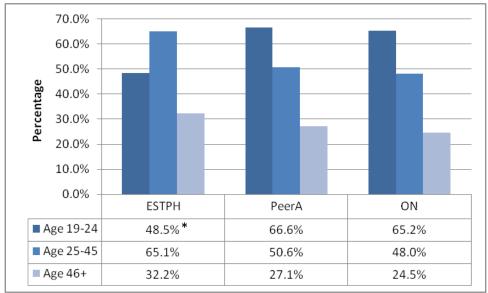


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

- The proportion of the population exceeding the low risk alcohol drinking guideline 2 was highest among the upper income group and lowest among those in the low income group.
- Elgin St. Thomas had a significantly higher proportion of the upper income population exceed the low risk alcohol drinking guideline 2 than the upper income groups in Ontario or the peer health units.

#### By Age Group

Figure 4.34 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guideline #2, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

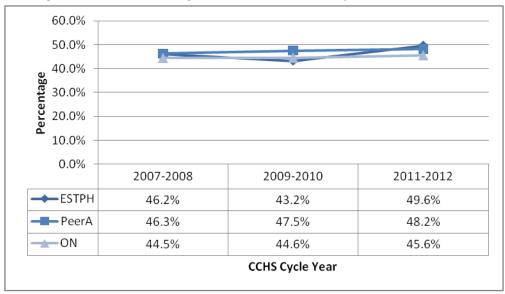


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

- In general, the proportion of the population exceeding the low risk alcohol drinking guideline 2 was significantly higher for those in the youngest age group compared to those in the oldest age group.
- The unique trend identified for Elgin St. Thomas, where those in the middle age group were the most likely to exceed guideline 2, is likely due to small samples and variability in the data.

# **Exceeds Low Risk Alcohol Drinking Guidelines 1 and 2**

Figure 4.35 – Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guidelines 1 and 2, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

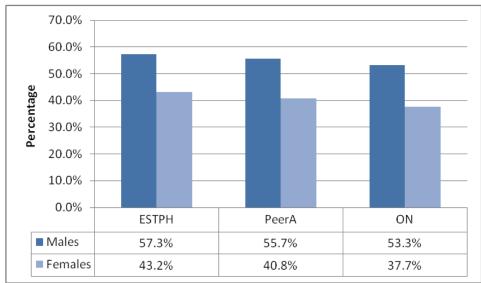


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Approximately 50% of the population of Elgin St. Thomas consumed alcohol in excess of the low risk drinking guidelines 1 and 2.
- There were no significant differences between groups over time.

#### By Gender

Figure 4.36 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guidelines 1 and, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



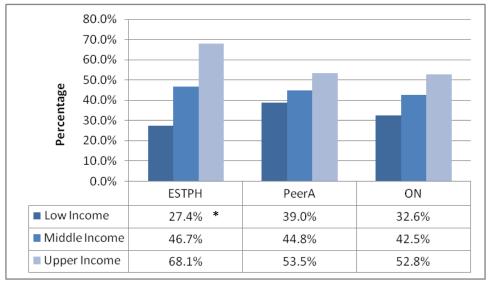
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability.

#### **Key Findings:**

• A larger proportion of males than females drank alcohol in excess of the low risk drinking guidelines 1 and 2. The difference was statistically significant for Ontario and the peer health units, but not for Elgin St. Thomas.

#### By Income

Figure 4.37 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guidelines 1 and 2, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

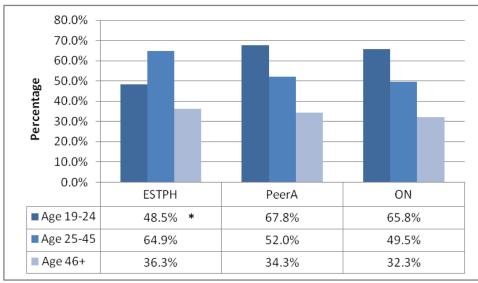


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

- The proportion of the population exceeding the low risk alcohol drinking guidelines 1 and 2 was highest among the upper income group and lowest among those in the low income group.
- Elgin-St. Thomas had the highest proportion of the population in the upper income group exceeding the low risk alcohol drinking guidelines number 1 and 2 in the upper income group compared to Ontario and the peer health units.

#### By Age Group

Figure 4.38 -Age-Standardized Proportion of the Population who Exceeded the Low Risk Alcohol Drinking Guidelines 1 and 2, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

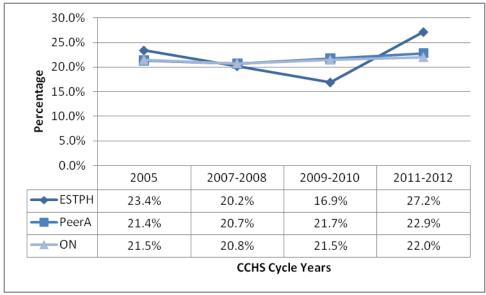
#### **Key Findings:**

• In general, the proportion of the population exceeding the low risk alcohol drinking guidelines 1 and 2 decreased significantly with each age group. The different pattern seen in Elgin St. Thomas (highest proportion in the middle age group) is likely due to small samples sizes and a wide confidence interval.

## **Heavy Drinking**

Heavy drinking is defined as having consumed 5 or more standard alcoholic drinks on at least one occasion in the past 12 months.

Figure 4.39 – Age-Standardized Proportion of the Population reporting Heavy Drinking, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012

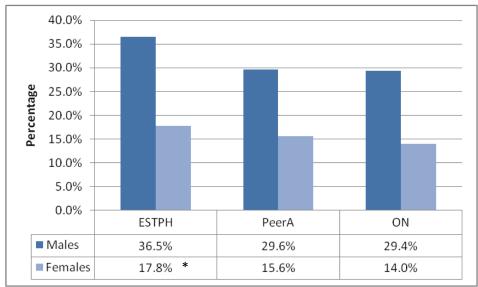


Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- 27% of the population of Elgin St. Thomas reported heavy drinking on at least one occasion the past year.
- There were no significant differences in heavy drinking between any of the three groups over time.

#### **By Gender**

Figure 4.40 -Age-Standardized Proportion of the Population reporting Heavy Drinking, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



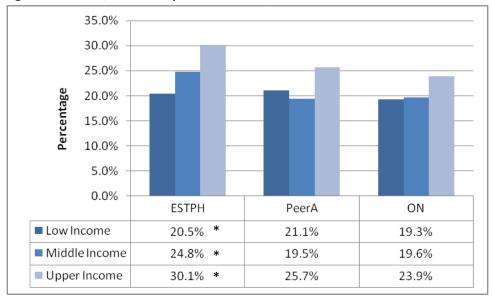
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

#### **Key Findings:**

• A statistically significantly higher proportion of males than females reported heavy drinking on at least one occasion in the past year. There were no significant differences between Elgin St. Thomas, Ontario or the peer health units.

#### By Income

Figure 4.41 -Age-Standardized Proportion of the Population reporting Heavy Drinking, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

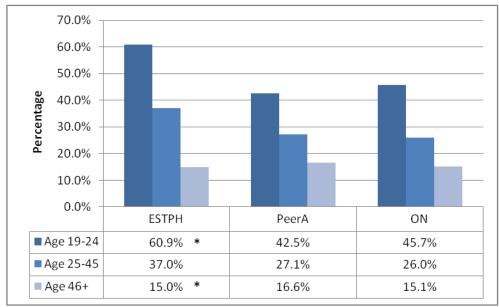


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

- The proportion of the population reporting heavy drinking was highest among respondents in the upper income groups.
- The upper income groups in Ontario and the peer health units reported statistically significantly more heavy drinking than the middle or lower income groups. The differences between income groups for Elgin St. Thomas were not statistically significant.

#### By Age Group

Figure 4.42 -Age-Standardized Proportion of the Population reporting of Heavy Drinking, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

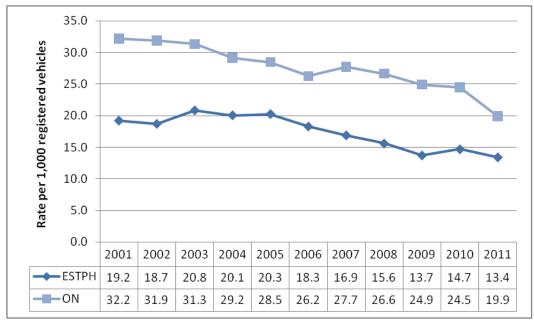
- In Elgin-St. Thomas, there were significantly more heavy drinkers among those aged 19-24 and those aged 25-45 than among respondents over the age of 45.
- For Ontario and the peer health units, the proportion of heavy drinkers decreased significantly with age for all three age groups.

## **Motor Vehicle Collisions**

#### **Motor Vehicle Collisions**

The motor vehicle collisions in this section are reported based on the population of registered vehicles and not on the population of drivers. Keep in mind that rates might be different from collisions reported per 1,000 drivers as more than one driver may use any one registered vehicle.

Figure 4.43 –Rate of Motor Vehicle Collisions (per 1,000 registered vehicles), Elgin St. Thomas and Ontario, 2001-2011

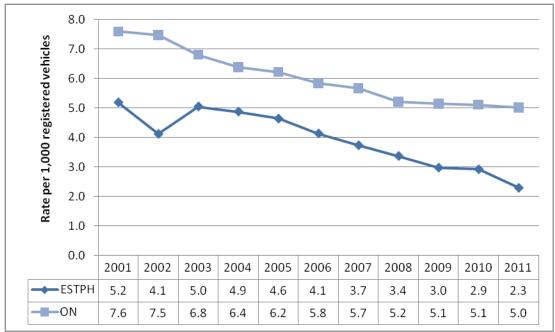


Source: Ontario Road Safety Annual Report (ORSAR), 2001-2011, Ministry of Transportation

- In Elgin St. Thomas in 2011, there were 13 collisions per 1,000 registered vehicles compared to 20 in Ontario.
- Over time, there was a 43% decrease in total collisions in Elgin-St. Thomas. During this same time period, there was also a 19% increase in the total number of registered motor vehicles (data not shown).

## **Motor Vehicle Collisions Involving Injury or Fatality**

Figure 4.44 -Rate of Motor Vehicle Collisions Involving an Injury or a Fatality (per 1,000 registered vehicles), Elgin St. Thomas and Ontario, 2001-2011



Source: Ontario Road Safety Annual Report (ORSAR), 2001-2011, Ministry of Transportation

- In Elgin St. Thomas in 2011, there were 2 motor vehicle collisions involving an injury or fatality per 1,000 registered vehicles compared to 5 in Ontario.
- The rate of collisions involving injury or a fatality decreased consistently over time between 2001 and 2011 for both Elgin St. Thomas and Ontario.
- In Elgin St. Thomas, there were half as many collisions involving an injury or a fatality in 2011 as there were in 2001.

30.0% 25.0% Percentage of total collisions 20.0% 15.0% 10.0% 5.0% 0.0% 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 ESTPH 27.0% 22.0% 24.2% 24.3% 22.9% 22.6% 22.1% 21.6% 21.6% 19.8% 17.0% ON-23.6% 23.4% 21.7% 21.9% 21.8% 22.2% 20.4% 19.5% 20.6% 20.9% 25.2%

Figure 4.45 -Proportion of Motor Vehicle Collisions Involving an Injury or a Fatality, Elgin St. Thomas and Ontario, 2001-2011

Source: Ontario Road Safety Annual Report (ORSAR), 2001-2011, Ministry of Transportation

- In Elgin St. Thomas, over a 10-year period, an average of 22% of collisions each year resulted in an injury or a fatality. This was similar to Ontario within the time period.
- Over time, the proportion of collisions in Elgin St. Thomas that resulted in an injury or fatality decreased by approximately 10%.
- Although a similar or slightly lower proportion of collisions in Elgin St. Thomas resulted in an injury or a fatality over time, Elgin St. Thomas had statistically significantly higher rates of emergency department visits, hospitalizations and mortality per 100,000 population due to motor vehicle collisions. This may be an indication that the injuries occurring in the collisions in Elgin St. Thomas were more serious than those in Ontario. For more details see the section on Injuries due to Motor Vehicle Collisions (p.196 -202).

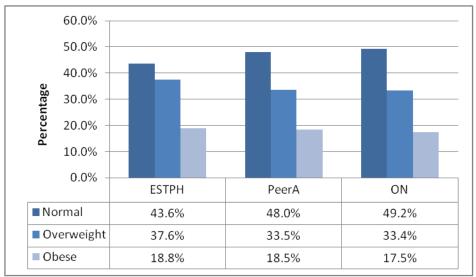
# **Body Weight**

# **Adult Body Mass Index (BMI)**

The Body Mass Index (BMI) is a common method used to determine overweight and obesity in adults. BMI is calculated using a ratio of weight to height (kg/m²) and is considered to be the most useful indicator of population health risk associated with body weight.

- Normal Weight –BMI 18.5-24.9
- Overweight –BMI 25.0-29.9
- Obese –BMI 30.0 and above

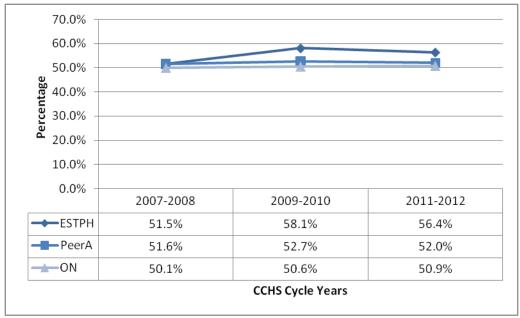
Figure 4.46 – Age-Standardized Proportion of Adults by BMI Category, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin St. Thomas in 2011-2012, 38% of residents were overweight and 19% were obese compared to Ontario where 33% were overweight and 18% were obese. These differences were not statistically significant.
- Considering those who are overweight and obese together for Elgin-St. Thomas, there was a significantly higher proportion of the population classified as overweight/obese than those classified as normal weight (56.4% vs. 43.6%).

Figure 4.47 -Age-Standardized Proportion of Adults with a BMI Classification of Overweight/Obese, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

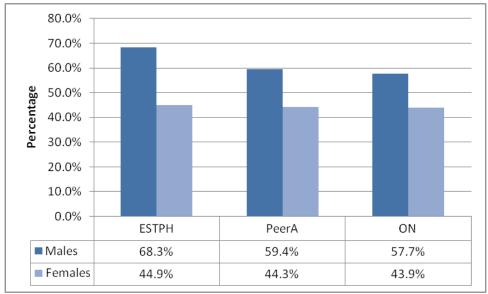


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin St. Thomas in 2011-2012, 56% of the population was either overweight or obese.
- There was no statistically significant change in the proportion of the population classified as overweight or obese over time in Elgin St. Thomas, Ontario or the peer health units.

## By Gender

Figure 4.48 -Age-Standardized Proportion of Adults with a BMI Classification of Overweight/Obese, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



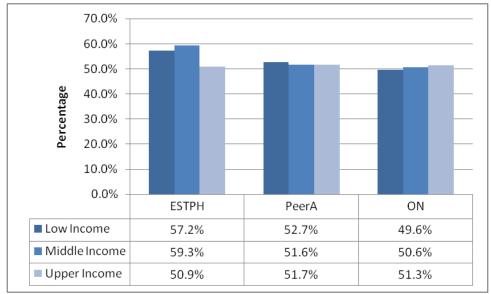
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

#### **Key Findings:**

• Nearly 70% of males and 45% of females in Elgin St. Thomas were classified as either overweight or obese according to their BMI as compared to 58% of males and 44% of females in Ontario.

#### By Income

Figure 4.49 -Age-Standardized Proportion of Adults with a BMI Classification of Overweight/Obese, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



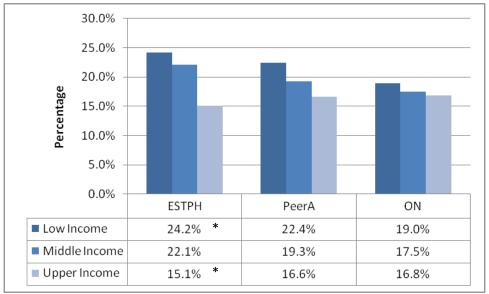
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

#### **Key Findings:**

• When considering a BMI classification of overweight and obese combined, there are no significant differences based on income.

#### By Income -Obese Only

Figure 4.50 -Age-Standardized Proportion of Adults with a BMI Classification of Obese only, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

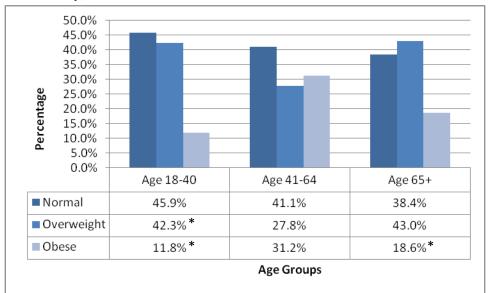


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

- While there was no statistically significant difference in BMI classification by income group when
  considering overweight and obesity combined, there appears to be a trend associated with
  income when looking at obesity by itself.
- For the peer health units, a significantly higher proportion of respondents in the lower income group had a BMI with an obese classification compared to those in the upper income group. While the differences in income groups were not statistically significant for Elgin St. Thomas, the trend was similar.

#### By Age Group

Figure 4.51 -Age-Standardized Proportion of Adults by BMI Classification, by Age Group, Elgin St. Thomas only, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

#### **Key Findings:**

• For Elgin St. Thomas, respondents in the youngest age group (18-40 years) were the most likely to be classified with a BMI in the normal weight range, respondents in the middle age group (41-64 years) were the mostly likely to be obese and respondents in the oldest age group (65+ years) were the most likely to be overweight.

## **Nutrition**

# **Consumption of Fruits and Vegetable**

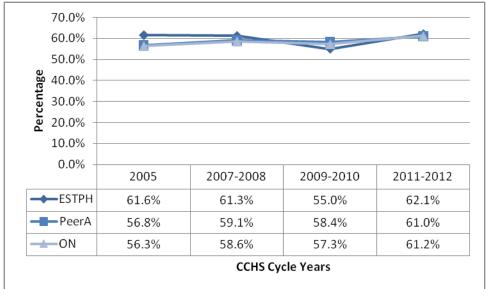
Increased fruit and vegetable consumption is associated with many health benefits including a reduced risk of cardiovascular disease and stroke. Some evidence suggests that diets rich in dietary fibre (e.g. whole grains, legumes, vegetables, fruits) are associated with a lower risk of Type 2 diabetes.

The daily number of servings of fruits and vegetables, as recommended by Canada's Food Guide, vary by age and gender as seen in the table below:

Age (years)	Sex	Daily Recommended Servings of Fruits and Vegetables
2-3	Both Sexes	4
4-8	Both Sexes	5
9-13	Both Sexes	6
14-18	Males	8
	Females	7
19-50	Males	8-10
	Females	7-8
51+	Males	7
	Females	7

The vast majority of Canadians are required to eat at least 5 servings of fruits and vegetables per day; because of this, 5 or more servings of fruits and vegetables is a commonly used indicator for healthy eating.

Figure 4.52 – Age-Standardized Proportion of the Population Eating less than 5 Servings of Fruits and Vegetables per Day, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012

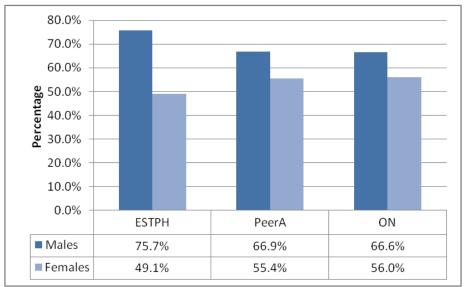


Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Approximately 60% of people in Elgin St. Thomas, Ontario and the peer health units reported eating fewer than 5 servings of fruits and vegetables on a daily basis in 2011-2012.
- There were no significant differences between groups or over time.

#### By Gender

Figure 4.53 – Age-Standardized Proportion of the Population Eating less than 5 Servings of Fruits and Vegetables per Day, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

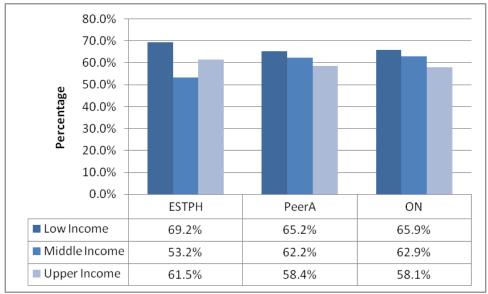


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Males were more likely than females to report eating fewer than 5 servings of fruits and vegetables each day.
- Only 49% of females in Elgin St. Thomas were eating fewer than 5 servings of fruits and vegetables on a daily basis. This makes them the only group where more than 50% were meeting the recommendations.

#### By Income

Figure 4.54 – Age-Standardized Proportion of the Population Eating less than 5 Servings of Fruits and Vegetables per Day, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

#### **Key Findings:**

• In general, the proportion of the population eating fewer than 5 servings of fruits and vegetables each day increased as income decreased. Respondents in the highest income group were the most likely to be eating 5 or more servings per day.

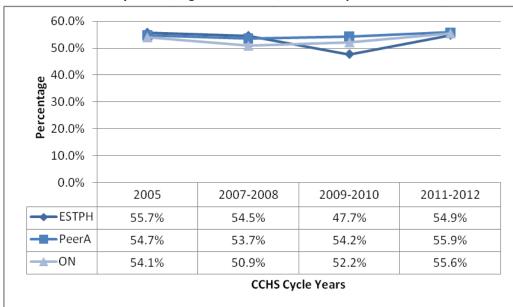
# **Physical Activity**

# **Leisure Time Physical Activity**

Leisure time physical activity refers to any physical activity done in the past 3 months during leisure time. Examples include time spent doing sports, walking, cycling, gardening, fishing and other home exercises.

Activities were assessed based on the physical activity index which uses energy expenditures to categorize individuals as being active, moderately active or inactive. Active people are those who averaged 3.0+kcal/kg/day of energy expenditure from leisure-time physical activity. This is the amount of exercise needed to benefit the heart. Moderately active includes those who average 1.5-2.9 kcal/kg/day from leisure-time physical activity. Those who were moderately active might experience some health benefits but not much heart health benefit. The inactive category applies to those with energy expenditure levels less than 1.5 kcal/kg/day from leisure-time physical activity.

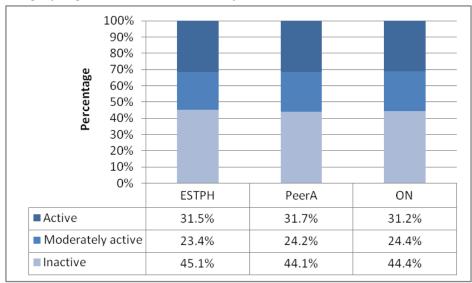
Figure 4.55 -Age-Standardized Proportion of the Population where Leisure Time Physical Activity is Active or Moderately Active, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012



Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin St. Thomas in 2011-2012, just over half of the population (55%) reported being active or moderately physically active during their leisure time.
- There were no significant differences in self-reported leisure time physical activity between groups or over time.

Figure 4.56 -Age-Standardized Proportion of the Population, by Leisure Time Physical Activity Category, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

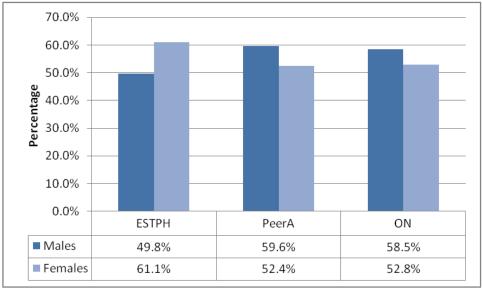


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- In Elgin St. Thomas, 32% of the population reported being active enough to receive cardiovascular benefit from leisure time physical activity.
- Nearly 45% of the population was considered inactive.
- There were no statistically significant differences between respondents from Elgin St. Thomas, Ontario or the peer health units.

#### By Gender

Figure 4.57 -Age-Standardized Proportion of the Population where Leisure Time Physical Activity is Active or Moderately Active, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



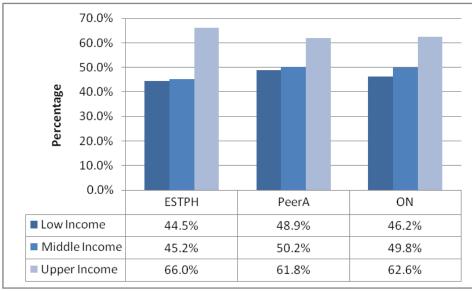
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

# **Key Findings:**

• In Elgin-St. Thomas, females were more likely to be active or moderately active during leisure time than males; however the difference was not statistically significant. This was different from the trend in Ontario and the peer health units where significantly more males than females were physically active during leisure time.

#### By Income

Figure 4.58 -Age-Standardized Proportion of the Population where Leisure Time Physical Activity is Active or Moderately Active, by income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012

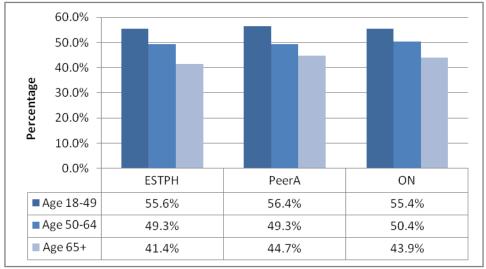


Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Across Elgin-St. Thomas, Ontario and the peer health units, respondents in the upper income group were the only ones who were more likely to be active than inactive during leisure time.
- Significantly more respondents in the upper income group were active during leisure time than those in the lower or middle income groups for Ontario and the peer health units. The trend was the same in Elgin St. Thomas, but the difference was not statistically significant.

# By Age Group

Figure 4.59 -Age-Standardized Proportion of the Population where Leisure Time Physical Activity is Active or Moderately Active, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

# **Key Findings:**

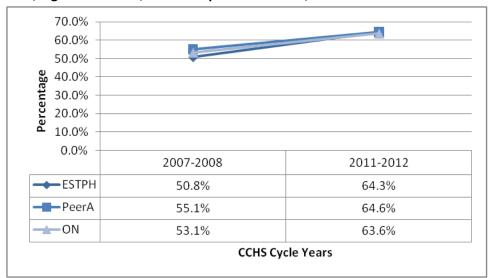
• In Elgin St. Thomas 56% of respondents aged 18-49 were physically active during leisure time. Being active or moderately active during leisure time showed a clear decline with increasing age.

# **Sedentary Activities**

Screen time was assessed by asking survey respondents about the number of hours in a typical week over the past three months they spent watching television (including videos) and using a computer (including playing computer games and using the Internet). Respondents were asked to report leisure-time hours only and to exclude time spent on similar activities at work or school.

The Canadian Society for Exercise Physiology (CSEP) guidelines recommend that children and youth aged 5-17 years should limit recreational screen time (television, computer, video games, etc.) to no more than 2 hours per day for health benefits. To date, no guidelines have been proposed for adults so a cutoff of 15 hours per week is used universally.

Figure 4.60 -Age-Standardized Proportion of Respondents Spending 15+ hours per week on Screen Time, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012



Source: Canadian Community Health Survey, 2007-2008, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

#### **Key Findings:**

• For Elgin St. Thomas, there was a statistically significant increase in the proportion of the population spending 15+ hours of leisure time each week on screen time from 51% in 2007-2008 to 64% in 2011-2012.

#### By Gender

Figure 4.61 -Age-Standardized Proportion of Respondents Spending 15+ hours per week on Screen Time, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



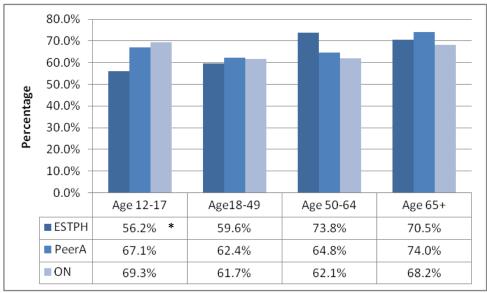
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

# **Key Findings:**

• A significantly higher proportion of males spent 15+ hours per week on screen time leisure activities than females in Ontario and the peer health units. The trend was the same in Elgin St. Thomas but the difference was not statistically significant.

#### By Age Group

Figure 4.62 -Weighted Proportion of Respondents Spending 15+ hours per week on Screen Time, by Age Group, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care Note: \* Estimate should be interpreted with caution due to high variability

- Across all age groups, those in the very youngest and the very oldest age groups had the highest rates of screen time.
- In Elgin St. Thomas the trend was slightly different. The youngest age group had the lowest rate of screen time and the group aged 50-64 had the highest rate. These differences are not statistically significant and may be the result of small samples sizes.

