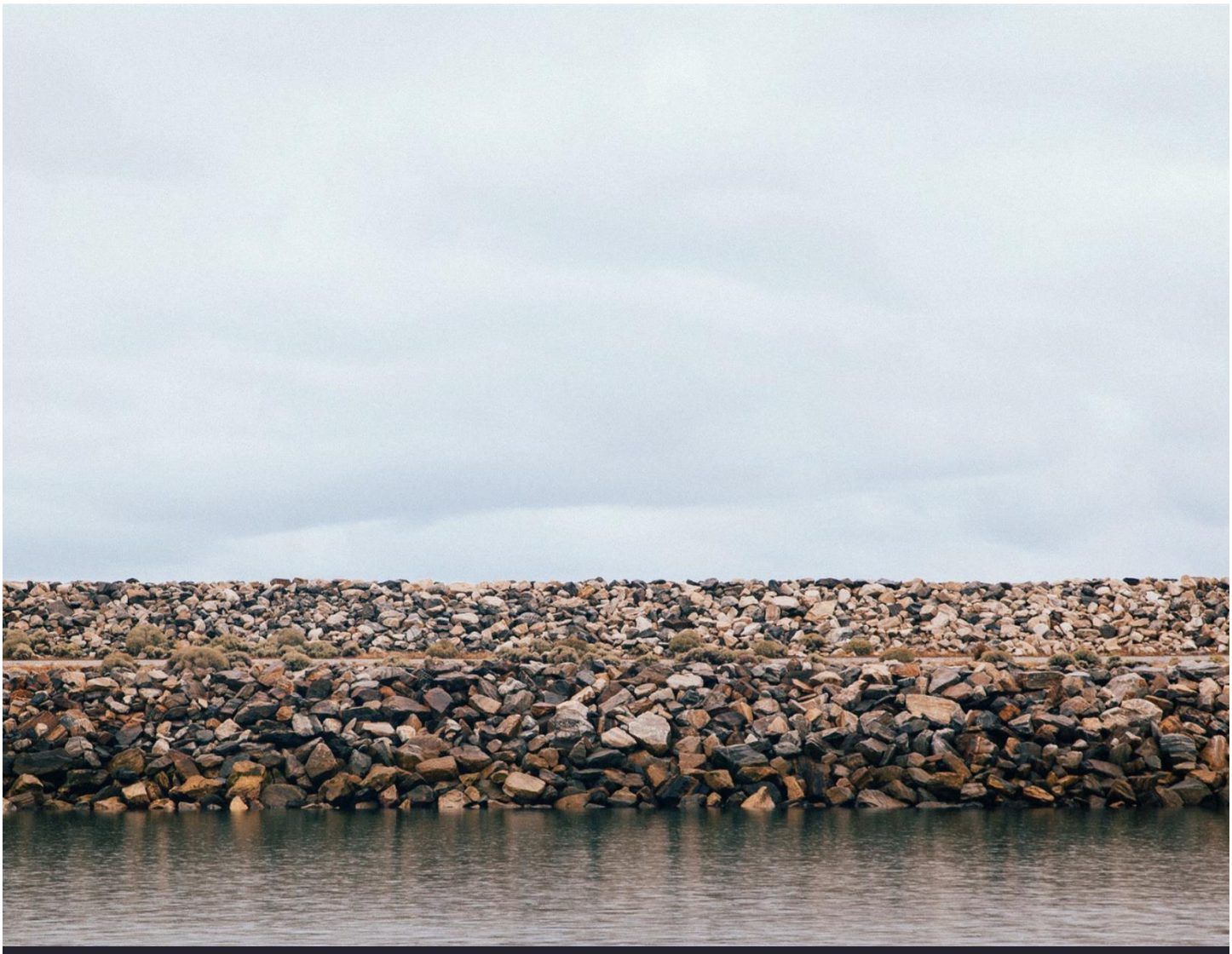

SELF-HARM & OTHER INTENTIONAL INJURIES IN GREY BRUCE

2019

CONTENTS

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KEY FINDINGS

SELF-HARM

How Many Incidents per Year?

On average, there are 170 emergency department (ED) visits and 100 hospitalizations for self-inflicted injuries, and 18 deaths by suicide each year by Grey Bruce residents.

How Do We Compare to Other Regions?

The local rates of ED visits and hospitalizations for self-inflicted injuries are comparable to Ontario rates, and lower than rates in mainly rural areas of Ontario. The local suicide rate is comparable to rates in Ontario and mainly rural areas.

What Are the Most Common Methods of Self-harm?

Most ED visits and hospitalizations for self-inflicted injuries are caused by intentional self-poisoning with drugs, medications, and alcohol, while the most common method of suicide is hanging, strangulation, and suffocation. Firearm discharge and exposure to gases and vapours are more common methods of suicide in Grey Bruce than provincially.

Who Is Most at Risk?

Young females aged 15 to 24 are at greatest risk of visiting an emergency department or being hospitalized for self-inflicted injuries. The risk of dying by suicide among this group, however, remains low. Adult males aged 25 to 44 and older adult males aged 65+ are at greatest risk of dying by suicide.

Are There Any Notable Trends?

Among young females aged 15 to 24 in Grey Bruce, the rate of ED visits due to self-harm tripled between 2011 and 2017, and the rate of hospitalizations nearly quadrupled from 2011 to 2015. Rates of ED visits and hospitalizations due to self-harm are also increasing among young females living in mainly rural areas of Ontario and young females across Ontario.

ASSAULT

How Many Incidents per Year?

On average, there are 439 emergency department visits and 20 hospitalizations due to assault, and 2 local residents killed in homicides each year in Grey Bruce.

How Do We Compare to Other Regions?

The local rate of emergency department visits due to assault is higher than the Ontario rate and nearly equal to the rate in mainly rural areas of Ontario. The local rate of hospitalizations due to assault is comparable to both the Ontario and mainly rural rates, while the local homicide rate is too low to make comparisons.

What Are the Most Common Methods of Assault?

Most emergency department visits and hospitalizations due to assault in Grey Bruce are caused by 'assault by bodily force'. This category includes unarmed brawls or fights, and excludes assault with a weapon, assault by strangulation, and sexual assault.

Who Is Most at Risk?

Young males aged 15 to 24 are at greatest risk of visiting an emergency department or being hospitalized due to assault.

Are There Any Notable Trends?

Local rates among males in the three youngest age groups decreased significantly in the early 2010s. Among males under 15 and males aged 25 to 44, the local rate increased again by 2017.

INTRODUCTION

INTRODUCTION TO INTENTIONAL INJURIES

Intentional injuries refer to injuries for which there is evidence of intent, such as self-harm and assault (as opposed to unintentional injuries such as accidental falls). Intentional self-harm injuries are injuries where a person has purposefully injured or poisoned themselves. Injuries resulting from assault are injuries inflicted by another person with intent to injure or kill, by any means. These include assault by bodily force, assault with a weapon, sexual assault, neglect and abandonment, and other maltreatment such as mental cruelty, physical or sexual abuse.

WHAT WE KNOW

- Thirteen percent of Grey Bruce residents aged 12 and older have ever seriously contemplated suicide. Overall, Grey Bruce residents and Ontarians are similarly likely to have ever seriously contemplated suicide. Male Grey Bruce residents, however, are more likely than male Ontarians to have seriously contemplated suicide.[1]
- Between 2008 and 2012, suicide was the leading cause of death among 25 to 44 year-olds in Grey Bruce, and the second-leading cause of death among 15 to 24 year-olds in Grey Bruce. The suicide mortality rate among Grey Bruce residents aged 25 to 44 was significantly higher than the Ontario rate for that age group.[2]

WHAT THIS REPORT ADDS

- Latest available emergency department visit and hospitalization rates due to self-harm and assault (2017)
- Latest available suicide mortality rates (2015)
- Rates by county, and by sex and age group, where possible
- Comparisons between the local rate, the Ontario rate, and the rate in mainly rural areas of Ontario

ABOUT THE REPORT

In the tables and figures that follow, causes of intentional injury death, hospitalization and emergency department visits (ED Visits) are presented in terms of age-standardized rates for Grey Bruce Health Unit, mainly rural health regions of Ontario (the Statistics Canada peer group which includes Grey Bruce Health Unit), and Ontario. Age-standardized rates do not represent the actual number of ED visits/hospitalizations/deaths expected in our population—they are the numbers expected if our population had a similar age distribution to a reference population (Canadian population in 2011). This allows for ease of comparability between geographic regions, or over time.

Other rates that are presented in the following document include crude (unadjusted) rates for age (or age-specific rates). Ten-year averages are also presented. These are reflective of what is actually occurring in the population because they are not adjusted to a reference population. See the Methods section (p. 21) for more detail.

[1] Grey Bruce Health Unit. (2018). Canadian Community Health Survey Indicators: 2015–16: Share File Content. Owen Sound, Ontario: Grey Bruce Health Unit.

[2] Grey Bruce Health Unit. (2019). Leading Causes of Death: Grey Bruce 2003 to 2012. Owen Sound: Grey Bruce Health Unit.

Grey Bruce rates are compared to Ontario rates, and rates among mainly rural health regions of Ontario. Mainly rural health regions refers to the mainly rural peer group as defined in 2018 by Statistics Canada. These are characterized by a moderate Aboriginal population, low population growth between 2011 and 2016, and high employment. They include:

- Grey Bruce Health Unit
- Haldimand-Norfolk Health Unit
- Huron County Health Unit
- Leeds, Grenville and Lanark District Health Unit
- Northwestern Health Unit
- Perth District Health Unit
- Renfrew County and District Health Unit
- Simcoe Muskoka District Health Unit
- Wellington-Dufferin-Guelph Health Unit
- Oxford Elgin St. Thomas Health Unit

SUICIDE CLASSIFICATION

Canada is fortunate to have high quality vital registration data on causes of death, which can be used directly to estimate suicide rates.[3] In Canada, all deaths that are unexpected, unexplained, or caused by violence are investigated by a coroner or medical examiner.[4] Even in countries with high quality vital registration data, however, there is potential for misclassification and particularly undercounting of suicides. This is especially true in cases where 'less active' methods such as poisoning, gassing, and drowning are used (as opposed to 'more active' methods such as hanging, shooting, and cutting).[5] In these cases, medical or legal authorities must rely on strong corroborative evidence such as witnesses, prior suicide attempts, or suicide notes.[5] While deaths due to drowning or exposure to gasses or fumes are relatively infrequent, poisoning deaths are of increasing concern as the opioid crisis continues to escalate. It is difficult to quantify the extent to which these opioid-related suicides are undercounted, but existing evidence indicates that somewhere between 20 to 30% of opioid overdose deaths are suicides.[6]

RURAL CONTEXT: ACCESS TO CARE

The entire population of Grey Bruce resides either in rural areas or small population centres, and much of Grey Bruce is geographically remote from any major population centre. Because this report uses emergency department visits, hospitalizations, and deaths to approximate rates of intentional injuries it is also important to acknowledge the effect of Grey Bruce's rural geography on the type of care residents seek to address these injuries. A person's health care seeking decisions are determined by a number of complex factors. In rural areas these might include a person's access to transportation, availability of health-care resources, socioeconomic status, rural values and health beliefs.[7]

[3] World Health Organization. Quality of suicide mortality data [Internet]. World Health Organization. World Health Organization; 2011 [cited 2019Jul18]. Available from: https://www.who.int/mental_health/suicide-prevention/mortality_data_quality/en/

[4] Skinner R, McFaull S, Rhodes AE. Suicide in Canada: Is Poisoning Misclassification an Issue? The Canadian Journal of Psychiatry. 2016Mar23;61(7):405–12.

[5] Rockett IRH, Kapusta ND, Bhandari R. Suicide Misclassification in an International Context: Revisitation and Update. Suicidology Online. 2011Oct;2:48–61

[6] Oquendo MA, Volkow ND. Suicide: A Silent Contributor to Opioid-Overdose Deaths. New England Journal of Medicine. 2018Apr26;378(17):1567–9.

[7] Pong RW, DesMeules M, Read Guernsey J, Manuel D, Kazanjian A, Want F. Health Services Utilization in Rural Canada. In: Health in Rural Canada. Vancouver, BC: UBC Press; 2012. p. 62.

Although the number of ED visits is not a direct measure of primary care access, it is is often used as a proxy measure of appropriate access to timely and after-hours primary care.[8] **"While many ED visits are urgent and not avoidable, others could potentially be avoided if primary care providers were available in a timely way and outside of regular office hours. The number of ED visits in rural areas is often higher because there are no alternative primary care, specialty care or diagnostic services available."**[8] Additionally, hospitalization rates may be higher in rural hospitals because they often have more beds available relative to urban centres, and because the long distance a person may have to travel to the hospital can necessitate more admissions for observation.[8] In Grey Bruce, annual visits to a primary care physician are low relative to most of Ontario[8], despite our older population. Access to after-hours primary care is highly limited or nonexistent for Grey Bruce residents, and rates of ED visits in Grey Bruce are among the highest in the province.[8]

[8] Glazier RH, Gozdyra P, Kim M, Bai L, Kopp A, Schultz SE, Tynan AM. Geographic Variation in Primary Care Need, Service Use and Providers in Ontario, 2015/16. Toronto, ON: Institute for Clinical Evaluative Sciences; 2018

1. SELF-HARM

SUMMARY

Between 2008 and 2017, self-inflicted injuries accounted for an average of 170 emergency department (ED) visits, and 100 hospitalizations per year by Grey Bruce residents. Between 2006 and 2015, an average of 18 Grey Bruce residents died by suicide each year. The local rates of ED visits and hospitalizations for self-inflicted injuries are comparable to Ontario rates, and lower than the rates in mainly rural regions of Ontario (the Statistics Canada peer group which includes the Grey Bruce Health Region). The local suicide rate is comparable to the provincial rate and the rate in mainly rural regions of Ontario.

Figure 1. Average Number of Emergency Department Visits, Hospitalizations, and Deaths due to Self-inflicted Injuries, Grey Bruce, 2008-2017 (EDVs and Hospitalizations), 2006-2015 (Deaths), with Comparisons between Age-standardized Rates in Grey Bruce, Ontario, and Mainly Rural Health Regions in Ontario

ED VISITS	HOSPITALIZATIONS	DEATHS
170 per year	**100** per year	**18** per year
≈ to ON rate	≈ to ON rate	≈ to ON rate
⬇ than Rural rate	⬇ than Rural rate	≈ to Rural rate

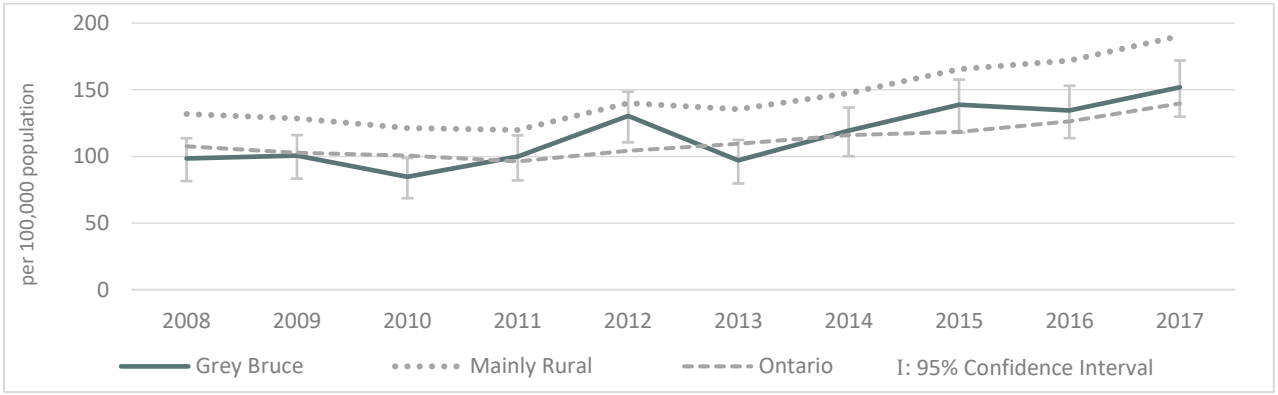
EMERGENCY DEPARTMENT VISITS FOR SELF-HARM

Grey Bruce rate: In Grey Bruce in 2017, the age-standardized rate of ED visits for self-inflicted injuries was 152 visits for every 100,000 Grey Bruce residents (Figure 2).

Geographic comparisons: In 2017, as in most years, the Grey Bruce was lower than the rate in mainly rural areas of Ontario, and similar to the provincial rate. (Figure 2).

Trends over time: Following a spike in 2012, the local rate has been trending upwards since 2013, reaching a ten-year-high in 2017. Mainly rural and provincial rates are also trending upwards (Figure 2).