# **Chapter 5: Injuries and Injury Prevention**

# Summary

### **Most Common Injuries**

- Elgin St. Thomas had statistically significantly higher rates of emergency department visits due to all unintentional injuries than Ontario
- Elgin St. Thomas had significantly higher rates of hospitalizations than Ontario for injuries due to sports and recreation, all-terrain vehicles (ATV), falls and motor vehicle collisions
- There were no significant differences in mortality rates due to injury between Elgin St. Thomas and Ontario

#### All Unintentional Injuries

- Elgin St. Thomas had higher rates of emergency department visits, hospitalizations and mortality due to all unintentional injuries than Ontario
- Central Elgin had higher rates of emergency department visits due to all unintentional injuries compared to the East or West ends of the county. There were no significant differences for rates of hospitalization across the county

# <u>Falls</u>

- Elgin St. Thomas had higher rates of emergency department visits, hospitalizations and mortality due to falls than Ontario
- > Central Elgin had higher rates of emergency department visits due to falls compared to the East or West ends of the county. There were no significant differences for rates of hospitalization
- Emergency department visits due to falls were highest among those aged 0-4 years and those aged 65 years and older. Rates of hospitalization and mortality due to falls increased with age and were highest among seniors

#### Sports and Recreation Injuries

➤ Elgin St. Thomas had higher rates of emergency department visits and hospitalizations due to sports and recreation injuries than Ontario

#### **Motor Vehicle Collisions**

Elgin St. Thomas had higher rates of emergency department visits and hospitalizations due to motor vehicle collision injuries than Ontario however rates decreased over time

#### **ATV-Related Injuries**

- Elgin St. Thomas had higher rates of emergency department visits and hospitalizations due to ATV-related injuries than Ontario and rates of hospitalization increased significantly over time
- ➤ ATV-related injuries were higher among males than females in Elgin St. Thomas; males in Elgin St. Thomas had rates of emergency department visits that were between 3-5 times higher than males in Ontario
- Emergency department visits due to ATV-related injuries were highest among those aged 15-19 and 20-24 years old. Hospitalizations were highest among 10-14 year olds

#### **Animal Bites**

Elgin St. Thomas had higher rates of emergency department visits due to animal bites than Ontario. There were very few hospitalizations and no deaths over time.

#### **Cycling Injuries**

- Elgin St. Thomas had higher rates of emergency department visits due to cycling-related injuries than Ontario, very few hospitalizations and fewer than 5 deaths over time
- Emergency department visits due to cycling-related injuries were highest among those aged 10-14, 15-19 and then those 5-9 years old

#### **Poisoning**

- Elgin St. Thomas had higher rates of emergency department visits due to poisoning than Ontario, very few hospitalizations and fewer than 20 deaths over time
- Emergency department visits due to burns were highest among those aged 0-4 years old

#### Burns

- ➤ Elgin St. Thomas had higher rates of emergency department visits due to burns than Ontario, very few hospitalizations and fewer than 5 deaths over time
- Emergency department visits due to poisoning were highest among those aged 0-4 years old

# **All Intentional Injuries**

- Elgin St. Thomas had similar rates of emergency department visits, hospitalizations and mortality due to all intentional injuries when compared to Ontario and the rates decreased over time
- Central Elgin had statistically significantly higher rates of emergency department visits due to all intentional injuries compared to the East or West ends of the county. There were no significant differences for rates of hospitalization

#### **Assault and Abuse**

- Elgin St. Thomas had similar rates of emergency department visits due to assault and abuse compared to Ontario, very few hospitalizations and fewer than 10 deaths over time
- Rates of injury due to assault and abuse were higher among males than females in Elgin St. Thomas. Rates were highest among those aged 20-24 and 15-19 years old

#### Self-Harm and Suicide

- Elgin St. Thomas had lower rates of emergency department visits and hospitalizations due to self-harm than Ontario
- Rates of emergency department visits and hospitalizations due to self-harm were higher among females than males, while rates of suicide were higher among males than females
- Emergency department visits due to self-harm were highest among those aged 20-24, 25-29 and 15-19 years old

# **Helmet Use**

In Elgin St. Thomas just under 30% of the population reported wearing a helmet while riding a bicycle always or most of the time compared to more than 45% in Ontario

# **Injuries and Injury Prevention**

Emergency department (ED) visits occur when a person presents to the emergency department, or a hospital-based urgent care centre, either by their own means or by ambulance, and without a prior scheduled appointment.

Hospitalizations are also referred to as "hospital discharges" or "hospital separations" because a hospital visit is not recorded when a patient is admitted to hospital, but at the time of discharge or transfer to another institution like a long term care facility.

Injuries can be categorized as unintentional (i.e. accidental) such as falls and motor vehicle collisions or as intentional (i.e. deliberate) such as assault, abuse and self-harm.

# **Summary of Most Common Injuries**

Table 5.1: Three Year Average Age-Standardized Emergency Department (ED) Visits, Hospitalization and Mortality Rates for selected Injuries and Potential Years of Life Lost (PYLL), Elgin St. Thomas and Ontario, 2007-2009 and 2010-2012

Injuries	ED Visits (per 100,000)	Hospitalization (per 100,000)	Mortality (per 100,000)	PYLL (75) (per 1,000)
Unintentional injuries				
<b>Sports and Recreation</b>	1,841.4 <sup>§</sup>	61.8 <sup>§</sup>	<5	20.0
ATV-related	113.8 <sup>§</sup>	15.9 <sup>§</sup>	0.0	0.0
Burns	207.9 <sup>§</sup>	8.7	<5	12.6
Poisoning	226.9 <sup>§</sup>	28.6	<5	66.3
Cycling	251.1 <sup>§</sup>	12.7	<5	7.8
Animal Bites	299.9 <sup>§</sup>	4.5	0.0	0.0
Falls	3,845.4 <sup>§</sup>	279.2 <sup>§</sup>	9.7	11.5
Motor Vehicle Collisions (MVC)	840.3 <sup>§</sup>	79.3 <sup>§</sup>	8.1	88.9
Intentional Injuries				
Assault and Abuse	322.4	17.9	<5	17.0
Self-Harm/Suicide	102.1	43.7	7.3	96.0

Source: Ambulatory Emergency External Cause 2010-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014; Inpatient Discharges 2010-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014, Deaths 2007-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 28 2014.

#### <u>Data Notes</u>:

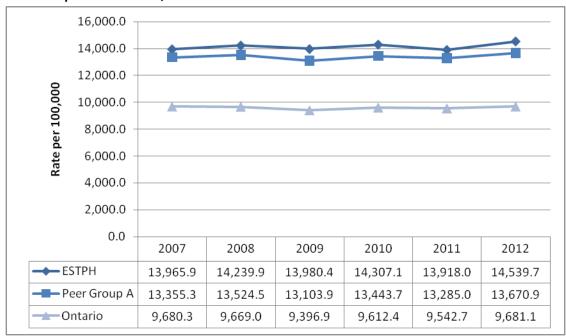
<5 =The numbers are too small to report accurately -there were more than 0 deaths, but less than 5 §= Rates are statistically significantly higher than the average for Ontario

- Elgin St. Thomas had significantly higher rates of emergency department visits due to all leading unintentional injuries than Ontario; however this was not true for intentional injuries.
- Elgin St. Thomas had significantly higher rates of hospitalization than Ontario for sports and recreation injuries, ATV-related injuries, falls and injuries due to motor vehicle collisions.
- There were no significant differences between Elgin St. Thomas and Ontario for mortality due to injury.
- The injuries leading to the most potential years of life lost were self-harm/suicide, motor vehicle collisions and poisoning. The injuries with the largest number of potential years of life lost are those where the youngest populations were affected.

# **Unintentional Injuries**

# All Unintentional Injuries - Emergency Department Visits

Figure 5.1 – Age-Standardized Rates of ED Visits due to All Unintentional Injuries, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

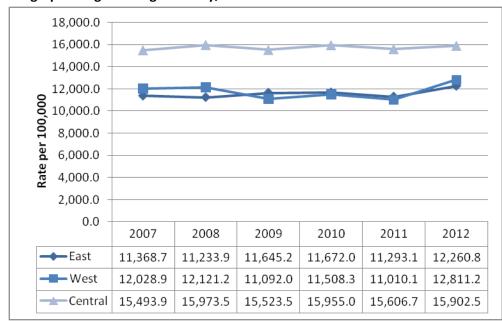
• Elgin St. Thomas had the highest rates of emergency department visits due to unintentional injuries over time compared to Ontario and the peer health units. All three groups were significantly different from each other over time.

# By Elgin Geography

Throughout the report there will be data presented by geographic regions in Elgin County; specifically, East, West and Central regions.

- East –Bayham, Aylmer and Malahide
- West Dutton-Dunwich and West Elgin
- Central –Southwold, Central Elgin and St. Thomas

Figure 5.2 – Age-Standardized Rates of ED Visits due to All Unintentional Injuries, Elgin St. Thomas by Geographic Region in Elgin County, 2007-2012



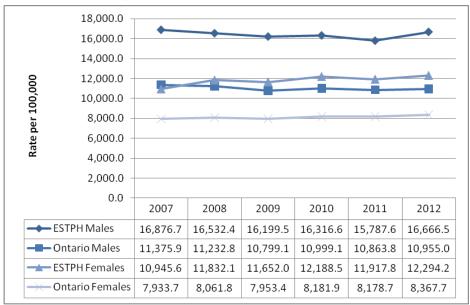
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

• There were significantly more ED visits due to unintentional injuries in the Central regions compared to the East and West ends of Elgin county.

#### By Gender

Figure 5.3 -Age-Standardized Rates of ED Visits due to All Unintentional Injuries, by Gender, Elgin St. Thomas and Ontario, 2007-2012

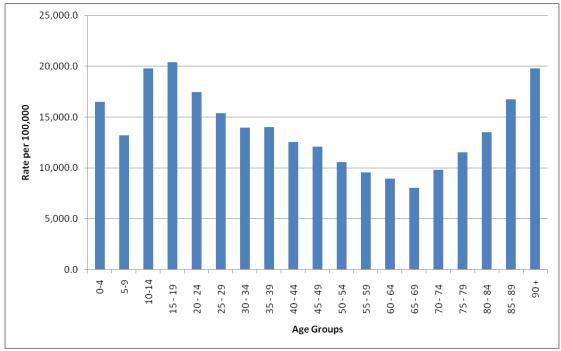


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Males had higher rates of ED visits due to unintentional injuries than females.
- However females in Elgin St. Thomas had higher rates of ED visits due to unintentional injuries than Ontario males.

# By Age Group

Figure 5.4 -Age-Specific Rates of ED Visits due to All Unintentional Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined

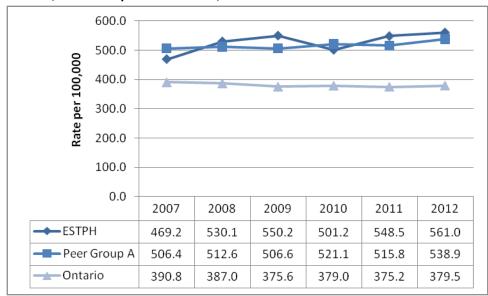


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- The highest rates of ED visits due to unintentional injuries were among those aged 15 to 19 years, 10 to 14 years and those aged 90 years or more.
- Overall rates of ED visits due to unintentional injury increased until the age of 20, and then decreased until the age of 70 before increasing steadily with age.

# All Unintentional Injuries –Hospitalizations

Figure 5.5 -Age-Standardized Rates of Hospitalization due to All Unintentional Injuries, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

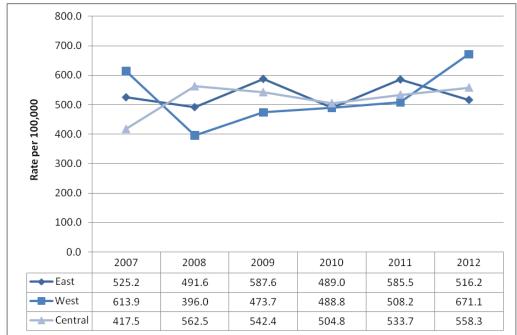


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- Elgin St. Thomas and the peer health units had higher rates of hospitalization due to unintentional injuries than Ontario over time.
- Hospitalization due to unintentional injuries increased between 2007 and 2012 for all three groups.

# By Elgin Geography

Figure 5.6 –Age-Standardized Rates of Hospitalization due to All Unintentional Injuries, Elgin St. Thomas by Geographic Region in Elgin County, 2007-2012



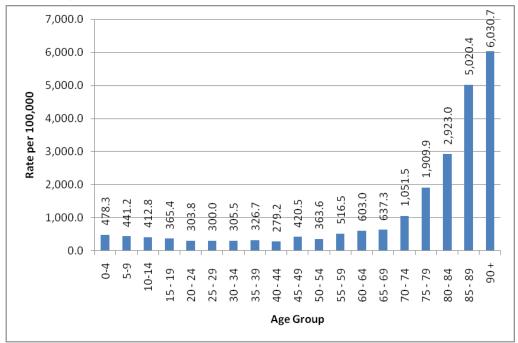
Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

# **Key Findings:**

• All three geographic regions in Elgin St. Thomas had similar rates of hospitalization due to unintentional injuries. There were no significant differences over time.

# By Age Group

Figure 5.7 -Age-Specific Rates of Hospitalization due to All Unintentional Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined



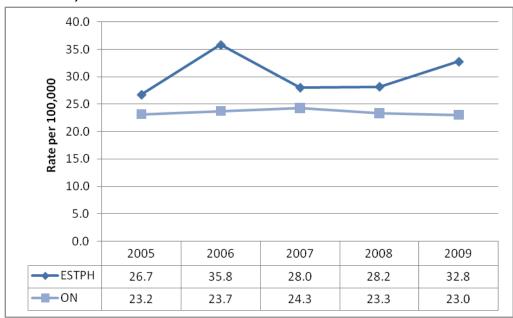
Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

# **Key Findings:**

• There was a dramatic increase in rates of hospitalization due to unintentional injuries associated with age. Rates increased consistently from the age of 55 years and older, with the highest rates occurring from the age of 70 years and older.

# All Unintentional Injuries - Mortality

Figure 5.8 –Age-Standardized Rates of Mortality due to All Unintentional Injuries, Elgin St. Thomas, and Ontario, 2005-2009



Source: Deaths 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 28

# **Key Findings:**

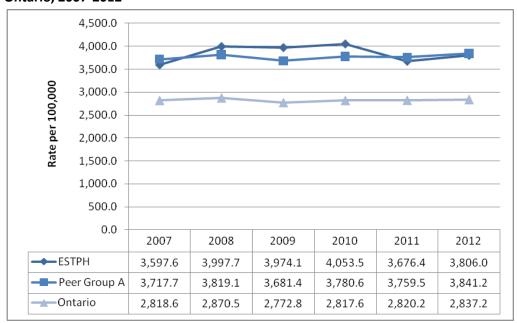
• Elgin St. Thomas had higher rates of mortality due to unintentional injuries than Ontario; however the differences were not statistically significant.

# **Falls**

This section includes all injuries due to falls. Some examples include falls on the same level involving ice and snow, falls due to slips, trips or stumbles and falls on the stairs.

# **Falls – Emergency Department Visits**

Figure 5.9 -Age-Standardized Rates of ED Visits due to Falls, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

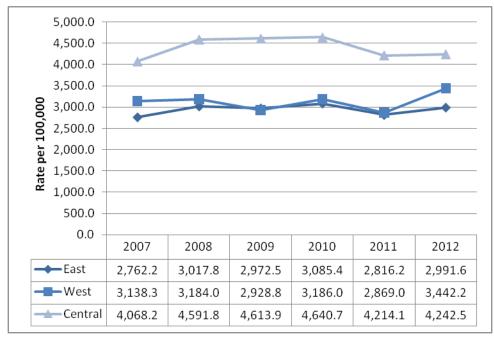


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Elgin St. Thomas and the peer health units had significantly higher rates of ED visits due to falls than Ontario.
- There were no significant changes over time.

# By Elgin Geography

Figure 5.10 – Age-Standardized Rates of ED Visits due to Falls, Elgin St. Thomas by Geographic Region, 2007-2012

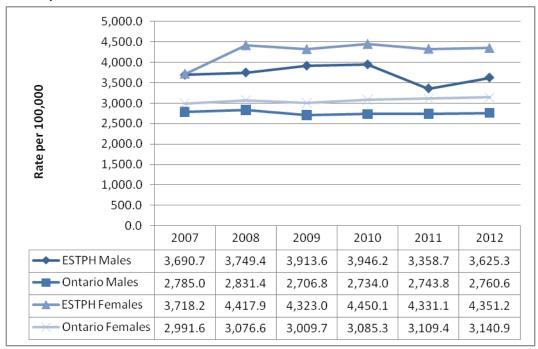


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- There were significantly higher rates of ED visits due to falls in the Central region of Elgin St. Thomas than the East or West regions.
- There were no significant changes over time.

#### By Gender

Figure 5.11 – Age-Standardized Rates of ED Visits due to Falls, by Gender, Elgin St. Thomas and Ontario, 2007-2012

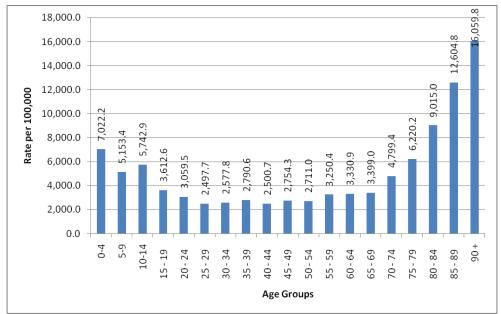


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Overall ED visits due to falls were higher for females compared to males.
- However males in Elgin St. Thomas had higher rates of ED visits due to falls than females in Ontario.

# By Age Group

Figure 5.12 -Age-Specific Rates of ED Visits due to Falls, by Age Group, Elgin St. Thomas, 2007-2012 combined



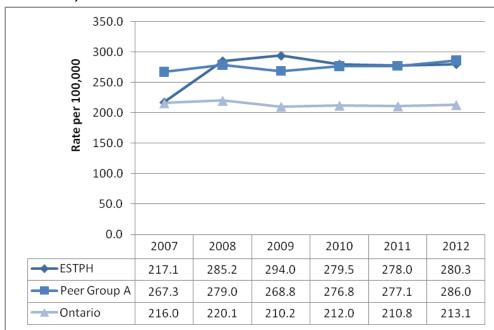
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• Rates of ED visits due to falls were highest among 0 to 4 year olds and then decreased with age until the age of 55 when they increased consistently with age.

# Falls - Hospitalizations

Figure 5.13 – Age-Standardized Rates of Hospitalization due to Falls, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

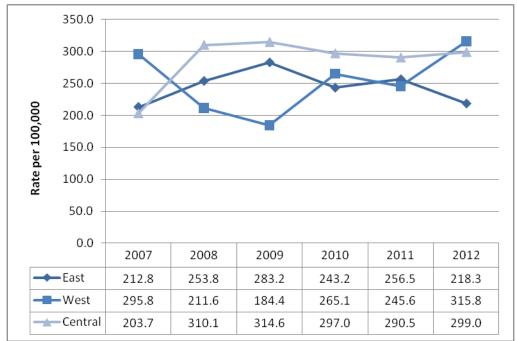


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- Elgin St. Thomas had the largest increase in rates of hospitalization due to falls over time with a 30% increase between 2007 and 2012.
- Rates of hospitalization due to falls in Elgin St. Thomas were not significantly different from Ontario in 2007. After the increase in 2008, Elgin St. Thomas had significantly higher rates than Ontario, but similar to the peer health units.

# By Elgin Geography

Figure 5.14 -Age-Standardized Rates of Hospitalization due to Falls, Elgin St. Thomas by Geographic Region, 2007-2012

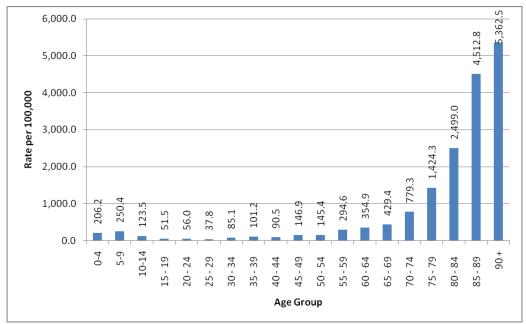


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- Rates of hospitalization in all three geographic regions of Elgin St. Thomas were similar over time.
- The variability in rates is likely due to small numbers.

# By Age Group

Figure 5.15 -Age-Specific Rates of Hospitalization due to Falls, by Age Group, Elgin St. Thomas, 2007-2012 combined

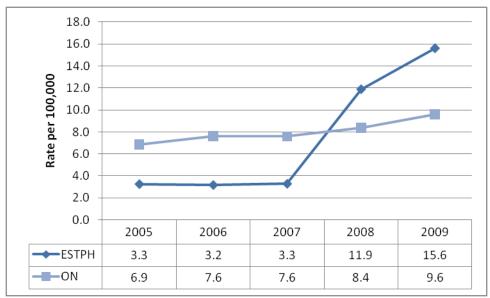


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- The rates of hospitalization due to falls increased dramatically with age from the age of 55.
- Rates were also higher among the very youngest age groups, those aged 0 to 4 and 5 to 9 years.
- Comparing hospitalizations due to falls by age group to ED visits due to falls (see Figure 5.12) we can see that, while children (under the age of 14) have high rates of ED visits due to falls, they have lower rates of hospitalizations or serious fall-related injuries. Seniors are more likely to require hospitalizations related to falling.

# Falls – Mortality

Figure 5.16 -Age-Standardized Rates of Mortality due to Falls, Elgin St. Thomas, and Ontario, 2005-2009



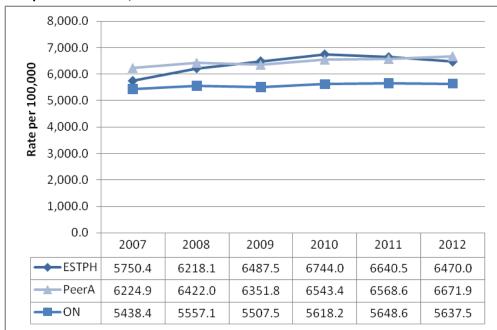
Source: Deaths 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 28 2014

- Mortality rates due to falls increased over time for both Elgin St. Thomas and Ontario. The
  increase for Elgin St. Thomas was dramatic from 2007 to 2009 while the increase in Ontario was
  more gradual.
- All of the deaths due to falls in Elgin St. Thomas, between 2005 and 2009, were among those aged 60 years or older.

# Falls in Seniors (Aged 65+)

#### **Emergency Department Visits**

Figure 5.17 – Age-Specific Rates of ED Visits due to Falls in Seniors (aged 65+), Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

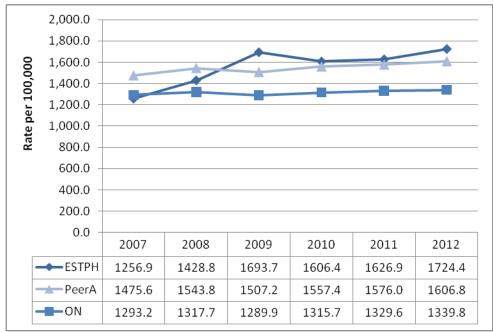


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- From 2008 to 2012 the rates of ED visits due to falls in seniors in Elgin St. Thomas were significantly higher than Ontario from 2008 to 2012. They were not different from those of the peer health units.
- There was an increase for all three groups over time.

#### Hospitalizations

Figure 5.18 -Age-Specific Rates of Hospitalization due to Falls in Seniors (aged 65+), Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

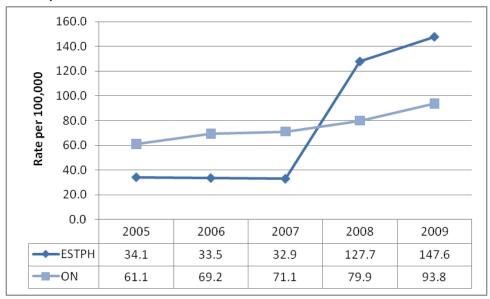


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- The rates of hospitalization for seniors in Elgin St. Thomas due to falls were similar to Ontario in 2007 and then increased; rates were significantly higher than Ontario from 2008 to 2012.
- There was an increase over time for all three groups, but the increase for Elgin St. Thomas was the largest.

# Mortality

Figure 5.19 -Age-Specific Rate of Mortality due to Falls in Seniors (aged 65+), Elgin St. Thomas and Ontario, 2005-2009



Source: Deaths 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 28 2014

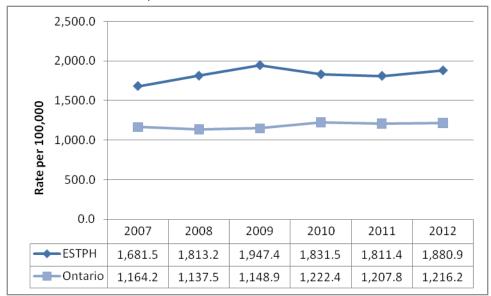
- In Elgin St. Thomas mortality rates for seniors due to falls increased significantly from 2007 to 2009.
- Rates of mortality due to falls in seniors in Elgin St. Thomas were not significantly different from rates in Ontario at any time between 2005 and 2009.

# **Sports and Recreation Related Injuries**

This section includes injuries due to all sports and recreation related activities. Some examples include being struck while participating in a sport, being struck by sport equipment, injuries related to playground equipment and injuries due to recreational vehicles (ATV, snowmobile, boating, etc.)

# Sports and Recreation Related Injuries –Emergency Department Visits

Figure 5.20 – Age-Standardized Rates of ED Visits due to Sports and Recreation Related Injuries, Elgin St. Thomas and Ontario, 2007-2012

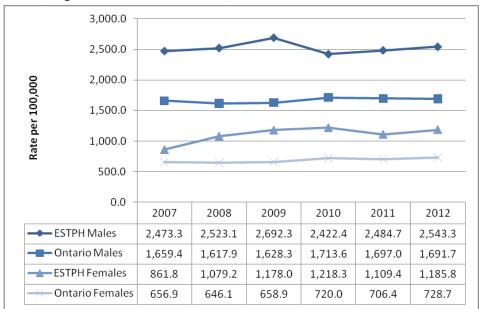


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Elgin St. Thomas had significantly higher rates of ED visits due to sports-related injuries than Ontario over time.
- There was no significant increase or decrease in rates over time.

#### By Gender

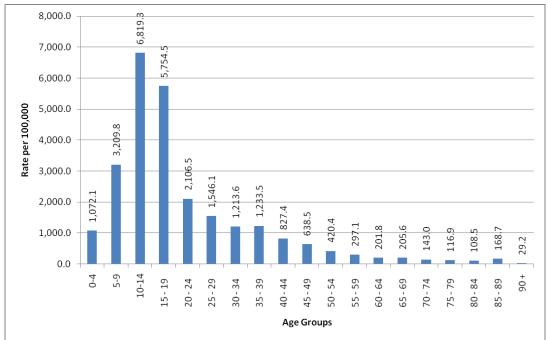
Figure 5.21 – Age-Standardized Rates of ED Visits due to Sports and Recreation Related Injuries, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Males had significantly higher rates of ED visits due to sports and recreation related injuries than females over time.
- The rate of ED visits for females increased while the rate for males did not change significantly over time.

Figure 5.22 -Age-Specific Rates of ED Visits due to Sport and Recreation Related Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined



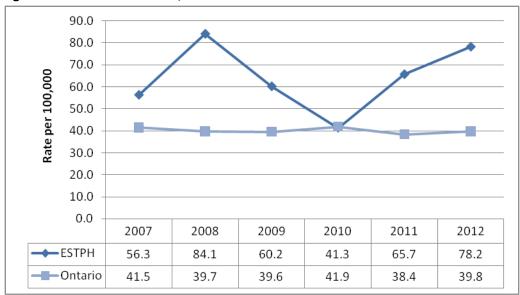
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• The highest rates of ED visits due to sports and recreation injuries were among those aged 10 to 14 years and 15 to 19 years. After the age of 20, rates decreased consistently with age.

# **Sports and Recreation Related Injuries – Hospitalizations**

Figure 5.23 – Age-Standardized Rates of Hospitalization due to Sports and Recreation Related Injuries, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- In Elgin St. Thomas, there was a 40% increase in the rate of hospitalization due to sports and recreation related injuries between 2007 and 2012. The rates in Ontario did not change significantly over the same time period.
- This data should be interpreted with caution as the rates for Elgin St. Thomas were based on a very small number of cases.

250.0 208.6 203.8 200.0 Rate per 100,000 150.0 100.0 62.5 50.0 0.0 10-14 5-9 0-4 15-19 30-34 35-39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 6470 - 74 90 85-Age Group

Figure 5.24 -Age-Specific Rates of Hospitalizations due to Sports and Recreation Related Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined

Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

# **Key Findings:**

• The highest age-specific rates of hospitalization due to sports and recreation related injuries were among children between the ages of 5 and 14 years. This pattern was similar to the age-specific ED Visits rates (see Figure 5.22).

# Sports and Recreation Related Injuries - Mortality

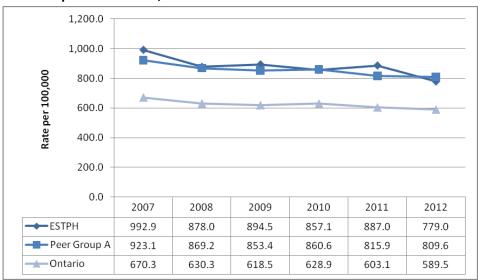
• There were between 1 and 3 deaths each year between 2005 and 2009 and those who died ranged in age from 20 to 69 years old.

# **Motor Vehicle Collisions**

This section includes injuries related to motor vehicle traffic collisions. Some examples include collisions involving cars, trucks, buses, pedestrians, cyclists, animal riders or the occupant of an animal-drawn vehicle. Refer to Chapter 5 and the section on Motor Vehicle Collisions for information on the rate of collisions and the proportion of collisions leading to injury and fatality.

# **Motor Vehicle Collisions – Emergency Department Visits**

Figure 5.25 -Age-Standardized Rates of ED Visits due to Motor Vehicle Collisions, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

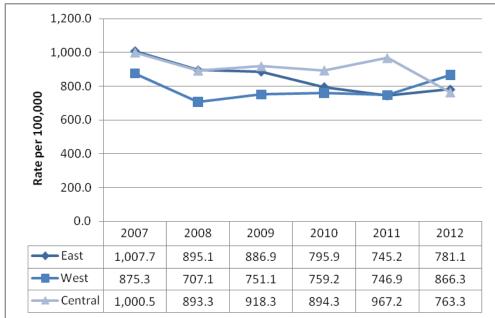


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Elgin St. Thomas and the peer health units had significantly higher rates of ED visits due to motor vehicle collisions than Ontario over time, but they were not significantly different from each other.
- The rate of ED visits due to motor vehicle collisions decreased over time for all groups.
- Recall that Elgin St. Thomas had a similar or slightly lower proportion of collisions that resulted in an injury or a fatality over time despite the higher rates of ED visits, hospitalizations and mortality due to motor vehicle collisions compared to Ontario. This may be an indication that the injuries occurring in the collisions in Elgin St. Thomas were more serious than those in Ontario. For more details, refer to the section on Motor Vehicle Collisions Involving Injury or Fatality (p.147).

# By Elgin Geography

Figure 5.26-Age-Standardized Rates of ED Visits due to Motor Vehicle Collisions, Elgin St. Thomas by Geographic Region in Elgin County, 2007-2012

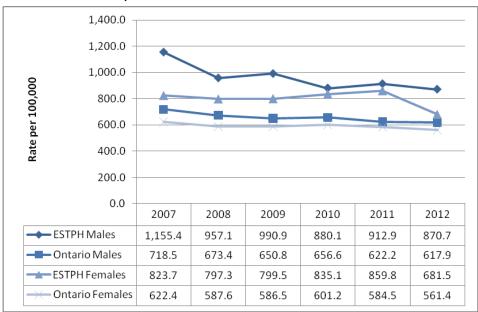


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• There were no significant differences in the rate of ED visits due to motor vehicle collisions by geographic region in Elgin St. Thomas.

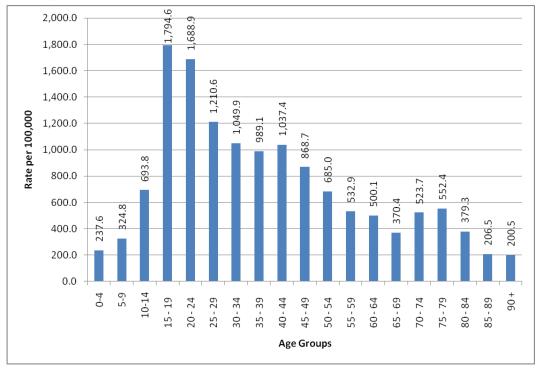
Figure 5.27 – Age-Standardized Rates of ED Visits due to Motor Vehicle Collisions, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Males had higher rates of ED visits due to motor vehicle collisions than females; however females in Elgin St. Thomas had higher rates of injury than males in Ontario.
- Between 2009 and 2011, males in Elgin St. Thomas had decreasing rates of ED visits due to motor vehicle collision while females in Elgin St. Thomas had increasing rates during that same time period, before rates dropped dramatically in 2012.

Figure 5.28 -Age-Specific Rates of ED Visits due to Motor Vehicle Collisions, by Age Group, Elgin St. Thomas, 2007-2012 combined



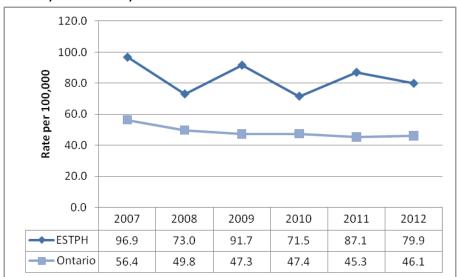
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

 Age-specific rates of ED visits due to motor vehicle collisions were highest among teens aged 15 to 19 years and young adults aged 20 to 24 years.

# **Motor Vehicle Collisions – Hospitalizations**

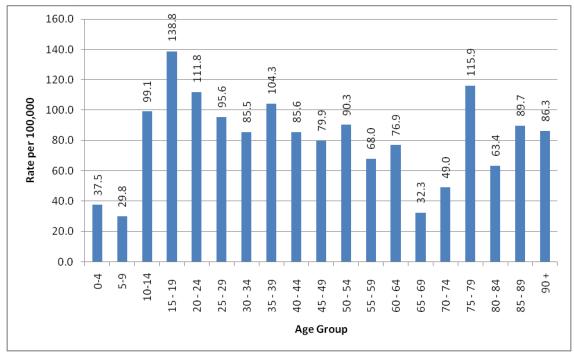
Figure 5.29 -Age-Standardized Rates of Hospitalization due to Motor Vehicle Collisions, Elgin St. Thomas, and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- Elgin St. Thomas had significantly higher rates of hospitalization due to motor vehicle collisions than Ontario over time.
- Overall, the rate of hospitalization due to motor vehicle collisions decreased over time.

Figure 5.30 -Age-Specific Rates of Hospitalization due to Motor Vehicle Collisions, by Age Group, Elgin St. Thomas, 2007-2012 combined



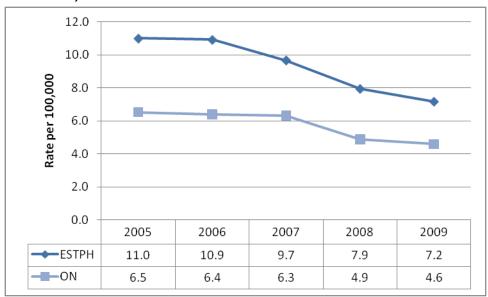
Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

# **Key Findings:**

• Age-specific rates of hospitalization due to motor vehicle collisions in Elgin St. Thomas were highest among 15 to 19 year olds. There were also high rates of injury among 20 to 24 year olds and 75-79 year olds.

# **Motor Vehicle Collisions – Mortality**

Figure 5.31 – Age-Standardized Rates of Mortality due to Motor Vehicle Collisions, Elgin St. Thomas, and Ontario, 2005-2009



Source: Deaths 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 28 2014

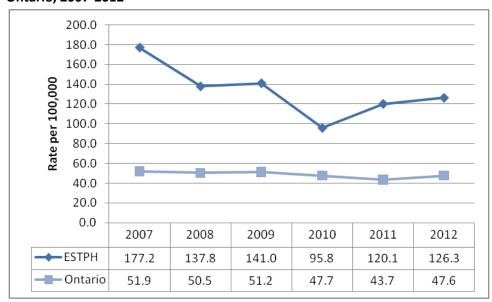
- The mortality rate due to motor vehicle collisions decreased over time for Elgin St. Thomas and Ontario.
- In Elgin St. Thomas, there were an average of 8 deaths per year between 2005 and 2009. These deaths occurred across the lifespan in people over 15 years of age.

# **ATV-Related Injuries**

This section described injuries to an occupant of a special all-terrain vehicle (ATV) or other motor vehicle designed primarily for off-road use. This includes the driver or the passenger of the ATV.

# **ATV-Related Injuries – Emergency Department Visits**

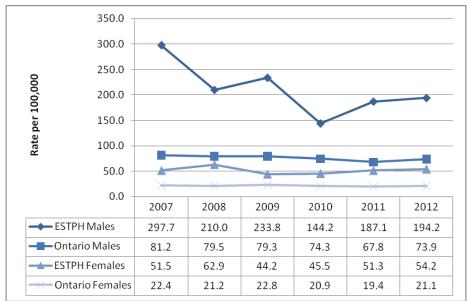
Figure 5.32 -Age-Standardized Rates of ED Visits due to ATV-Related Injuries, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- ED visits due to ATV-related injuries were between 100% and 200% higher in Elgin St. Thomas than Ontario over time. This represents about 100 visits to the emergency department each year.
- There was an overall decrease in rates of ED visits due to ATV-related injuries in Elgin St. Thomas over time. However the rates decreased from 2007 to 2010 and then started to show an increase again in 2011.

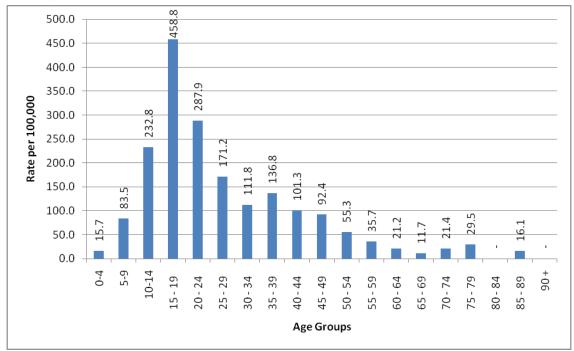
Figure 5.33 -Age-Standardized Rates of ED Visits due to ATV-Related Injuries, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Males had higher rates of ATV-related emergency department visits than females in Elgin St. Thomas and Ontario.
- Males in Elgin St. Thomas were 3 to 5 times more likely than males in Ontario to have an ATVrelated ED visit.

Figure 5.34 -Age-Specific Rates of ED Visits due to ATV-Related Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined



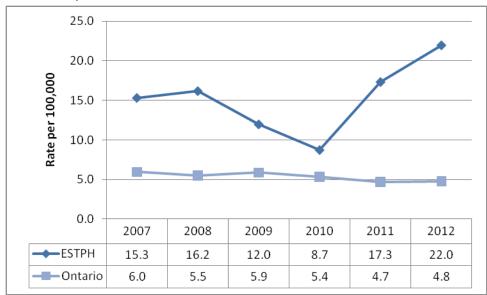
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• Age-specific rates of ED visits due to ATV-related injuries were highest among teens aged 15 to 19 years and young adults aged 20 to 24 years.

# **ATV-Related Injuries – Hospitalizations**

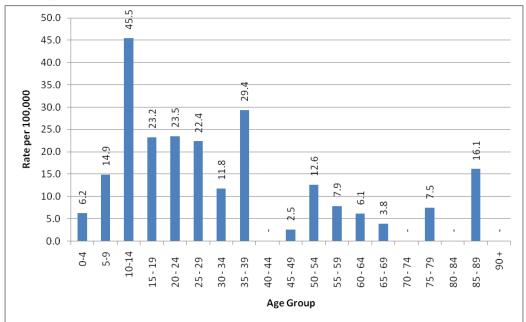
Figure 5.35 -Age-Standardized Rates of Hospitalization due to ATV-Related Injuries, Elgin St. Thomas, and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

- Hospitalizations due to ATV-related injuries were significantly higher for Elgin St. Thomas compared to Ontario. In 2012, rates in Elgin St. Thomas were nearly 400% higher than Ontario.
- While hospitalizations due to ATV-related injuries decreased in Ontario, they increased in Elgin St. Thomas over time. Despite a decline from 2007 to 2010, rates of ATV-related hospitalizations in Elgin St. Thomas more than doubled between 2010 and 2012.

Figure 5.36 -Age-Specific Rates of Hospitalization due to ATV-Related Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

#### **Key Findings:**

• The highest age-specific rate of hospitalizations due to ATV-related injuries in Elgin St. Thomas was among 10 to 14 year olds. This age group is younger than the group with the highest rates of ED Visits due to ATV injuries (see Figure 5.34).

# **ATV-Related Injuries – Mortality**

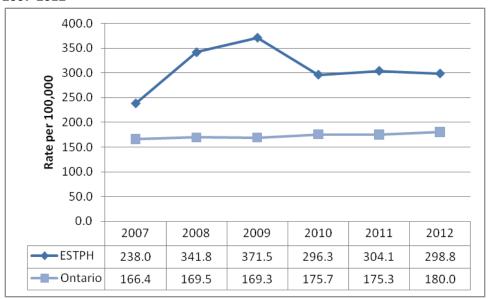
• There were fewer than 5 deaths due to ATV-related injuries in Elgin St. Thomas between 2005 and 2009 making them too small to report. Those who died were between the ages of 30 and 44 years old.

# **Animal Bites**

This section includes injuries that resulted from being bitten or struck by a dog or other mammal. These may include injuries due to dogs, cats, rats, etc. However they do not include injuries from snake bites, or injuries from other reptiles, insects or marine mammals.

# **Animal Bites – Emergency Department Visits**

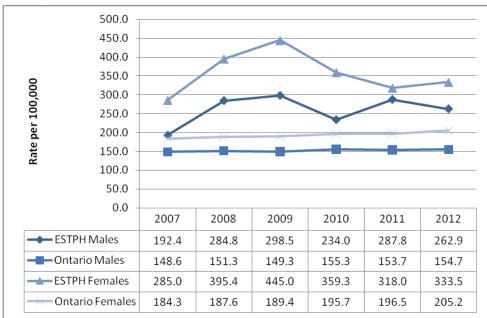
Figure 5.37 -Age-Standardized Rates of ED Visits due to Animal Bites, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Elgin St. Thomas had significantly higher rates of ED visits due to animal bites than Ontario over time.
- In Elgin St. Thomas, ED visits due to animal bites decreased after 2009 and then remained similar while rates in Ontario increased slightly over the same time period.

Figure 5.38 -Age-Standardized Rates of ED Visits due to Animal Bites, by Gender, Elgin St. Thomas and Ontario, 2007-2012

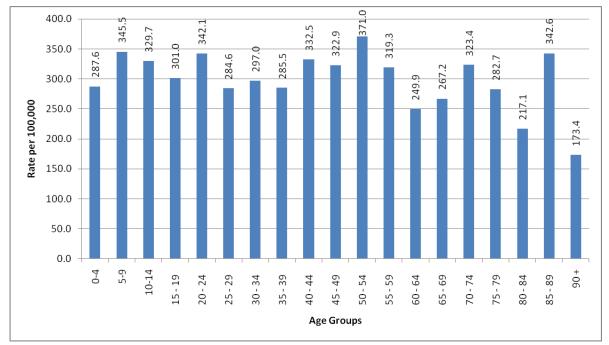


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• Females had higher rates of ED visits due to animal bites than males. However males in Elgin St. Thomas had higher rates of animal bite injuries than females in Ontario.

Figure 5.39 -Age-Specific Rates of ED Visits due to Animal Bites, by Age Group, Elgin St. Thomas, 2007-2012 combined



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• Age-specific rates of ED visits due to animal bites in Elgin St. Thomas were similar for all age groups.

# **Animal Bites – Hospitalizations and Mortality**

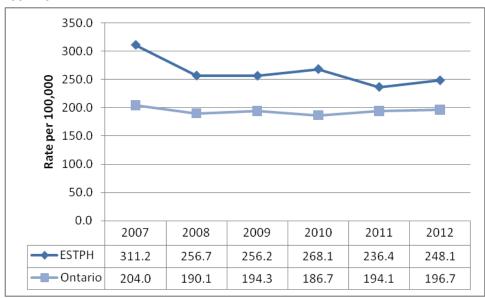
- The rates of hospitalization due to animal bites in Elgin St. Thomas could not be reported. Many of the years had fewer than 5 cases making them too small to report. On average, there were 5 cases per year.
- There were no deaths in Elgin St. Thomas due to animal bites between 2007 and 2012.

# **Cycling Injuries**

This section includes injuries to pedal cyclists who were involved in a transport collision. Some examples of the injuries included in this section are cyclists injured when colliding with a pedestrian, cyclists colliding with another cyclist or motor vehicle and cyclists who fell or were thrown from the bicycle without colliding with another object.

# **Cycling Injuries – Emergency Department Visits**

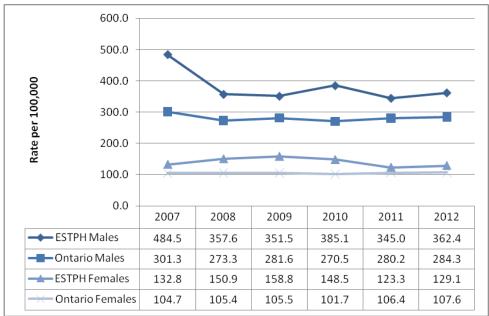
Figure 5.40 -Age-Standardized Rates of ED Visits due to Cycling Injuries, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Elgin St. Thomas had significantly higher rates of ED visits due to cycling injuries than Ontario over time.
- The rates of cycling injuries decreased over time for Elgin St. Thomas while there was minimal change in Ontario.

Figure 5.41 - Age-Standardized Rates of ED Visits due to Cycling Injuries, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Males had significantly higher rates of ED visits due to cycling injuries than females in Elgin St. Thomas and Ontario.
- Rates for males in Elgin St. Thomas were up to 70% higher than rates for females over time.

527.2 600.0 500.0 401.5 400.0 Rate per 100,000 300.5 300.0 237 200.0 100.4 100.0 33. 0.0 10-14 5-9 0-4 50 - 54 40 - 44 60 - 64 69 - 69 70 - 74 30-34 80 - 84 45-55-

Figure 5.42 -Age-Specific Rates of ED Visits due to Cycling Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined

Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

Age Groups

#### **Key Findings:**

• Age-specific rates of ED visits due to cycling injuries were highest among 10 to 14 year olds, 15 to 19 year olds and 5 to 9 year olds.

# Cycling Injuries –Hospitalizations and Mortality

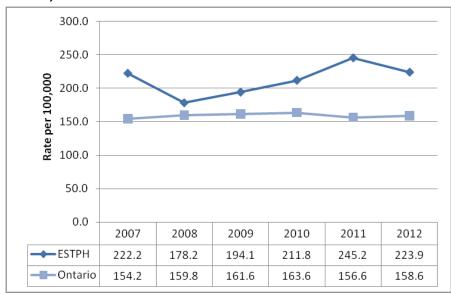
- The rates of hospitalization due to cycling injuries in Elgin St. Thomas could not be reported. Many of the years had fewer than 5 cases making them too small to report.
- On average, there were 10 hospitalizations per year.
- There were fewer than 5 deaths in total for Elgin St. Thomas due to cycling injuries between 2007 and 2012.

# **Unintentional Poisoning**

This section includes injuries due to an accidental overdose of a drug or when the wrong drug was given or taken unintentionally. Unintentional poisonings do not include an intentional overdose or injuries due to the adverse side effects from properly administered drugs.

# **Unintentional Poisoning – Emergency Department Visits**

Figure 5.43 -Age-Standardized Rates of ED Visits due to Unintentional Poisoning, Elgin St. Thomas and Ontario, 2007-2012

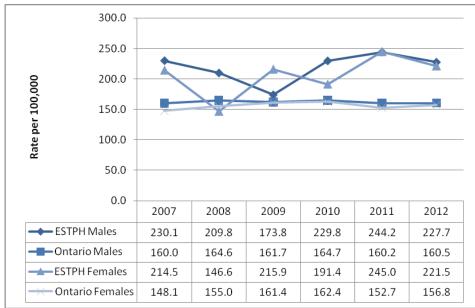


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

Rates of ED visits due to unintentional poisoning in Elgin St. Thomas were 12% higher than
 Ontario in 2008 and up to 57% higher in 2011. Rates for both group showed little real change over time.

Figure 5.44 -Age-Standardized Rates of ED Visits due to Unintentional Poisoning, by Gender, Elgin St. Thomas and Ontario, 2007-2012

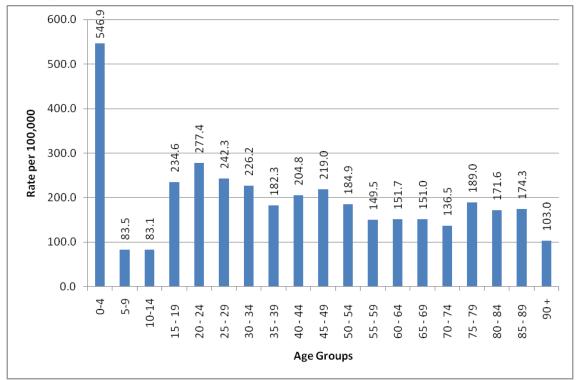


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• There were no significant gender differences for ED visits due to unintentional poisoning.

Figure 5.45 -Age-Specific Rates of ED Visits due to Unintentional Poisoning, by Age Group, Elgin St. Thomas, 2007-2012 combined



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• In Elgin St. Thomas, the age-specific rates of ED visits due to unintentional poisoning were highest among 0 to 4 year olds.

# **Unintentional Poisoning – Hospitalizations and Mortality**

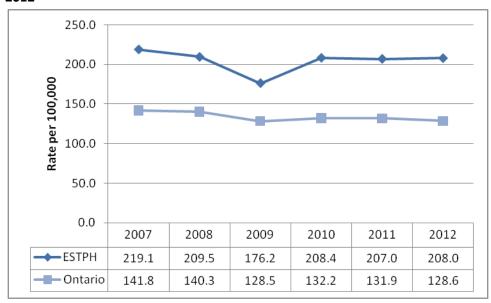
- The rates of hospitalization due to unintentional poisonings in Elgin St. Thomas could not be reported. Many of the years had fewer than 20 cases making them too small to age-standardize reliably.
- On average, there were 24 hospitalizations per year.
- There were 17 deaths in total for Elgin St. Thomas due to unintentional poisonings between 2007 and 2012.

# **Burns**

This section includes injuries due to contact with heat and hot substances. Some examples include exposure to smoke, fire and flames and exposure to hot water, steam or hot household appliances.

# **Burns – Emergency Department Visits**

Figure 5.46 -Age-Standardized Rates of ED Visits due to Burns, Elgin St. Thomas and Ontario, 2007-2012

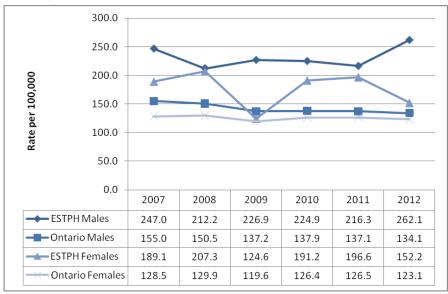


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

Rates of ED visits due to burns were between 30% and 60% higher for Elgin St. Thomas than
 Ontario over time. Rates decreased slightly for both groups over time.

Figure 5.47 -Age-Standardized Rates of ED Visits due to Burns, by Gender, Elgin St. Thomas and Ontario, 2007-2012

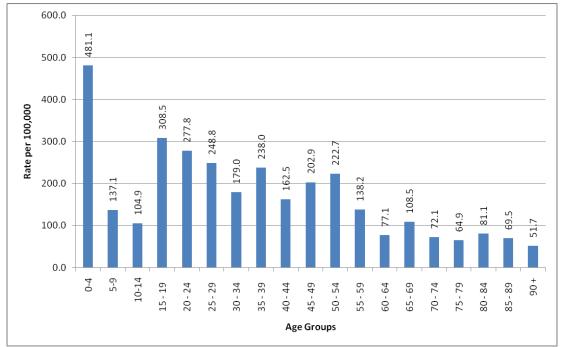


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

• In Elgin St. Thomas and Ontario, the rates of ED visits due to burns were similar for males and females; however males did show slightly higher rates over time.

Figure 5.48 -Age-Specific Rates of ED Visits due to Burns, by Age Group, Elgin St. Thomas, 2007-2012 combined



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

• The age-specific rates of ED visits due to burns in Elgin St. Thomas were highest among 0 to 4 year olds.

# **Burns – Hospitalizations and Mortality**

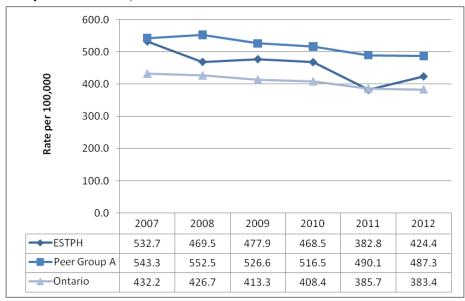
- The rates of hospitalization due to burns in Elgin St. Thomas could not be reported. Many of the years had fewer than 20 cases making them too small to age-standardize reliably.
- On average, there were 6 hospitalizations per year.
- There were fewer than 5 deaths in total for Elgin St. Thomas due to burns between 2007 and 2012.

# **Intentional Injuries**

An intentional injury is the result of a wilful act to cause harm. Some common categories of intentional injury include assault, abuse and self-harm which includes suicide.

# All Intentional Injuries –Emergency Department Visits

Figure 5.49 -Age-Standardized Rates of ED Visits due to All Intentional Injuries, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012



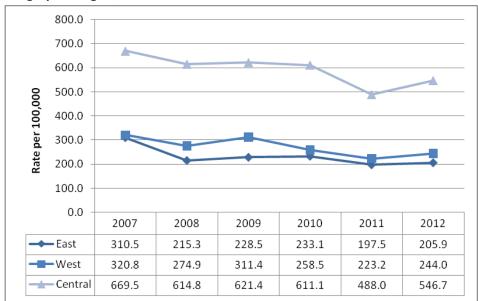
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

The rates of ED visits due to intentional injuries decreased over time for Elgin St. Thomas,
 Ontario and the peer health units. Elgin St. Thomas experienced the largest decrease during this time period.

# **By Elgin Geography**

Figure 5.50 -Age-Standardized Rates of ED Visits due to All Intentional Injuries, Elgin St. Thomas by Geographic Region,2007-2012

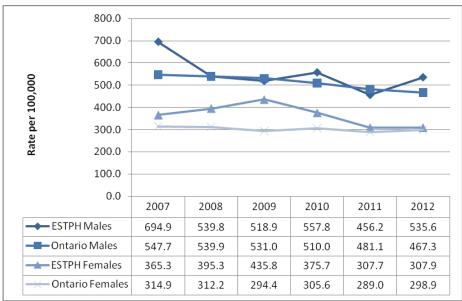


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• The Central region of Elgin St. Thomas had significantly higher rates of ED visits due to intentional injuries than the East or West regions. Rates were two or more times higher each year.

Figure 5.51 -Age-Standardized Rates of ED Visits due to All Unintentional Injuries, by Gender, Elgin St. Thomas and Ontario, 2007-2012

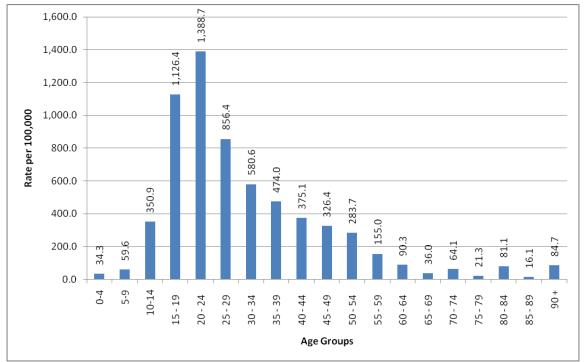


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• Males had higher rates of ED visits due to all intentional injuries than females in Elgin St. Thomas and Ontario.

Figure 5.52 -Age-Specific Rates of ED Visits due to All Intentional Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined



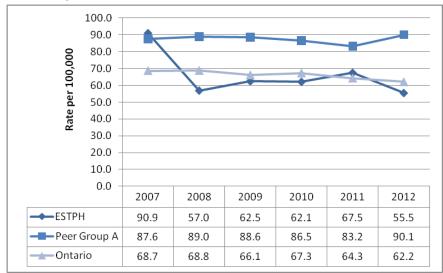
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• In Elgin St. Thomas, the age-specific rates of ED visits due to intentional injuries were highest among 20 to 24 year olds, 15 to 19 year olds and 25-29 year olds.

# All Intentional Injuries -Hospitalizations

Figure 5.53 -Age-Standardized Rates of Hospitalization due to All Intentional Injuries, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

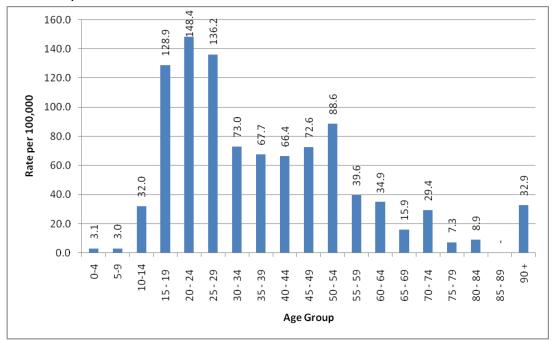


Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

# **Key Findings:**

• After 2007, Elgin St. Thomas had rates of hospitalization due to all intentional injuries similar to Ontario and lower than rates in the peer health units.