Figure 2. Annual Age-standardized Rate of ED Visits for Self-harm, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

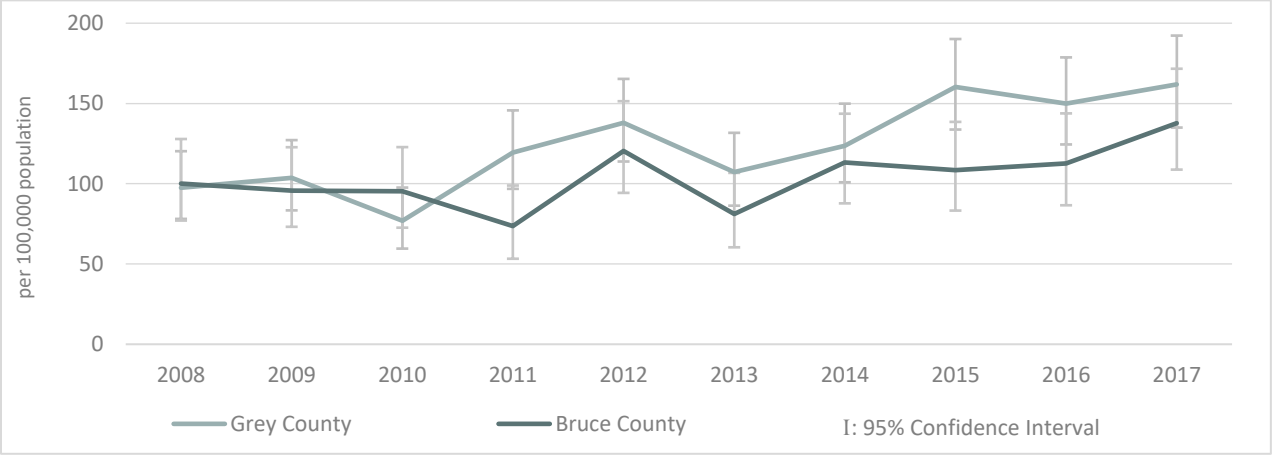


EMERGENCY DEPARTMENT VISITS FOR SELF-HARM: BY COUNTY

Grey Bruce rates: In Grey County in 2017, the age-standardized rate of ED visits due to self-inflicted injuries was 162 visits per 100,000 residents. The Bruce County rate was slightly lower, at 138 visits per 100,000 residents (Figure 3).

Trends over time: The Grey and Bruce County rates tend to be relatively similar. Both rates have increased between 2013 and 2017, but not to a statistically significant extent (Figure 3).

Figure 3. Annual Age-standardized Rate of ED Visits for Self-harm, Grey and Bruce Counties, 2008-2017



EMERGENCY DEPARTMENT VISITS FOR SELF-HARM: BY SEX AND AGE GROUP

At-risk groups: In Grey Bruce between 2015 and 2017, females between the ages of 15 and 24 were at greatest risk of visiting an emergency department for self-inflicted injuries (Figure 4). The rate of ED visits for self-inflicted injuries among 15 to 24 year-old females in Grey Bruce is about two-and-a-half times as high as the next highest local rate, among 15 to 24 year-old males. This gender gap has increased over time- in 2011, rates were nearly equal among 15 to 24 year-old males and females in Grey Bruce (Figure 5).

Geographic comparisons: Rates among female Grey Bruce residents in the three youngest age categories are significantly lower than the rates among their counterparts in mainly rural areas of Ontario. Among females under 15 the local rate is lower than the Ontario rate, and among females aged 15 to 24 the local rate is higher than the Ontario rate, though neither of these differences are statistically significant (Figure 4).

Rates among male Grey Bruce residents are nearly equal to the rates among males in mainly rural areas across age categories. Among males aged 15 to 24 and 25 to 44 the local rate is higher than the Ontario rate, though this difference is only statistically significant among 15 to 24 year-olds (Figure 4).

Trends over time: The rate of ED visits due to self-inflicted injuries has been increasing among young females between 15 and 24 years of age since the early 2010s, across the geographies presented (Table 10). In Grey Bruce, the rate among 15 to 24 year-old females tripled from 2011 to 2017 (Figure 5). Rates among other local demographic groups have remained fairly stable in recent years.

The rate of ED visits among male Grey Bruce residents aged 15 to 24 tripled between 2008 and 2012, and has not changed significantly since (Figure 5).

Figure 4. Annual Age-specific Rate of ED Visits for Self-harm, by sex, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2015-2017

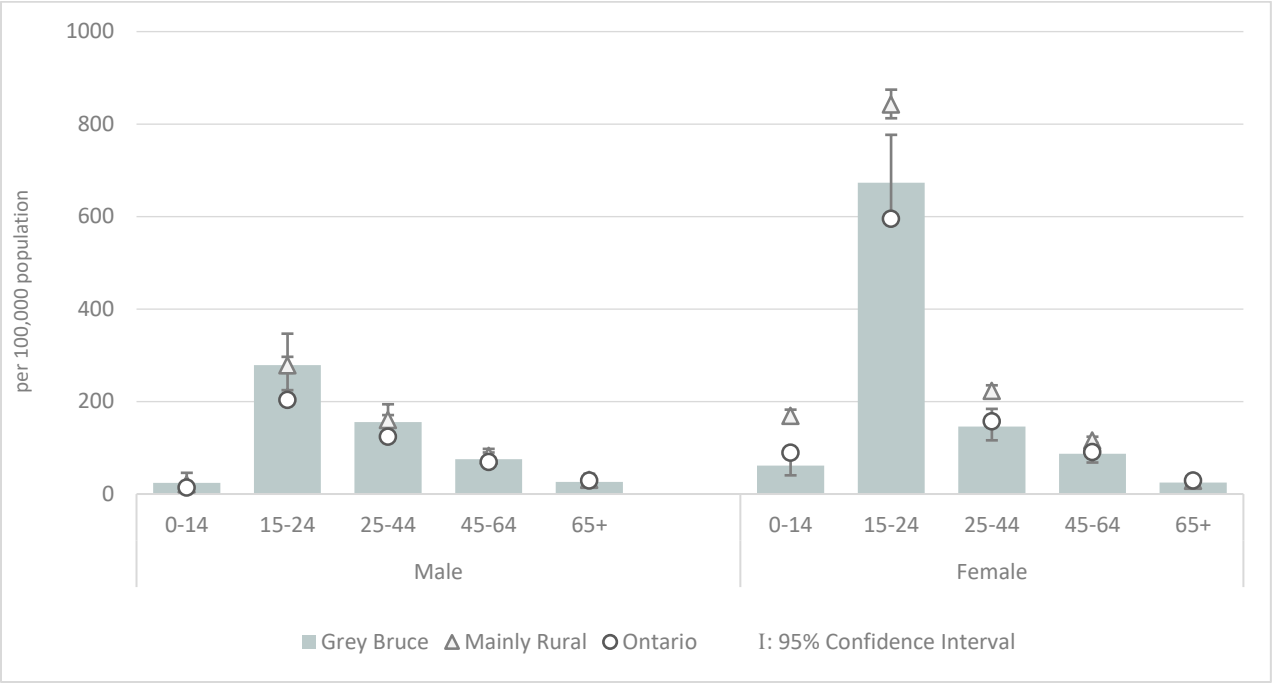


Figure 5. Annual Age-specific Rate of ED Visits for Self-harm, 15 to 24 Year-olds, by Sex, Grey Bruce, 2015-2017

SELF-HARM EMERGENCY DEPARTMENT VISITS: BY CAUSE

From 2008 to 2017, intentional self-poisoning by drugs, medications, and alcohol accounted for the greatest proportion of ED visits for self-inflicted injuries in Grey Bruce (67%). Intentional self-harm with a sharp object was the next most common cause of ED visits for self-inflicted injury (17%), followed by unspecified modes of self-harm (8%), exposure to unspecified chemicals and noxious substances (3%), and hanging, strangulation and suffocation (2%) (Table 1). The cause was due to unspecified means in a greater proportion of ED visits for self-harm in Grey Bruce than provincially, and a smaller proportion are due to self-poisoning with drugs, medications, and alcohol.

Table 1. Most Common Causes of Emergency Department Visits due to Self-harm in Grey Bruce, with comparisons to Ontario, 2008-2017

Cause of Injury	Grey Bruce	Ontario
Intentional self-poisoning by drugs, medications, and alcohol	66.8% (64.7% – 68.8%)	74.5% (74.3% – 74.8%)
Intentional self-harm with sharp object	17.0% (15.4% – 18.7%)	16.7% (16.5% – 16.9%)
Intentional self-harm by unspecified means	7.5% (6.4% – 8.7%)	1.1% (1.1% – 1.2%)
Intentional self-harm by exposure to unspecified chemicals and noxious substances	3.0% (2.4% – 3.9%)	2.5% (2.4% – 2.5%)
Intentional self-harm by hanging, strangulation and suffocation	1.9% (1.4% – 2.7%)	1.4% (1.4% – 1.5%)

ICD-10 Coding Groups: Self-poisoning by drugs, medications, and alcohol: X60-X65

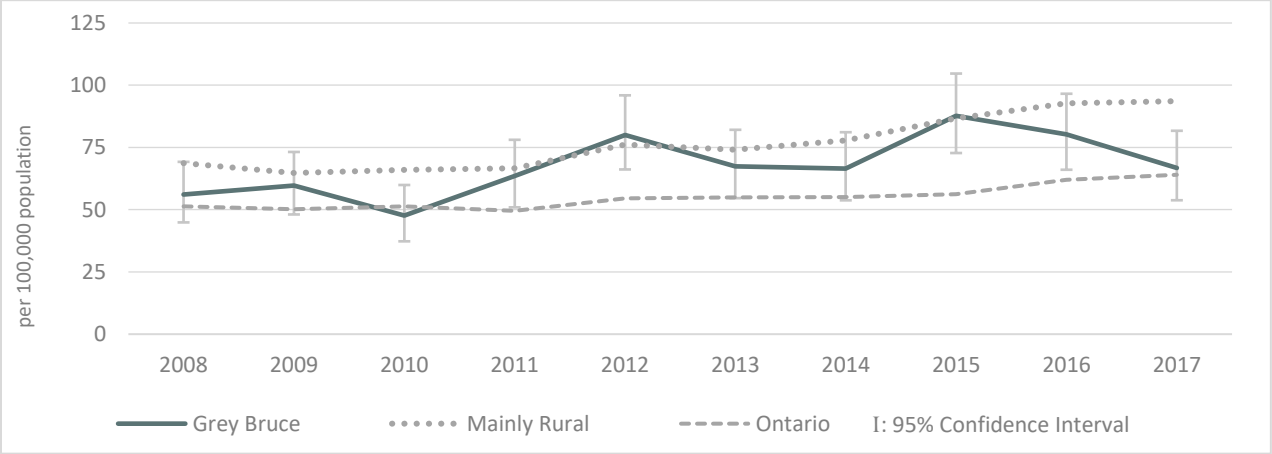
HOSPITALIZATIONS FOR SELF HARM

Grey Bruce rate: In Grey Bruce in 2017, the age-standardized rate of hospitalizations due to self-inflicted injuries was 67 hospitalizations for every 100,000 residents (Figure 6).

Geographic comparisons: Since 2011, the Grey Bruce rate has tended to be higher than the Ontario rate, and relatively similar to the rate in mainly rural areas. In 2017, the local rate decreased to be nearly equal to the Ontario rate of 64 hospitalizations per 100,000 residents, and significantly lower than the mainly rural rate of 94 hospitalizations per 100,000 residents (Figure 6).

Trends over time: The local hospitalization rate fluctuated slightly between 2008 and 2017, with one peak in 2012 and another in 2015 (Figure 6).

Figure 6. Annual Age-standardized Rate of Hospitalizations for Self-Harm, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

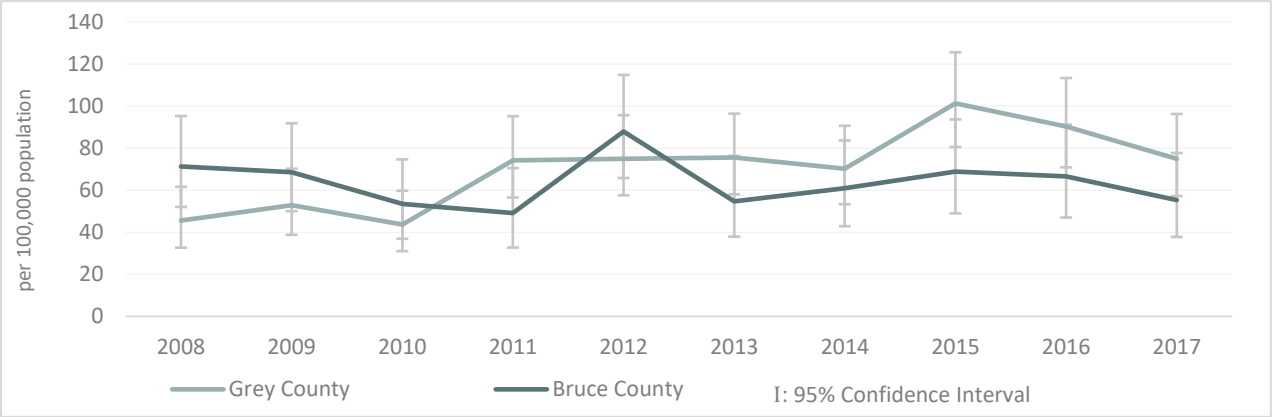


HOSPITALIZATIONS FOR SELF-HARM: BY COUNTY

Grey Bruce rates: In Grey County in 2017, the age-standardized rate of hospitalizations for self-inflicted injuries was 75 hospitalizations per 100,000 residents. In Bruce County the rate was 55 hospitalizations per 100,000 residents (Figure 7).

Trends over time: Rates between counties have not differed significantly over time. In Grey County, the rate rose between 2010 and 2011, and again between 2014 and 2015 to be significantly higher than the 2010 rate. The Bruce County rate peaked in 2012, but changes over time were not statistically significant (Figure 7).

Figure 7. Annual Age-standardized Rate of Hospitalizations for Self-Harm, Grey and Bruce Counties, 2008-2017



HOSPITALIZATIONS FOR SELF-HARM: BY SEX AND AGE GROUP

At-risk groups: In Grey Bruce between 2015 and 2017, females between the ages of 15 and 24 were at greatest risk of being hospitalized for self-inflicted injuries. The rate of ED visits for self-inflicted injuries among 15 to 24 year-old females in Grey Bruce is about three times as high as the next highest local rate, among 15 to 24 year-old males (Figure 8).

Geographic comparisons: Among males, local hospitalization rates are higher than Ontario rates for 15 to 24 year-olds, 25 to 44 year-olds, and 45 to 64 year-olds, though this difference is only statistically significant among 25 to 44 year-olds. Rates among local males are generally similar to rates among males in mainly rural areas (Figure 8).

Among females, local rates are higher than the Ontario rates for 15 to 24 year-olds, 25 to 44 year-olds, and 45 to 64 year-olds, but this difference is only statistically significant among 15 to 24 year-olds. Local rates among females are lower (but not significantly lower) than the mainly rural rates for all but the oldest age group (Figure 8, Table 13).

The rates among children and youth under 15 in Grey Bruce are too low to report.

Trends over time: The rate of hospitalizations for self-inflicted injuries nearly quadrupled among local females aged 15 to 24 between 2011 and 2015 (Figure 9). Hospitalization rates have not changed significantly in recent years among other demographic groups in Grey Bruce (Table 13). In mainly rural areas of Ontario, and provincially, rates are increasing among females in the two youngest age groups.