Figure 5.54 -Age-Specific Rates of Hospitalization due to All Unintentional Injuries, by Age Group, Elgin St. Thomas, 2007-2012 combined



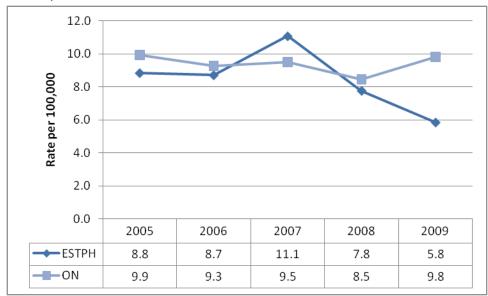
Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

# **Key Findings:**

• Age-specific rates of hospitalization due to all intentional injuries in Elgin St. Thomas were highest among 20 to 24 year olds, 25 to 29 year old and 15 to 19 year olds. These same age groups also had the highest rates of ED Visits due to intentional injuries (see Figure 5.52).

# All Intentional Injuries - Mortality

Figure 5.55 -Age-Standardized Rates of Mortality due to All Intentional Injuries, Elgin St. Thomas, and Ontario, 2005-2009



Source: Deaths 2005-2009, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 28 2014

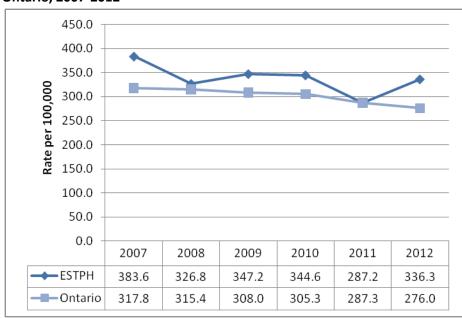
- There were, on average, 8 deaths per year in Elgin St. Thomas due to intentional injuries.
- Rates should be interpreted with extreme caution as they were calculated based on fewer than 10 cases per year.

# **Assault and Abuse**

Injuries in this section are those that were inflicted by another person with the intent to injure or kill by any means. Some examples include homicide, assault (physical, sexual, mental) and assault with weapons such as stabbing, shooting or harm with a blunt object.

# **Assault and Abuse – Emergency Department Visits**

Figure 5.56 -Age-Standardized Rates of ED Visits due to Assault and Abuse, Elgin St. Thomas and Ontario, 2007-2012

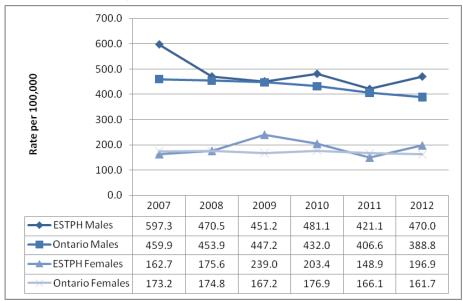


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

#### **Key Findings:**

• The rates of ED visits due to assault and abuse in Elgin St. Thomas were similar to the rates in Ontario over time. Rates decreased for both groups over time.

Figure 5.57 -Age-Standardized Rates of ED Visits due to Assault and Abuse, by Gender, Elgin St. Thomas and Ontario, 2007-2012



Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

# **Key Findings:**

• The rates of ED visits for assault and abuse were much higher for males than for females in Elgin St. Thomas and Ontario.

90

85-

### By Age Group

1,081.8 1,200.0 1,000.0 854. 800.0 Rate per 100,000 600.0 400.0 229.4 200.0 54.1 31.2 28.5 23.9 21.3 20.2 59. 59.

Figure 5.58 -Age-Specific Rates of ED Visits due to Assault and Abuse, by Age Group, Elgin St. Thomas, 2007-2012 combined

Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

### **Key Findings:**

0.0

 Age-specific rates of ED visits due to assault and abuse were highest among 20 to 24 year olds and 15 to 19 year olds. After the age of 24, rates decreased with age.

60 - 64

75-

54

50-

Age Groups

# Assault and Abuse -Hospitalizations and Mortality

0-4 5-9 10-14

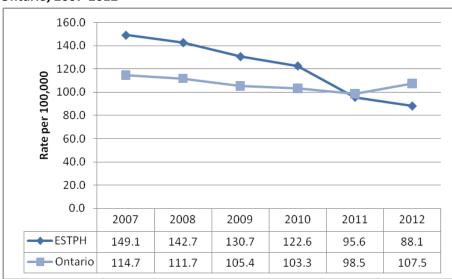
- The rates of hospitalization due to assault and abuse in Elgin St. Thomas could not be reported. Many of the years had fewer than 20 cases making them too small to age-standardize reliably.
- On average, there were 14 hospitalizations due to assault and abuse each year.
- There were a total of 5 deaths Elgin St. Thomas due to assault and abuse between 2007 and 2012.

### Intentional Self-Harm and Suicide

Intentional injuries that include any purposeful self-inflicted poisoning or injury as well as suicide attempts are considered self-harm injuries when they result in an emergency department visits or hospitalization. Deaths due to intentional self-harm are considered suicides.

### Intentional Self-Harm – Emergency Department Visits

Figure 5.59 -Age-Standardized Rates of ED Visits due to Intentional Self-Harm, Elgin St. Thomas and Ontario, 2007-2012



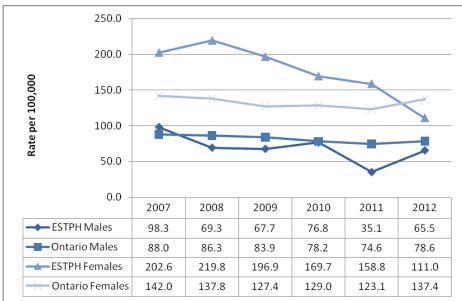
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

### **Key Findings:**

• There was a clear and consistent decrease in the rate of ED visits due to intentional self-harm in Elgin St. Thomas over time. Elgin St. Thomas went from rates of self-harm that were 30% higher than Ontario in 2007 to rates that were 20% lower in 2012.

### By Gender

Figure 5.60 -Age-Standardized Rates of ED Visits due to Intentional Self-Harm, by Gender, Elgin St. Thomas and Ontario, 2007-2012

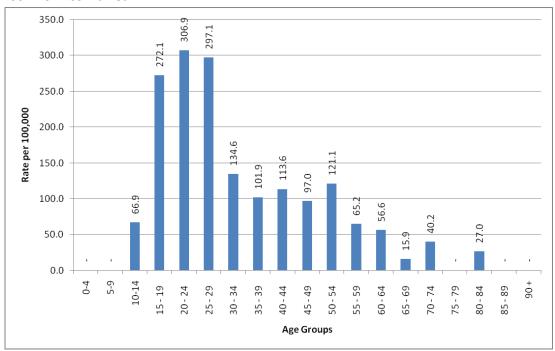


Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

- Females had a much higher rate of ED visits due to intentional self-harm than males over time.
- The rate of intentional self-harm for females in Elgin St. Thomas decreased by nearly 50% over time while the rate for males did not change significantly.

### By Age Group

Figure 5.61 -Age-Specific Rates of ED Visits due to Intentional Harm, by Age Group, Elgin St. Thomas, 2007-2012 combined



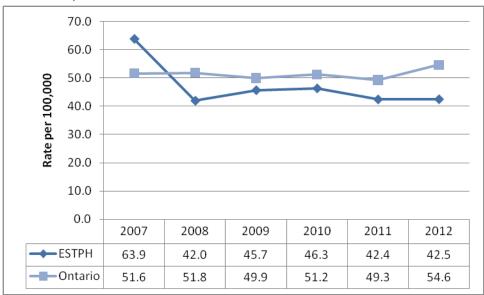
Source: Ambulatory Emergency External Cause 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: April 25, 2014

### **Key Findings:**

• Age-specific rates of ED visits due to intentional self-harm in Elgin St. Thomas were highest among 20 to 24 year olds as well as 25-29 year olds and 15 to 19 year olds. Rates decreased after the age of 29.

## **Intentional Self-Harm –Hospitalizations**

Figure 5.62 -Age-Standardized Rates of Hospitalization due to Intentional Self-Harm, Elgin St. Thomas and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

### **Key Findings:**

• The rates of hospitalization due to self-harm were lower for Elgin St. Thomas than Ontario over time, but the difference was not statistically significant.

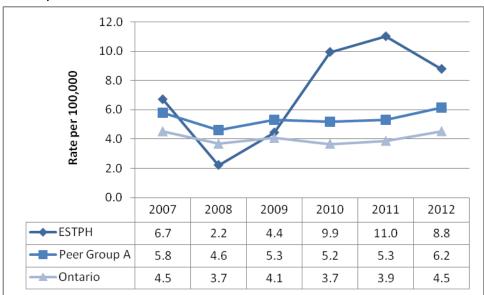
# **Suicide - Mortality**

- There were, on average, 8 deaths due to suicide in Elgin St. Thomas each year between 2005 and 2009. Those who died ranged in age from 15 to 84 years old.
- There were significantly more males than females who committed suicide in Elgin St. Thomas and Ontario over time. This is different from the trend for ED visits and hospitalizations due to self-harm where rates were higher among females than males.

# **Head Injuries**

### **Concussions**

Figure 5.63 – Crude rates of Hospitalization due to Concussion, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012



Source: Inpatient Discharges 2007-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: May 5 2014

### **Key Findings:**

- On average, there were 7 hospitalizations due to concussion in Elgin St. Thomas each year.
- Overall, there was no clear increase in the rate of hospitalizations due to concussion between 2007 and 2012. The rates for Ontario were the same and the rates for Elgin St. Thomas and the peer health units showed a very small increase.

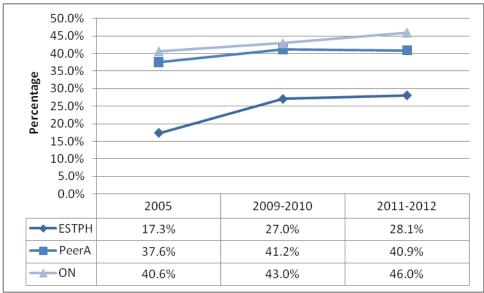
### **Data Interpretation:**

Age-standardized rates could not be calculated for this data because there were fewer than 10
cases per year. These rates should be interpreted with caution because they are based on small
numbers.

### **Helmet Use**

Respondents who reported riding a bicycle in the past 12 months were asked how often they wear a helmet while cycling.

Figure 5.64 – Age-Standardized Proportion of Respondents (aged 12+) who reported Always or Mostly Wearing a Bike Helmet while Cycling, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012

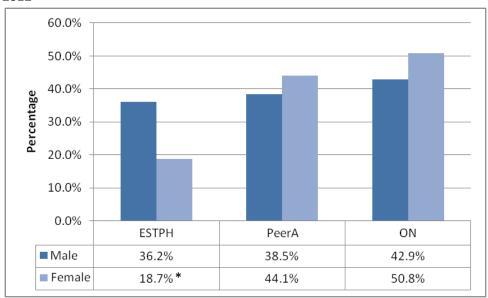


Source: Canadian Community Healthy Survey, 2005, 2009-2010, 2011-2012

- The proportion of the population who reported mostly or always wearing a helmet while cycling was significantly lower for Elgin St. Thomas than Ontario or the peer health units each year.
- The proportion of respondents wearing bike helmets consistently increased over time between 2005 and 2012 for all groups; however the increase was only significant for Ontario.

### By Gender

Figure 5.65 – Age-Standardized Proportion of Respondents (aged 12+) who reported Always or Mostly Wearing a Bike Helmet while Cycling, by Gender, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



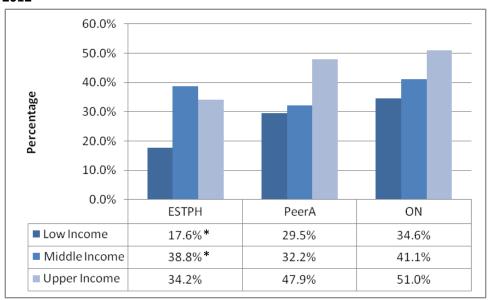
Source: Canadian Community Healthy Survey, 2005

Note: \* Estimate should be interpreted with caution due to high variability

- A significantly smaller proportion of females in Elgin St. Thomas reported wearing a bike helmet always or most of the time while cycling compared to females in Ontario and the peer health units.
- In Ontario, females were significantly more likely than males to report wearing a helmet regularly while cycling. Although, in Elgin St. Thomas, males were more likely to wear a helmet than females, the difference was not statistically significant.

### By Income

Figure 5.66 -Age-Standardized Proportion of Respondents (aged 12+) who reported Always or Mostly Wearing a Bike Helmet while Cycling, by Income, Elgin St. Thomas, Peer Group A and Ontario, 2011-2012



Source: Canadian Community Healthy Survey, 2005

Note: \* Estimate should be interpreted with caution due to high variability

### **Key Findings:**

• For Ontario, respondents in the highest income category were significantly more likely than those in the middle or lower income categories to report wearing a bike helmet all or most of the time. The same pattern was seen for the peer health units; however the differences were not statistically significant. In Elgin St. Thomas, the middle income group was the most likely to wear a helmet, however the apparent trend difference is likely due to small sample sizes and wide confidence intervals as the differences between income groups were not statistically significant.

# **Chapter 6: Maternal and Reproductive Health**

## **Summary**

#### Birth

- There were just over 1,000 births to women in Elgin St. Thomas each year
- The birth rate in Elgin St. Thomas was similar to Ontario with no significant changes over time
- ➤ The highest birth rates were among women aged 25-29 years old and the lowest birth rates were among women aged 40-44 years
- ➤ Birth rates in Elgin St. Thomas increased over time for women 35-39 years old and decreased for teens aged 15-19

### **Teen Pregnancy**

- > Teens aged 15-19 did not have a significantly higher rate of pregnancy than teens in Ontario and the rate of teen pregnancy decreased over time
- > Teens in Elgin St. Thomas had significantly lower rates of therapeutic abortions than teens in Ontario
- Elgin St. Thomas had a higher rate of teens who gave birth compared to Ontario and this rate decreased over time

### **Preterm Births**

Approximately 7% of births in Elgin St. Thomas were preterm. This was similar to Ontario and there was no significant change over time

### **Multiple Births**

In Elgin St. Thomas, between 2% and 5% of births were multiple births overtime. This was similar to Ontario and there was no significant change over time

#### Birth Weights and Size for Gestational Age

- In Elgin St. Thomas, approximately 5% of births were considered to have a low birth weight and 3% had a high birth weight
- Mothers in the oldest age groups had the highest proportion of babies with a low birth weight
- > 7% of births in Elgin St. Thomas were considered small for gestational age (SGA) and between 11% and 14% were considered to be large for gestational age (LGA). Elgin St. Thomas had lower rates of SGA and LGA babies compared to Ontario over time

### **Folic Acid Consumption**

Approximately 60% of respondents for Elgin St. Thomas who gave birth in the past 5 years reported taking folic acid supplements before their last pregnancy

### **Breastfeeding**

➤ Between 80% and 90% of respondents in Elgin St. Thomas reported breastfeeding or trying to breastfeed after their most recent pregnancy

### **Prenatal Classes**

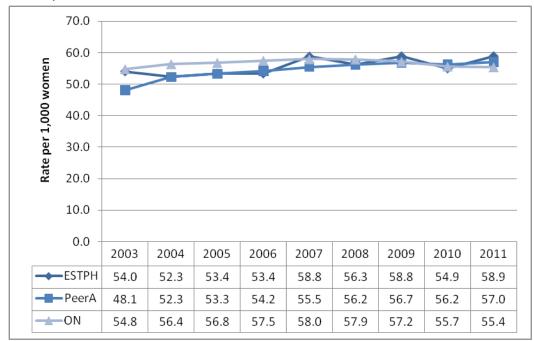
- > The number of attendees for prenatal classes decreased over time; however the number of hospital births remained the same during this time period
- > 45% of prenatal class attendees in Elgin St. Thomas took their classes at the Health Unit
- The majority of prenatal class attendees were between the ages of 20 and 34 years old. Fewer than 5% were under the age of 20

# **Pregnancies and Births**

## **Crude Pregnancy Rate**

The crude pregnancy rate refers to the number of pregnancies per 1,000 women of reproductive age (15- 49 years). The pregnancy rate includes the number live births, stillbirths (or deliveries), and therapeutic abortions.

Figure 6.1 -Crude Pregnancy Rate (per 1,000 women aged 15-49), Elgin St. Thomas, Peer Group A and Ontario, 2001-2011



Source: Inpatient Discharges 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

### **Key Findings:**

Pregnancy rates among women between 15 and 49 years old remained stable over time in Elgin
 St. Thomas, Ontario and the peer health units.

# **Number of Live Births**

Table 6.1 – Number of Live Births, Elgin St. Thomas, Peer Group A and Ontario, 2001-2011

		Peer	
Year	ESTPH	Group A	Ontario
2001	942	32,874	131,360
2002	895	31,735	128,208
2003	973	32,218	130,622
2004	927	32,268	132,221
2005	969	32,338	133,494
2006	1,019	32,440	135,309
2007	1,132	32,966	138,202
2008	1,050	33,898	140,501
2009	1,075	33,370	140,074
2010	1,050	33,126	139,263
2011	1,072	33,259	139,913

Source: Ontario Vital Statistics Live Birth Data 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

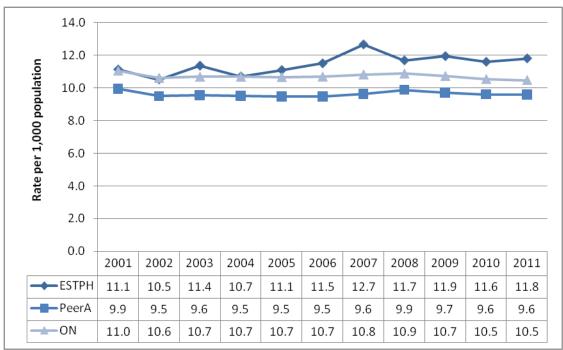
### **Key Findings:**

• There were just over 1,000 births to residents of Elgin St. Thomas each year.

### **Crude Birth Rate**

The crude birth rate refers to the total number of live births per 1,000 people in the total population. This rate is strongly affected by the age structure of the population and it will be higher or lower depending on the number of women of childbearing age.

Figure 6.2 -Crude Birth Rate (per 1,000 population), Elgin St. Thomas, Peer Group A and Ontario, 2001-2011



Source: Ontario Vital Statistics Live Birth Data 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

### **Key Findings:**

• There were no significant differences in the crude birth rate between Elgin St. Thomas, Ontario or the peer health units over time.

# **Age-Specific Fertility**

The age-specific fertility rate refers to the number of live births per 1,000 women in a specific age group.

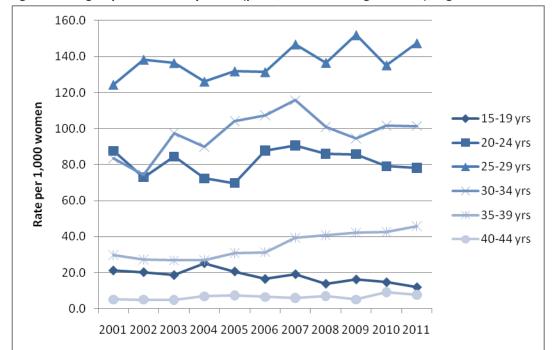


Figure 6.3 -Age-Specific Fertility Rates (per 1,000 women aged 15-49), Elgin St. Thomas, 2001-2011

Source: Ontario Vital Statistics Live Birth Data 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

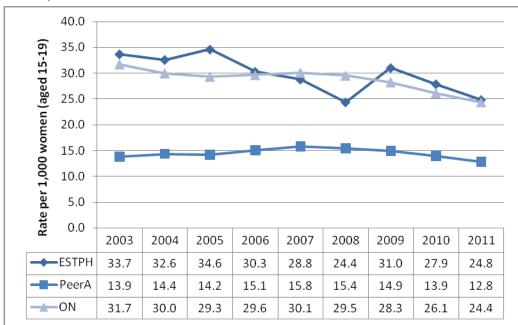
- In Elgin St. Thomas, the birth rate was highest among women aged 25 to 29, followed by women 30 to 34 years old.
- Birth rates were lowest among women in the oldest age category (40 to 44 years) and in the youngest age category (15 to 19 years).
- From 2004 to 2011, there was a consistent increase in fertility rates among women 35 to 39 years old.

# **Teen Pregnancies and Births**

## **Pregnancy Rate**

The teen pregnancy rate refers to the number of pregnancies per 1,000 women 15-19 years old. The pregnancy rate includes the number live births, stillbirths, and therapeutic abortions.

Figure 6.4 -Teen Pregnancy Rates (per 1,000 women aged 15-19), Elgin St. Thomas, Peer Group A and Ontario, 2003-2011



Source: Inpatient Discharges 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014 and Hospital and Medical Services Data 2003-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

- The rates of teen pregnancy in Elgin St. Thomas and Ontario were similar and decreased over time between 2003 and 2011.
- The rate of teen pregnancy in the peer health units was significantly lower than Elgin St. Thomas and Ontario and did not show much change over time.

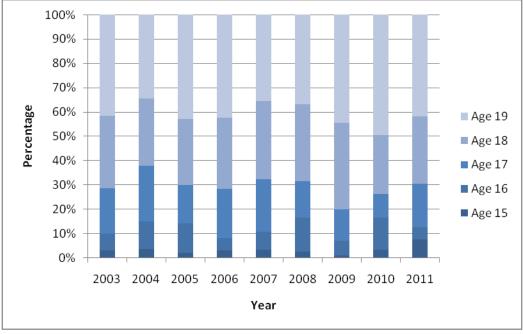


Figure 6.5 -Age-Specific Teen Pregnancy Rates (aged 15-19), Elgin St. Thomas, 2003-2011.

Source: Inpatient Discharges 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014 and Hospital and Medical Services Data 2003-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

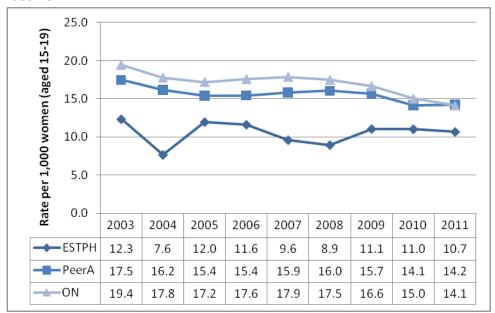
### **Key Findings:**

• The largest proportion of teen pregnancies were among the oldest teens. In 2011, over 40% of teen pregnancies in Elgin St. Thomas were among 19 year old women compared to 10% among 15, 16 and 17 year olds.

## **Therapeutic Abortions**

Therapeutic abortion is the deliberate termination of a pregnancy resulting in the death of the fetus or embryo. It can also be called an induced abortion.

Figure 6.6 -Teen Therapeutic Abortion Rates (aged 15-19), Elgin St. Thomas, Peer Group A and Ontario, 2003-2011



Source Hospital and Medical Services Data 2003-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

- The rate of therapeutic abortions among teens in Elgin St. Thomas was significantly lower than for Ontario or the peer health units.
- Teen therapeutic abortion rates decreased slightly over time in Ontario and the peer health units, but there were no consistent changes for Elgin St. Thomas.

### **Birth Rate**

The teen birth rate refers to the number of live births for women aged 15 to 19 years old.

30.0 Rate per 1,000 women (aged 15-19) 25.0 20.0 15.0 10.0 5.0 0.0 2003 2004 2005 2006 2007 2008 2009 2010 2011 **←**ESTPH 21.3 24.9 22.6 18.7 19.2 15.4 20.0 16.8 14.1 PeerA 13.9 14.4 14.2 15.1 15.8 15.4 14.9 13.9 12.8 → ON 12.3 12.2 12.1 12.1 12.2 12.1 11.6 11.1 10.2

Figure 6.7 -Teen Live Birth Rate (aged 15-19), Elgin St. Thomas, Peer Group A and Ontario, 2003-2011

Source: Inpatient Discharges 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

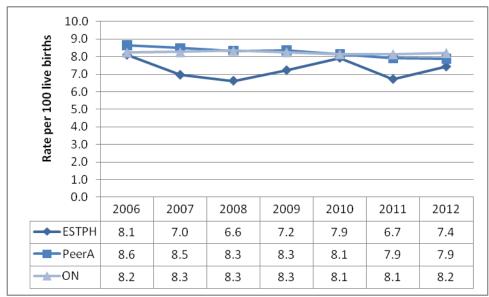
### **Key Findings:**

• The rate of births to teen moms in Elgin St. Thomas decreased between 2003 and 2011. The birth rate in Elgin St. Thomas before 2011 was significantly higher than Ontario or the peer health units; by 2011, it was no longer different.

## **Preterm Births**

Full term pregnancies last an average of 40 weeks, but they can range from 37 to 42 weeks. A baby born at less than 37 weeks gestation is considered preterm or premature. Prematurity may lead to complications at birth and an increased risk of mortality.

Figure 6.8 -Rate of Preterm Births (<37 weeks gestation), Elgin St. Thomas, Peer Group A and Ontario, 2006-2012



Source: Inpatient Discharges 2006-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

### **Key Findings:**

• Approximately 7% of all births in Elgin St. Thomas were preterm; this was similar to Ontario and the peer health units over time.

# **Multiple Births**

A multiple birth is when a pregnancy results in the development of two or more fetuses such as twins, triplets, quadruplets, quintuplets and other higher-order births. Pregnancy with multiples can lead to more complications for the mother and the babies during pregnancy and delivery.

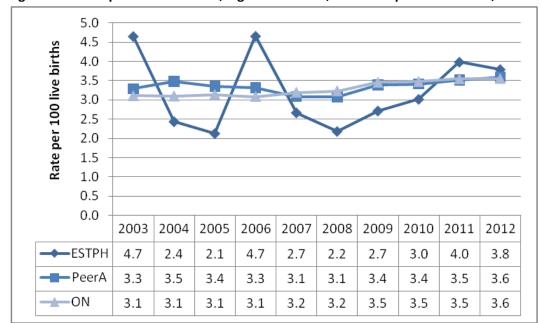


Figure 6.9 - Multiple Live Birth Rate, Elgin St. Thomas, Peer Group A and Ontario, 2003-2012

Source: Inpatient Discharges 2003-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

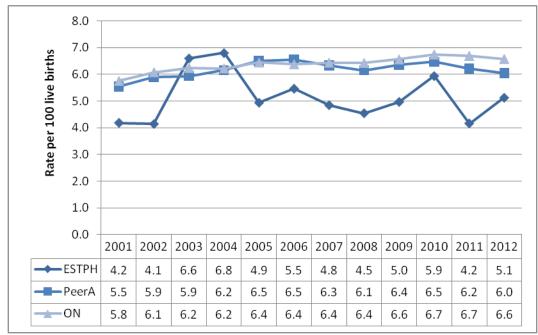
- In Elgin St. Thomas, between 2% and 5% of live births were multiple births.
- Ontario and the peer health units had similar trends with respect to multiple birth rates over time.
- In Elgin St. Thomas, the fluctuations in rates were likely due to small sample sizes.

# **Birth Weights**

### **Low Birth Weight**

A baby is considered to have a low birth weight if he or she was born weighing less than 2,500 grams or 5 pounds 8 ounces.

Figure 6.10 -Rate of Low Birth Weight (<2,500 grams), Elgin St. Thomas, Peer Group A and Ontario, 2001 -2012.



Source: Inpatient Discharges 2001-2012, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

- About 5% of all births in Elgin St. Thomas had a low birth weight.
- Low birth weight rates were similar over time for Elgin St. Thomas, Ontario, and the peer health units. For all three groups, the low birth weight rate increased slightly over time.
- In Elgin St. Thomas, fluctuations in low birth weight rates were likely due to small sample sizes.

# **High Birth Weight**

A baby is considered to have a low birth weight if he or she was born weighing 4500 grams or more or 9 pounds, 15 ounces or more.

5.0 4.5 4.0 Rate per 100 live births 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 2002 2003 2004 2005 2006 2007 2009 2010 2011 2012 2001 2008 -ESTPH 4.7 2.8 2.0 2.5 2.6 2.2 2.1 3.5 2.7 1.8 2.2 1.4 --- PeerA 2.6 2.5 2.3 2.3 2.2 1.9 1.9 2.1 1.8 1.8 1.8 1.8 → ON 2.4 2.2 2.2 2.0 1.8 1.8 1.7 1.8 1.7 1.6 1.6 1.6

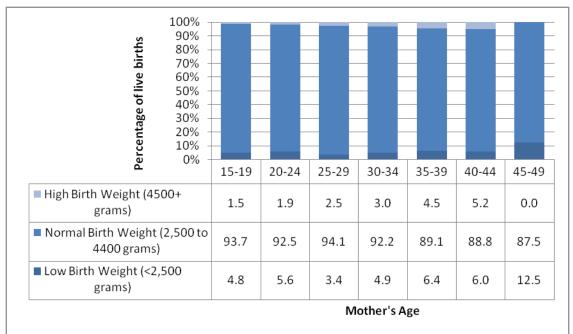
Figure 6.11 - Rate of High Birth Weight (4500+ grams), Elgin St. Thomas, Peer Group A and Ontario, 2001 -2012.