Figure 8. Annual Age-specific Rate of Hospitalizations for Self-harm, by sex, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2015-2017

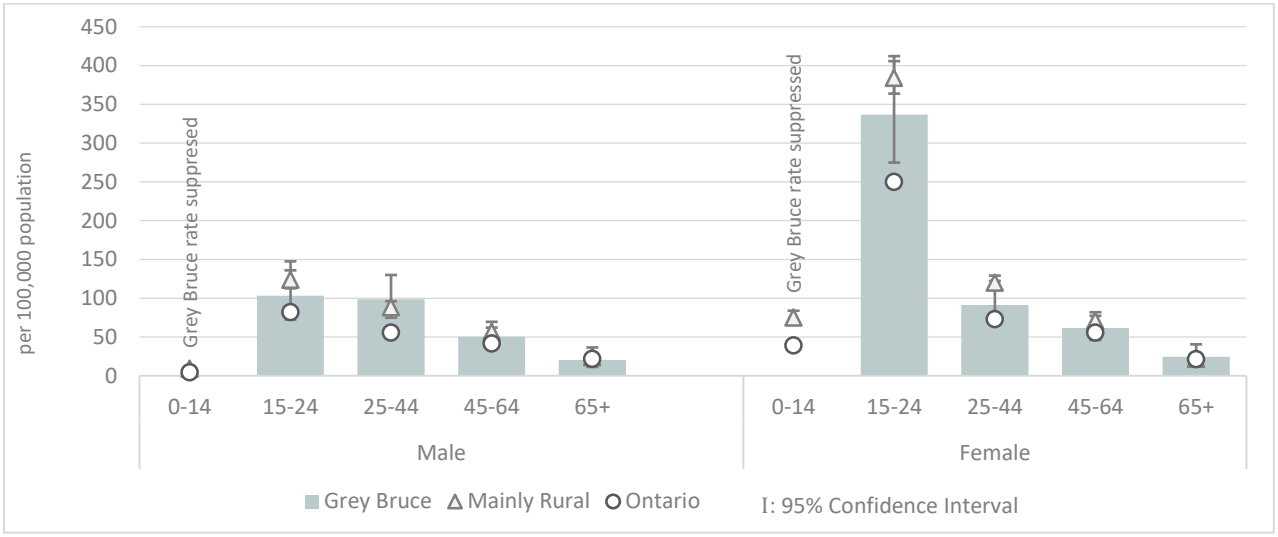
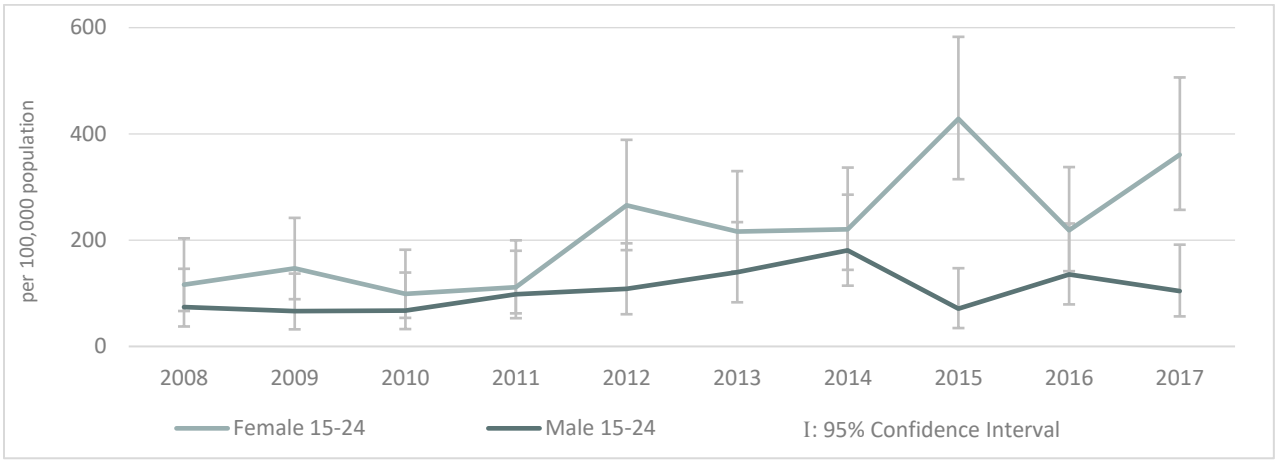


Figure 9. Annual Age-specific Rate of Hospitalizations for Self-harm, 15 to 24 Year-olds, by Sex, Grey Bruce, 2015-2017



SELF-HARM HOSPITALIZATIONS: BY CAUSE

From 2008 to 2017, intentional self-poisoning by drugs, medications, and alcohol accounted for the greatest proportion of hospitalizations for self-inflicted injuries in Grey Bruce (82%). Intentional self-harm with a sharp object was the next most common cause of hospitalizations for self-inflicted injury (10%), followed by exposure to unspecified chemicals and noxious substances (3%), hanging, strangulation and suffocation (1%), and exposure to gases and vapours (1%) (Table 2).

Table 2. Most Common Causes of Hospitalizations due to Self-harm in Grey Bruce, with comparisons to Ontario, 2008-2017

Cause of Injury	Grey Bruce	Ontario
Intentional self-poisoning by drugs, medications, and alcohol	82.4% (80.2% – 84.4%)	84.2% (84.0% – 84.5%)
Intentional self-harm with sharp object	9.5% (8.0% – 11.3%)	8.4% (8.3% – 8.6%)
Intentional self-harm by exposure to unspecified chemicals and noxious substances	3.2% (2.3% – 4.3%)	2.5% (2.4% – 2.6%)
Intentional self-harm by hanging, strangulation and suffocation	1.4% (0.9% – 2.3%)	1.6% (1.5% – 1.7%)
Intentional self-poisoning by and exposure to gases and vapours	1.0% (0.5% – 1.7%)	0.9% (0.8% – 1.0%)

ICD-10 Coding Groups: Self-poisoning by drugs, medications, and alcohol: X60-X65; Self-poisoning by exposure to gases or vapours: X66-X67

SUICIDE MORTALITY

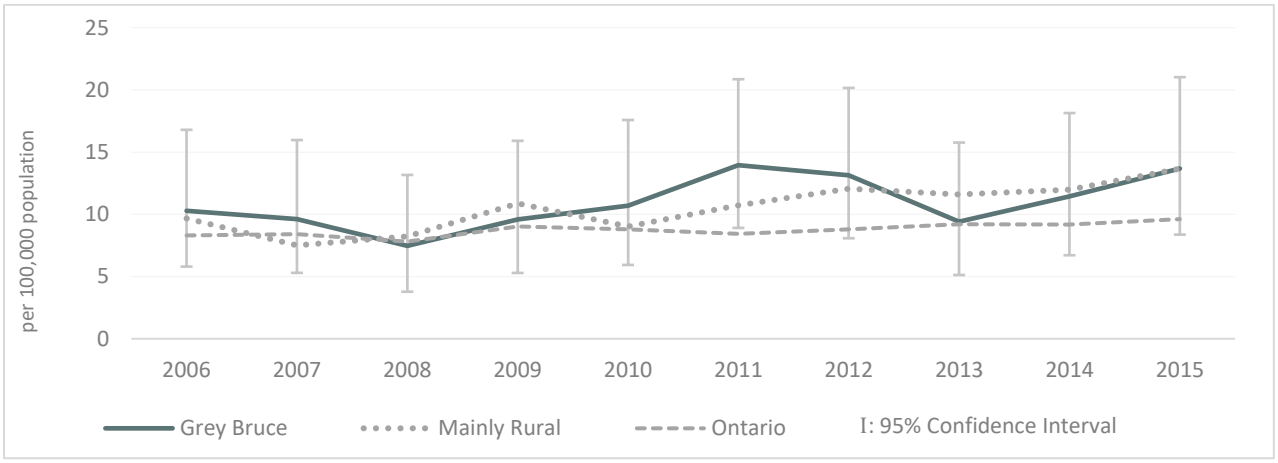
Grey Bruce rate: In Grey Bruce in 2015, the age-standardized rate of death by suicide was 14 deaths per 100,000 population (Figure 10). The rate is too low to compare by county.

Geographic comparisons: The rate of death by suicide in Grey Bruce was slightly higher in some years than the Ontario rate, though this difference was only statistically significant in 2011. The Grey Bruce rate tends to be fairly similar to the rate in other mainly rural areas (Figure 10).

Trends over time: The local rate of death by suicide did not change significantly between 2006 and 2015 (Figure 10).

Recent trends (special request): Data obtained through a coroner's request indicates a high number of deaths by suicide in Grey Bruce in 2016 and 2017. Twenty-eight suicide deaths were recorded among Grey Bruce residents in 2016, and another 31 were recorded in 2017 (email to Maddie Johnson from Dr. Rick Mann, 2019, unreferenced). This is higher than the highest number recorded between 2006 and 2015, which was 25 deaths in 2011 (Table 14).

Figure 10. Annual Age-standardized Rate of Suicide Mortality, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017



SUICIDE MORTALITY: BY SEX AND AGE GROUP

At-risk groups: In Grey Bruce between 2006 and 2015, male residents aged 15 and over were at greatest risk of dying by suicide. Males between the ages of 25 and 44 had the highest suicide mortality rates, followed closely by those aged 65 and older (Figure 11).

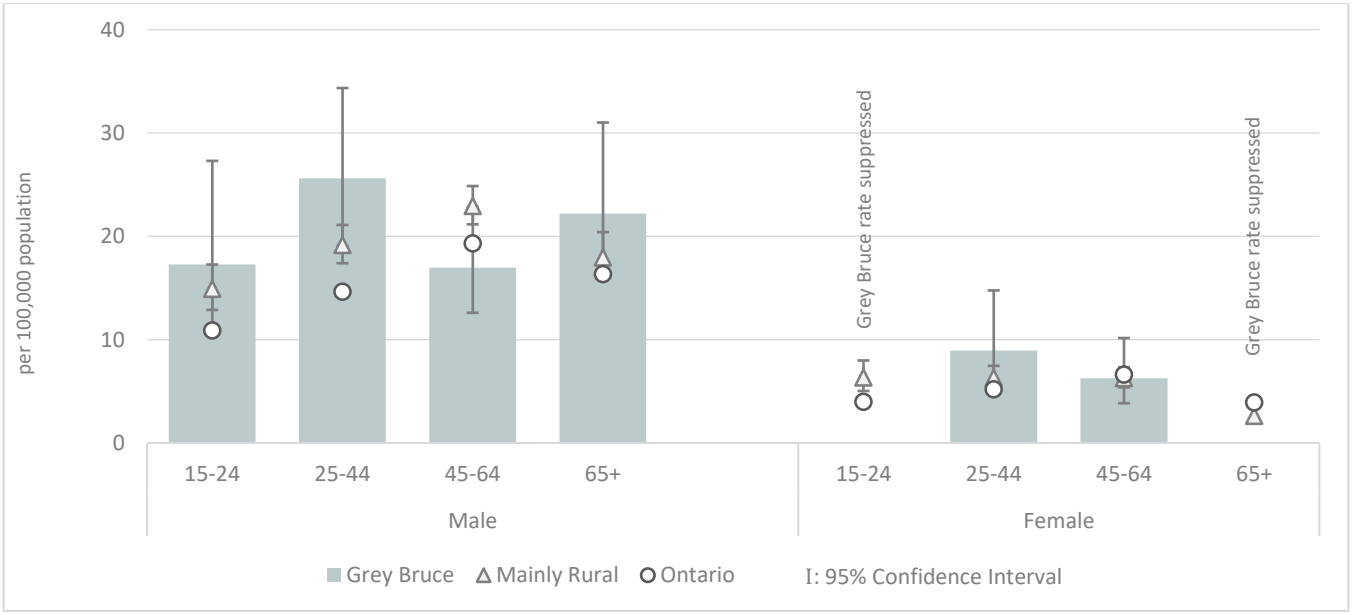
The suicide mortality rate among young female residents of Grey Bruce between the ages of 15 to 24 is too low to report, despite this group having very high rates of ED visits and hospitalizations for self-harm. It is well-documented that while females attempt suicide more frequently, completed suicides are more frequent among males.[9]

Geographic comparisons: Among males, local suicide mortality rates are higher than Ontario rates and mainly rural rates for 15 to 24 year-olds, 25 to 44 year-olds, and those aged 65+, though this difference is only statistically significant between 25 to 44 year-old males in Grey Bruce and their counterparts in Ontario. Among 45 to 64 year-olds males, the local rate is lower than the Ontario and mainly rural rates, but not to a statistically significant extent (Figure 11).

Among females, local suicide mortality rates are higher than Ontario and mainly rural rates for 25 to 44 year-olds, but not to a statistically significant extent. Local rates are too low to report among females aged 15 to 24, and 65+ (Figure 11).

Note that children under 15 are excluded from the figure because no deaths by suicide were recorded among Grey Bruce residents under 15 years of age over this time period. Prior to age 10 a death cannot be classified as a suicide.

Figure 11. Annual Age-specific Rate of Suicide Mortality, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2006 to 2015



[9] Canetto SS, Sakinofsky I. The Gender Paradox in Suicide. Suicide and Life-threatening Behavior. 1998;28(1):1–23.

METHOD OF SUICIDE

From 2006 to 2015, the most common method of death by suicide in Grey Bruce was hanging, strangulation or suffocation (41%), followed by firearm discharge (19%), self-poisoning with drugs, medications or alcohol (19%), and self-poisoning by exposure to gases and vapours (10%). Firearm discharge, and exposure to gases and vapours are more common methods of suicide in Grey Bruce than provincially (Table 3).

Table 3. Most Common Methods of Suicide Deaths in Grey Bruce, with comparisons to Ontario, 2006-2015

Cause of Death	Grey Bruce	Ontario
Intentional hanging, strangulation or suffocation	41.5% (34.5% – 48.9%)	43.5% (42.6% – 44.4%)
Intentional self-harm by firearm discharge	19.3% (14.1% – 25.8%)	11.6% (11.1% – 12.2%)
Intentional self-poisoning by drugs, medications, and alcohol	19.3% (14.1% – 25.8%)	19.2% (18.4% – 19.9%)
Intentional self-poisoning by and exposure to gases and vapours	10.2% (6.5% – 15.7%)	5.5% (5.1% – 5.9%)

ICD-10 Coding Groups: Self-harm by firearm discharge: X72-X74; Self-poisoning by drugs, medications, and alcohol: X60-X65; Self-poisoning by exposure to gases or vapours: X66-X67

2: ASSAULT

SUMMARY

Between 2008 and 2017, injuries due to assault (injuries intentionally inflicted by another person) accounted for an average of 433 ED visits, and 20 hospitalizations per year by Grey Bruce residents. Between 2006 and 2015, an average of 2 Grey Bruce residents were killed in a homicide each year (i.e. murder and manslaughter). The local rate of ED visits for assault is higher than the Ontario rate, and comparable to the rate in mainly rural regions of Ontario (the Statistics Canada peer group which includes the Grey Bruce Health Region). The local rate of hospitalizations for assault is comparable to both the Ontario and mainly rural rate, and the local rate of homicide deaths is too low to compare.

Figure 12. Average Number of Emergency Department Visits, Hospitalizations, and Deaths due to Assault, Grey Bruce, 2007-2016 (EDVs and Hospitalizations), 2006-2015 (Deaths), with Comparisons between Age-standardized Rates in Grey Bruce, Ontario, and Mainly Rural Health Regions in Ontario

ED VISITS	HOSPITALIZATIONS	DEATHS
439 per year	**20** per year	**2** per year
⬆ than ON rate	≈ to ON rate	*too low to compare*
≈ to Rural rate	≈ to Rural rate	*too low to compare*

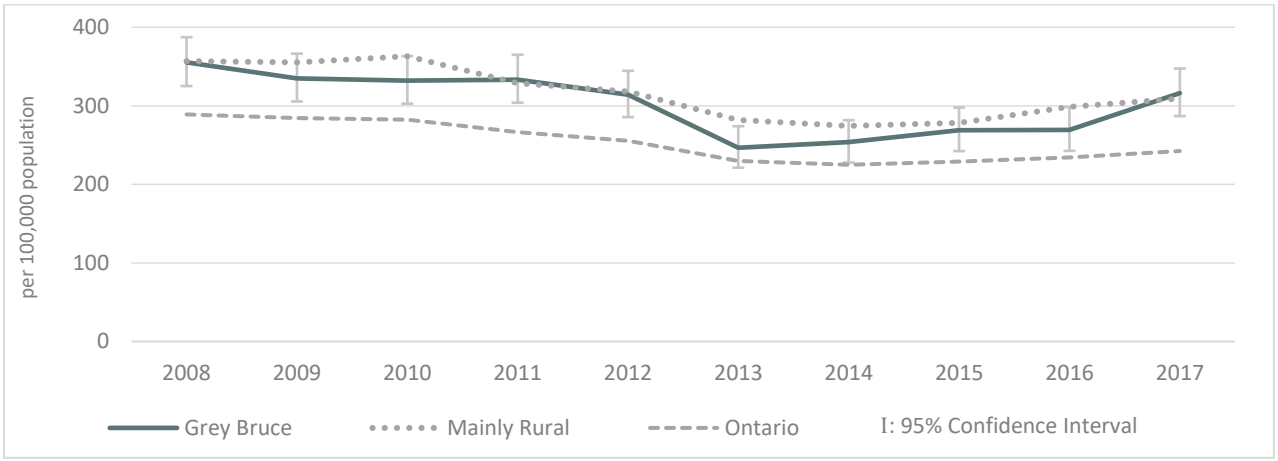
EMERGENCY DEPARTMENT VISITS FOR ASSAULT

Grey Bruce rate: In Grey Bruce in 2017, the age-standardized rate of ED visits due to assault was 316 visits per 100,000 Grey Bruce residents (Figure 13).