Source: Inpatient Discharges 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

- About 3% of all births in Elgin St. Thomas had a high birth weight.
- For all three groups, the proportion of high birth weights decreased over time.
- In Elgin St. Thomas, fluctuations in the high birth weight are likely due to smaller sample sizes.

# Birth Weight by Mother's Age

Figure 6.12 – Proportion of Live Births by Birth Weight and Mother's Age, Elgin St. Thomas only, 2001-2011 Combined



Source: Ontario Vital Statistics Live Birth Data 2001-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

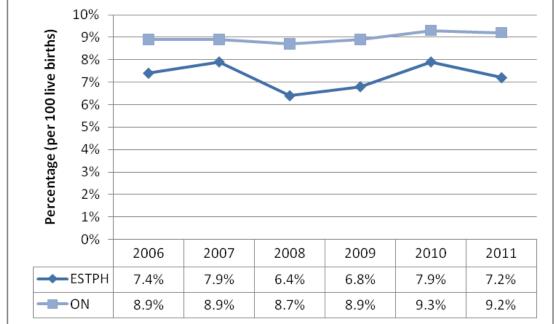
- Historically, teen pregnancy has been linked to low birth weight; however this trend was not seen over time in Elgin St. Thomas.
- Mothers in the oldest age categories (aged 35+) had the highest proportion of babies with low birth weight. Mothers aged 35 to 39 and 40 to 44 also had the highest proportion of babies with a high birth weight.

## Small for Gestational Age (SGA)

Measures of birth weight do not take into account the baby's gestational age or level of development. A baby who is born at full term has a better chance of being in the normal weight range than a baby who is born premature. Measures of birth weight that account for gestational age are more sensitive indicators.

The small-for-gestational-age rate (SGA) is number of singleton live births with a sex-specific birth weight below the 10<sup>th</sup> percentile for gestational age. This calculation excludes live births with unknown gestational age, live births with a gestational age of less than 22 weeks or greater than 43 weeks, live births with unknown birth weight and multiple births.

Figure 6.13 -Proportion of Small for Gestational Age (SGA) Births, Elgin St. Thomas and Ontario, 2006-2011



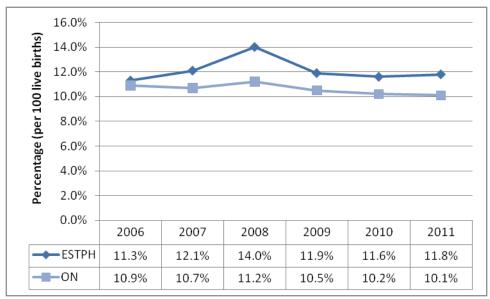
Source: Inpatient Discharges 2006-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

- Elgin St. Thomas had a consistently lower proportion of babies who were small for gestational age over time.
- About 7% of births in Elgin St. Thomas were small for gestational age. This is slightly higher than the 5% who had a low birth weight (See Figure 6.10).

## Large for Gestational Age (LGA)

The large-for-gestational-age rate (LGA) is the number of singleton live births with a sex-specific birth weight above the 90<sup>th</sup> percentile for gestational age. This calculation excludes live births with unknown gestational age, live births with a gestational age of less than 22 weeks or greater than 43 weeks, live births with unknown birth weight and multiple births.

Figure 6.14 – Proportion of Large for Gestational Age (LGA) Births, Elgin St. Thomas and Ontario, 2006-2011.



Source: Inpatient Discharges 2006-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: August 15, 2014

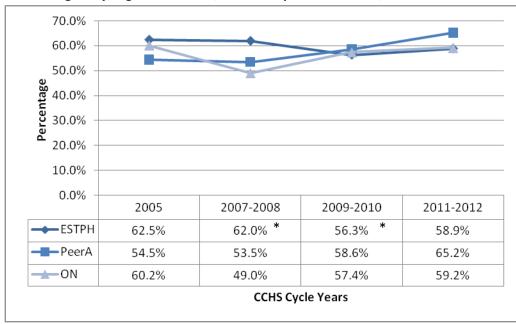
### **Key Findings:**

• In Elgin St. Thomas, between 11% and 14% of births were large for gestational age compared to the 3% of births with a high birth weight (see Figure 6.11).

# **Folic Acid Supplementation**

Women between 15 and 55 years of age participating in the Canadian Community Health Survey (CCHS) who reported giving birth in the past 5 years were asked whether they had taken a vitamin supplement containing folic acid before their last pregnancy.

Figure 6.15 -Proportion of Women (aged 15-55) who took Folic Acid Supplements Before their most recent Pregnancy, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012



Source: Canadian Community Health Survey (CCHS) Cycles 2005, 2007-2008, 2009-2010, 2011-2012 <a href="Note">Note</a>: \* Estimate should be interpreted with caution due to high variability

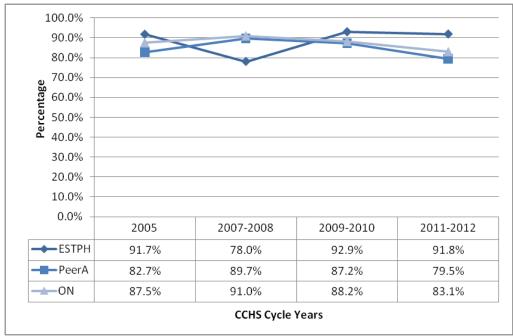
### **Key Findings:**

 Approximately 60% of women in Elgin St. Thomas reported taking a folic acid supplement before their most recent pregnancy. There were no significant differences between groups or over time.

# **Breastfeeding Initiation**

Women between 15 and 55 years of age participating in the Canadian Community Health Survey (CCHS) who reported giving birth in the past 5 years were asked whether they had breastfed or tried to breastfeed their most recent child, even if only for a short time.

Figure 6.16 -Proportion of Women (aged 15-55) who Breastfed or Tried to Breastfeed their most recent Child, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012



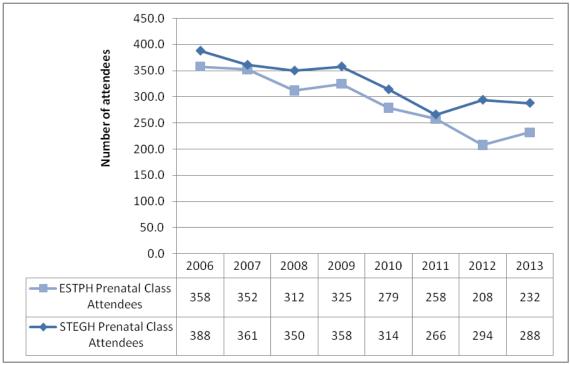
Source: Canadian Community Health Survey (CCHS) Cycles 2005, 2007-2008, 2009-2010, 2011-2012

- The vast majority of women in Elgin St. Thomas reported breastfeeding or attempting to breastfeed their most recent child.
- Self-reported rates for breastfeeding or attempting to breastfeed most recent child were based on extremely small numbers for Elgin St. Thomas.

### **Prenatal Class Attendance**

Elgin St. Thomas Public Health's prenatal classes are designed to provide information about pregnancy and parenting to new parents. The program is taught over 4 weeks plus a hospital class at the St. Thomas Elgin General Hospital. The classes offer new parents an opportunity to learn about a variety of topics including: having a healthy baby, breastfeeding, parenting and baby care and preparation for labour and delivery.

Figure 6.17 –Number of Prenatal Class Attendees at Elgin St. Thomas Public Health and in Elgin County, 2006-2013

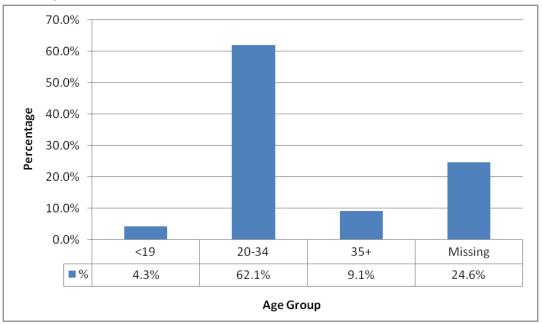


Source: Internal Elgin St. Thomas Public Health Prenatal Class Database, 2006-2013

STEGH: St. Thomas Elgin General Hospital

- About 45% of all prenatal class attendees took prenatal classes at Elgin St. Thomas Public Health.
- The total number of prenatal class attendees in Elgin St. Thomas decreased over time, yet the number of hospital births has been flat during the same time period (data not shown).

Figure 6.18 - Proportion of Elgin St. Thomas Public Health Prenatal Class Attendees, by Age Group, 2013 only



Source: Internal Elgin St. Thomas Public Health Prenatal Class Database, 2006-2013

### **Key Findings:**

- About 5% of live births in Elgin St. Thomas were to mothers under 20 years of age; a similar proportion of prenatal class attendees were in this age group.
- About 13% of live births in Elgin St. Thomas were to mothers over the age of 35; a small proportion of these mothers made up the prenatal class attendees.

### **Data interpretation note:**

• The age data should be interpreted with caution. A large proportion of the age data was missing for prenatal attendees in 2013, which could have an impact on the true proportion of attendees by age.

# **Births in High Risk Families**

Healthy Babies Healthy Children (HBHC) is a program funded by the Ministry of Children and Youth Services (MCYS). Clients enter the HBHC program through a screening process at the prenatal, postpartum or early childhood stage. HBHC is a voluntary prevention and early intervention home visiting program for families and children from the prenatal period until their transition to school.

Prior to 2013, there were two screening tools used to identify families with possible risk, one for prenatal (Larson) and one for postpartum (Parkyn). In 2012-2013, MCYS introduced enhancements to strengthen the HBHC program, including a single HBHC screening tool to use with families in the prenatal, postpartum and early childhood periods. ESTPH implemented the new HBHC screen on February 25, 2013. The new HBHC screen consists of 36 questions clustered in categories of Pregnancy and Birth, Family, Parenting, Infant/Child Development, and Health Care Professional Observations. Following the completion of the screen, further assessment may be needed to determine if there is need for more services and support for the family.

Table 6.2 – Prenatal Screening for Risk, Live Births with Consent for Public Health Contact and Live Births Screened with Risk, Elgin St. Thomas Public Health, 2006-2013

Year	# of women screened prenatally for risk	% of women screened who were found to be at risk	% of all live births who consented to PHU contact	% of live births screened with risk
2006	133	61.0%	98.6%	24.0%
2007	235	47.0%	95.1%	24.0%
2008	249	45.0%	88.4%	23.0%
2009	243	40.0%	95.0%	25.0%
2010	257	41.0%	87.7%	29.0%
2011	229	35.0%	79.9%	25.0%
2012	222	36.0%	77.2%	23.0%
2013	257	43.0%	78.5%	59.0%

Source: Integrated Services for Children Information System (ISCIS), Elgin St. Thomas Public Health, 2006-2012

- As of February 25, 2013, a new screening tool was introduced to the HBHC program. Since the introduction of the new tool there has been a large increase in the number of families classified as "identified with risk".
- The proportion of all live births where Elgin St. Thomas Public Health has consent to contact the family has decreased over time.
- The number of women screened prenatally for risk has increased over time and, at the same time, the proportion of women found to be at risk prenatally has decreased. This indicates a change in the pattern of screening, from screening mainly those women suspected of risk to a more general screening of all women.

# **Chapter 7: Oral Health**

## Summary

### **Oral Health Screening**

- During the 2013-2014 school year, a total of 2,876 students from all grades in Elgin St. Thomas received an oral health screening
- ➤ In Elgin St. Thomas, 23% of schools in 2013-2014 were classified as high risk based on dental decay among students in grade 2 which is much lower than the 63% of schools classified as high risk in 2010-2011
- > 80% of all students in grade 2 in Elgin St. Thomas received a dental screening in 2013-2014. 13.5% did not provide consent to participate
- > 11% of all grade 2 students screened in Elgin St. Thomas in 2013-2014 had urgent dental care needs
- Urgent dental care needs increased over time in Central Elgin as well as the West of the county and decreased in the East

### Children in Need of Treatment (CINOT) and Healthy Smiles Ontario (HSO) Programs

- Use of the CINOT program has decreased over time along with fees associated with supporting the program
- Enrolment in the HSO program has increased over time, use of the program has decreased, however fees associated have increased

### **Oral Health**

Oral health is an important part of overall health. Cavities and gum disease are largely preventable and can be treated effectively. When children suffer from poor oral health, it can have impacts beyond even the medical problems. Dental disease can affect a child's ability to learn and concentrate at school; it can interfere with eating nutritious foods and can have an impact on speech development, as well as cause terrible pain and infection.

# **Oral Health Screening**

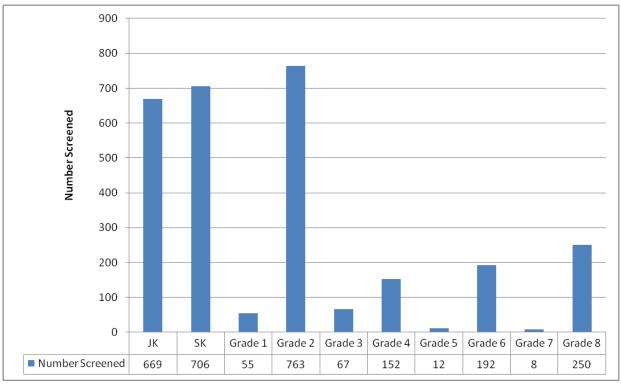
## **Oral Health Screening**

The Ontario Public Health Standards (OPHS) require that the Board of Health conducts oral health screening of children in schools, refer individuals who may be at risk of poor oral health outcomes to dental care, and report oral health data in accordance with the Oral Health Assessment and Surveillance Protocol (Ministry of Health and Long-term Care, 2009). The school screening program is also an opportunity for public health units to communicate positive oral health messaging and to provide information about non-mandated or local health programs that might be of interest to families with children. Parents who prefer that their children be excluded from dental screening are given the opportunity to withdraw their consent prior to the actual day of screening and these children are not seen.

Oral health screening in schools in mandated for all students in junior kindergarten, senior kindergarten, and grade 2. The screening intensity of each school is decided based the current year's assessment results of grade 2 students.

- Low intensity screening: -for schools where the prevalence of grade 2 students with at least 2 teeth affect by decay is less than 9.5% there are no additional screening requirements.
- Medium intensity screening: -In schools where the prevalence of grade 2 students with at least 2 teeth affected by decay is between 9.5% and 14%, grade 8 students must also be screened.
- **High intensity screening:** -In schools where the prevalence of grade 2 students with at least 2 teeth affected by decay is greater than 14%, students in all of the even grades are also screened.

Figure 7.1 – Students by Grade who received Oral Health Screening, Elgin St. Thomas, 2013-2014 School Year



Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

- During the 2013-2014 school year the ESTPH Oral Health team screened a total of 2,876 children from Junior Kindergarten to Grade 8.
- The majority of children (74%) were in junior kindergarten, senior kindergarten and grade 2 as the Board of Health aims to screen all children in these three grades.
- Students from the other grades were screened in schools that were classified as having a medium or high intensity rating after students in grade 2 were screened.

25 20 **Number of Schools** 15 10 5 0 2010-2011 2011-2012 2012-2013 2013-2014 ■ High Risk 22 4 7 15 ■ Moderate Risk 6 4 6 1 Low Risk 7 17 16 22 School Year

Figure 7.2 –Number of Schools in Elgin St. Thomas, by Level of Oral Health Screening Intensity, 2010-2014

Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

### **Key Findings:**

 The proportion of schools requiring high screening intensity decreased over the last four years from 63% in 2010-2011 down to 23% of schools in 2013-2014. This decrease indicates that the proportion of students in Grade 2 with two or more decayed teeth at the time of screening has declined over time. Excluded/Refused

Screened

Absent on screening day

2014

100%
90%
80%
70%
40%
40%

2012-2013

12.1%

6.2%

81.7%

Figure 7.3 –Participation in Oral Health School Screening, Grade 2 students in Elgin St. Thomas, 2012-2014

Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

30% 20% 10% 0%

### **Key Findings:**

- In the 2013-2014 school year, 80% or 763 of the 954 children in grade 2 in Elgin St. Thomas participated in oral health screening.
- Of the 20% of students who were not screened, 129 (13.5%) did not participate in the program due to personal or parental consent issues and 62 (6.5%) were absent on the day of screening.

**School Year** 

2013-2014

13.5%

6.5%

80.0%

- The total rate of participation in the screening program declined slightly in 2013-2014 from the previous school year.
- The Oral Health Surveillance and Assessment Protocol's screening intensity formula uses screening results from children in grade 2 to determine which other grades should also be screened; therefore it is imperative that as many children in grade 2 are screened as possible. The Oral Health team will continue to monitor participation in the screening program and investigate strategies to improve participation and parental consent rate for students from eligible grades and for children in grade 2 in particular.

### **School Oral Health Screening Results**

School screening identifies children at risk of poor oral health outcomes who require a referral to a dental professional or who meet the eligibility criteria for provincially mandated publicly funded dental programs and services. Parents are notified when their children are found to have urgent care conditions (UC), non-urgent conditions (NU), or if they meet the clinical eligibility criteria for mandated preventive services (PSO). Examining the number of children classified as UC, NU, PSO, or where no care is required (NCR), gives insight into possible unmet dental needs in the community, both urgent and non-urgent treatment needs, and preventive needs.

- **Urgent care conditions (UC):** A child with urgent care conditions meets the clinical eligibility requirement of the Children in Need of Treatment program (CINOT) and is assumed to have both urgent and non-urgent dental problems.
- **Non-urgent conditions (NU):** -A child with non-urgent conditions has dental problems, but of a less urgent nature, and does not qualify for CINOT.
- Mandated preventive services (PSO): -A child eligible for mandated preventive services has
  neither urgent nor non-urgent dental conditions, but still meets the clinical eligibility criteria to
  receive preventive services.
- No care required (NCR): -A child with no care required at the time of screening.

70.0% 60.0% 50.0% Percentage 40.0% 30.0% 20.0% 10.0% 0.0% No care Non-urgent Preventive Urgent care required care required services only required (UC) (NCR) (NU) (PSO) 2013-2014 24.0% 10.5% 4.2% 62.4%

Figure 7.4 –Results of Oral Health Screening among Grade 2 Students, Elgin St. Thomas, 2013-2014 school year

Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

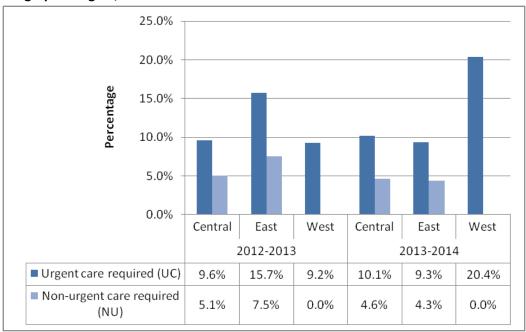
- Just over 10 % of children screened were found to require urgent dental care and another 4% also required non-urgent care.
- Less than a quarter of the children screened required no dental services following screening.

### By Geographic Region

The geographic regions are based on the location of the school where the dental screenings took place.

- East –schools in Bayham, Aylmer and Malahide
- West –schools in Dutton-Dunwich and West Elgin
- Central –schools in Southwold, Central Elgin and St. Thomas

Figure 7.5 – Children in Grade 2 in Elgin St. Thomas with Urgent and Non-Urgent Dental needs, By Geographic Region, 2012-2014



Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

- The largest increase in the proportion of children screened in grade 2 who were found to require urgent dental care was in the West where the proportion increased from 9.2% up to 20.4% over the last two school years. In contrast, the proportion of children in grade2 requiring urgent care in the East decreased over the same time period.
- The proportion of children screened in grade 2 who required non-urgent dental care also decreased over time for the Central and East regions.

80.0% 70.0% Percentage 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% Central East West Central East West 2012-2013 2013-2014 ■ No care required (NCR) 40.0% 22.2% 70.4% 22.9% 28.1% 19.3% Prev services only (PSO) 58% 46% 50% 28% 63% 69%

Figure 7.6 - Children in Grade 2 with No Dental needs (NCR) or Requiring only Preventive Services (PSO), By Geographic Region, Elgin St. Thomas, 2012-2014

Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

### **Key Findings:**

• The proportion of children screened in grade 2 who did not require any further dental care decreased over time for all regions.

### **Dental Caries and Decay**

The most common form of dental disease affecting children is dental caries. Dental caries is a progressive bacterial infection that causes the outer surfaces of teeth to weaken. In its early stages, caries is reversible using non-invasive techniques. In its advanced stages, dental caries creates an open hole and can infiltrate the blood supply inside a tooth. The cavity and pain can be fixed by receiving a professional filling of affected teeth or, in the worst cases, by extraction. Fillings and extractions are irreversible markers of dental caries infection which are used during screening to identify prevalence of advanced disease. As such it is important to keep in mind this may be an underestimation of disease.

The prevalence of tooth decay or dental caries is defined as the percentage of students with dental caries experienced in the form of decayed (dt+DT), missing due to caries (mt+MT), and/or filled (ft+FT) teeth.

60.0%
50.0%
20.0%
10.0%
2012-2013
2013-2014

Has had caries
48.8%
52.4%

Figure 7.7 – Proportion of Students in Grade 2 in Elgin St. Thomas who have ever had dental caries (DEMT>0)

Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

### **Key Findings:**

• The proportion of children screened in grade 2 in Elgin St. Thomas who have ever had dental caries increased by about 4% over time.

### **CINOT and HSO**

The Children in Need of Treatment (CINOT) program is a publicly funded dental safety net program that ensures that children and youth with urgent treatment needs and no other access to dental care can receive treatment at no cost. Enrolment in the program is dependent on clinical conditions.

The Healthy Smiles Ontario (HSO) program is a publicly funded dental program for children and youth from low-income households who have met certain financial eligibility criteria. Enrolment is not dependent on clinical conditions and is renewable each year.

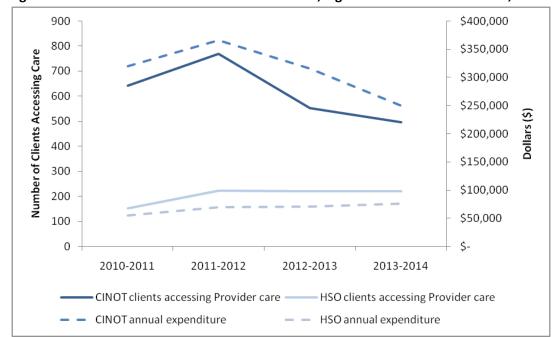


Figure 7.8 -Number of CINOT and HSO Client Visits, Elgin St. Thomas Public Health, 2010-2014

Source: Elgin St. Thomas Public Health, Oral Health Database, 2013-2014

- Since the 2011-2012 school year, the number of clients using the Children in Need of Treatment (CINOT) program to access dental care through private practice providers has declined. The fee for service expenses associated with these visits has also declined.
- The number clients accessing care through the Healthy Smiles Ontario (HSO) program has
  remained stable over time, despite annual increases in the number of children enrolled in the
  HSO program and the growing fee for service costs. In other words, even though more families
  are enrolled in the program, there has not been an increase in the number of care visits. Yet
  those who are using the program have more expensive care needs.
- A key difference between the two programs, which may account for these differences, is that
  Health Unit staff are required to ensure that CINOT clients access care until all treatment needs
  are met while the same obligations to ensure follow-up do not exist with HSO clients except
  where a client has been screened as having urgent dental needs.

# **Chapter 8: Communicable Diseases**

# Summary

### Most Common Reportable Diseases

Chlamydia was the most commonly reported communicable disease in Elgin St. Thomas, Hepatitis C was the second most common and Influenza was the third

### Food and Waterborne Diseases

- ➤ The most common food and waterborne diseases in Elgin St. Thomas were Campylobacteriosis, Salmonellosis and Cryptosporidiosis
- ➤ There were, on average, 18 cases of Campylobacteriosis each year and rates were lower in Elgin St. Thomas than Ontario
- > Salmonellosis rates were lower in Elgin St. Thomas than Ontario and an average of 12 cases per year. Rates were highest among 0-4 year olds
- Cryptosporidiosis rates were lower in Elgin St. Thomas than Ontario and there were on average
   7 cases per year. Rates were highest among 0-4 year olds

### Tuberculosis (TB)

There were only 4 confirmed cases of Tuberculosis reported in Elgin St. Thomas between 2005 and 2011. Rates were approximately 4 times lower in Elgin St. Thomas than Ontario

### **Institutional Outbreaks**

- ➤ Just over 60% of confirmed institutional outbreaks in Elgin St. Thomas were due to respiratory disease while the other 40% were due to enteric illness
- Confirmed outbreaks decreased over time in Elgin St. Thomas between 2010 and 2013

### **Healthcare Worker Vaccination**

➤ The proportion of healthcare workers in hospitals and long term care homes in Elgin St. Thomas who received the seasonal influenza vaccine increased each year from 2010-2011 to 2013-2014

### **Communicable Diseases**

Infectious diseases are caused by microorganisms, such as bacteria, viruses and parasites, which may cause serious illness or be transmitted to large numbers of individuals. As per Ontario's Health Protection and Promotion Act (HPPA), a number of diseases are required to be reported to the local Medical Officer of Health (refer to Appendix A: Full List of Reportable Diseases for details).

Health care providers must report any person who is infected with a reportable disease to public health. The health unit is responsible for tracking these individuals and, consequently, can tabulate the most commonly occurring infections and the profile of people who are infected by them.

Despite these requirements to report, often people do not seek medical care when they are ill or treatment may be provided without first doing lab tests to confirm the disease. For these reasons, diseases may be under reported in the population. The data presented in this section are only lab confirmed cases which for some diseases may be just a small portion of a bigger picture.

# **Most Common Reportable Diseases**

Chlamydia
Hepatitis C
Influenza
Campylobacter Enteritis
Pertussis (Whooping Cough)
Salmonellosis
Gonorrhoea (All Types)
Streptococcus Pneumoniae, Invasive
Cryptosporidiosis
Giardiasis

0 100 200 300 400 500 600 700 800 900

Number of Confirmed Cases

Figure 8.1 –Top 10 Most Common Reportable Diseases, by Gender, Elgin St. Thomas, 2005-2013 combined

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

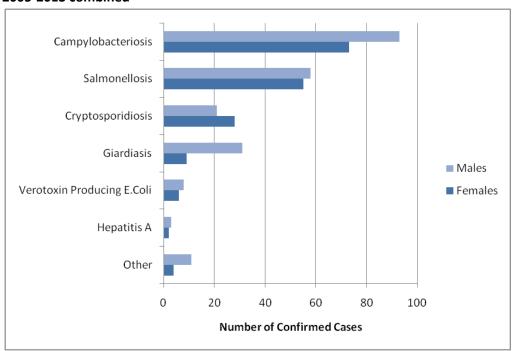
- Chlamydia was the most common reportable disease in Elgin St. Thomas. A greater proportion of reported Chlamydia infections were among females than males. For more details, see the section on Chlamydia (pages 291-292).
- The second most frequent reportable disease was Hepatitis C. There were just slightly more
  cases reported among males than females. For more details, see the section on Hepatitis C
  (pages 295-296).

# **Reportable Food and Waterborne Diseases**

Food and waterborne diseases are a category of communicable disease spread by food and water. Illness is caused by bacteria, parasites, and viruses that have found their way into the water supply or into a food source through an infected animal or another infected person. These diseases are often referred to as "enteric diseases" meaning they are located in the intestine and symptoms are usually related to the digestive tract.

### **Most Common Reportable Food and Waterborne Diseases**

Figure 8.2 – Most Common Reportable Food and Waterborne Diseases, by Gender, Elgin St. Thomas, 2005-2013 combined



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

<u>Data Note</u>: Other includes Brucellosis, Amebiasis, Listeriosis, Cyclosporiasis, Shigellosis, Q fever and Yersiniosis

### **Key Findings:**

• Campylobacteriosis was the most commonly reported enteric disease in Elgin-St. Thomas between 2005 and 2013, followed by Salmonellosis and Cryptosporidiosis.

### Campylobacteriosis

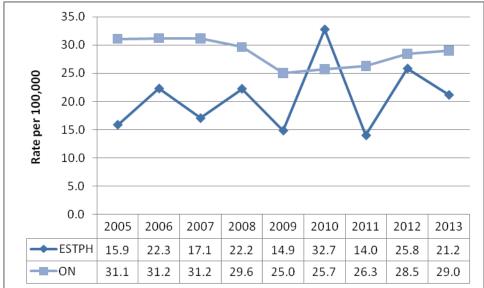
Campylobacteriosis is a disease caused by the Campylobacter bacteria. It is one of most common causes of diarrhea-related illness both in Canada and around the world.

Infections are typically caused by consuming undercooked poultry or raw unpasteurized milk. People can become infected through cross-contamination; for example by cutting raw chicken on a cutting board and then using the knife to cut raw vegetables without thoroughly washing it in between.

Common symptoms include mild to severe diarrhea, stomach pain, cramps, nausea, vomiting, fever, headache, and muscle pain. Some people infected with Campylobacter may not have any symptoms but can still pass the infection on to others.

Figure 8.3 –Age-Standardized Rates of Confirmed Cases of Campylobacteriosis, Elgin St. Thomas and Ontario, 2005-2013

35.0



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- Elgin St. Thomas had lower rates of confirmed cases of Campylobacteriosis than Ontario over time. The exception was in 2010, when the rate in Elgin St. Thomas exceeded the rate in Ontario.
- On average, there were 18 cases of Campylobacteriosis in Elgin St. Thomas each year.
- The apparent fluctuation in rates in Elgin St. Thomas over time is likely due to Elgin St. Thomas having a smaller number of cases which make the rates unstable.

### **Salmonellosis**

Salmonellosis is caused by the Salmonella bacteria. This bacteria is spread through food or water that is contaminated by the feces of an infected animal or person. It can also be spread from person-to-person; for example if someone does not adequately wash their hands after using the toilet, they can spread the bacteria to others. Owning a bird or reptile can also put a person at risk for Salmonellosis since these animals can be carriers of the bacteria without having any symptoms.

30.0 25.0 Rate per 100,000 20.0 15.0 10.0 5.0 0.0 2005 2006 2007 2008 2009 2010 2011 2012 2013 -ESTPH 17.0 12.2 13.3 15.4 12.1 10.8 11.1 21.3 10.3 ON 24.8 19.5 23.4 19.7 18.6 21.7 20.0 23.4 19.4

Figure 8.4 – Age-Standardized Rates of Confirmed Cases of Salmonellosis, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- The rates of confirmed cases of Salmonellosis were higher in Ontario than Elgin St. Thomas over time.
- Rates for both groups remained relatively stable over time. In 2012, Elgin St. Thomas saw a peak in rates.
- On average, there were 12 confirmed cases of Salmonellosis per year in Elgin St. Thomas.
- Age-specific rates of confirmed cases of Salmonellosis were highest among those in the
  youngest age group, 0 to 4 year olds. The average rate for this group was 37.7 per 100,000
  (2005-2013 combined). This was nearly double the rates for every other age group (data not
  shown).

# **Cryptosporidiosis**

Cryptosporidiosis is an illness caused by the parasite Cryptosporidium. This illness is spread through person-to-person contact; for example if someone does not inadequately wash their hands after using the toilet, they can spread it to others. Cryptosporidiosis can also be transmitted through the water; for example by drinking contaminated water or by swallowing untreated recreational water such as water from lakes or rivers. Pets and farm animals can be a source of infection since Cryptosporidiosis can also infect animals.

16.0 14.0 12.0 Rate per 100,000 10.0 8.0 6.0 4.0 2.0 0.0 2005 2009 2010 2013 2006 2007 2008 2011 2012 -ESTPH 2.6 9.7 9.4 12.2 10.8 8.7 6.4 14.1 5.6 -ON 2.4 3.7 3.7 3.8 2.8 3.0 2.7 2.52 2.63

Figure 8.5 – Crude Rates of Confirmed Cases of Cryptosporidiosis, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- The rate of confirmed cases of Cryptosporidiosis in Elgin St. Thomas fluctuated over time. This is due primarily to small numbers. Rates in Ontario did not change significantly over the same time period.
- There were, on average, 7 confirmed cases per year in Elgin St. Thomas.
- The highest age-specific rates were among children between 0 and 4 years old (data not shown).

### **Giardiasis**

Giardiasis is a diarrheal infection caused by a parasite called Giardia lamblia. It is one of the most common waterborne illnesses in North America. Giardiasis can be spread by consuming contaminated food or water; for example swallowing lake or river water, especially water inhabited by beavers. The infection is also spread through direct contact with feces; for example changing diapers in a child care setting or having unprotected sexual contact.

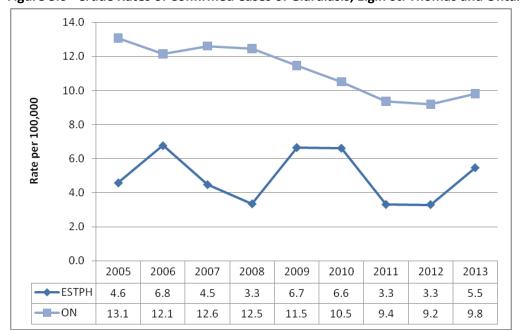


Figure 8.6 - Crude Rates of Confirmed Cases of Giardiasis, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

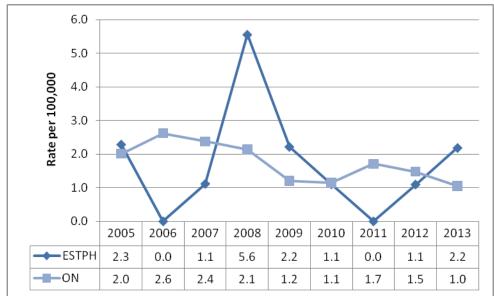
- Rates of confirmed cases of Giardiasis were much lower in Elgin St. Thomas compared to Ontario over time.
- On average, there were 4 confirmed cases of Giardiasis in Elgin St. Thomas each year.
- Rates in Ontario decreased over time; however there was no significant change in rates for Elgin St. Thomas during that time period likely due to a small number of cases.

### **Verotoxin Producing E. Coli**

Escherichia coli or E. coli is a bacterium with many subtypes. Most subtypes of E. coli live in the intestines of humans and animals and are harmless. However, there are some subtypes of E.coli such as Verotoxin-producing Escherichia coli (VTEC), that produce toxins that can cause severe illness.

E.coli can be contracted by eating contaminated food or drinking contaminated fluids such as water or unpasteurized milk or juice. E. coli is found in feces and can also spread from person to person as a result of inadequate hand washing or through improper food handling.

Figure 8.7 – Crude Rates of Confirmed Cases of Verotoxin Producing E. Coli, Elgin St. Thomas and Ontario, 2005-2013



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- On average, there were 2 confirmed cases of Verotoxin producing E. Coli reported in Elgin St. Thomas each year.
- Rates of E. Coli appear very unstable in Elgin St. Thomas due to a very small number of cases each year.

### Other Food-borne and Water-borne Enteric Diseases

### **Amebiasis**

Amebiasis is caused by a parasite called Entamoeba histolytica, which lives in human intestines and is passed in the feces. It is spread mainly by consuming contaminated food and water but can also be spread through fecal oral contact. Those most at risk for this disease include recent immigrants or visitors who have returned from countries with poor sanitation; persons living in institutions; and men who have sex with men.

There were 2 confirmed cases of Amebiasis in Elgin St. Thomas between 2005 and 2013.

#### **Brucellosis**

Brucellosis is an infectious disease caused by the Brucella bacteria. People can get the disease when they consume infected meat or unpasteurized milk or if they come in close contact with an infected animal. The animals most commonly infected include sheep, cattle, goats, pigs, and dogs. Those at higher risk for the disease include slaughterhouse workers, meat inspectors, animal handlers, veterinarians, and laboratory workers.

There was only 1 confirmed case of Brucellosis in Elgin St. Thomas between 2005 and 2013

### Cyclosporiasis

Cyclosporiasis is a disease caused by a parasite called Cyclospora cayetanensis. The parasite infects the small intestines of humans. This disease is usually associated with travel as it is more common in tropical or subtropical countries. Cyclospora is spread when people eat or drink food or water that has been contaminated with infected feces.

• There were 2 confirmed cases of Cyclosporiasis in Elgin St. Thomas between 2005 and 2013.

### Listeriosis

Listeriosis is an illness caused by eating food contaminated with bacteria called Listeria monocytogenes. The bacteria are commonly found in the environment (water and soil). Some foods are more likely to carry Listeria including raw or unpasteurized milk, soft cheeses and ready-to-eat meats such as hot dogs, pâté and deli meats. Pregnant women, the elderly and those with weakened immune systems, should avoid these foods to reduce the risk of becoming infected with listeriosis. Infections during pregnancy can lead to miscarriage, stillbirth, premature delivery, and infection of the newborn.

There were 2 confirmed cases of Listeriosis in Elgin St. Thomas between 2005 and 2013.

### Q Fever

Human Q fever is an illness caused by the bacteria Coxiella burnetii. Cattle, sheep, and goats are commonly infected and may transmit the infection to humans when they give birth. Individuals who reside or spend time near ranches and livestock rearing facilities are at the highest risk for this infection.

• There were 3 confirmed cases of Q fever in Elgin St. Thomas between 2005 and 2013.

### Yersiniosis

Yersiniosis is an infection caused by a bacterium of the genus Yersinia. Most human infections are caused by Yersinia enterocolitica. People get infected by drinking contaminated fluids and eating contaminated food, especially raw or undercooked pork products. If proper hand washing is not practiced after using the toilet or handling raw meat, an infected person can transfer the bacteria to food and objects.

• There were 3 confirmed cases of Yersiniosis in Elgin St. Thomas between 2005 and 2013.

### **Tuberculosis**

Tuberculosis (TB) is a curable infectious disease caused by a bacterium called Mycobacterium tuberculosis. TB usually affects the lungs, but the bacteria can travel through the bloodstream and infect other parts of the body. Active TB occurs when the body's immune system is unable to stop the growth and spread of the bacteria after the individual becomes infected. Inactive or latent TB occurs when a person is infected, but is neither ill nor contagious from the infection. Five to ten per cent of individuals with inactive TB later develop the active form of the disease.

### **Tuberculosis**

- In Elgin St. Thomas, there were 4 confirmed cases of Tuberculosis reported between 2005 and 2011.
- The crude rate of TB Elgin St. Thomas was approximately 4 times lower than the rate for Ontario.

### **Institutional Outbreaks**

All outbreaks of disease in an institution, such as a long term care home, need to be reported to public health. Outbreaks of gastrointestinal illness are commonly caused by viruses such as norovirus and rotavirus among others. Outbreaks of respiratory infections in institutions are commonly caused by influenza A and B, respiratory syncytial virus (RSV), parainfluenza, rhinovirus, and adenovirus.

When an outbreak in an institution is identified, health unit staff collaborate with the facility to identify the cause of the disease through laboratory testing. They also provide ongoing support to minimize the duration of the outbreak and it's the impact on both staff and residents.

### **Institutional Outbreaks**

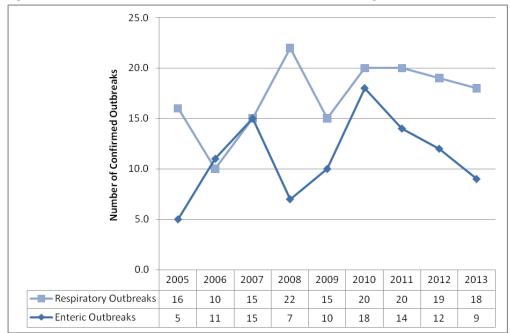


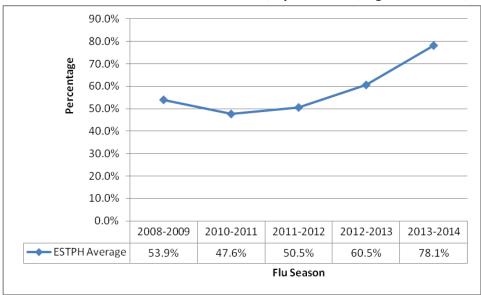
Figure 8.8 -Number of Confirmed Institutional Outbreaks, Elgin St. Thomas, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- In total, there were 256 confirmed outbreaks reported by Institutions in Elgin St. Thomas between 2005 and 2013.
- Just over 60% of the outbreaks were due to respiratory disease and the other 40% were due to enteric illnesses.
- The total number of confirmed outbreaks reported by institutions in Elgin St. Thomas has increased from 21 in 2005 to 27 in 2013. However, since peaking in 2010 with a total of 38 confirmed outbreaks, there has been a consistent decline over subsequent years.

### **Healthcare Worker Vaccination**

Figure 8.9 –Average Proportion of Healthcare Workers in Hospitals and Long Term Care Homes (LTCH) who were vaccinated for Seasonal Influenza, by Flu Season, Elgin St. Thomas, 2008-2014

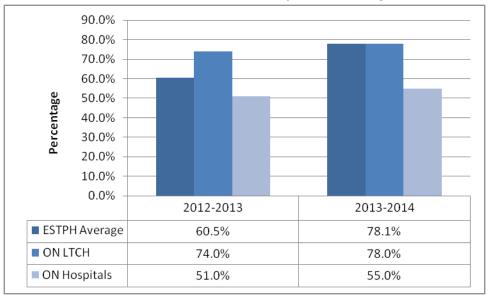


Source: Internal Elgin St. Thomas Public Health Healthcare Worker Vaccination Rate Database, 2008-2014

### **Key Findings:**

 During the 2011-2012 flu season, 78% of healthcare workers in Elgin St. Thomas received a seasonal influenza vaccine. The average proportion of vaccinated healthcare workers has increased each year starting from 54% in 2008-2009.

Figure 8.10 -Average Proportion of Healthcare Workers in Hospitals and Long Term Care Homes (LTCH) who were Vaccinated for Seasonal Influenza, by Flu Season, Elgin St. Thomas and Ontario, 2012-2014



Source: Internal Elgin St. Thomas Public Health Healthcare Worker Vaccination Rate Database, 2008-2014

- On average, the proportion of health care workers in Elgin St. Thomas who received a seasonal influenza vaccine was below that of the province for long term care home (LTCH) workers in 2012-2013 and the same as Ontario in 2013-2014.
  - Elgin St. Thomas is best compared to the Ontario LTCH average because there are 9 long term care facilities and only 1 hospital in the region.
- In Ontario, the proportion of healthcare workers in hospitals who were vaccinated for seasonal
  influenza was much lower than healthcare workers in long term care facilities for both time
  periods.

# **Chapter 9: Sexual Health**

# Summary

### Sexual Health Behaviours and Risk Factors

- 35% of teens in Elgin St. Thomas aged 15-19 reported ever having sexual intercourse
- > 78% of respondents in Elgin St. Thomas were under the age of 20 at their sexual debut
- > 13% of residents of Elgin St. Thomas reported having 2 or more sexual partners in the past year
- Only 50% of the population in Elgin St. Thomas who were considered at a higher risk for sexually transmitted infections reported using a condom during their most recent sexual encounter

### Sexual Transmitted Infections (STIs)

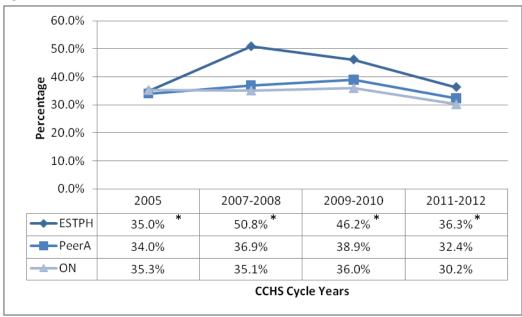
- ➤ The most commonly reported sexually transmitted infections in Elgin St. Thomas were Chlamydia, Hepatitis C and Gonorrhoea
- ➤ Elgin St. Thomas had lower rates of confirmed cases of Chlamydia than Ontario, but the difference decreased over time
- Chlamydia was more common in females than males and was highest among 20-24 and 15-19 year olds
- ➤ Elgin St. Thomas had lower rates of Gonorrhoea than Ontario and Gonorrhoea rates were highest among 20-24 and 15-19 year olds
- > The rates of Hepatitis C were similar for Elgin St. Thomas and Ontario with rates increasing over time
- ➤ The rate of HIV/AIDS in Elgin St. Thomas was approximately 10 times lower than rates in Ontario with an average of 2 cases per year compared to 8 for Ontario; however Elgin St. Thomas had an increase in cases of HIV/AIDS from 2010 to 2013
- > There was an average of 2 confirmed cases of infectious Syphilis in Elgin St. Thomas each year. Rates in Elgin St. Thomas increased between 2005 and 2013 while rates in Ontario decreased over the same time period

### Sexual Health Behaviours and Risk Factors

The sexual health behaviours and risk factors in this section are self-reported. Self-reporting on such sensitive topics may be subject to social desirability bias (trying to tell the interviewer what they want to hear) or high non-response. This could result in an under or overestimate of the true prevalence of the behaviour in the population.

### **Youth Sexual Activity**

Figure 9.1 - Weighted Proportion of Teens (aged 15-19) who reported ever having sexual intercourse, Elgin St. Thomas, Ontario and Peer Health Units, 2005-2012



Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012

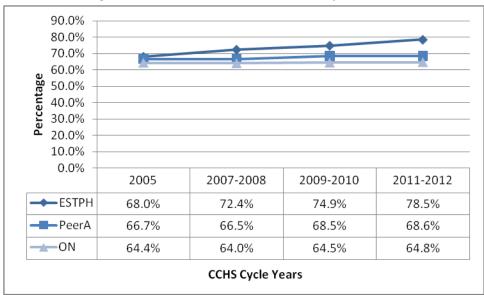
Note: \* Estimate should be interpreted with caution due to high variability

- Approximately 35% of teens reported ever having sexual intercourse.
- There were no significant differences in the proportion of sexually active teens between Elgin St. Thomas, Ontario or the peer health units. There were no significant differences over time.

# **Age of Sexual Debut**

Age of sexual debut refers to the age at which someone had their first sexual intercourse.

Figure 9.2 –Weighted Proportion of Respondents (aged 15-49) who were Under 20 years of Age at Sexual Debut, Elgin St. Thomas, Ontario and Peer Group A, 2005-2012



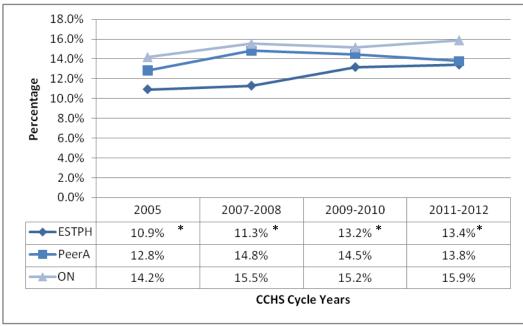
Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012

- In 2011-2012, Elgin St. Thomas and the peer health units had a significantly larger proportion of the population who reported a sexual debut before the age of 20 than respondents from Ontario.
- The proportion of respondents reporting an early sexual debut increased over time for all groups, although the increase was not statistically significant.

### **Number of Sexual Partners**

A question about the number of sexual partners in the past year was only asked of respondents aged 15 to 49 who reported having sexual intercourse in the past year.

Figure 9.3 –Age-Standardized Proportion of Respondents (aged 15-49) with 2+ Sexual Partners in the Past Year, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012



Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012

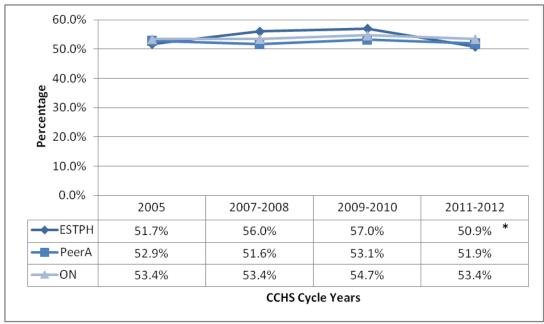
Note: \* Estimate should be interpreted with caution due to high variability

- In Elgin St. Thomas, approximately 13% of the population reported having more than one sexual partner in the past year. This information is important because having multiple partners increases a person's risk for contracting a sexually transmitted infection (STI).
- There were no significant differences between Elgin St. Thomas, the peer health units or Ontario over time.

### **Condom Use**

This is a measure of condom use during the most recent sexual encounter of those at higher risk for a sexually transmitted infection (STI). This question was only asked of respondents aged 15-49 who reported having sex in the past year with more than one partner and who were not married or in a common law relationship at the time.

Figure 9.4 -Age-Standardized Proportion of Respondents (aged 15-49) who used a Condom During their Last Sexual Encounter, Elgin St. Thomas, Peer Group A and Ontario, 2005-2012



Source: Canadian Community Health Survey, 2005, 2007-2008, 2009-2010, 2011-2012

Note: \* Estimate should be interpreted with caution due to high variability

- Only about half of the population who was at a higher risk for an STI reported using condoms during their most recent sexual encounter.
- The proportions were similar for all groups and over time.

# **Sexually Transmitted Infections**

# **Most Common Sexually Transmitted Infections**

Sexually transmitted infections (STIs) can be passed on through body fluids such as semen and vaginal secretions, and in some cases, through breast milk and saliva. Transmission occurs primarily from person to person through sexual contact; however, vertical transmission from mother to newborn is also possible.

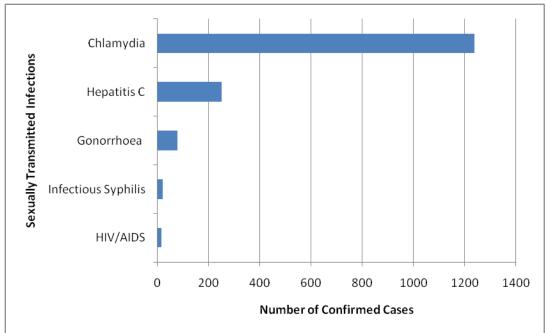


Figure 9.5 – Most Commonly Reported Sexually Transmitted Infections, Elgin St. Thomas, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- The most commonly reported STI in Elgin St. Thomas was Chlamydia with over a thousand more cases than the next most common STI.
- Other commonly reported STIs in Elgin St. Thomas were Hepatitis C and Gonorrhoea.

### Chlamydia

Chlamydia is caused by a bacterium called Chlamydia trachomatis. The disease is spread by having unprotected anal, oral, or vaginal sex with an infected person. It can also be passed from an infected mother to her baby during delivery. A person with Chlamydia remains infectious until they have been properly treated, but the disease is curable. Many people infected with Chlamydia may not have any symptoms (especially women). If untreated, the disease could lead to sterility and complicated (ectopic) pregnancy in women.

350.0 300.0 Rate per 100,000 250.0 200.0 150.0 100.0 50.0 0.0 2005 2006 2007 2008 2009 2010 2011 2012 2013 ESTPH 108.1 105.9 254.6 100.4 163.6 | 163.8 | 244.6 271.9 222.7 -ON 195.7 198.5 204.6 227.0 247.2 283.5 304.4 303.4 288.6

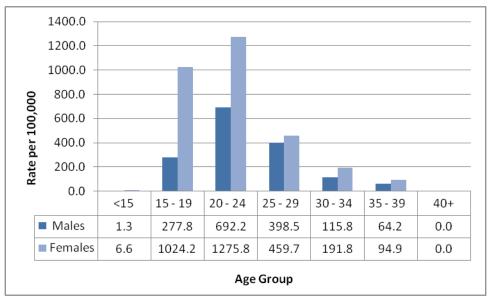
Figure 9.6 – Age-Standardized Rates of Confirmed Cases of Chlamydia, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- Chlamydia was the most commonly reported disease in Elgin-St. Thomas between 2005 and 2013 and the age-standardized rate more than doubled over time.
- On average, there were 138 confirmed cases of Chlamydia in Elgin St. Thomas each year.
- The rate of confirmed cases of Chlamydia in Ontario was 87.6% higher than the rate in Elgin St. Thomas in 2005 and only 65.9% higher in 2013. In other words, while the rates of Chlamydia in Elgin St. Thomas appear to be following the same trend as the rest of Ontario, the overall difference in these rates appears to be narrowing over time.

### By Age Group

Figure 9.7 – Age-Specific Rates of Confirmed Cases of Chlamydia, by Age Group, Elgin St. Thomas, 2005-2013 combined



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- The rate of confirmed cases of Chlamydia increased over time for both males and females.
- Over time females have consistently had much higher rates of Chlamydia than males.
  - Chlamydia may be more commonly reported in women because women are more likely to be tested regularly for STIs during their annual pap test. Male partners of a woman who is a confirmed case may also receive treatment without formal testing which would make rates of confirmed cases appear significantly lower than they are in reality.
- Rates of confirmed cases of Chlamydia were highest among 20 to 24 year olds followed by 15 to 19 year olds and 25 to 29 year olds.

### Gonorrhoea

Gonorrhoea is a treatable sexually transmitted infection (STI) caused by a bacterium called Neisseria gonorrhoeae. The infection is spread through unprotected anal, oral or vaginal sex with an infected person. It can also be passed from an infected mother to her baby during birth. Gonorrhoea may not have any symptoms. If untreated, gonorrhoea could lead to serious and permanent complications such as pelvic inflammatory disease (PID) in women and epididymitis (inflammation of the tubes of the testicles) in men. Gonorrhea can also spread to the blood and joints.

40.0 35.0 Rate per 100,000 30.0 25.0 20.0 15.0 10.0 5.0 0.0 2006 2009 2010 2011 2013 2005 2007 2008 2012 -ESTPH 23.8 2.4 18.5 9.5 15.3 11.0 3.1 4.3 13.8 -ON 29.4 33.6 34.4 33.3 30.2 33.4 35.1 33.8 37.5

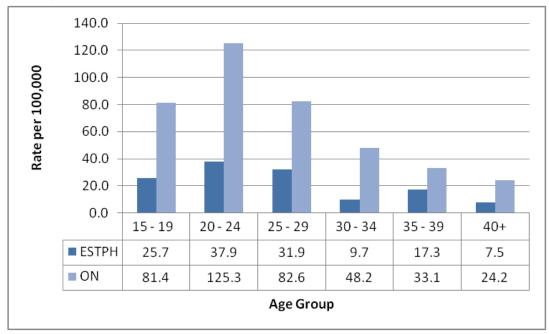
Figure 9.8 – Age-Standardized Rates of Confirmed Cases of Gonorrhoea, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- On average, there were 9 confirmed cases of Gonorrhoea in Elgin St. Thomas each year.
- In Elgin-St. Thomas, the age-standardized rates of Gonorrhoea decreased over time while rates in Ontario increased approximately 8% over time.
  - The apparently dramatic changes in rates over time for Elgin St. Thomas are likely due to very small numbers and unstable rates.
- Age-standardized rates of Gonorrhoea were much higher across all years in Ontario than in Elgin-St. Thomas.

### By Age Group

Figure 9.9 – Age-Specific Rates of Confirmed Cases of Gonorrhoea, by Age Group, Elgin St. Thomas and Ontario, 2005-2013 Combined



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

• Rates of confirmed cases of Gonorrhoea were highest among 20 to 24 year olds in Elgin St.

Thomas and Ontario. Rates were also higher among 25 to 29 year olds and teens aged 15 to 19.

# **Hepatitis C**

Hepatitis C is an infection of the liver caused by the Hepatitis C virus (HCV). HCV is a slowly progressive disease that may lead to liver cirrhosis (scarring) or cancer. HCV spreads through contact with the blood of an infected person, mainly through the sharing of contaminated needles, syringes or other injection drug equipment; blood transfusions prior to 1992 before screening became available; unsafe tattoos/piercings; sexual contact with an infected person; and/or being born to an infected mother.

45.0 40.0 35.0 Rate per 100,000 30.0 25.0 20.0 15.0 10.0 5.0 0.0 2005 2006 2007 2008 2009 2010 2011 2012 2013 **ESTPH** 21.3 22.3 36.0 42.9 34.1 26.6 29.8 28.2 40.2 -ON 29.4 33.6 34.4 33.3 30.2 33.4 35.1 33.8 37.5

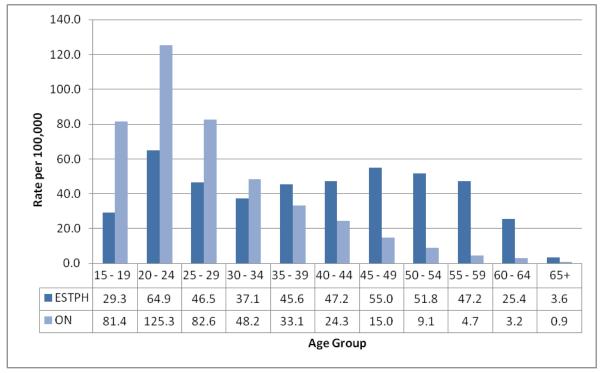
Figure 9.10 – Age-Standardized Rates of Confirmed Cases of Hepatitis C, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- On average, there were 28 confirmed cases of Hepatitis C reported in Elgin St. Thomas each year.
- In both Elgin St. Thomas and Ontario, the rates of Hepatitis C increased between 2005 and 2009. The rates fluctuated in Elgin St. Thomas, but this is likely due to small sample sizes.