Geographic comparisons: The rate of ED visits due to assault in Grey Bruce tends to be similar to the rate in mainly rural areas of Ontario, and higher than the provincial rate. In 2017 the Grey Bruce rate of 316 visits per 100,000 population was nearly equal to the mainly rural rate of 309 visits, and significantly higher than the Ontario rate of 242 visits (Figure 13).

Trends over time: The local rate decreased significantly between 2012 and 2013, and has been trending upwards in recent years (Figure 13).

Figure 13. Annual Age-standardized Rate of ED Visits for Assault, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

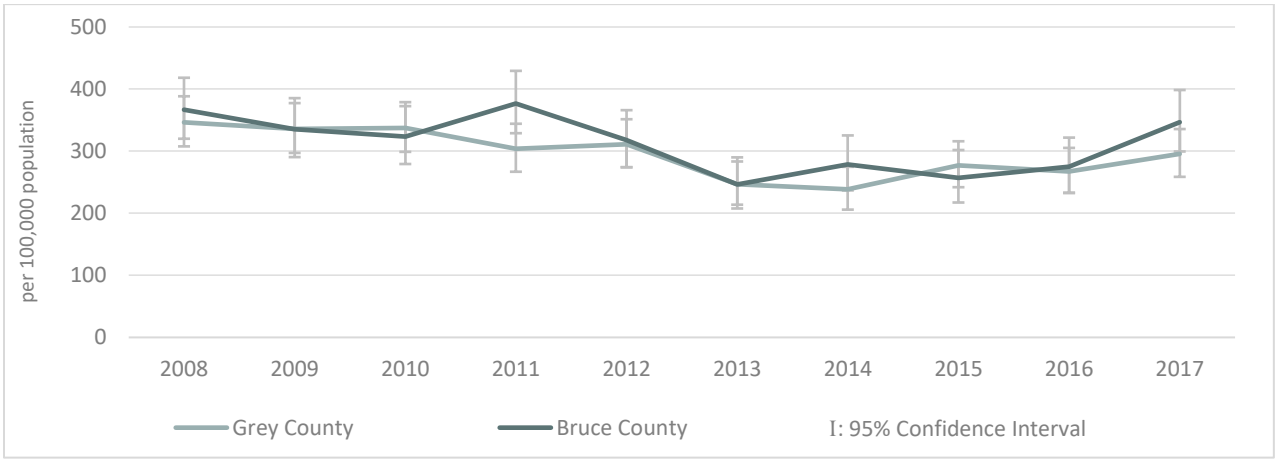


EMERGENCY DEPARTMENT VISITS FOR ASSAULT: BY COUNTY

Grey Bruce rates: In Grey County in 2017, the age-standardized rate of ED visits due to assault was 295 visits per 100,000 residents. The Bruce County rate was higher, at 347 visits per 100,000 residents, but this was not a statistically significant difference (Figure 14).

Trends over time: The Grey and Bruce County rates tend to be very similar. Both rates decreased significantly between 2008 and 2013, and the Bruce County rate increased significantly between 2013 and 2017 (Figure 14).

Figure 14. Annual Age-standardized Rate of ED Visits for Assault, Grey and Bruce Counties, 2008-2017



EMERGENCY DEPARTMENT VISITS FOR ASSAULT: BY SEX AND AGE GROUP

At-risk groups: In Grey Bruce between 2015 and 2017, males between the ages of 15 and 24 were at greatest risk of visiting an emergency department for injuries due to assault (Figure 15). The rate of ED visits for injuries due to assault among 15 to 24 year-old males in Grey Bruce is nearly twice as high as the next highest local rate, among 15 to 24 year-old females. This gender gap has decreased over time- in 2009 the rate among 15 to 24 year-old males in Grey Bruce was four times as high as the rate among 15 to 24 year-old females (Figure 16).

Geographic comparisons: Local rates are significantly higher than Ontario rates among males in the two youngest age groups, and females in all but the oldest age group. Local rates tend to be similar to the rates in mainly rural areas, except among males under 15 for whom the local rate is significantly higher than the mainly rural rate, and males aged 25 to 44 for whom the local rate is significantly lower than the mainly rural rate (Figure 15).

Trends over time: Local rates among males in the three youngest age groups decreased significantly in the early 2010s. Among males under 15 and males aged 25 to 44, the local rate had increased again by 2017. Among males aged 15 to 44 the local rate levelled off after decreasing between 2012 and 2013 (Figure 16).

Figure 15. Annual Age-specific Rate of ED Visits for Assault, by sex, Grey Bruce, Mainly Rural Health Regions, and Ontario 2015-2017

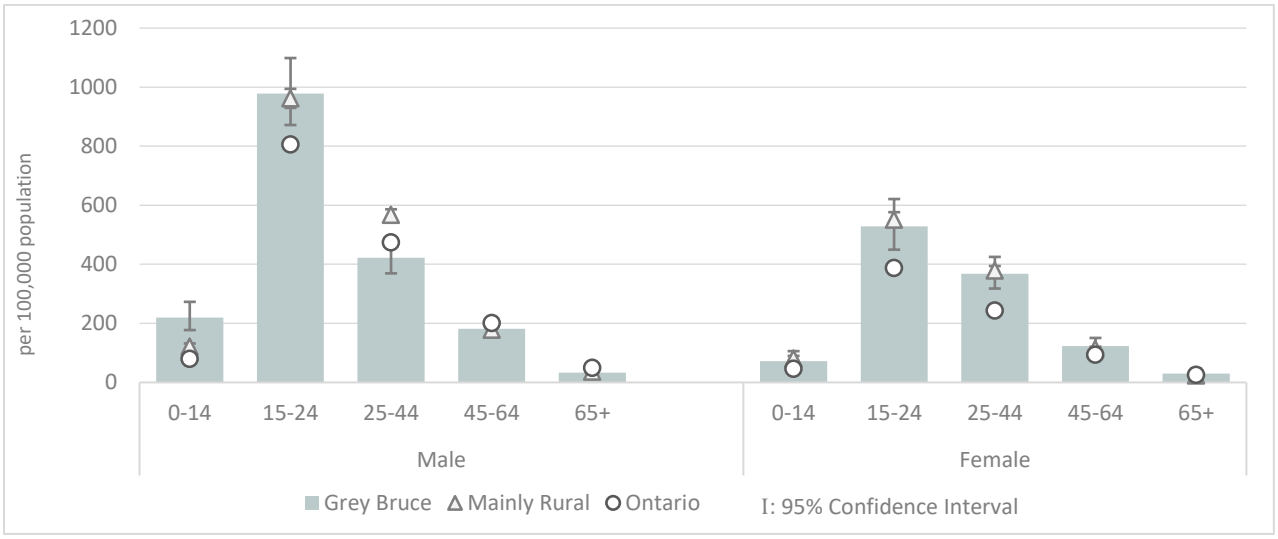
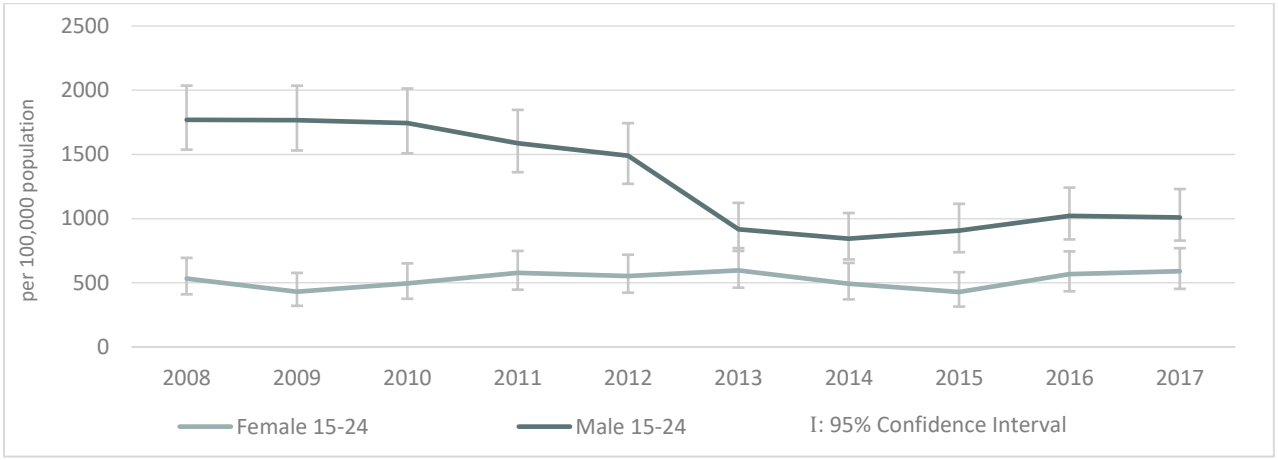


Figure 16. Annual Age-specific Rate of ED Visits for Assault, 15 to 24 Year-olds, by Sex, Grey Bruce 2015-2017



EMERGENCY DEPARTMENT VISITS DUE TO ASSAULT: BY CAUSE

From 2008 to 2017, assault by bodily force accounted for the greatest proportion of ED visits due to assault in Grey Bruce (80%). This includes unarmed brawls or fights, and excludes assault with a weapon. Assault by 'other specified means' was the next most common cause (5%), followed by assault by a sharp object (3%), assault by unspecified means (3%), and sexual assault by bodily force (2%). Assault by bodily force, and assault by 'other specified means' cause a greater proportion of ED visits due to assault in Grey Bruce than provincially, while assault by a sharp object, and assault by unspecified means cause a smaller proportion of ED visits in Grey Bruce than provincially (Table 4).

Table 4. Most Common Causes of Emergency Department Visits due to Assault in Grey Bruce, with comparisons to Ontario, 2008-2017

Cause of Injury	Grey Bruce	Ontario
Assault by bodily force	79.5% (78.3% – 80.7%)	71.0% (70.9% – 71.2%)
Assault by other specified means	4.6% (4.0% – 5.3%)	3.4% (3.3% – 3.5%)
Assault by sharp object	2.8% (2.4% – 3.3%)	6.0% (5.9% – 6.0%)
Assault by unspecified means	2.5% (2.1% – 3.1%)	4.2% (4.1% – 4.2%)
Sexual Assault by bodily force	2.4% (2.0% – 2.9%)	2.6% (2.6% – 2.7%)

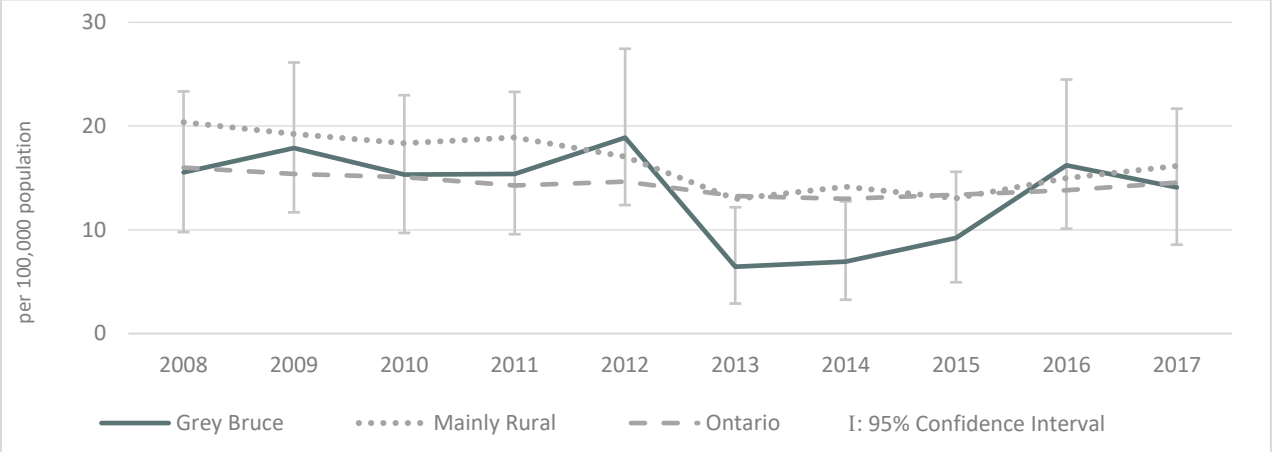
HOSPITALIZATIONS FOR ASSAULT

Grey Bruce rate: In Grey Bruce in 2017, the age-standardized rate of hospitalizations due to assault was 15 hospitalizations per 100,000 residents (Figure 17).

Geographic comparisons: The local rate of hospitalizations due to assault tends to be similar to the Ontario and mainly rural rates (Figure 17).

Trends over time: The local rate has remained fairly stable over time, with the exception of a significant decrease between 2012 and 2013 (Figure 17).

Figure 17. Annual Age-standardized Rate of Hospitalizations for Assault, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017



HOSPITALIZATION FOR ASSAULT: BY COUNTY

In 2017, the age-standardized rate of hospitalizations due to assault was 18 hospitalizations per 100,000 residents in Bruce County and 11 hospitalizations per 100,000 residents in Grey County. Between 2008 and 2017 the hospitalization rate did not differ significantly between the two counties (Table 20).

HOSPITALIZATIONS FOR ASSAULT: BY SEX AND AGE GROUP

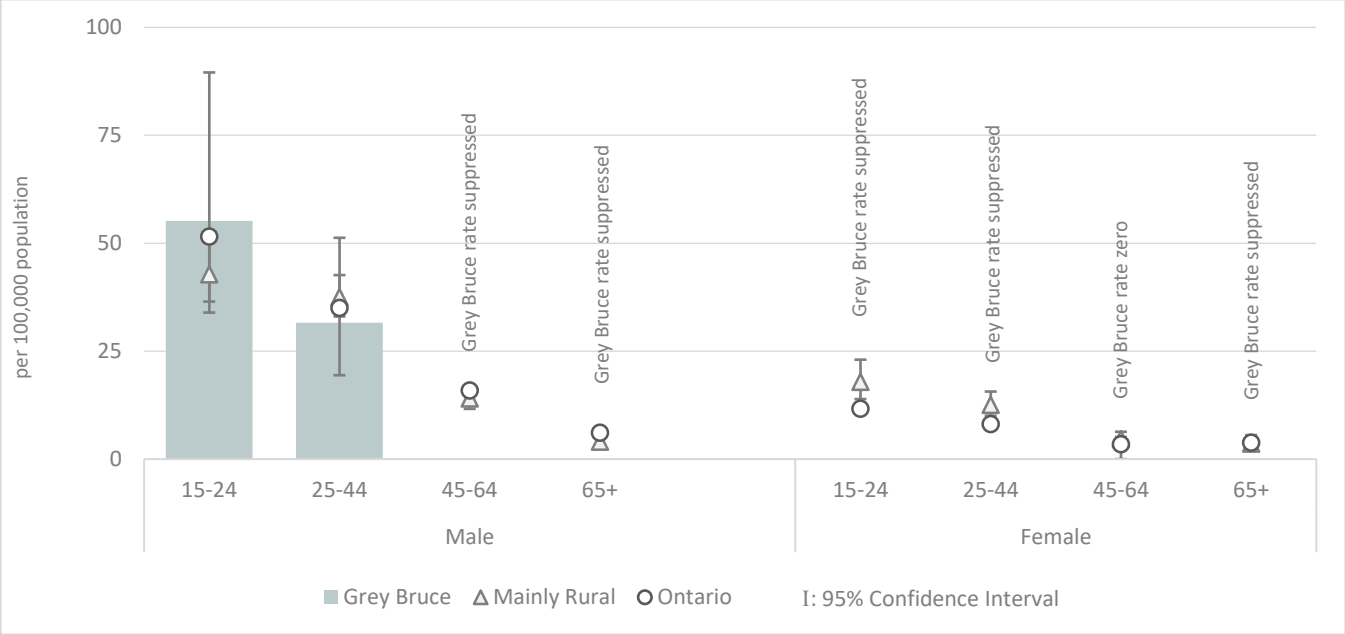
At-risk groups: In Grey Bruce between 2015 and 2017, males aged 15 to 24 had the highest rate of hospitalizations due to assault followed by males aged 45 to 64. Rates among other demographic groups in Grey Bruce were too low to report.

Geographic comparisons: Among males aged 15 to 24, the local rate of hospitalizations is similar to the Ontario rate and higher than the rate in mainly rural areas, but not to a statistically significant extent. The rate among 25 to 44 year-old males in Grey Bruce is similar to both the mainly rural and Ontario rates.

Trends over time: Local hospitalization rates have not changed significantly over time among males aged 15 to 24 or males aged 25 to 64.

Note that children under 15 are excluded from the figure because no hospitalizations due to assault were recorded among Grey Bruce residents under 15 years of age over this time period.

Figure 18. Annual Age-specific Rate of Hospitalizations for Assault, by sex, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2015 to 2017



HOSPITALIZATIONS DUE TO ASSAULT: BY CAUSE

From 2008 to 2017, assault by bodily force accounted for the greatest proportion of hospitalizations due to assault in Grey Bruce (66%). Assault by a sharp object was the next most common cause of hospitalizations due to assault (7%), followed by sexual assault (7%), assault by a blunt object (7%), and assault by 'other specified means' (3%). Assault by bodily force caused a greater proportion of hospitalizations due to assault in Grey Bruce than provincially, while a smaller proportion are due to assault by a sharp object (Table 5).

Table 5. Most Common Causes of Hospitalizations due to Assault in Grey Bruce, with comparisons to Ontario, 2008-2017

Cause of Injury	Grey Bruce	Ontario
Assault by bodily force	66.2% (59.4% – 72.4%)	48.3% (47.6% – 49.0%)
Assault by sharp object	7.0% (4.1% – 11.4%)	24.1% (23.5% – 24.7%)
Sexual assault by bodily force	6.5% (3.7% – 10.8%)	3.6% (3.4% – 3.9%)
Assault by blunt object	6.5% (3.7% – 10.8%)	6.8% (6.4% – 7.1%)
Assault by other specified means	3.0% (1.2% – 6.5%)	1.8% (1.6% – 2.0%)

HOMICIDE MORTALITY

A total of 17 Grey Bruce residents were killed in a homicide between 2006 and 2015. Stab wounds and other injuries inflicted with a sharp object were the most common cause of these fatal injuries locally. Provincially the most common mode of homicide was assault by sharp object (34%), followed by assault by firearm discharge (32%), assault by a blunt object (11%), assault by strangulation, suffocation and hanging (6%), and assault by unspecified means (5%). Between 2006 and 2015 males in Ontario were 2 to 3 times more likely to be killed in a homicide than females (Table 22).

METHODS

DATA SOURCES

All data for this report were extracted from IntelliHEALTH Ontario, the medical services and demography database query system provided and managed by the Ontario Ministry of Health and Long-term Care.

Population Estimates

Population estimates were used as denominators to determine the population rates of ED visits, hospitalizations and deaths. These estimates are prepared by Statistics Canada based on post/intercensal estimates depending on the time period, and shared with the Ministry of Health and Long-term Care for distribution via IntelliHEALTH Ontario. The 2016 estimate was substituted for 2017. The data citation for these population estimates is:

Population Estimates 2006–2016, Ontario Ministry of Health and Long-term Care, IntelliHEALTH Ontario, Date Extracted: July 10, 2019.

Emergency Room Visits & Hospitalizations

ED visit and hospitalization data were extracted from the Ambulatory Visits tables, which contain data from the National Ambulatory Care Reporting System (NACRS), developed by the Canadian Institute for Health Information (CIHI). Here, hospitalizations consist of cases in which a client is admitted to the hospital as an inpatient. The data citation for these emergency room visit and hospitalization data is:

Ambulatory Visits 2008–2017, Ontario Ministry of Health and Long-term Care, IntelliHEALTH Ontario, Date Extracted: July 10, 2019.

Deaths

Deaths data were extracted from the Deaths tables, which contain mortality data collected by the Ontario Registrar General. These tables contain only data for deaths that occurred in Ontario regardless of the residence of the deceased. While the Ontario Registrar General does collect data on deaths that occurred outside the province, they will not provide this information to the province.

In order for a death record to be created, two documents must be submitted to the Ontario Registrar General: one from the medical certifier (physician) and one from next-of-kin or a legal certifier.

Ontario Mortality Data 2006-2015, Ontario Ministry of Health and Long-term Care, IntelliHEALTH Ontario, Date Extracted: July 10, 2019.

QUERY CRITERIA

Query Criteria Data for deaths, hospitalizations and ED visits were retrieved for residents based on geography: residents of Grey Bruce, residents of Ontario, and residents of mainly rural health regions. These include: Grey Bruce Health Unit; Haldimand-Norfolk Health Unit; Huron County Health Unit; Leeds, Grenville and Lanark District Health Unit; Northwestern Health Unit; Perth District Health Unit; Renfrew County and District Health Unit; Simcoe Muskoka District Health Unit; Wellington-Dufferin-Guelph Health Unit; and Oxford Elgin St. Thomas Health Unit.

For deaths, each case counts as one death. Therefore, a mortality rate of 2 per 100,000 population means that 2 in 100,000 people died. For hospitalizations and ED visits, each case is a visit or hospital stay. As previously noted, hospitalizations are technically defined as hospital admittances—i.e., cases where clients visiting the emergency room were admitted as inpatients. Thus, a hospitalization rate of 2 per 100,000 population means that there were 2 cases were admitted from the emergency room per 100,000 people. ED visits and hospitalizations have the potential to double count (or more) individuals,

as they are counts of hospitalizations or ED visits experienced by patients, not counts of the patients who were hospitalized or provided care at an emergency department.

You cannot add ED visits, hospitalizations and deaths to get the total number of 'incidents' of a certain type. You also cannot take the number of hospitalizations or ED visits for a certain injury to represent the number of separate incidents that led to hospitalization or ED visits. Unlike in the case of death, a person can make multiple trips to an emergency room for the same issue and can have multiple hospital stays for the same issue. In addition to possible hospital readmission or multiple ED visits for the same issue, it's possible that a person is seen in the ER, admitted to hospital, and dies of the same incident (or some other combination of these events).

APPENDIX A: SUMMARY TABLES

↑ Grey Bruce rate significantly higher than comparator rate ↓ Grey Bruce rate significantly lower than comparator rate

– no significant difference between rates x Grey Bruce rate too low to compare

Table 6. Comparisons between Rates in Grey Bruce and Ontario, 2015-2017 (ED Visits and Hospitalizations, 2006-2015 (Deaths)

		Self-harm			Assault		
		ED Visits	Hospitalizations	Deaths	ED Visits	Hospitalizations	Deaths
Overall		–	–	–	↑	–	–
Females	0-14	–	–	x	↑	x	x
	15-24	–	↑	–	↑	x	x
	25-44	–	–	–	↑	x	x
	45-64	–	–	–	↑	x	x
	65+	–	–	x	–	x	x
Males	0-14	–			↑	x	x
	15-24	↑			↑	–	x
	25-44	–	↑	↑	–	–	x
	45-64	–			–	x	x
	65+	–			–	x	x

Table 7. Comparisons between Rates in Grey Bruce and Mainly Rural Regions of Ontario, 2015-2017 (ED Visits and Hospitalizations, 2006-2015 (Deaths)

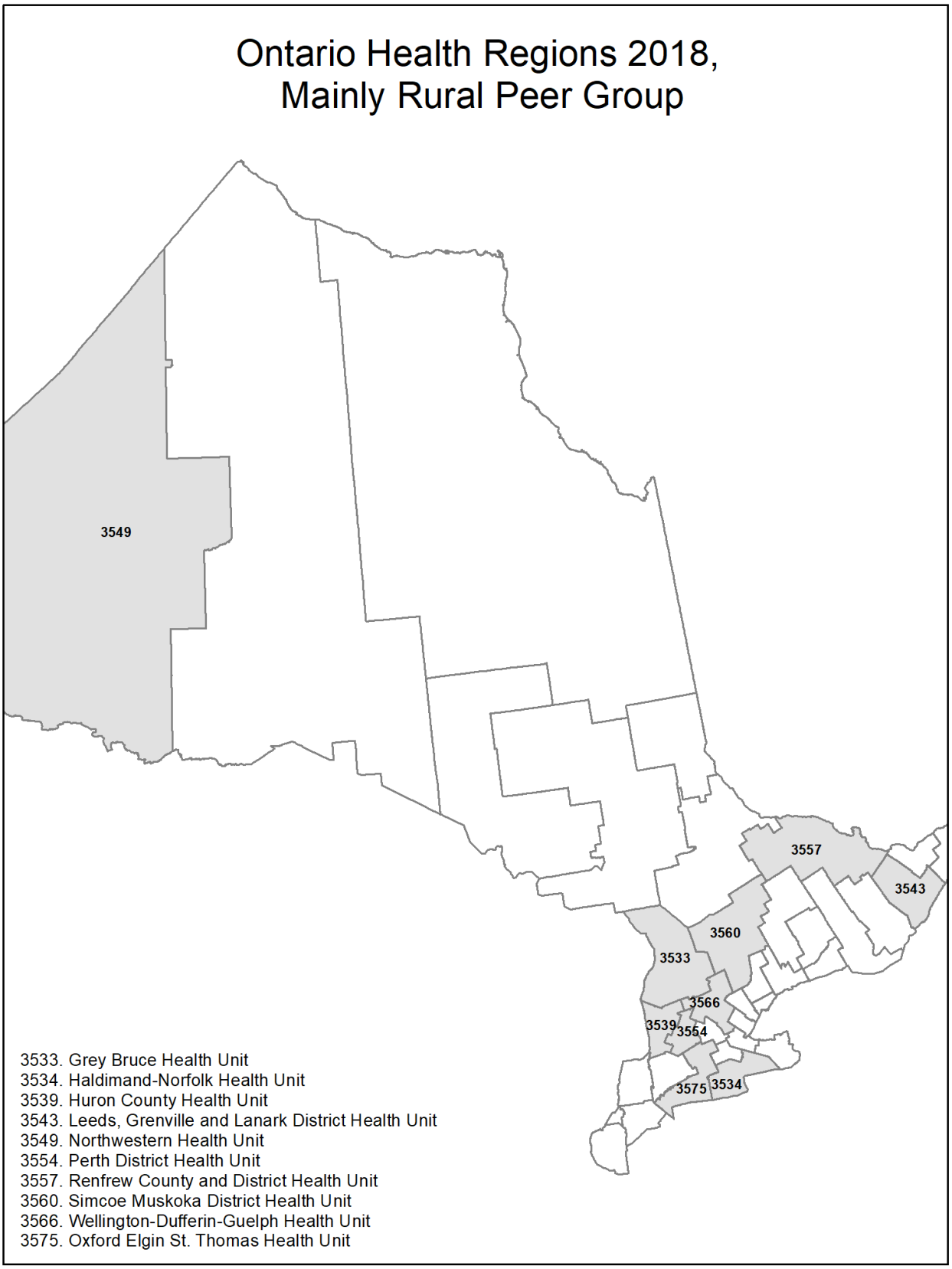
		Self-harm			Assault		
		ED Visits	Hospitalizations	Deaths	ED Visits	Hospitalizations	Deaths
Overall		↓	↓	–	–	–	x
Females	0-14	↓	–	x	–	x	x
	15-24	↓	–	–	–	x	x
	25-44	↓	–	–	–	x	x
	45-46	–	–	–	–	x	x
	65+	–	–	x	–	x	x
Males	0-14	–	–	–	↑	–	x
	15-24	–	–	–	–	–	x
	25-44	–	–	–	↓	x	x
	45-46	–	–	–	–	x	x
	65+	–	–	–	–	x	x

APPENDIX B: ICD-10 CAUSE CODES

Category	ICD 10 Code	Description
Intentional Self-harm	**X60**	Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
	X61	Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
	X62	Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified
	X63	Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system
	X64	Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
	X65	Intentional self-poisoning by and exposure to alcohol
	X66	Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours
	X67	Intentional self-poisoning by and exposure to other gases and vapours
	X68	Intentional self-poisoning by and exposure to pesticides
	X69	Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances
	X70	Intentional self-harm by hanging, strangulation and suffocation
	X71	Intentional self-harm by drowning and submersion
	X72	Intentional self-harm by handgun discharge
	X73	Intentional self-harm by rifle, shotgun and larger firearm discharge
	X74	Intentional self-harm by other and unspecified firearm discharge
	X75	Intentional self-harm by explosive material
	X76	Intentional self-harm by smoke, fire and flames
	X77	Intentional self-harm by steam, hot vapours and hot objects
	X78	Intentional self-harm by sharp object
	X79	Intentional self-harm by blunt object
	X80	Intentional self-harm by jumping from a high place
	X81	Intentional self-harm by jumping or lying before moving object
	X82	Intentional self-harm by crashing of motor vehicle
	X83	Intentional self-harm by other specified means Includes intentional self-harm by: caustic substances except poisoning, crashing of aircraft, electrocution
	X84	Intentional self-harm by unspecified means
	X87.0	Sequelae or “late effects” of intentional self-harm
Assault	**X85**	Assault by drugs, medicaments and biological substances
	X86	Assault by corrosive substance
	X87	Assault by pesticides
	X88	Assault by gases and vapours
	X89	Assault by other specified chemicals and noxious substances
	X90	Assault by unspecified chemical or noxious substance
	X91	Assault by hanging, strangulation and suffocation

Category	ICD 10 Code	Description
	X92	Assault by drowning and submersion
	X93	Assault by handgun discharge
	X94	Assault by rifle, shotgun and larger firearm discharge
	X95	Assault by other and unspecified firearm discharge
	X96	Assault by explosive material
	X97	Assault by smoke, fire and flames
	X98	Assault by steam, hot vapours and hot objects
	X99	Assault by sharp object
	Y00	Assault by blunt object
	Y01	Assault by pushing from high place
	Y02	Assault by pushing or placing victim before moving object
	Y03	Assault by crashing of motor vehicle
	Y04	Assault by bodily force Includes: unarmed brawl or fight Excludes: assault by strangulation, submersion, use of weapon, sexual assault by bodily force
	Y05	Sexual assault by bodily force
	Y06	Neglect and abandonment
	Y07	Other maltreatment Includes: mental cruelty, physical abuse, sexual abuse, torture Excludes: neglect and abandonment, sexual assault by bodily force
	Y08	Assault by other specified means
	Y09	Assault by unspecified means Includes: assassination, homicide, manslaughter, murder

APPENDIX C: MAP OF MAINLY RURAL HEALTH REGIONS



APPENDIX D: DATA TABLES

SELF-HARM: EMERGENCY DEPARTMENT VISITS

Table 8. Annual Age-standardized Rate of ED Visits for Self-harm, Grey Bruce, Mainly Rural Health Regions and Ontario, 2008-2017

Sex	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	2008	98.5 (83.4-115.5)	154	131.7 (126.3-137.3)	2,246	107.7 (105.9-109.4)	14,121
	2009	100.6 (85.2-117.8)	156	128.6 (123.2-134.1)	2,187	102.7 (101.0-104.4)	13,508
	2010	84.7 (70.5-100.7)	130	121.2 (116.0-126.6)	2,059	100.5 (98.8-102.2)	13,324
	2011	99.9 (84.0-117.8)	144	119.8 (114.6-125.2)	2,025	96.3 (94.6-97.9)	12,854
	2012	130.5 (112.5-150.5)	193	140.1 (134.5-145.8)	2,379	104.2 (102.5-106.0)	14,019
	2013	97.0 (81.7-114.3)	145	135.5 (130.0-141.1)	2,318	109.4 (107.7-111.2)	14,774
	2014	119.4 (102.1-138.7)	175	147.4 (141.6-153.3)	2,516	116.1 (114.3-117.9)	15,707
	2015	138.7 (119.8-159.7)	197	165.4 (159.3-171.6)	2,813	118.4 (116.5-120.2)	16,000
	2016	134.4 (115.7-155.0)	192	171.9 (165.7-178.3)	2,910	126.3 (124.5-128.3)	17,200
	2017	151.9 (131.8-174.0)	209	190.3 (183.8-197.0)	3,217	139.7 (137.7-141.7)	19,021
Female	2008	125.0 (101.2-152.6)	98	165.2 (156.6-174.2)	1,400	131.7 (129.0-134.6)	8,669
	2009	131.0 (106.5-159.3)	102	161.7 (153.2-170.6)	1,371	123.0 (120.4-125.7)	8,141
	2010	94.4 (73.7-118.8)	74	154.6 (146.3-163.2)	1,311	124.3 (121.6-127.0)	8,281
	2011	94.9 (73.5-120.4)	69	149.3 (141.1-157.8)	1,258	118.8 (116.2-121.4)	7,966
	2012	146.9 (120.1-177.8)	107	173.8 (165.0-182.9)	1,466	131.2 (128.5-134.0)	8,822
	2013	107.8 (85.3-134.2)	81	179.3 (170.3-188.5)	1,522	143.9 (141.0-146.8)	9,667
	2014	131.0 (105.9-160.2)	98	201.0 (191.5-210.8)	1,699	151.7 (148.8-154.7)	10,189
	2015	158.4 (130.0-190.9)	111	222.0 (212.0-232.4)	1,858	157.2 (154.2-160.2)	10,510
	2016	166.3 (136.9-199.9)	115	241.1 (230.6-252.0)	2,002	168.4 (165.3-171.5)	11,311
	2017	197.0 (164.8-233.4)	134	260.6 (249.7-271.8)	2,172	185.3 (182.1-188.6)	12,448
Male	2008	73.2 (55.1-95.2)	56	99.6 (93.0-106.6)	846	84.1 (81.9-86.4)	5,452
	2009	70.9 (53.0-92.7)	54	96.6 (90.1-103.5)	816	82.8 (80.6-85.1)	5,367
	2010	74.6 (56.1-97.1)	56	88.7 (82.4-95.3)	748	77.1 (75.0-79.3)	5,043
	2011	105.7 (82.8-132.6)	75	91.4 (85.0-98.1)	767	74.3 (72.2-76.4)	4,888
	2012	115.3 (91.9-142.6)	86	107.6 (100.7-114.9)	913	78.1 (76.0-80.2)	5,197
	2013	86.4 (66.3-110.6)	64	93.3 (86.9-100.0)	796	76.2 (74.2-78.4)	5,107
	2014	107.9 (84.9-134.9)	77	95.9 (89.4-102.7)	817	81.9 (79.7-84.1)	5,518
	2015	119.7 (95.3-148.1)	86	111.2 (104.3-118.6)	955	81.1 (78.9-83.2)	5,490
	2016	104.4 (82.0-130.8)	77	105.7 (98.9-112.9)	908	86.1 (84.0-88.4)	5,889
	2017	108.5 (85.2-136.0)	75	123.1 (115.7-130.8)	1,045	96.1 (93.8-98.5)	6,573