# By Age Group

Figure 9.11 – Age-Specific Rates of Confirmed Cases of Hepatitis C, by Age Group, Elgin St. Thomas and Ontario, 2005-2013



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- Rates of confirmed cases of Hepatitis C were highest among 20-24 year olds for both Elgin St. Thomas and Ontario. Rates were also high among 15 to 19 year olds and 25-29 year olds.
- In Elgin St. Thomas, the rates of confirmed cases of Hepatitis C in those over the age of 34 were higher than Ontario.

# **HIV/AIDS**

Human Immunodeficiency Virus (HIV) is a blood-borne infection that attacks the body's immune system. HIV can lead to Acquired Immunodeficiency Syndrome (AIDS) which is a disease of the immune system that leaves the person at risk of getting other infections and diseases. HIV is spread through direct blood-to-blood contact and direct contact with certain infected body fluids such as semen and vaginal secretions. People at risk of getting HIV/AIDS include those who have unprotected anal, oral or vaginal sex; those who have multiple sex partners; injection drug users; people who received blood transfusions before 1985; and those born to a mother infected with the virus as the baby can become infected during pregnancy, birth or through breastfeeding.

10.0 9.0 8.0 Rate per 100,000 7.0 6.0 5.0 4.0 3.0 2.0 1.0 0.0 2005 2006 2007 2008 2009 2010 2011 2012 2013 ESTPH 1.1 1.1 1.1 1.1 1.1 1.1 3.3 2.2 4.4 -ON 9.1 9.3 9.0 8.6 7.5 7.2 7.0 6.0 5.8

Figure 9.12 – Crude Rates of Confirmed Cases of HIV and AIDS in Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- In total, there were 15 confirmed cases of HIV and AIDS in Elgin St. Thomas between 2005 and 2013. On average, there were 2 cases per year.
- The rates of HIV/AIDS in Elgin St. Thomas were approximately 10 times lower than rates in Ontario over time.
- From 2010 to 2013, there was a steady increase in the rate of confirmed cases in Elgin St. Thomas.

# **Infectious Syphilis**

Syphilis is a sexually transmitted infection (STI) caused by the Treponema pallidum bacterium which is spread through unprotected vaginal, anal or oral sex or during pregnancy from a mother to her unborn baby. Those at risk of contracitng Syphilis include any sexually active person (particularly those who do not practice safe/safer sex and men who have sex with men); injection drug users; and babies born to infected mothers.

Syphilis is considered infectious in the early latent, primary or secondary forms; otherwise, Syphilis is generally considered to be non-infectious.

20.0 18.0 16.0 Rate per 100,000 14.0 12.0 10.0 8.0 6.0 4.0 2.0 0.0 2005 2006 2007 2008 2009 2010 2011 2012 2013 ESTPH 0.0 2.3 2.2 0.0 3.3 2.2 4.4 4.4 4.4 9.7 17.5 14.3 12.5 10.4 -ON 13.4 11.7 10.3 8.9

Figure 9.13 – Crude Rate of Confirmed Cases of Infectious Syphilis, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- In total, there were 21 confirmed cases of infectious Syphilis in Elgin-St. Thomas between 2005 and 2013. On average, there were approximately 2 cases per year.
- Rates in Elgin St. Thomas increased between 2005 and 2013 while rates in Ontario decreased slightly during that time.

# Chapter 10: Vaccine Preventable Disease and Immunization

# **Summary**

### Vaccine Preventable Diseases

- The most common vaccine preventable diseases in Elgin St. Thomas were Influenza, Pertussis and Streptococcal pneumoniae
- There was an increase in confirmed cases of Influenza in Elgin St. Thomas between 2010 and 2013
- There was a large outbreak of Pertussis in Elgin St. Thomas in 2011-2012. The outbreak led to an increase in cases across Ontario in 2012-2013
- Confirmed cases of Pertussis were highest among those in the youngest age group, children 0-4 years old
- ➤ In Elgin St. Thomas, there were an average of 4 confirmed cases of Hepatitis B in 2005 and 2006 and then cases decreased to an average of 2 per year from 2007 to 2013
- There were typically between 6 and 13 confirmed cases of Streptococcus pneumoniae in Elgin St. Thomas each year; however in 2013, there were 0 cases which was unexpected
- Rates of Streptococcus pneumoniae were highest among seniors aged 65 years and older
- On average in Elgin St. Thomas, there were 4 confirmed cases of invasive Group A Streptococcal disease (iGAS) each year, which was similar to Ontario. Rates of iGAS were highest among seniors aged 65 years and older

### Self-Reported Flu Shots

- ➤ In Elgin St. Thomas, 60% of respondents reported ever receiving a flu shot at some point in the past and 42% received a flu shot in the past year
- Seniors aged 65 and older were more likely to have received a flu shot in the past year than those in younger age groups

### **Vaccine Preventable Diseases**

Vaccine preventable diseases are infectious diseases for which a safe and effective vaccine is available to prevent the disease. Effective vaccination campaigns have succeeded in reducing and even eliminating the threat of certain diseases in Canada and the entire world.

Having a large proportion of the population vaccinated against these diseases is important; not only because it reduces the risk of infection for vaccinated individuals, but also because it reduces the risk of disease transmission to others within the population.

### **Most Common Vaccine Preventable Diseases**

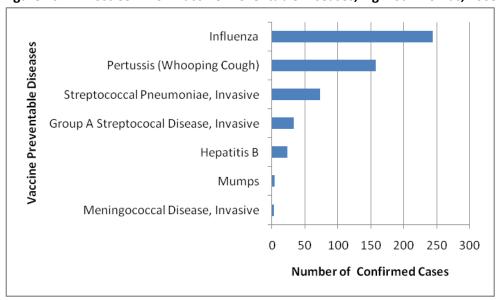


Figure 10.1 - Most Common Vaccine Preventable Diseases, Elgin St. Thomas, 2005-2013 Combined

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

• Influenza was the most common vaccine preventable disease in Elgin St. Thomas, followed by Pertussis and infection with invasive Streptococcus pneumoniae.

### Influenza

Influenza is a viral infection that causes respiratory symptoms. The flu season starts in October and ends in April but incidental cases occur all year round. The severity of the influenza season varies each year and can range from mild to severe.

The flu is spread by breathing in droplets that an infected person coughs or sneezes into the air. The virus can survive outside the body on unwashed hands, tissues or clothing, and on hard surfaces. Those most at risk for complications from an influenza infection are the elderly, young children, pregnant women and anyone with an underlying health condition.

Reporting on confirmed cases of influenza is different from other infectious diseases because this disease is very common in the population. People who are sick with influenza do not often seek medical treatment and when they do, samples are not always taken or sent for laboratory testing. Rates of influenza reported below can give an idea of the overall trend over time, but do not provide a full picture of the disease circulating in the community.

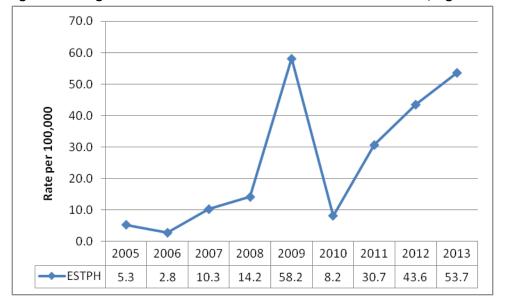


Figure 10.2 - Age-Standardized Rates of Confirmed Cases of Influenza, Elgin St. Thomas, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- In Elgin St. Thomas there were 228 laboratory confirmed cases of Influenza between 2005 and 2013. There was a wide range with between 3 and 58 confirmed cases each year. These cases include the different influenza strains such as influenza A, B and H1N1.
- The peak in 2009 reflects the year of the H1N1 pandemic.
  - It's important to note that due to the large volume of confirmed cases of influenza, testing was stopped part way through the year. The peak on the graph represents the outbreak, but cannot be used as a true reflection of the number of influenza cases that year.

## **Pertussis (Whooping Cough)**

Pertussis or whooping cough is a respiratory infection caused by the Bordetella pertussis bacterium. The disease can affect people of any age but symptoms are most severe in children less than one year of age. The disease is spread from person to person through direct contact with droplets spread by the coughing of an infected person.

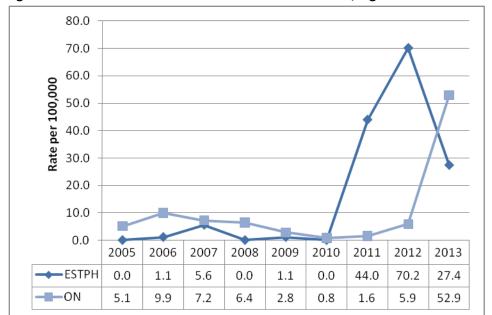


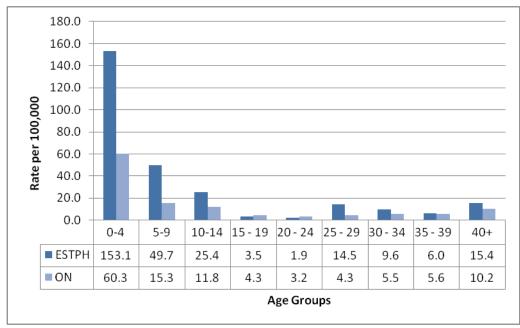
Figure 10.3 - Crude Rates of Confirmed Cases of Pertussis, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- In Elgin St. Thomas from 2005 to 2010, there were a total of 6 confirmed cases of Pertussis or between 0 and 5 cases per year. In 2011, there were 40 cases and then 64 cases in 2012.
  - The peak in cases was due to an outbreak of Pertussis in the Low German Speaking Mennonite community which soon spread to the general population.
  - The cases spread out of Elgin County and the increase could be seen in Ontario in 2013.

### By Age Group

Figure 10.4 – Age-Specific Rates of Confirmed Cases of Pertussis, Elgin St. Thomas and Ontario, 2005-2013 combined



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

• Rates of confirmed cases of Pertussis were highest among those in the youngest age groups (0-4 years) for both Elgin St. Thomas and Ontario.

### **Hepatitis B**

Hepatitis B is an infection of the liver caused by the Hepatitis B virus. Chronic Hepatitis can lead to liver cirrhosis (scarring) and liver cancer.

Hepatitis B is spread through contact with infected blood, semen, and other body fluids (mainly through sexual contact); the sharing of contaminated needles, syringes or other injection drug equipment; needle stick injuries and transmission at birth (babies born to Hepatitis B carriers have a 90% chance of developing the disease unless they are vaccinated immediately after birth).

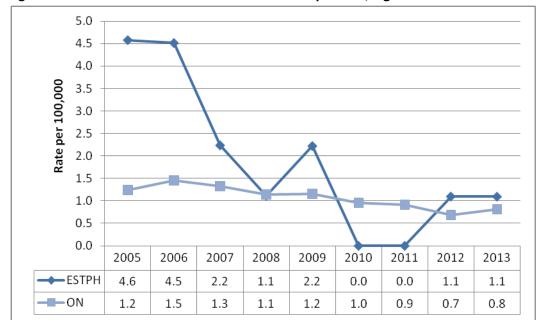


Figure 10.5 - Crude Rates of Confirmed Cases of Hepatitis B, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

• There were an average of 4 confirmed cases of Hepatitis B in Elgin St. Thomas in 2005 and 2006; this decreased to 2 or fewer cases per year from 2007 to 2013.

## **Streptococcus Pneumoniae**

Streptococcus pneumoniae is bacteria that can cause an infection in the lungs and is one of the most common causes of severe pneumonia. The infection is spread from person to person through contact with respiratory secretions such as saliva or mucus. Many people, especially children, can have the bacteria in their nose or throat without showing any symptoms of being sick, but they can still spread the infection to others.

16.0 14.0 12.0 Rate per 100,000 10.0 8.0 6.0 4.0 2.0 0.0 2005 2006 2007 2008 2009 2010 2011 2012 2013 ESTPH 8.0 9.0 8.9 7.8 12.2 6.6 14.3 14.3 0.0 -ON 7.4 7.4 7.3 8.2 9.4 9.1 5.1 4.6

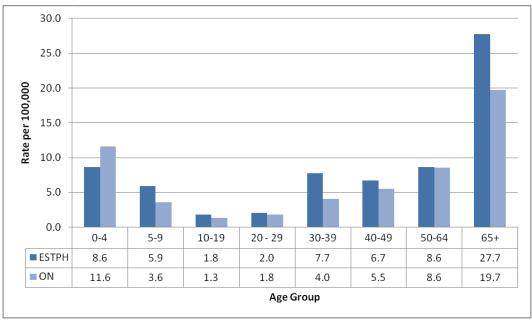
Figure 10.6 –Crude Rates of Confirmed Cases of Streptococcus Pneumoniae, Elgin St. Thomas and Ontario, 2005-2013

Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

- In Elgin St. Thomas, there were 8 cases per year on average from 2005 to 2013.
  - Typically cases ranged from 6 to 13 per year. There were 0 cases in 2013 which was unexpected.

### By Age Group

Figure 10.7 – Age-Specific Rates of Confirmed Cases of Streptococcus Pneumoniae, Elgin St. Thomas and Ontario, 2005-2013 combined



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

• In Elgin St. Thomas, the rates of confirmed cases of Streptococcus pneumoniae were high among 0 to 4 year olds and then also increased with age from 40 years of age and up. The very highest rates were among those over the age of 65.

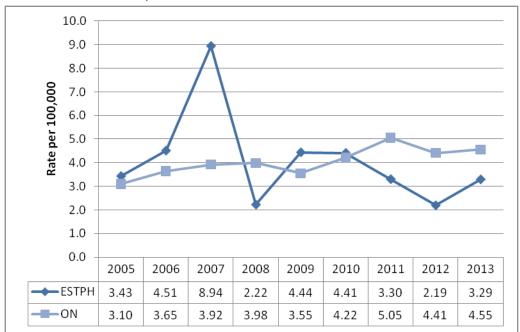
### **Invasive Group A Streptococcal Disease (iGAS)**

Most infections with Group A Streptococcal disease are relatively mild illnesses such as strep throat, scarlet fever, and impetigo (a skin infection). Occasionally these bacteria can cause invasive, severe and even life-threatening diseases termed iGAS infections. Two of the most severe but least common forms of iGAS are necrotizing fasciitis (flesh eating disease) and toxic shock syndrome.

Some people may carry these bacteria on their skin or in their throats for periods of time without any symptoms or illness but they can spread them to others.

Those most at risk for iGAS infections include the elderly; people with chronic disease such as cancer, diabetes, kidney, heart and lung disease; those with skin lesions; adults with a history of alcohol abuse or injection drug use, and those taking certain medications such as steroids. Children with chickenpox also have a higher risk of developing iGAS ifections.

Figure 10.8 –Crude Rates of Confirmed Cases of Invasive Group A Streptococcal Disease (iGAS), Elgin St. Thomas and Ontario, 2005-2013



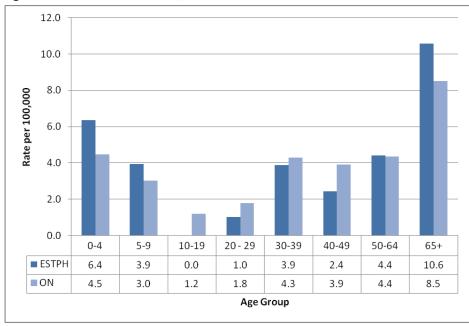
Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

• On average, there were 4 confirmed iGAS cases in Elgin St. Thomas each year. There were a total of 33 cases between 2005 and 2013.

### By Age Group

Figure 10.9 – Age-Specific Rates of Confirmed Cases of Invasive Group A Streptococcal Disease (iGAS), Elgin St. Thomas and Ontario, 2005-2013 combined



Source: Integrated Public Health Information System (iPHIS), Extracted: August 14 2014

### **Key Findings:**

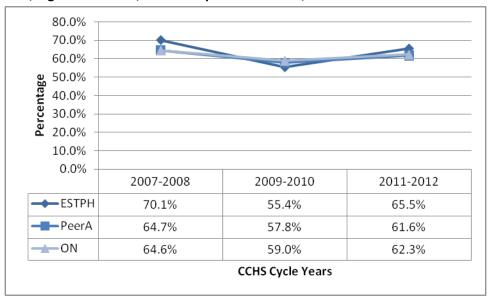
• In Elgin St. Thomas, the highest rates of confirmed iGAS cases were among seniors aged 65 and older. Rates were also high among children in the youngest age groups, 0 to 4 and 5 to 9 year olds.

## **Self-Reported Flu Shots**

This section refers to whether or not survey respondents reported ever receiving a seasonal flu shot and if so, whether they received their flu shot in the past year.

### **Ever Received a Flu Shot**

Figure 10.10 – Age-Standardized Proportion of Respondents (aged 12+) who have Ever Received a Flu Shot, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012

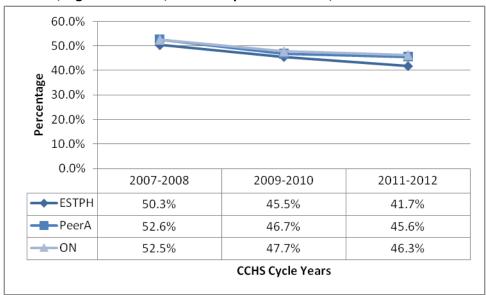


Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- Approximately 60% of survey respondents have received a flu shot at some point in their lifetime.
- There were no statistically significant differences over time.

### Received a Flu Shot in the Past Year

Figure 10.11 – Age-Standardized Proportion of Respondents (aged 12+) who Received a Flu Shot in the Past Year, Elgin St. Thomas, Peer Group A and Ontario, 2007-2012



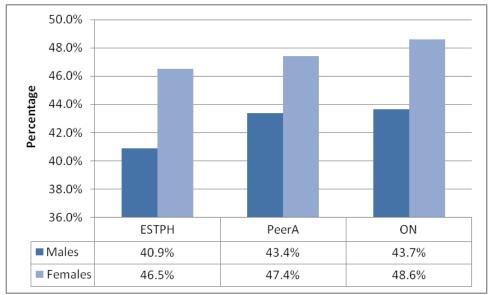
Source: Canadian Community Health Survey, 2007-2008, 2009-2010, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

### **Key Findings:**

 The proportion of the population who reported receiving their flu shot in the past year decreased significantly from 2007-2008 to 2009-2010 for Ontario and the peer health units. Elgin St. Thomas experienced a similar decrease but the difference was not statistically significant.

### By Gender

Figure 10.12 -Age-Standardized Proportion of Respondents (aged 12+) who Received a Flu Shot in the Past Year, by Gender, Elgin St. Thomas, 2011-2012



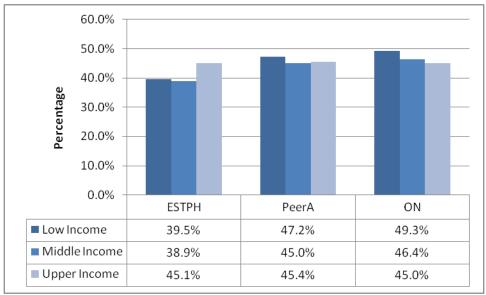
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

### **Key Findings:**

• A higher proportion of females than males reported receiving a flu shot in the past year. The difference was only significant for Ontario, but the pattern was similar for Elgin St. Thomas and the peer health units.

### By Income

Figure 10.13 -Age-Standardized Proportion of Respondents (aged 12+) who Received a Flu Shot in the Past Year, by Income, Elgin St. Thomas, 2011-2012



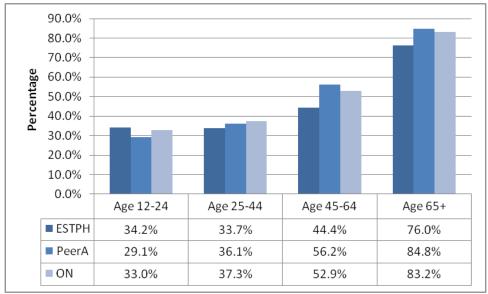
Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

### **Key Findings:**

• There were no significant differences in the proportion of the population who reported receiving a flu shot in the past year by income.

### By Age Group

Figure 10.14 -Age-Specific Proportion of Respondents who Received a Flu Shot in the Past Year, by Age Group, Elgin St. Thomas, 2011-2012



Source: Canadian Community Health Survey, 2011-2012, Share File, Ontario Ministry of Health and Long-Term Care

- There was a clear increase in the proportion of the population who received a flu shot in the past year with increasing age.
- Seniors (aged 65+) were significantly more likely to have received a flu shot in the past year than those in other age groups.

## **Chapter 11: Needle Exchange Program**

## **Summary**

### **ESTPH Needle Exchange Program**

- > The ESTPH needle exchange program received an average of 27 client visits per month
- Over 30,000 clean needles were distributed through the ESTPH needle exchange program and over 20,000 used needles were returned for safe disposal
- > The majority of our needle exchange clients were between 20-29 and 30-39 years old
- ➤ The most commonly reported drugs used in Elgin St. Thomas were hydromorphone, steroids and cocaine

## **Needle Exchange**

Harm reduction is a public health approach that aims to reduce drug-related harm experienced by individuals and communities, without necessarily reducing the consumption of drugs. Harm reduction strategies meet drug users "where they're at", addressing conditions of use along with the use itself<sup>7</sup>.

In Ontario, needle exchange programs (NEPs) are legislated as a mandatory public health program in areas where injection drug use is recognized as a problem in the community<sup>8</sup>. We do know that illicit injection drug use has been associated with severe health-related harms and high rates of hospitalization. Hepatitis C is a blood borne infection that is listed as the top burdensome infectious agent in Ontario<sup>9</sup> and was the second most common reportable disease in Elgin St. Thomas (see page 272). Approximately 65% of intravenous drug users will be infected with Hepatitis C after five years of intravenous drug use. NEPs are listed as one of three ways to prevent the spread of the infectious disease.

Elgin St. Thomas Public Health offers a needle exchange program at 1230 Talbot St., St. Thomas and also at a satellite location at Port Stanley United Church (239 Colborne St.). The purpose of an NEP program is to:

- a. Educate individuals about safer drug use practices to reduce risky behaviour
- b. Improve access to services that provide sterile, single-use supplies (syringes and drug use equipment)
- c. Prevent transmission of blood borne viruses and pathogens between individuals e.g. HIV, Hepatitis C and B and various other sexually transmitted infections
- d. Collect and safely dispose of dirty sharps and other drug use equipment to reduce the incidence of improperly discarded sharps in public places, landfills and other non-ideal disposal locations

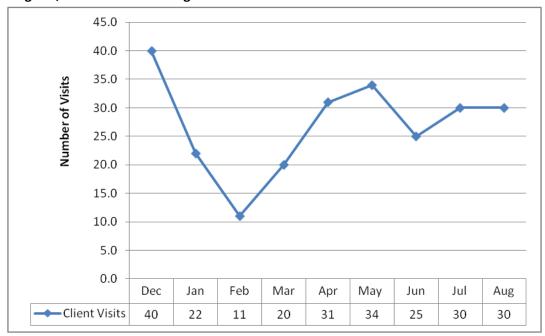
<sup>&</sup>lt;sup>7</sup> Retrieved from Ontario Harm Reduction Distribution Program <u>www.harmreduction.org</u>

<sup>&</sup>lt;sup>8</sup> Ontario Ministry of Health and Long Term Care, "Mandatory health programs and services guidelines., Toronto, Ontario, 1997
<sup>9</sup> Kwong JC, Crowcroft NS, Campitelli MA, Ratnasingham S, Daneman N, Deeks SL, Manuel DG. Ontario Burden of Infectious Disease Study (ONBOIDS) Toronto: Institute for Clinical Evaluative Sciences (ICES). An OAHPP/ICES
Report. 2010

## **ESTPH Needle Exchange Program**

### **Client Visits**

Figure 11.1 – Number of Client Visits per Month to the Elgin St. Thomas Public Health Needle Exchange Program, December 2013- August 2014



Source: Internal Needle Exchange Program Database, Elgin St. Thomas Public Health, Extracted September 2014.

#### **Key Findings:**

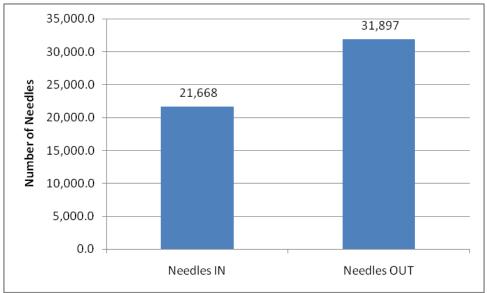
- The needle exchange program received an average of 27 client visits per month.
- The drop in visits in early January and February 2014 was most likely due to the relocation of the Health Unit from 99 Edward to 1230 Talbot St. Following the move, client visits have increased.

### **Data Interpretation Note:**

• It is important to keep in mind that this data refers to client visits and not individual clients. Due to the sensitive nature of this program, clients remain anonymous, which also makes tracking individual clients impossible. Visits however can give a good idea of how much the needle exchange services are being used.

## **Needles Exchanged**

Figure 11.2 –Number of Needles Collected and Distributed by the Elgin St. Thomas Public Health Needle Exchange Program, December 2013 to August 2014



Source: Internal Needle Exchange Program Database, Elgin St. Thomas Public Health, Extracted September 2014.

- The Elgin St. Thomas public health needle exchange program distributed more than 30,000 clean needles between December 2013 and August 2014 and received over 20,000 used needles in return. These were sent for safe disposal.
- The number of needles returned may be lower than the number of needles distributed because clients sometimes stock-pile their sharps. They might not have a ride to the clinic and do not want to carry used drug equipment to the clinic (while walking or using public transportation, etc.). It is not mandatory to return sharps in order to get clean ones.

### **NEP Clients Served**

**Data Interpretation Note**: Please note that the following data, while it refers to clients, may not be based on data from unique clients. Due to the sensitive nature of this program, clients remain completely anonymous, which also makes tracking unique clients impossible. A single client may be represented by multiple visits over the time period. Despite this data limitation, we can still get an impression of the clients who are using this important service.

80.0% 70.0% 60.0% 50.0% Percentage 40.0% 30.0% 20.0% 10.0% 0.0% St. Thomas Other Port Stanley ■ NEP Clients 20.4% 73.9% 5.7% **Client City of Residence** 

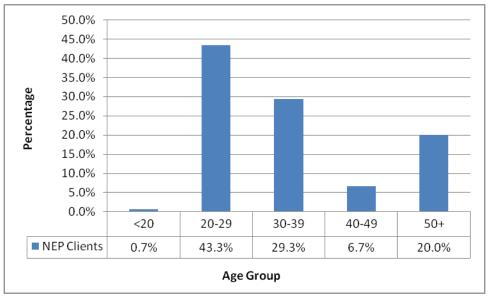
Figure 11.3 –Elgin St. Thomas Public Health Needle Exchange Program Clients, by location of residence, December 2013 to August 2014

Source: Internal Needle Exchange Program Database, Elgin St. Thomas Public Health, Extracted September 2014. <u>Data Note</u>: Other includes Aylmer, Central Elgin, London, New Glasgow and West Lorne

- The vast majority of needle exchange program clients reported living in the City of St. Thomas
- The next largest group were living in Port Stanley

### By Age Group

Figure 11.4 -Elgin St. Thomas Public Health Needle Exchange Program Clients, by age group, December 2013 to August 2014



Source: Internal Needle Exchange Program Database, Elgin St. Thomas Public Health, Extracted September 2014.

### **Key Findings:**

• The majority of clients who reported their age were between 20 to 29 years and 30 to 39 years of age.

### **Drugs Used by NEP Clients**

Table 11.1 – Drugs used by Elgin St. Thomas Needle Exchange Program Clients, based on proportion of total responses provided, December 2013 to August 2014

Drug of Choice	Percentage (%)
Hydromorphone/Dilaudid	36.7%
Steroids	11.2%
Cocaine	10.7%
Opiates	10.1%
Methamphetamine	5.9%
Morphine	4.7%
Oxycontin	4.1%
Fentanyl	3.6%
Pills	3.0%
Other	10.1%

Source: Internal Needle Exchange Program Database, Elgin St. Thomas Public Health, Extracted September 2014.

### **Key Findings:**

- The mostly commonly reported drug used by needle exchange clients in Elgin St. Thomas was Hydromorphone.
- Other commonly reported drugs included steroids, cocaine and opiates.

### **Data Interpretation:**

The proportions in the table are based on the total number of individual drugs reported. One
client may have reported multiple drugs during one visit. In addition, due to client anonymity,
this data is not based on unique client visits. A single client may have reported drugs used on
multiple visits.