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 9. Annual Age-standardized Rate of ED Visits for Self-harm, Bruce County and Grey County, 2008-2017

Sex	Year	Bruce Rate	Bruce Count	Grey Rate	Grey Count
Overall	2008	100.1 (77.1-127.8)	65	97.5 (78.1-120.3)	89
	2009	95.6 (73.2-122.7)	63	103.6 (83.4-127.2)	93
	2010	95.4 (72.6-122.8)	61	76.9 (59.6-97.6)	69
	2011	73.6 (53.3-98.9)	44	119.5 (96.8-145.7)	100
	2012	120.4 (94.3-151.4)	75	137.9 (113.8-165.3)	118
	2013	81.2 (60.4-106.8)	52	107.3 (86.3-131.7)	93
	2014	113.3 (87.8-143.6)	69	123.7 (100.9-149.9)	106
	2015	108.4 (83.3-138.5)	64	160.2 (133.7-190.1)	133
	2016	112.7 (86.6-143.8)	65	149.8 (124.5-178.7)	127
	2017	137.7 (108.8-171.6)	79	161.9 (135.0-192.3)	130
Female	2008	134.9 (97.7-181.4)	44	118.6 (88.7-155.2)	54
	2009	132.0 (95.4-177.8)	44	130.3 (98.5-168.8)	58
	2010	117.5 (82.6-161.9)	38	78.1 (54.3-108.6)	36
	2011	68.2* (41.9-104.4)	21	113.9 (83.3-151.4)	48
	2012	146.4 (105.8-196.8)	44	147.0 (112.5-188.4)	63
	2013	90.7* (60.8-130.1)	30	119.0 (88.3-156.5)	51
	2014	111.0 (76.6-155.2)	35	144.9 (110.7-185.9)	63
	2015	138.1 (98.3-187.9)	40	173.0 (134.7-218.4)	71
	2016	143.5 (102.1-195.2)	40	182.4 (142.8-229.0)	75
	2017	200.2 (150.8-259.9)	56	195.0 (153.7-243.5)	78
Male	2008	65.5* (40.3-100.5)	21	77.8 (54.0-108.4)	35
	2009	60.3* (36.0-94.5)	19	77.6 (53.9-108.1)	35
	2010	73.6* (46.4-110.6)	23	75.2* (51.4-105.9)	33
	2011	81.6* (51.6-122.0)	23	124.8 (92.6-164.0)	52
	2012	97.4* (65.6-139.0)	31	128.2 (96.2-167.0)	55
	2013	71.4* (44.6-108.0)	22	96.6 (69.1-131.0)	42
	2014	115.9 (80.1-161.7)	34	102.3 (73.7-137.9)	43
	2015	79.0* (50.3-117.7)	24	148.1 (113.0-190.4)	62
	2016	82.4* (52.7-122.1)	25	119.6 (88.8-157.4)	52
	2017	77.6* (49.1-116.1)	23	130.0 (96.8-170.3)	52

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 10. Annual Rates and 3 to 4 Year Counts of Emergency Department Visits for Self-harm, by Sex and Age Group, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

Sex	Age Group	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Female	0-14	2008-2011	40.0* (25.6–62.5)	19	54.9 (49.2–61.2)	319	34.6 (32.9–36.4)	1,494
		2012-2014	45.7* (28.2–74.3)	16	101.8 (92.6–111.8)	431	72.0 (69.1–75.0)	2,310
		2015-2017	61.2* (40.4–92.6)	22	169.6 (157.7–182.5)	720	90.2 (87.0–93.5)	2,917
	15-24	2008-2011	269.2 (223.2–324.6)	109	432.8 (414.1–452.3)	1,967	339.5 (333.5–345.6)	11,977
		2012-2014	430.4 (361.4–512.5)	125	580.3 (555.3–606.3)	1,984	450.5 (442.6–458.6)	12,149
		2015-2017	673.2 (583.4–776.8)	186	842.9 (812.5–874.4)	2,826	595.7 (586.5–605.0)	15,868
	25-44	2008-2011	131.0 (106.4–161.4)	88	206.5 (197.0–216.4)	1,742	152.8 (150.0–155.7)	11,193
		2012-2014	114.8 (88.4–149.0)	56	201.6 (190.7–213.1)	1,244	141.8 (138.7–145.0)	7,877
		2015-2017	146.2 (116.2–184.1)	72	223.1 (211.7–235.1)	1,388	157.8 (154.6–161.1)	8,965
	45-64	2008-2011	106.0 (88.0–127.7)	110	114.3 (107.9–121.0)	1,172	100.9 (98.6–103.2)	7,418
		2012-2014	100.0 (80.0–125.0)	77	112.0 (104.9–119.6)	892	92.8 (90.3–95.3)	5,380
		2015-2017	86.8 (68.1–110.6)	65	116.3 (109.1–123.9)	937	91.3 (88.9–93.8)	5,407
	65+	2008-2011	24.9* (15.5–39.8)	17	22.9 (19.4–27.0)	140	24.0 (22.6–25.6)	975
		2012-2014	21.1* (12.1–36.9)	12	26.5 (22.4–31.3)	136	28.1 (26.4–29.9)	962
		2015-2017	24.6* (14.9–40.6)	15	28.9 (24.8–33.8)	161	29.7 (28.0–31.5)	1,112
Male	0-14	2008-2011	17.9* (9.4–33.9)	9	11.7 (9.3–14.8)	72	10.2 (9.3–11.2)	466
		2012-2014	Supp.	6	17.2 (13.8–21.5)	77	12.3 (11.2–13.6)	417
		2015-2017	24.1* (12.7–45.9)	9	21.4 (17.6–26.2)	96	14.4 (13.2–15.7)	489
	15-24	2008-2011	159.8 (125.8–202.8)	67	195.3 (183.1–208.2)	929	155.0 (151.0–159.1)	5,635
		2012-2014	302.0 (246.0–370.6)	91	242.8 (227.2–259.4)	872	166.7 (162.0–171.5)	4,689
		2015-2017	279.1 (224.6–346.7)	81	278.8 (261.9–296.7)	984	203.7 (198.5–209.0)	5,731
	25-44	2008-2011	125.3 (101.5–154.7)	86	141.9 (134.2–150.1)	1,214	116.7 (114.3–119.3)	8,325
		2012-2014	128.9 (101.1–164.2)	65	136.9 (128.1–146.4)	855	108.4 (105.6–111.2)	5,807
		2015-2017	155.8 (125.0–194.1)	79	160.5 (151.0–170.7)	1,014	124.2 (121.3–127.2)	6,801
	45-64	2008-2011	67.0 (52.9–84.7)	69	82.5 (77.2–88.3)	847	76.9 (74.9–78.9)	5,536
		2012-2014	68.7 (52.4–90.1)	52	77.6 (71.7–83.9)	615	73.3 (71.1–75.6)	4,159
		2015-2017	75.0 (57.7–97.6)	55	83.2 (77.1–89.8)	666	69.6 (67.5–71.8)	4,021
	65+	2008-2011	17.1* (9.3–31.4)	10	23.1 (19.3–27.7)	115	24.8 (23.1–26.6)	788
		2012-2014	26.1* (15.3–44.7)	13	24.9 (20.6–30.1)	107	27.2 (25.4–29.3)	750
		2015-2017	26.0* (15.5–43.6)	14	31.3 (26.6–36.7)	148	29.8 (27.9–31.8)	910

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

SELF-HARM: HOSPITALIZATIONS

Table 11. Annual Age-standardized Rate of Hospitalizations for Self-harm, Grey Bruce, Mainly Rural Health Regions and Ontario, 2008-2017

Sex	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	2008	56.1 (44.9-69.2)	88	68.8 (64.9-72.8)	1,177	51.4 (50.2-52.6)	6,723
	2009	59.7 (48.1-73.2)	94	64.8 (61.0-68.7)	1,108	50.2 (49.0-51.4)	6,575
	2010	47.6 (37.3-59.9)	75	66.0 (62.2-70.0)	1,125	51.3 (50.1-52.5)	6,782
	2011	63.5 (50.9-78.1)	91	66.6 (62.8-70.6)	1,132	49.5 (48.4-50.8)	6,605
	2012	80.1 (66.2-96.0)	120	76.1 (72.0-80.4)	1,295	54.5 (53.3-55.8)	7,327
	2013	67.4 (54.6-82.1)	100	74.1 (70.1-78.3)	1,273	55.0 (53.7-56.2)	7,425
	2014	66.4 (53.8-81.1)	99	77.8 (73.6-82.1)	1,331	55.1 (53.9-56.4)	7,463
	2015	87.7 (72.8-104.7)	125	86.7 (82.4-91.3)	1,485	56.3 (55.0-57.5)	7,623
	2016	80.3 (66.1-96.6)	116	92.7 (88.1-97.4)	1,581	62.0 (60.7-63.3)	8,464
	2017	66.7 (53.8-81.7)	95	93.6 (89.0-98.3)	1,590	64.0 (62.7-65.4)	8,727
Female	2008	67.1 (50.1-87.9)	53	78.1 (72.3-84.3)	667	60.8 (58.9-62.7)	3,998
	2009	82.6 (63.5-105.5)	65	78.3 (72.4-84.5)	669	58.9 (57.0-60.7)	3,894
	2010	56.0 (40.7-75.1)	46	82.2 (76.2-88.6)	701	62.5 (60.6-64.4)	4,166
	2011	62.1 (45.0-83.3)	45	82.7 (76.7-89.1)	703	59.2 (57.4-61.1)	3,980
	2012	102.8 (80.6-129.1)	75	93.2 (86.7-99.9)	789	67.9 (66.0-69.9)	4,575
	2013	71.5 (53.4-93.7)	53	94.7 (88.2-101.5)	809	70.9 (68.9-72.9)	4,782
	2014	80.6 (61.2-104.1)	61	103.4 (96.6-110.5)	876	70.7 (68.7-72.8)	4,772
	2015	114.2 (90.2-142.2)	80	111.3 (104.2-118.7)	938	72.6 (70.5-74.6)	4,883
	2016	90.3 (69.1-115.7)	64	127.9 (120.3-135.8)	1,067	82.5 (80.4-84.7)	5,571
	2017	88.4 (67.6-113.4)	63	124.5 (117.0-132.3)	1,047	85.3 (83.1-87.6)	5,749
Male	2008	45.9 (31.9-64.0)	35	60.0 (54.9-65.5)	510	42.3 (40.7-43.9)	2,725
	2009	37.2* (24.8-53.6)	29	51.8 (47.1-56.9)	439	41.7 (40.2-43.4)	2,681
	2010	38.8* (25.8-55.8)	29	50.2 (45.5-55.2)	424	40.3 (38.8-41.9)	2,616
	2011	65.6 (47.9-87.6)	46	51.0 (46.3-56.1)	429	40.1 (38.6-41.7)	2,625
	2012	59.1 (42.8-79.3)	45	59.8 (54.6-65.2)	506	41.6 (40.0-43.2)	2,752
	2013	63.4 (46.3-84.5)	47	54.2 (49.3-59.4)	464	39.7 (38.2-41.2)	2,643
	2014	52.5 (37.0-72.1)	38	53.0 (48.3-58.2)	455	40.1 (38.6-41.6)	2,691
	2015	62.1 (45.0-83.5)	45	63.4 (58.1-68.9)	547	40.6 (39.1-42.1)	2,740
	2016	70.9 (52.6-93.2)	52	59.2 (54.1-64.6)	514	42.3 (40.8-43.9)	2,893
	2017	45.9 (31.2-64.8)	32	63.9 (58.6-69.5)	543	43.6 (42.1-45.2)	2,978

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 12. Annual Age-standardized Rate of Hospitalizations for Self-harm, Bruce County and Grey County, 2008-2017

Sex	Year	Bruce Rate	Bruce Count	Grey Rate	Grey Count
Overall	2008	71.3 (52.1-95.3)	46	45.5 (32.7-61.6)	42
	2009	68.6 (50.0-91.8)	46	52.9 (38.8-70.2)	48
	2010	53.4 (36.9-74.7)	35	43.7 (31.0-59.7)	40
	2011	49.1* (32.7-70.5)	29	74.1 (56.5-95.2)	62
	2012	87.9 (65.8-114.8)	55	74.9 (57.6-95.7)	65
	2013	54.7 (37.9-76.3)	35	75.5 (58.0-96.4)	65
	2014	60.9 (42.9-83.7)	39	70.3 (53.3-90.6)	60
	2015	68.8 (49.0-93.7)	40	101.3 (80.5-125.6)	85
	2016	66.6 (47.0-91.2)	39	90.4 (70.9-113.4)	77
	2017	55.3 (37.8-77.7)	33	75.0 (57.2-96.3)	62
Female	2008	96.2* (65.1-136.8)	31	46.8* (29.1-71.2)	22
	2009	98.1* (67.2-138.4)	33	71.1* (48.3-100.6)	32
	2010	70.9* (44.9-106.4)	24	45.3* (28.0-69.1)	22
	2011	46.5* (25.2-77.9)	14	72.9* (49.1-103.9)	31
	2012	104.4* (70.5-148.3)	31	102.0 (73.7-137.3)	44
	2013	54.3* (31.9-86.2)	18	83.0 (57.6-115.3)	35
	2014	66.2* (40.6-101.3)	22	90.7 (64.0-124.4)	39
	2015	100.5* (66.9-144.1)	29	124.1 (92.0-163.4)	51
	2016	81.5* (51.1-122.3)	23	97.2 (69.0-132.5)	41
	2017	74.7* (46.3-113.2)	22	98.4 (70.1-133.7)	41
Male	2008	46.8* (25.9-77.5)	15	45.2* (27.5-69.9)	20
	2009	40.1* (21.2-68.9)	13	34.8* (19.8-56.7)	16
	2010	35.7* (17.6-64.0)	11	41.4* (24.3-65.6)	18
	2011	54.6* (30.4-89.4)	15	74.8* (50.5-106.2)	31
	2012	74.9* (47.4-112.1)	24	48.2* (29.6-73.7)	21
	2013	54.7* (31.7-87.6)	17	68.8* (46.0-98.6)	30
	2014	56.4* (32.7-90.3)	17	49.9* (30.7-76.3)	21
	2015	38.2* (18.8-68.1)	11	79.4 (54.4-111.5)	34
	2016	51.6* (29.1-84.1)	16	84.4 (58.7-117.3)	36
	2017	36.6* (18.1-65.3)	11	52.5* (32.3-80.1)	21

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 13. Annual Rates and 3 to 4 Year Counts of Hospitalizations for Self-harm, by Sex and Age Group, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

Sex	Year	Age Group	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Female	0-14	2008-2011	21.1* (11.4–38.8)	10	20.0 (16.6–23.9)	116	12.9 (11.8–14.0)	556
		2012-2014	28.6* (15.5–52.6)	10	39.7 (34.1–46.1)	168	29.8 (28.0–31.8)	956
		2015-2017	Supp.	8	75.2 (67.4–83.9)	319	39.4 (37.3–41.6)	1,274
	15-24	2008-2011	118.5 (89.4–157.1)	48	179.1 (167.2–191.8)	814	133.0 (129.3–136.9)	4,692
		2012-2014	234.1 (184.7–296.7)	68	258.8 (242.4–276.4)	885	191.7 (186.5–196.9)	5,168
		2015-2017	336.6 (274.9–412.2)	93	384.2 (363.8–405.7)	1,288	250.0 (244.0–256.0)	6,659
	25-44	2008-2011	77.4 (59.0–101.5)	52	110.4 (103.5–117.7)	931	76.2 (74.2–78.2)	5,582
		2012-2014	90.2 (67.2–121.0)	44	113.3 (105.2–122.0)	699	69.9 (67.7–72.1)	3,883
		2015-2017	91.4 (68.3–122.3)	45	120.2 (111.9–129.2)	748	73.2 (71.0–75.5)	4,160
	45-64	2008-2011	81.9 (66.3–101.3)	85	74.9 (69.8–80.4)	768	61.3 (59.6–63.1)	4,509
		2012-2014	74.0 (57.2–95.9)	57	77.4 (71.5–83.7)	616	59.2 (57.3–61.2)	3,434
		2015-2017	61.4 (46.1–81.9)	46	71.2 (65.6–77.3)	574	55.7 (53.8–57.6)	3,299
	65+	2008-2011	20.5* (12.2–34.4)	14	18.2 (15.1–21.9)	111	17.2 (16.0–18.6)	699
		2012-2014	17.6* (9.6–32.4)	10	20.6 (17.1–25.0)	106	20.1 (18.7–21.7)	688
		2015-2017	24.6* (14.9–40.6)	15	22.1 (18.5–26.4)	123	21.7 (20.2–23.2)	811
Male	0-14	2008-2011	Supp.	Supp.	3.3* (2.1–5.0)	20	2.9 (2.5–3.5)	134
		2012-2014	--	0	6.0* (4.1–8.8)	27	4.1 (3.4–4.8)	137
		2015-2017	Supp.	Supp.	9.2 (6.8–12.4)	41	4.7 (4.1–5.5)	161
	15-24	2008-2011	76.3* (54.1–107.7)	32	89.5 (81.4–98.4)	426	64.1 (61.5–66.8)	2,330
		2012-2014	142.7 (106.0–192.1)	43	113.6 (103.1–125.1)	408	68.6 (65.6–71.7)	1,929
		2015-2017	103.4* (72.4–147.5)	30	123.8 (112.7–136.0)	437	82.4 (79.1–85.8)	2,318
	25-44	2008-2011	72.9 (55.3–96.0)	50	80.4 (74.6–86.7)	688	59.1 (57.3–60.9)	4,215
		2012-2014	73.4 (53.2–101.1)	37	76.6 (70.0–83.7)	478	53.7 (51.8–55.7)	2,877
		2015-2017	98.6 (74.8–130.0)	50	88.5 (81.5–96.1)	559	55.6 (53.7–57.6)	3,045
	45-64	2008-2011	48.5 (36.8–64.0)	50	56.2 (51.8–61.0)	577	46.9 (45.4–48.5)	3,379
		2012-2014	54.2 (39.9–73.5)	41	54.0 (49.1–59.3)	428	45.4 (43.7–47.2)	2,574
		2015-2017	50.5 (36.6–69.6)	37	56.6 (51.6–62.1)	453	41.7 (40.1–43.4)	2,411
	65+	2008-2011	Supp.	5	18.3 (14.9–22.5)	91	18.5 (17.1–20.1)	589
		2012-2014	18.1* (9.5–34.4)	9	19.6 (15.8–24.2)	84	20.7 (19.0–22.4)	569
		2015-2017	20.4* (11.4–36.5)	11	24.1 (20.1–28.9)	114	22.1 (20.5–23.9)	676

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

SELF-HARM: DEATHS

Table 14. Annual Age-standardized Suicide Mortality Rate, Grey Bruce, Mainly Rural Health Regions and Ontario, 2006-2015

Sex	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	2006	10.3* (5.8-16.8)	16	9.7 (8.2-11.3)	164	8.3 (7.8-8.8)	1,035
	2007	9.6* (5.3-16.0)	15	7.5 (6.3-8.9)	129	8.4 (7.9-8.9)	1,066
	2008	7.5* (3.8-13.2)	12	8.2 (6.9-9.7)	143	7.8 (7.3-8.3)	996
	2009	9.6* (5.3-15.9)	15	10.9 (9.4-12.6)	186	9.0 (8.5-9.6)	1,164
	2010	10.7* (5.9-17.6)	15	9.0 (7.7-10.6)	156	8.8 (8.3-9.3)	1,149
	2011	14.0* (8.9-20.9)	25	10.7 (9.2-12.4)	190	8.4 (7.9-8.9)	1,115
	2012	13.1* (8.1-20.2)	22	12.0 (10.5-13.8)	211	8.8 (8.3-9.3)	1,178
	2013	9.4* (5.1-15.8)	15	11.6 (10.1-13.3)	210	9.2 (8.7-9.7)	1,251
	2014	11.4* (6.7-18.1)	19	12.0 (10.4-13.7)	213	9.2 (8.7-9.7)	1,261
	2015	13.7* (8.4-21.0)	22	13.7 (12.0-15.5)	242	9.6 (9.1-10.1)	1,330
Female	2006	Supp.	Supp.	3.7* (2.6-5.3)	32	4.1 (3.6-4.6)	259
	2007	Supp.	Supp.	2.5* (1.6-3.9)	22	4.0 (3.5-4.5)	261
	2008	Supp.	Supp.	3.1* (2.0-4.5)	28	3.9 (3.4-4.4)	253
	2009	Supp.	Supp.	5.2 (3.8-7.0)	44	4.4 (3.9-4.9)	290
	2010	Supp.	6	4.5 (3.2-6.2)	38	4.9 (4.4-5.5)	327
	2011	Supp.	5	5.0 (3.6-6.7)	44	4.4 (3.9-4.9)	296
	2012	Supp.	Supp.	4.6 (3.3-6.3)	39	4.2 (3.7-4.7)	287
	2013	Supp.	Supp.	5.6 (4.2-7.4)	50	4.5 (4.0-5.0)	312
	2014	12.5* (5.8-23.4)	10	7.0 (5.4-9.0)	64	4.9 (4.4-5.5)	345
	2015	Supp.	Supp.	6.8 (5.2-8.8)	60	5.4 (4.9-6.0)	379
Male	2006	16.4* (8.6-28.2)	13	15.9 (13.3-19.0)	132	12.9 (12.0-13.9)	776
	2007	16.8* (8.8-28.9)	13	12.9 (10.5-15.6)	107	13.1 (12.2-14.1)	805
	2008	13.9* (6.8-25.1)	11	13.5 (11.1-16.2)	115	12.0 (11.1-12.9)	743
	2009	15.6* (7.9-27.4)	12	16.6 (14.0-19.6)	142	14.1 (13.1-15.0)	874
	2010	12.9* (5.8-24.4)	9	13.9 (11.5-16.6)	118	13.0 (12.1-13.9)	822
	2011	23.3* (14.0-36.4)	20	16.6 (14.0-19.5)	146	12.8 (11.9-13.7)	819
	2012	22.1* (13.1-35.0)	19	19.6 (16.8-22.8)	172	13.6 (12.8-14.6)	891
	2013	17.2* (9.1-29.3)	14	17.8 (15.1-20.8)	160	14.3 (13.4-15.2)	939
	2014	Supp.	9	17.1 (14.5-20.1)	149	13.7 (12.9-14.7)	916
	2015	23.0* (13.5-36.6)	19	20.7 (17.8-24.0)	182	14.2 (13.3-15.1)	951

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 15. Annual Rates and 10 Year Counts of Deaths by Suicide, by Sex and Age Group, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2006-2015

Sex	Age Group	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	0-14	--	0	0.8* (0.5–1.2)	24	0.4 (0.3–0.5)	94
	15-24	9.8* (6.4–15.2)	20	10.7 (9.5–12.1)	250	7.5 (7.1–7.9)	1,351
	25-44	17.4 (13.5–22.4)	59	12.8 (11.7–13.9)	544	9.9 (9.5–10.2)	3,596
	45-64	11.6 (9.0–14.9)	59	14.6 (13.6–15.7)	749	12.9 (12.5–13.3)	4,719
	65+	11.5 (8.4–15.8)	38	9.6 (8.5–10.7)	277	9.4 (9.0–9.9)	1,785
Female	0-14	--	0	0.9* (0.5–1.5)	13	0.5 (0.4–0.7)	55
	15-24	Supp.	Supp.	6.3 (5.0–8.0)	72	4.0 (3.6–4.4)	352
	25-44	8.9* (5.4–14.8)	15	6.3 (5.3–7.5)	133	5.2 (4.9–5.5)	962
	45-64	6.3* (3.8–10.2)	16	6.3 (5.4–7.3)	161	6.6 (6.3–7.0)	1,223
	65+	Supp.	Supp.	2.6 (2.0–3.6)	42	3.9 (3.6–4.3)	417
Male	0-14	--	0	0.7* (0.4–1.3)	11	0.3 (0.3–0.5)	39
	15-24	17.3* (10.9–27.3)	18	14.9 (12.9–17.3)	178	10.9 (10.2–11.6)	999
	25-44	25.6 (19.1–34.4)	44	19.2 (17.4–21.1)	411	14.6 (14.1–15.2)	2,634
	45-64	17.0 (12.6–22.9)	43	22.9 (21.2–24.9)	588	19.3 (18.7–20.0)	3,496
	65+	22.2* (15.9–31.0)	34	18.0 (15.8–20.4)	235	16.3 (15.5–17.2)	1,368

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

ASSAULT: EMERGENCY DEPARTMENT VISITS

Table 16. Annual Age-standardized Rate of ED Visits for Assault, Grey Bruce, Mainly Rural Health Regions and Ontario, 2008-2017

Sex	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	2008	355.3 (325.2-387.3)	525	356.8 (347.8-366.1)	5,997	289.0 (286.1-291.9)	37,989
	2009	334.9 (305.5-366.4)	486	355.4 (346.4-364.6)	5,924	284.3 (281.5-287.2)	37,465
	2010	332.0 (302.7-363.2)	482	363.1 (353.9-372.4)	6,023	282.2 (279.4-285.1)	37,434
	2011	333.4 (303.9-365.0)	477	328.9 (320.2-337.8)	5,470	266.5 (263.7-269.3)	35,575
	2012	314.1 (285.6-344.5)	456	318.2 (309.6-326.9)	5,282	255.4 (252.7-258.1)	34,349
	2013	246.6 (221.2-274.0)	350	281.8 (273.7-290.0)	4,655	229.9 (227.4-232.5)	31,086
	2014	253.7 (227.8-281.7)	356	274.4 (266.4-282.5)	4,544	224.9 (222.4-227.5)	30,558
	2015	269.0 (242.3-297.8)	380	278.2 (270.2-286.4)	4,616	228.9 (226.3-231.4)	31,145
	2016	269.5 (242.6-298.4)	375	298.5 (290.3-307.0)	4,962	234.2 (231.7-236.8)	32,182
	2017	316.1 (286.9-347.5)	439	309.3 (300.9-318.0)	5,130	242.5 (239.9-245.1)	33,318
Female	2008	196.7 (165.5-232.0)	144	222.5 (212.4-233.0)	1,850	159.6 (156.6-162.7)	10,506
	2009	190.7 (159.4-226.2)	134	215.8 (205.8-226.1)	1,774	153.9 (150.9-157.0)	10,166
	2010	185.6 (154.9-220.3)	132	234.4 (224.0-245.2)	1,929	162.8 (159.7-165.9)	10,832
	2011	192.7 (161.4-228.1)	136	218.3 (208.3-228.7)	1,800	153.5 (150.5-156.5)	10,272
	2012	179.3 (149.2-213.4)	129	211.1 (201.2-221.3)	1,740	149.3 (146.4-152.3)	10,061
	2013	197.4 (165.4-233.4)	138	205.3 (195.6-215.4)	1,681	142.3 (139.4-145.1)	9,640
	2014	215.0 (181.5-252.6)	150	204.9 (195.2-215.0)	1,684	146.5 (143.7-149.4)	9,970
	2015	230.6 (195.4-269.9)	157	211.4 (201.5-221.7)	1,728	150.7 (147.8-153.7)	10,260
	2016	207.5 (174.3-244.8)	141	224.7 (214.5-235.2)	1,835	153.9 (150.9-156.8)	10,571
	2017	237.4 (202.0-277.0)	165	248.5 (237.7-259.6)	2,029	164.9 (161.8-167.9)	11,316
Male	2008	506.8 (456.7-560.9)	381	486.0 (471.2-501.1)	4,147	417.5 (412.6-422.5)	27,483
	2009	475.0 (426.2-527.8)	352	490.6 (475.7-505.8)	4,150	414.6 (409.7-419.6)	27,299
	2010	475.3 (426.4-528.2)	350	487.6 (472.6-502.8)	4,094	401.7 (396.8-406.5)	26,602
	2011	470.2 (421.2-523.2)	341	436.1 (422.0-450.5)	3,670	379.5 (374.8-384.2)	25,303
	2012	444.4 (397.1-495.6)	327	422.0 (408.2-436.2)	3,542	361.3 (356.8-365.9)	24,288
	2013	294.3 (255.7-336.9)	212	355.8 (343.1-368.9)	2,974	317.5 (313.3-321.8)	21,446
	2014	290.2 (251.5-332.8)	206	341.6 (329.1-354.4)	2,860	303.4 (299.2-307.5)	20,588
	2015	305.8 (266.5-349.1)	223	343.0 (330.6-355.8)	2,888	306.9 (302.8-311.1)	20,885
	2016	329.3 (288.1-374.6)	234	370.2 (357.3-383.4)	3,127	314.5 (310.3-318.7)	21,611
	2017	392.8 (347.1-442.4)	274	368.5 (355.5-381.7)	3,101	320.2 (316.0-324.5)	22,002

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 17. Annual Age-standardized Rate of ED Visits for Assault, Bruce County and Grey County, 2008-2017

Sex	Year	Bruce Rate	Bruce Count	Grey Rate	Grey Count
Overall	2008	366.8 (320.0-418.3)	227	346.4 (307.7-388.4)	298
	2009	335.5 (290.4-385.4)	203	335.6 (297.1-377.4)	283
	2010	323.5 (279.3-372.5)	195	337.2 (298.9-378.9)	287
	2011	376.7 (328.9-429.3)	227	303.8 (266.8-344.1)	250
	2012	317.6 (274.0-366.0)	193	311.1 (274.2-351.4)	263
	2013	246.4 (207.6-290.0)	146	246.8 (213.7-283.3)	204
	2014	278.6 (236.8-325.3)	162	238.5 (205.8-274.8)	194
	2015	257.1 (217.2-301.8)	152	277.2 (241.9-315.9)	228
	2016	274.9 (233.1-321.8)	156	267.1 (232.5-305.2)	219
	2017	346.5 (299.5-398.5)	199	295.4 (258.6-335.6)	240
Female	2008	176.6 (132.9-229.7)	56	209.1 (167.2-258.0)	88
	2009	225.1 (172.8-287.6)	64	167.9 (130.4-212.5)	70
	2010	168.5 (123.8-223.2)	48	199.3 (158.4-247.2)	84
	2011	206.6 (158.0-264.9)	62	183.3 (143.5-230.3)	74
	2012	212.9 (162.6-273.1)	62	156.2 (120.4-199.0)	67
	2013	198.4 (149.7-257.0)	57	198.3 (156.9-246.8)	81
	2014	255.5 (199.6-321.5)	74	188.3 (147.9-235.8)	76
	2015	187.8 (139.7-246.2)	52	262.6 (214.0-318.3)	105
	2016	216.5 (164.6-278.7)	60	200.6 (158.9-249.5)	81
	2017	246.0 (191.4-310.6)	72	232.0 (186.5-284.7)	93
Male	2008	547.1 (467.2-636.4)	171	478.5 (415.3-548.4)	210
	2009	441.3 (370.3-521.9)	139	500.0 (434.4-572.4)	213
	2010	474.4 (400.2-558.2)	147	473.0 (409.5-543.3)	203
	2011	539.0 (459.2-628.3)	165	421.9 (361.3-489.5)	176
	2012	418.3 (349.3-496.8)	131	462.6 (399.5-532.5)	196
	2013	292.9 (234.6-360.9)	89	294.2 (244.1-351.2)	123
	2014	298.2 (238.5-367.7)	88	286.8 (236.9-343.7)	118
	2015	322.7 (261.7-393.4)	100	289.7 (240.3-346.0)	123
	2016	330.0 (266.8-403.1)	96	331.4 (277.8-391.9)	138
	2017	441.5 (367.5-525.3)	127	357.6 (301.4-420.8)	147

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 18. Annual Rates and 3 to 4 Year Counts of Emergency Department Visits for Assault, by Sex and Age Group, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