## **Chapter 12: Environmental Health**

### Summary

### Reportable Vectorborne and Zoonotic Diseases

- ➤ There has only ever been one confirmed case of West Nile virus in Elgin St. Thomas and that was in 2004
- No mosquitoes in Elgin St. Thomas tested positive for the West Nile virus in 2013
- There was only 1 confirmed case of Lyme disease in a resident of Elgin St. Thomas; however this case was travel-related

#### **Food Premises Inspections**

- ➤ On average there were 791 food premises inspections conducted by Elgin St. Thomas Public Health each year
- Elgin St. Thomas Public Health has consistently achieved its goal of inspecting all high risk premises over the past 3 years

### **Food Handler Certification**

- ➤ The number of courses offered for food handler certification decreased between 2012 and 2014 while the total number of students attending the training increased
- There were 320 safe food handler training certificates issues by Elgin St. Thomas Public Health in 2013 and the number of certifications issued each year increased between 2009 and 2013

### Posted Bathing Beaches

➤ Three beaches in Elgin St. Thomas received a posted advisory or closure in 2014. These postings lasted between 9 and 26 days

#### Air Quality

➤ The air quality for Elgin St. Thomas was good or very good for 75-81% of days each year. There were never any days rated as having very poor air quality and only one day rated as poor each year

#### **Smog Advisories**

- In Elgin St. Thomas, the number of smog alerts and smog alert days has been decreasing since 2007
- ➤ There were no smog alerts issued for Elgin St. Thomas in 2013 or 2014 compared to 13 in 2007 which was the year with the most advisories

### Elgin St. Thomas Public Health Health Status Report 2015

### Extreme Weather

- ➤ Between 2009 and 2014, there were 20 heat alerts issued in Elgin St. Thomas lasting an average of 4 days each time
- ➤ Heat alerts were issued between May and September with 45% of the alerts being issued in July
- ➤ Between 2009 and 2014, there were 20 cold alerts issued in Elgin St. Thomas lasting an average of 4 days each time
- > Cold alerts were issued between January and March with the most being issued in January and February

### **Private Well Water Testing**

- ➤ On average, 25% of private wells tested in Elgin St. Thomas had adverse results. There were no significant differences over time or between municipalities
- > 59% of the adverse water testing results were due to evidence of bacterial contamination in the water. Only 23% were due to the more serious result of contamination with sewage

## **Reportable Vectorborne and Zoonotic Diseases**

### **West Nile Virus**

- There has only ever been 1 confirmed case of West Nile virus in Elgin St. Thomas since 2001 and it was reported in 2004.
- In Ontario, there were 510 cases reported between 2005 and 2013; more than half of them occurred in 2012.

### **Vector Surveillance**

Elgin St. Thomas Public Health has conducted vector surveillance for West Nile virus (WNV) since 2005. Samples of mosquitoes were collected throughout the summer months and tested to determine if any of them were positive for the virus. For example in 2013, 5 trap stations were located in Aylmer and St. Thomas and were sampled regularly from June to the end of August. A total of 526 mosquitoes were captured and 101 of them were tested.

Table 12.1 - Trapped Mosquito Pools Testing Positive for West Nile Virus, Elgin St. Thomas and Ontario, 2005-2013

Year	ESTPH	ON
2005	2	291
2006	1	182
2007	0	51
2008	0	62
2009	0	14
2010	0	56
2011	0	278
2012	2	464
2013	0	198

Source: Elgin St. Thomas Public Health Vector Borne Disease Annual Report, 2013

#### **Key Findings:**

• There were no mosquitoes that tested positive for West Nile virus in Elgin St. Thomas in 2013.

### Lyme Disease

- There has only ever been 1 confirmed case of Lyme disease in Elgin County between 2005 and 2013. The case occurred in 2007 and was travel-related with the illness acquired in the Kingston area.
- In Ontario between 2005 and 2012, there was an average of 95 confirmed cases each year. Cases increased over time from 28 in 2005 up to 162 in 2012.

## **Food Premises Inspection**

All food premises in Elgin St. Thomas are required to be inspected at least once every year but some are required to be inspected more often.

Food premises are categorized as being low, medium or high risk. The level of risk is assigned based on the type of food being served, the vulnerability of the population being served (for example whether the food is specifically for young children or the frail elderly) and the results of past inspections.

- High risk premises are inspected 3 times per year
- Medium risk premises are inspected at least 2 times per year
- Low risk premises are inspected at least once a year

Table 12.2 – Number of Food Premise Inspections, by Level of Risk, Elgin St. Thomas Public Health, 2011-2013

Year	High Risk	Medium Risk	Low Risk	Total
2011	177	254	294	725
2012	198	263	332	793
2013	187	276	393	856

Source: Food Premise Inspection Data. Hedgehog Database, Elgin St. Thomas Public Health

- The number of inspections can fluctuate each year as new premises open, others close, or due to changes in the number of required re-inspections.
- On average, there were 791 total inspections done on food premises in Elgin St. Thomas each year.

100.0% 90.0% 80.0% 70.0% Percentage 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 2005 2007 2008 2009 2004 2006 2010 2011 2012 2013 ■ High Risk 3.6% 5.4% 44.8% 92.5% 97.2% 56.8% 89.2% 100.0% | 100.0% | 100.0% ■ Medium Risk 32.4% 14.4% 53.3% 97.6% 82.9% 14.3% 74.2% 96.6% 96.5% 99.3% Low Risk 29.8% 37.6% 58.5% 89.5% 90.4% 23.9% 76.6% 97.9% 98.9% 98.3%

Figure 12.1 – Proportion of Food Premises with Completed Mandatory Inspections based on their Level of Risk, Elgin St. Thomas Public Health, 2004-2013

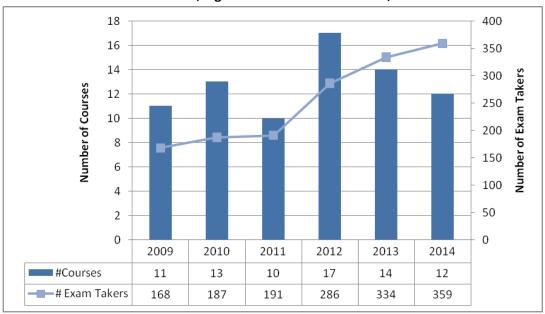
Source: Food Premise Inspection Data. Hedgehog Database, Elgin St. Thomas Public Health

- Elgin St. Thomas achieved its goal of 100% completion for inspections of high risk premises consistently over the past 3 years.
- In 2009, inspections had to be curtailed due to workload associated with H1N1 pandemic priorities and service delivery.

## **Food Handler Training Certification**

Elgin St. Thomas Public Health offers Food Handler Certification Courses in order to provide food handlers with the knowledge of safe food handling practices to help prevent foodborne illness.

Figure 12.2 – Number of Food Handler Training Courses Offered and Number of People who took the Food Handler Certification Exam, Elgin St. Thomas Public Health, 2009-2014



Source: Internal Elgin St. Thomas Public Health Heat Alert Database, 2009-2014

- The number of food handler certification courses offered by Elgin St. Thomas Public Health decreased from 2012 to 2014 while the number of students participating in food handler training increased during the same time period.
- On average, 12% of exam takers did not participate in the food handler training course but had food handler experience and opted to challenge the exam directly instead.

Nubmer ■ Certificates Issued 

Figure 12.3 –Number of Food Handler Training Certificates Issued by Elgin St. Thomas Public Health, 2009-2013

Source: Internal Elgin St. Thomas Public Health Heat Alert Database, 2009-2014

- The number of food handler certificates issued by Elgin St. Thomas Public Health increased each year between 2009 and 2013.
- On average, there was a 97% pass rate for people who took the food handler training certification exams.

## **Posted Bathing Beaches**

Bathing beaches are considered "posted" when advisories are issued or physical signs are put up to communicate a swimming advisory or beach closure. The health unit conducts routine surveillance visits (i.e. taking water samples) of public beaches in Elgin St. Thomas to monitor whether they are suitable for swimming.

A beach is "posted" if the daily geometric mean of the samples exceeds 100 E.coli per 100-ml. water or if other health hazards have been identified. Examples of other hazards include waste spills or poor water clarity resulting in poor visibility of submerged swimmers or dangerous objects in the water. Beaches can also be closed when risk is deemed excessive.

E.coli levels in beach water are highly influenced by factors such as rainfall, current and wind direction, farm runoff, the presence of birds or other animals, as well as the management of storm and sanitary sewers.

30 40.0% 35.0% 25 30.0% 20 Number of Days % of Days Postec 25.0% 15 20.0% 15.0% 10 10.0% 5 5.0% 0 0.0% Little Main Port Port Beach -Beach -Port Burwell Port Springwa Erie Rest Burwell Glasgow ter CA Port Port Bruce Provincial Village Stanley Stanley Park 9 # of Days Posted 0 26 11 0 0 0 0 --- % of Days Posted 0.0% 38.0% 16.0% 0.0% 0.0% 13.0% 0.0% 0.0% Recreational Water and Beaches in Elgin St. Thomas

Figure 12.4 - Number of Days Bathing Beaches Posted and Proportion of Days Posted, Elgin St. Thomas, 2014 only

Source: Internal Elgin St. Thomas Public Beach Posting Database, 2014

#### **Key Findings:**

• Three bathing beaches that were monitored in 2014 were posted. These beaches were posted for between 9 and 26 days.

## **Air Quality**

### Air Quality Index (AQI)

The Air Quality Index (AQI) is based on six common pollutants that can have adverse effects on human health and the environment: Ozone (O3), fine particulate matter (PM2.5), nitrogen dioxide (NO2), carbon monoxide (CO), sulphur dioxide (SO2) and total reduced sulphur (TRS) compounds.

- AQI Very Good or Good: -an index of less than 32 and there are no health effects expected for healthy people
- **AQI Moderate:** -an index of 32 to 49. People with respiratory diseases and people who are sensitive may be at risk for irritation when breathing during vigorous physical activity.
- **AQI Poor:** -an index of 50 to 99. The general population is at some risk and people with respiratory disease should limit exertion.
- AQI Very Poor: -an index of 100 or more. People may experience serious respiratory effects even during light physical activity. The general population is at increased risk but the highest risk is for people with heart disease, children and the elderly.

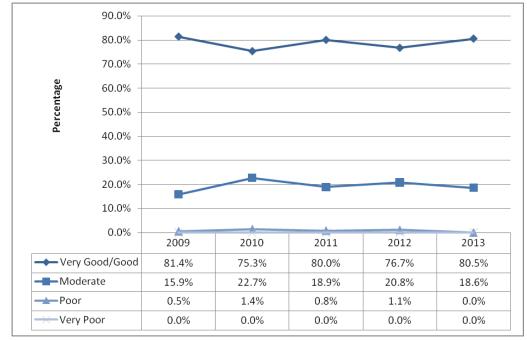


Figure 12.5 – Proportion of Days of the Year by Air Quality, Elgin St. Thomas, 2009-2013

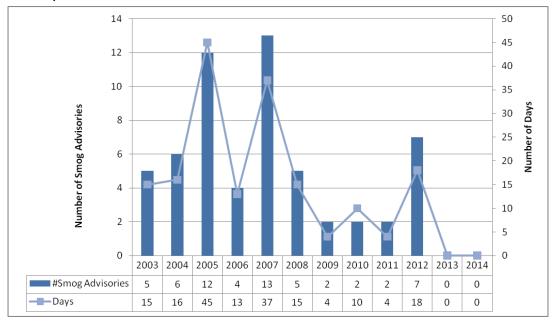
Source: Ontario Air Quality Index. Ministry of the Environment

- The air quality in Elgin County was good or very good between 75% and 81% of days each year.
- Air quality was never in the very poor range between 2009 and 2013 and it was only in the poor range for approximately one day each year.

## **Smog Advisories**

The Ministry of the Environment monitors air pollution levels and issues smog advisories when there is a strong likelihood that widespread elevated and persistent smog levels are expected.

Figure 12.6 – The Number of Smog Advisories and the Number of Smog Advisory Days, Elgin St. Thomas, 2003-2014



Source: Ontario Air Quality Smog Advisory Statistics. Ministry of the Environment

- There were no smog alerts or smog days in Elgin St. Thomas in 2013 or 2014.
- The largest number of smog alerts and smog alerts days occurred in 2005 and 2007. There have been fewer smog alerts over time since 2007.

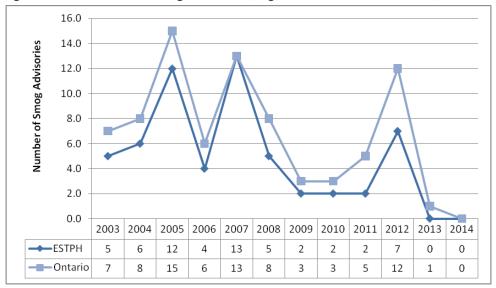


Figure 12.7 -Number of Smog Advisories, Elgin St. Thomas and Ontario, 2003-2014

Source: Ontario Air Quality Smog Advisory Statistics. Ministry of the Environment

- Elgin St. Thomas had consistently fewer smog advisories over time than Ontario.
- In 2014, there were no smog advisories anywhere in the province.

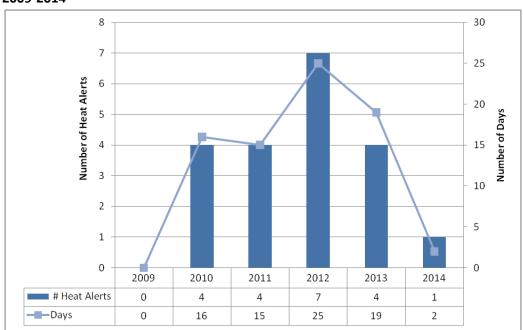
### **Extreme Weather Advisories**

### **Heat Alerts**

Elgin St. Thomas Public Health issues heat alerts to community partners through the Extreme Temperature Notification System. A heat alert is issued if at least one of the following criteria is met:

- the forecast is showing a humidex of 40 or higher which means it will feel like 40° C.
- the humidex is forecast to rise to 36 or higher and an Environment Canada Smog Alert has been issued
- Environment Canada issues a humidex warning for outdoor activity for people in Elgin St.
   Thomas
- the temperature is 38° Celsius or above with no humidex indicated

Figure 12.8 – Number of Heat Alerts and Number of Days of Heat Alerts per Year, Elgin St. Thomas, 2009-2014



Source: Internal Elgin St. Thomas Public Health Heat Alert Database, 2009-2014

- There were 20 heat alerts issued between 2009 and 2014 which lasted between 2 and 8 days. The average length of a heat alert was 4 days.
- 2012 was the year that Elgin St. Thomas had the largest number of heat alerts and heat alerts in place for the most number of days.

50.0% 45.0% 45.0% 40.0% 35.0% 30.0% 30.0% 25.0% 20.0% 20.0% 15.0% 15.0% 10.0% 10.0% 10.0% 5.0% 0.0% -May June July Aug Sept Month Heat Alert Initiated

Figure 12.9 – Proportion of Heat Alerts by the Month in which they were Initiated, Elgin St. Thomas, 2009-2014 Combined

Source: Internal Elgin St. Thomas Public Health Heat Alert Database, 2009-2014

### **Key Findings:**

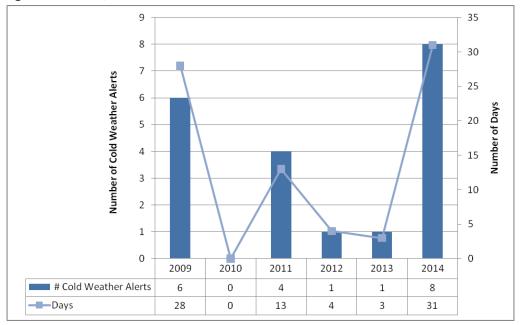
• Heat alerts in Elgin St. Thomas were issued between May and September. Just under half of all heat alerts were issued in July.

### **Cold Weather Alerts**

Elgin St. Thomas Public health issues cold alerts to community partners through the Extreme Temperature Notification System. A cold alert is issued if at least one of the following criteria is met:

- the daily predicted low temperature is -15° Celsius or lower
- the wind chill reaches the level at which Environment Canada issues a warning for outdoor activity for residents of Elgin St. Thomas
- there are extreme weather conditions such as a blizzard or ice storm

Figure 12.10 – Number of Cold Weather Alerts and Number of Days of Cold Weather Alerts per Year, Elgin St. Thomas, 2009-2014



Source: Internal Elgin St. Thomas Public Health Cold Weather Alert Database, 2009-2014

- There were 20 cold weather alerts issued between 2009 and 2014 which lasted between 1 and 11 days. The average length of a cold weather alert was 4 days.
- Elgin St. Thomas had the coldest winter in 2014, with the largest number of cold weather alerts and cold weather alerts in place for the most number of days.

45.0% 40.0% 40.0% 40.0% 35.0% 30.0% 25.0% 20.0% 20.0% 15.0% 10.0% 5.0% 0.0% Jan Feb Mar Month Cold Weather Alert Initiated

Figure 12.11 – Proportion of Cold Weather Alerts by the Month in which they were Initiated, Elgin St. Thomas, 2009-2014 Combined

Source: Internal Elgin St. Thomas Public Health Cold Weather Alert Database, 2009-2014

### **Key Findings:**

• Cold weather alerts in Elgin St. Thomas were issued between January and March each year.

## **Private Well Water Testing**

The Elgin St. Thomas Public Health private well water testing database provides a summary of information about the quality of the well water samples that were tested in this region. This does not represent all wells in the county because well testing is not mandatory. The data below only include wells that the property owner has chosen to test.

The well water tests are primarily looking for different types of Coliform bacteria. Coliform are commonly found in animal waste and sewage, as well as in the soil and in some plants. The presence of coliform in the water may indicate that surface water is going into the well. E.coli are a type of Coliform bacteria found only in the gut of people and animals. The presence of E.coli in well water is usually the result of animal or human waste getting into the well from nearby.

100% 90% Percentage of Samples Tested 80% 70% 60% 50% 40% 30% 20% 10% 0% Central Dutton/Du Aylmer Bayham Malahide Southwold St. Thomas West Elgin Elgin nwich Adverse Results 22.9% 22.8% 22.2% 22.2% 21.2% 33.0% 19.7% 35.2% ■ No signficant evidence of bacetria 77.1% 77.2% 77.8% 78.8% 67.0% 80.3% 64.8% 77.8% Municipality

Figure 12.12 – Proportion of Private Well Water Samples Tested by Type of Result, by Municipality, Elgin St. Thomas, 2009-2014 combined

Source: Internal Elgin St. Thomas Public Health Private Well Water Testing Database, 2009-2014

- On average, 25% of private well water samples tested in Elgin St. Thomas had adverse results.
- The proportion of samples with adverse results was very similar for each municipality; however Southwold and West Elgin had a slightly higher percentage of adverse test results.
- On average, 8% of samples submitted could not be tested due to various problems with the sample or because of missing information (data not included in graph).

100% Percentage of Results Tested 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2009 2011 2010 2012 2013 2014 Adverse Results 25.5% 18.7% 31.0% 24.2% 24.9% 22.6% ■ No signficant evidence of 74.5% 81.3% 69.0% 75.8% 75.1% 77.4% bacetria

Figure 12.13 -Proportion of Private Well Water Samples Tested by Type of Result, Elgin St. Thomas, 2009-2014

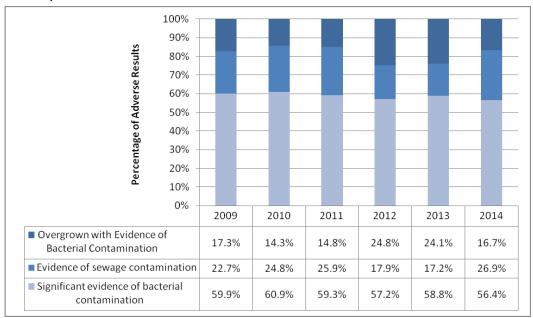
Source: Internal Elgin St. Thomas Public Health Private Well Water Testing Database, 2009-2014

- On average, 25% of private well water samples tested in Elgin St. Thomas had adverse results each year.
- The higher proportion of adverse results in 2011 is like due to variation in sample size; that year there was a significantly smaller number of samples tested than in other years.

#### **Adverse Well Water Results**

- No evidence of bacterial contamination: -There were between 0 and 5 total coliform per 100ml and 0 E.coli per 100ml. The water is safe to drink.
- Significant evidence of bacterial contamination: There were between 6 and more than 80 total coliform per 100ml and 0 E.coli per 100ml. The water is not safe to drink unless boiled or treated.
- Evidence of sewage contamination: There were between 6 and more than 80 total coliform per 100ml and between 1 and more than 80 E.coli per 100ml. The water is not safe to drink.
- Overgrown with evidence of bacterial contamination: –The sample was overgrown with non-coliform bacteria making the coliform results unclear. Another sample is needed to determine of the water is safe to drink.

Figure 12.14 – Proportion of Adverse Well Water Sample Results, by Type of Adverse Result, Elgin St. Thomas, 2009-2014



Source: Internal Elgin St. Thomas Public Health Private Well Water Testing Database, 2009-2014

- On average, 59% of well water samples with adverse results in Elgin St. Thomas each year had
  evidence of bacterial contamination making the water unsafe to drink without boiling or
  treatment.
- On average, 23% of the adverse results were due to more serious contamination with sewage which makes the water undrinkable.

## **Chapter 13: Tobacco Enforcement**

## **Summary**

### Enforcement of the Smoke Free Ontario Act (SFOA)

The most common charges and warnings issued in Elgin St. Thomas under the SFOA were for smoking in workplaces or public places. Charges and warnings issued for the display handling and promotion of tobacco were the least common

### Minors' Access to Tobacco

- ➤ In Elgin St. Thomas there were, on average, 27 charges and warnings issued each year under the SFOA for selling tobacco to someone under the age of 19. There was an increase in the number of charges and warnings issued between 2011 and 2013
- ➤ There has been an increase in vendor compliance with the SFOA between 2011 and 2013 indicating fewer sales to minors over time

## **Enforcement of the Smoke-Free Ontario Act (SFOA)**

The Smoke-Free Ontario Act (SFOA) is the law in Ontario that prohibits smoking in workplaces, enclosed public spaces and in motor vehicles when children under the age of 16 are present. The SFOA also bans the public display of tobacco products prior to purchase and prohibits youth-targeted tobacco products such as flavoured cigarillos.

Elgin St. Thomas Public Health's Tobacco Enforcement Officers (TEOs) are the designated Provincial Offences Officers with authority to enforce the Smoke-Free Ontario Act in our community.

### **Workplaces and Public Places Charges and Warnings**

Local businesses, public places, schools and other workplaces including bars, restaurants and work vehicles are inspected to ensure that proper No Smoking signage is posted as required and that there is no smoking on the premises.

Table 13.1 – Number of Workplace and Public Places Charges and Warnings under the Smoke Free Ontario Act (SFOA), Elgin St. Thomas, 2011-2013

Year	Charges	Warnings	Total
2011	22	64	86
2012	21	21	42
2013	10	48	58

Source: Tobacco Inspection System (TIS) Database, 2011-2013

### **Key Findings:**

• Charges and warnings related to smoking in a workplace or public place were the most common type of infraction for the SFOA in Elgin St. Thomas.

## **Tobacco Vendor Display and Promotion Charges and Warnings**

Tobacco vendors are inspected to ensure they are in compliance with the law that requires putting tobacco products and promotional materials out of sight.

Table 13.2 -Number of Tobacco Vendor Display and Promotion Charges and Warnings under the Smoke Free Ontario Act (SFOA), Elgin St. Thomas, 2011-2013

Year	Tobacco Vendor Display and Promotion Charges	Tobacco Vendor Display and Promotion Warnings	Total
2011	5	4	9
2012	1	9	10
2013	1	7	8

Source: Tobacco Inspection System (TIS) Database, 2011-2013

### **Key Findings:**

• Charges and warnings related to the display and promotion of tobacco were the least common type of infraction under the SFOA in Elgin St. Thomas between 2011 and 2013.

## **Minors' Access to Tobacco**

## **Tobacco Vendor Youth Access Charges and Warnings**

Tobacco vendors are inspected using youth test shoppers to ensure that stores will not sell tobacco to anyone under 19 years of age. The charges and warnings in this section are related to sales to minors.

Table 13.3 -Number of Tobacco Vendor Youth Access Charges and Warnings under the Smoke Free Ontario Act (SFOA), Elgin St. Thomas, 2011-2013

Year	Charges	Warnings	Total
2011	16	8	24
2012	16	11	27
2013	26	3	29

Source: Tobacco Inspection System (TIS) Database, 2011-2013

- On average, there were 27 charges and warnings laid each year.
- There were more charges laid for selling tobacco products to someone under the age of 19 in Elgin St. Thomas each year between 2011 and 2013.

## **Tobacco Vendor Youth Access Compliance**

Tobacco vendors are considered compliant with the youth access section of the Smoke Free Ontario Act (SFOA) if there are no sales of tobacco products to persons under the age of 19 during test shopping.

If a vendor fails a compliance inspection, then re-inspections occur until the vendor has achieved compliance.

Table 13.4 – Tobacco Vendor Compliance with the Youth Access Section of SFOA at Last Inspection and for All Inspections, Elgin St. Thomas, 2011-2013

Year	Compliance at Last Inspection (%)	Compliance at all Inspections (%)
2011	72.6%	75.0%
2012	89.5%	89.8%
2013	100.0%	92.7%

Source: Tobacco Inspection System (TIS) Database, 2011-2013

- The proportion of tobacco vendors compliant at last inspection increased each year from 2011. In 2013, the goal of 100% was achieved.
- The overall vendor compliance rates increased each year from 2011, indicating fewer sales to minors over time.

# **Appendix A: Full List of Reportable Diseases**

Report <u>Immediately</u> *	Report the <u>Same Day</u>	Report by the <u>Next Working Day</u>
<ul> <li>Anthrax</li> <li>Botulism</li> <li>Influenza, novel</li> <li>Lassa fever</li> <li>Meningococcal disease, invasive</li> <li>Poliomyelitis, acute</li> <li>Rabies</li> <li>Smallpox</li> <li>Streptococcal infections, Group A invasive</li> <li>Tetanus</li> <li>Tuberculosis, active</li> <li>Verotoxin-producing E. coli Infection indicator conditions, including Hemolytic Uremic Syndrome</li> <li>Yersiniosis</li> <li>* Call 519-631-9900 (24 hours/day, 7 days/week)</li> </ul>	<ul> <li>Acute Flaccid Paralysis (AFP)</li> <li>Brucellosis</li> <li>Clostridium difficile associated disease (CDAD) outbreaks in Public Hospitals</li> <li>Diphtheria</li> <li>Food poisoning, all causes</li> <li>Gastroenteritis, institutional outbreaks</li> <li>Haemophilus influenza b disease, invasive</li> <li>Hantavirus Pulmonary Syndrome</li> <li>Hemorrhagic Fevers, including <ol> <li>Ebola virus disease</li> <li>Marburg virus disease</li> <li>Marburg virus disease</li> <li>Hepatitis, viral</li> <li>Hepatitis, viral</li> <li>Hepatitis A</li> </ol> </li> <li>Legionellosis</li> <li>Listeriosis</li> <li>Measles</li> <li>Mumps</li> <li>Paralytic Shellfish Poisoning (PSP)</li> <li>Paratyphoid fever</li> <li>Pertussis (Whooping Cough)</li> <li>Plague</li> <li>Respiratory infection, institutional outbreaks</li> <li>Rubella and Congenital Rubella Syndrome</li> <li>Salmonellosis</li> <li>Severe Acute Respiratory Syndrome (SARS)</li> <li>Shigellosis</li> <li>Tularemia</li> <li>Typhoid Fever</li> <li>West Nile Virus</li> </ul>	<ul> <li>Acquired Immunodeficiency Syndrome (AIDS)</li> <li>Amebiasis</li> <li>Campylobacter</li> <li>Chickenpox (Varicella)</li> <li>Chlamydia trachomatis infections</li> <li>Cholera</li> <li>Cryptosporidiosis</li> <li>Cyclosporiasis</li> <li>Encephalitis, including <ol> <li>Primary, viral</li> <li>Post-infectious</li> <li>Vaccine related</li> <li>Sub-acute sclerosing panencephalitis</li> <li>Unspecified</li> <li>Giardiasis, except asymptomatic cases</li> <li>Gonorrhea</li> <li>Hepatitis, viral <ol> <li>Hepatitis C</li> <li>Influenza (community cases)</li> <li>Leprosy</li> <li>Lyme Disease</li> <li>Malaria</li> <li>Meningitis, acute <ol> <li>Bacterial</li> <li>Viral</li> <li>Bacterial</li> <li>Viral</li> <li>Other</li> <li>Ophthalmia neonatorum</li> <li>Psittacosis/Ornithosis</li> <li>Q Fever</li> <li>Streptococcal infections, Group B neonatal</li> <li>Streptococcus pneumoniae, invasive</li> <li>Syphilis</li> <li>Transmissible Spongiform</li> <li>Encephalopathy</li> <li>Creutzfeldt-Jakob Disease, all types</li> <li>Trichinosis</li> <li>Yellow Fever</li> </ol> </li> </ol></li></ol></li></ul>