Sex	Age Group	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Female	0-14	2008-2011	105.3 (79.9–138.8)	50	91.7 (84.3–99.8)	533	53.2 (51.0–55.4)	2,297
		2012-2014	68.6* (46.1–102.1)	24	72.7 (65.0–81.3)	308	41.7 (39.5–44.0)	1,337
		2015-2017	72.3* (49.4–106.0)	26	80.8 (72.7–89.8)	343	45.7 (43.5–48.1)	1,479
	15-24	2008-2011	508.8 (444.0–582.9)	206	613.0 (590.7–636.1)	2,786	438.0 (431.2–444.9)	15,451
		2012-2014	547.4 (468.9–639.1)	159	546.9 (522.7–572.2)	1,870	376.1 (368.9–383.5)	10,142
		2015-2017	528.4 (449.6–621.1)	146	550.9 (526.4–576.5)	1,847	387.9 (380.5–395.5)	10,334
	25-44	2008-2011	290.3 (252.4–333.9)	195	340.3 (328.1–353.0)	2,871	228.1 (224.7–231.6)	16,711
		2012-2014	282.8 (239.4–334.0)	138	317.4 (303.7–331.8)	1,959	219.0 (215.1–222.9)	12,164
		2015-2017	367.6 (317.9–425.1)	181	378.7 (363.7–394.3)	2,356	243.2 (239.2–247.3)	13,815
	45-64	2008-2011	85.8 (69.7–105.5)	89	101.2 (95.2–107.5)	1,038	86.3 (84.2–88.5)	6,346
		2012-2014	93.5 (74.3–117.7)	72	106.1 (99.2–113.5)	845	88.1 (85.7–90.5)	5,106
		2015-2017	122.9 (100.2–150.7)	92	113.4 (106.3–121.0)	914	93.7 (91.3–96.2)	5,551
	65+	2008-2011	Supp.	6	20.5 (17.2–24.4)	125	23.9 (22.5–25.5)	971
		2012-2014	42.3* (28.4–62.9)	24	24.0 (20.1–28.6)	123	26.9 (25.3–28.7)	922
		2015-2017	29.5* (18.7–46.7)	18	23.7 (20.0–28.1)	132	25.9 (24.3–27.6)	968
Male	0-14	2008-2011	240.0 (200.9–286.7)	121	179.3 (169.0–190.2)	1,100	112.5 (109.5–115.6)	5,123
		2012-2014	148.3 (114.0–193.0)	55	114.5 (105.0–124.8)	512	78.6 (75.7–81.6)	2,655
		2015-2017	220.0 (177.3–272.9)	82	121.3 (111.5–132.0)	543	80.1 (77.2–83.2)	2,727
	15-24	2008-2011	1,717.0 (1,597.0–1,845.9)	720	1,613.8 (1,578.4–1,650.0)	7,678	1,325.6 (1,313.9–1,337.4)	48,187
		2012-2014	1,085.0 (974.2–1,208.4)	327	1,064.6 (1,031.6–1,098.7)	3,824	918.6 (907.5–929.8)	25,846
		2015-2017	978.6 (871.7–1,098.5)	284	961.5 (929.8–994.2)	3,394	805.9 (795.5–816.4)	22,673
	25-44	2008-2011	631.0 (574.4–693.1)	433	638.7 (622.1–655.8)	5,464	534.0 (528.7–539.4)	38,083
		2012-2014	454.0 (399.0–516.6)	229	578.0 (559.5–597.1)	3,609	486.7 (480.8–492.6)	26,074
		2015-2017	422.1 (369.3–482.4)	214	567.4 (549.2–586.3)	3,584	473.9 (468.2–479.7)	25,945
	45-64	2008-2011	130.1 (109.8–154.0)	134	163.2 (155.6–171.2)	1,675	194.2 (191.0–197.5)	13,988
		2012-2014	163.8 (137.5–195.3)	124	166.7 (158.0–175.9)	1,322	187.2 (183.7–190.8)	10,619
		2015-2017	181.4 (153.1–215.0)	133	178.1 (169.1–187.6)	1,425	201.3 (197.7–205.0)	11,631
	65+	2008-2011	27.3* (16.8–44.4)	16	28.9 (24.6–34.1)	144	41.1 (39.0–43.4)	1,306
		2012-2014	20.1* (10.9–37.0)	10	25.4 (21.0–30.6)	109	41.0 (38.7–43.4)	1,128
		2015-2017	33.4* (21.1–52.8)	18	35.9 (30.9–41.7)	170	49.9 (47.4–52.4)	1,522

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

ASSAULT: HOSPITALIZATIONS

Table 19. Annual Age-standardized Rate of Hospitalizations for Assault, Grey Bruce, Mainly Rural Health Regions and Ontario, 2008-2017

Sex	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	2008	15.5* (9.8-23.3)	23	20.4 (18.2-22.7)	338	16.0 (15.3-16.7)	2,093
	2009	17.9* (11.7-26.1)	27	19.2 (17.2-21.5)	317	15.4 (14.7-16.1)	2,012
	2010	15.3* (9.7-23.0)	23	18.4 (16.3-20.6)	303	15.1 (14.4-15.8)	1,991
	2011	15.4* (9.6-23.3)	22	18.9 (16.8-21.1)	310	14.3 (13.6-14.9)	1,901
	2012	18.9* (12.4-27.5)	27	17.1 (15.1-19.2)	284	14.7 (14.0-15.3)	1,969
	2013	6.4* (2.9-12.2)	9	13.0 (11.3-14.8)	213	13.3 (12.6-13.9)	1,793
	2014	6.9* (3.3-12.7)	10	14.1 (12.4-16.1)	235	13.0 (12.4-13.6)	1,771
	2015	9.2* (4.9-15.6)	14	13.1 (11.4-14.9)	219	13.4 (12.8-14.0)	1,831
	2016	16.2* (10.1-24.5)	22	15.0 (13.2-17.0)	250	13.8 (13.2-14.5)	1,911
	2017	14.1* (8.6-21.7)	21	16.1 (14.3-18.2)	270	14.5 (13.9-15.2)	2,005
Female	2008	Supp.	7	11.0 (8.9-13.5)	93	5.7 (5.2-6.3)	379
	2009	Supp.	6	7.2 (5.5-9.3)	60	5.0 (4.4-5.5)	329
	2010	Supp.	5	8.9 (7.0-11.2)	74	6.0 (5.4-6.6)	399
	2011	Supp.	Supp.	7.9 (6.1-10.0)	67	4.8 (4.3-5.4)	326
	2012	Supp.	6	9.8 (7.8-12.2)	85	5.6 (5.1-6.2)	387
	2013	Supp.	Supp.	6.9 (5.2-8.9)	57	5.0 (4.5-5.5)	342
	2014	Supp.	Supp.	7.2 (5.5-9.3)	62	5.1 (4.6-5.7)	358
	2015	Supp.	6	7.2 (5.5-9.2)	61	5.5 (5.0-6.1)	383
	2016	Supp.	5	9.5 (7.5-11.8)	78	5.9 (5.4-6.5)	418
	2017	Supp.	Supp.	7.9 (6.1-10.1)	68	5.6 (5.0-6.2)	390
Male	2008	22.2* (12.6-36.0)	16	29.4 (25.8-33.3)	245	26.2 (25.0-27.5)	1,714
	2009	27.0* (16.6-41.5)	21	31.1 (27.4-35.1)	257	25.9 (24.7-27.2)	1,683
	2010	24.1* (14.3-38.1)	18	27.5 (24.1-31.3)	229	24.2 (23.0-25.4)	1,592
	2011	27.0* (16.2-42.2)	19	29.8 (26.1-33.8)	243	23.8 (22.7-25.1)	1,575
	2012	30.1* (18.6-45.8)	21	24.0 (20.8-27.6)	199	23.7 (22.5-24.9)	1,582
	2013	Supp.	7	18.9 (16.1-22.1)	156	21.6 (20.5-22.7)	1,451
	2014	Supp.	7	20.9 (17.9-24.2)	173	20.9 (19.8-22.0)	1,413
	2015	Supp.	8	18.9 (16.0-22.1)	158	21.3 (20.2-22.4)	1,448
	2016	24.3* (14.1-38.8)	17	20.4 (17.4-23.7)	172	21.7 (20.6-22.9)	1,493
	2017	24.0* (13.9-38.5)	17	24.2 (20.9-27.7)	202	23.6 (22.5-24.8)	1,615

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 20. Annual Age-standardized Rate of Hospitalizations for Assault, Bruce County and Grey County, 2008-2017

Sex	Year	Bruce Rate	Bruce Count	Grey Rate	Grey Count
Overall	2008	17.9* (8.8-32.0)	11	14.0* (7.1-24.3)	12
	2009	28.2* (16.5-44.8)	18	10.2* (4.6-19.4)	9
	2010	14.3* (6.5-27.1)	9	16.2* (8.8-27.1)	14
	2011	18.4* (9.1-32.7)	11	13.2* (6.5-23.5)	11
	2012	18.1* (8.7-32.9)	10	19.3* (11.2-31.0)	17
	2013	Supp.	5	Supp.	Supp.
	2014	Supp.	7	Supp.	Supp.
	2015	Supp.	6	Supp.	8
	2016	25.1* (13.3-42.3)	13	10.1* (4.6-19.2)	9
	2017	18.2* (8.9-32.7)	11	11.0* (5.1-20.5)	10

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

Table 21. Annual Rates and 3 to 4 Year Counts of Hospitalizations for Assault, by Sex and Age Group, Grey Bruce, Mainly Rural Health Regions, and Ontario, 2008-2017

Sex	Year	Age Group	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Female	0-14	2008-2011	Supp.	Supp.	3.8* (2.5–5.7)	22	2.2 (1.8–2.7)	97
		2012-2014	Supp.	Supp.	4.5* (2.9–7.0)	19	2.4 (1.9–3.0)	77
		2015-2017	--	0	2.8* (1.6–4.9)	12	2.4 (1.9–3.0)	77
	15-24	2008-2011	22.2* (11.7–42.2)	9	22.0 (18.1–26.8)	100	12.4 (11.3–13.7)	439
		2012-2014	Supp.	Supp.	16.4 (12.6–21.3)	56	10.6 (9.4–11.9)	285
		2015-2017	Supp.	Supp.	17.9 (13.9–23.0)	60	11.6 (10.4–13.0)	310
	25-44	2008-2011	Supp.	Supp.	12.1 (10.0–14.7)	102	7.1 (6.5–7.7)	519
		2012-2014	Supp.	Supp.	11.3 (9.0–14.3)	70	6.4 (5.8–7.1)	356
		2015-2017	Supp.	7	12.5 (10.0–15.6)	78	8.1 (7.4–8.9)	460
	45-64	2008-2011	Supp.	5	5.0 (3.8–6.5)	51	3.3 (3.0–3.8)	246
		2012-2014	Supp.	Supp.	4.9 (3.6–6.7)	39	3.8 (3.4–4.4)	223
		2015-2017	--	0	4.6 (3.3–6.3)	37	3.4 (3.0–3.9)	201
	65+	2008-2011	Supp.	Supp.	3.1* (2.0–4.9)	19	3.3 (2.7–3.9)	132
		2012-2014	Supp.	Supp.	3.9* (2.5–6.0)	20	4.3 (3.6–5.0)	146
		2015-2017	Supp.	Supp.	3.6* (2.3–5.6)	20	3.8 (3.2–4.5)	143
Male	0-14	2008-2011	Supp.	5	4.7* (3.3–6.8)	29	3.5 (3.0–4.1)	158
		2012-2014	Supp.	Supp.	4.9* (3.2–7.4)	22	2.9 (2.4–3.6)	99
		2015-2017	--	0	2.9* (1.7–5.0)	13	2.6 (2.1–3.2)	87
	15-24	2008-2011	69.2* (48.2–99.3)	29	80.7 (73.0–89.2)	384	70.2 (67.6–73.0)	2,553
		2012-2014	46.5* (27.7–78.0)	14	46.2 (39.7–53.8)	166	53.8 (51.2–56.6)	1,514
		2015-2017	55.1* (33.9–89.5)	16	42.8 (36.5–50.2)	151	51.5 (48.9–54.2)	1,449
	25-44	2008-2011	33.5* (22.3–50.3)	23	46.9 (42.5–51.7)	401	36.3 (34.9–37.7)	2,590
		2012-2014	25.8* (15.1–44.1)	13	38.9 (34.3–44.1)	243	35.2 (33.6–36.8)	1,884
		2015-2017	31.6* (19.4–51.3)	16	37.5 (33.0–42.6)	237	35.0 (33.4–36.6)	1,914
	45-64	2008-2011	14.6* (8.8–24.0)	15	13.7 (11.7–16.2)	141	15.1 (14.2–16.0)	1,088
		2012-2014	Supp.	6	10.7 (8.7–13.3)	85	14.2 (13.2–15.2)	803
		2015-2017	Supp.	8	14.0 (11.6–16.8)	112	15.9 (14.9–17.0)	919
	65+	2008-2011	Supp.	Supp.	3.8* (2.4–6.0)	19	5.5 (4.8–6.4)	175
		2012-2014	--	0	2.8* (1.6–4.9)	12	5.3 (4.5–6.2)	146
		2015-2017	Supp.	Supp.	4.0* (2.6–6.3)	19	6.1 (5.3–7.1)	187

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases

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Table 22. Annual Age-standardized Homicide Mortality Rate, Grey Bruce, Mainly Rural Health Regions and Ontario, 2006-2015

Sex	Year	Grey Bruce Rate	Grey Bruce Count	Mainly Rural Rate	Mainly Rural Count	Ontario Rate	Ontario Count
Overall	2006	Supp.	Supp.	0.9* (0.5-1.5)	15	1.4 (1.2-1.6)	180
	2007	Supp.	Supp.	0.9* (0.5-1.5)	16	1.5 (1.3-1.7)	189
	2008	Supp.	Supp.	Supp.	8	1.2 (1.1-1.4)	161
	2009	Supp.	Supp.	0.9* (0.5-1.5)	14	1.3 (1.1-1.5)	169
	2010	Supp.	Supp.	1.4* (0.9-2.1)	23	1.3 (1.2-1.6)	177
	2011	Supp.	Supp.	0.7* (0.4-1.3)	13	1.1 (0.9-1.3)	141
	2012	Supp.	Supp.	1.2* (0.7-1.8)	20	1.1 (1.0-1.3)	152
	2013	Supp.	Supp.	0.7* (0.4-1.3)	13	1.1 (0.9-1.3)	152
	2014	Supp.	Supp.	0.6* (0.3-1.0)	10	1.1 (0.9-1.2)	145
	2015	Supp.	Supp.	1.0* (0.6-1.5)	17	1.2 (1.0-1.3)	159
Female	2006	--	0	Supp.	7	0.9 (0.7-1.1)	56
	2007	--	0	Supp.	6	0.8 (0.6-1.0)	51
	2008	--	0	Supp.	Supp.	0.6 (0.4-0.8)	41
	2009	Supp.	Supp.	Supp.	8	0.7 (0.5-1.0)	47
	2010	--	0	1.0* (0.5-2.0)	9	0.7 (0.5-1.0)	49
	2011	Supp.	Supp.	Supp.	6	0.6 (0.5-0.9)	44
	2012	Supp.	Supp.	Supp.	Supp.	0.5 (0.4-0.7)	37
	2013	--	0	Supp.	Supp.	0.7 (0.5-0.9)	48
	2014	--	0	Supp.	5	0.5* (0.3-0.6)	33
	2015	Supp.	Supp.	1.1* (0.5-2.1)	10	0.7 (0.5-0.9)	47
Male	2006	Supp.	Supp.	Supp.	8	1.9 (1.6-2.3)	124
	2007	Supp.	Supp.	1.2* (0.6-2.2)	10	2.2 (1.8-2.6)	138
	2008	Supp.	Supp.	Supp.	6	1.9 (1.5-2.2)	120
	2009	--	0	Supp.	6	1.9 (1.6-2.3)	122
	2010	Supp.	Supp.	1.7* (0.9-2.8)	14	1.9 (1.6-2.3)	128
	2011	Supp.	Supp.	Supp.	7	1.5 (1.2-1.8)	97
	2012	Supp.	Supp.	1.9* (1.1-3.1)	16	1.7 (1.4-2.1)	115
	2013	Supp.	Supp.	1.2* (0.6-2.2)	10	1.6 (1.3-1.9)	104
	2014	Supp.	Supp.	Supp.	5	1.7 (1.4-2.0)	112
	2015	Supp.	Supp.	Supp.	7	1.7 (1.4-2.0)	112

* Rate may be unreliable due to small sample size, interpret with caution
Supp. Rate suppressed due to high degree of variability, or count suppressed if between 1 and 4 cases