



## Opioid and Other Substance Misuse

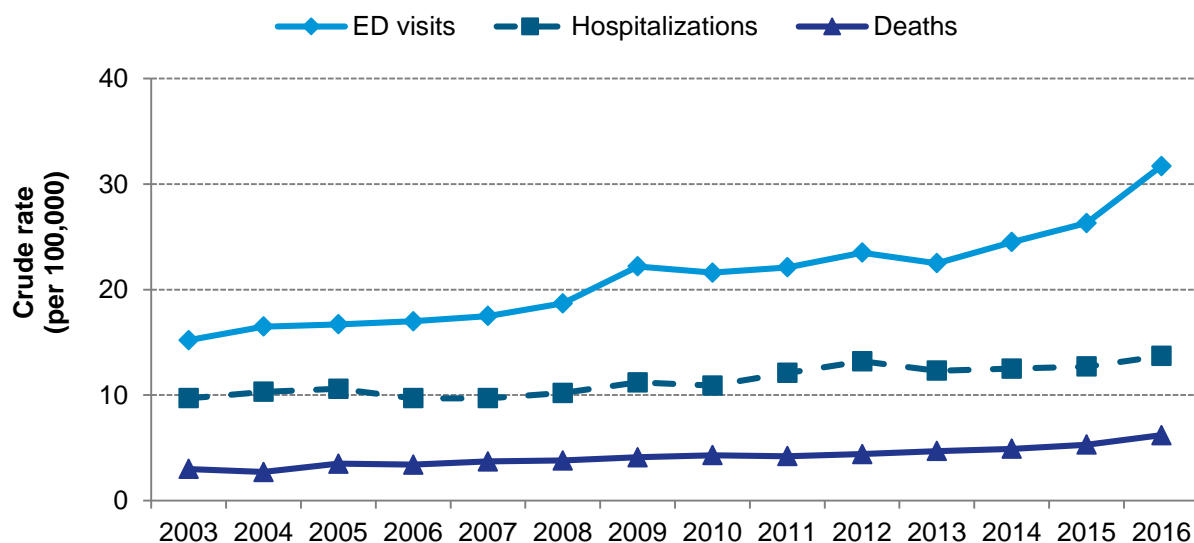
### Summary

- Oxford County is experiencing the impact of opioid and other substance misuse that has already negatively affected other communities in Canada.
- Approximately 400 to 1,200 Oxford County residents may be at risk of experiencing negative health outcomes from opioid and other substance misuse (excluding alcohol and cannabis). The lower end of this range is based on the number of individuals who have accessed substance use services, the estimated number of people who inject drugs and the number of individuals prescribed opioid maintenance therapy. The upper end of this range is based on the per cent of residents that self-reported using illicit drugs in the past year.
- The rate of opioid-related deaths among Oxford County residents is increasing and in 2016 was similar to Ontario (6.2 per 100,000 population, i.e., seven deaths).
- Prescription opioid use among Oxford County residents was higher than average compared to other counties in Ontario for opioid maintenance therapy (137 per 10,000 Ontario Drug Benefit (ODB) eligible people, i.e., 394 people) and high strength opioid users (2.9% of ODB eligible people, i.e., 182 people).
- Self-reported illicit drug use among Oxford County residents 12 years and older was similar to Ontario from 2009-2012. Among Oxford County residents, 45.2% reported ever using an illicit drug and 11.8% reported using an illicit drug in the past year. The most commonly reported drug used was cannabis.
- Between October 1, 2016 and September 30, 2017, there were 378 Oxford County residents with at least one admission to a provincially funded substance use service. Some of these individuals had more than one admission during this time, for a total of 462 admissions.

## Background

Canada is in the midst an opioid crisis driven by the introduction of fentanyl and other illicit opioids, which has contributed to an increase in overdoses and deaths.<sup>1</sup> Ontario is also experiencing this crisis and opioid-related deaths and ED visits across the province has doubled since 2003 (Figure 1). The causes of this crisis are complex and includes prescribing practices and subsequent addiction to prescription opioids, the introduction of potent opioids such as fentanyl and carfentanil to communities, social determinants of health such as social and economic inequities (e.g., Ontario residents with lower income were more likely to be dispensed opioids to treat addiction),<sup>2</sup> experiences of trauma and mental health issues.<sup>1</sup>

**Figure 1. Opioid-related deaths, hospitalizations and emergency department visits, Ontario, 2003-2016**



**Note:** 2016 death data should be considered preliminary and is subject to change with future updates as remaining cases are closed by the Office of the Chief Coroner of Ontario.

**Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

In order to address this crisis, the Ontario Ministry of Health and Long-Term Care (MOHLTC) released an opioid strategy that includes modernized training for those prescribing and dispensing opioids, patient education, improved data collection and surveillance, improved access to substance use services and enhanced harm reduction services.<sup>3</sup> In October 2017, the MOHLTC established an Opioid Emergency Task Force to strengthen the province's coordinated response to the opioid crisis.<sup>4</sup> As part of the provincial strategy, public health units are enhancing their harm reduction programs, with the goal of creating sustainable community outreach and response capacity to address opioid and other substance use issues.<sup>5</sup> This enhancement focuses on three components:

- 1) local opioid response, which includes implementing, maintaining or expanding local programming based on an assessment of local data and local needs
- 2) naloxone distribution and training
- 3) opioid overdose early warning and surveillance to ensure the timely identification of and response to an increase in overdoses<sup>5</sup>

This initial report provides an overview of current opioid and other substance use in Oxford County in order to better understand the current situation and begin to assess our opportunities to be both proactive and responsive to the pending crisis.

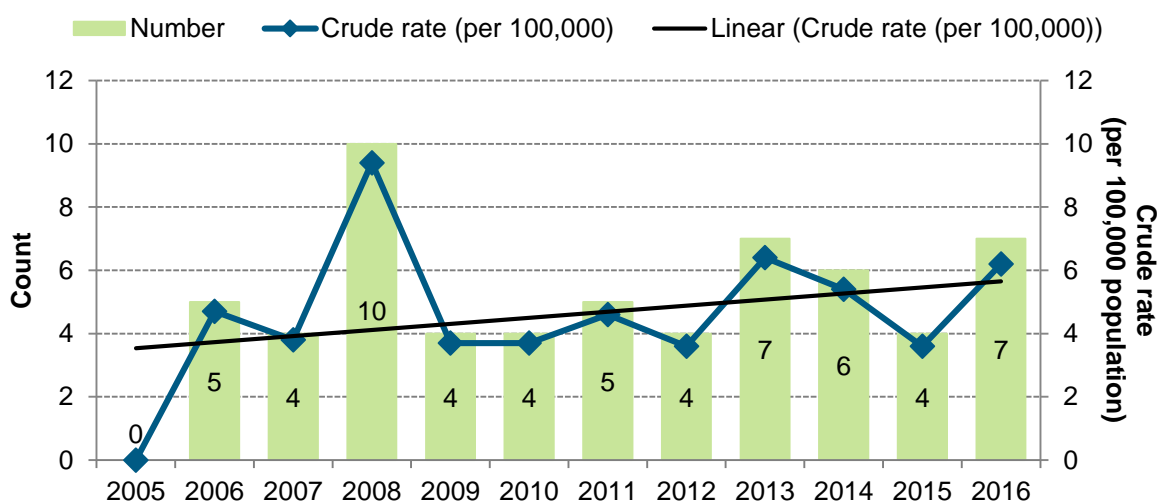
## Findings

### Opioids

#### Opioid-related deaths

In 2016, there were seven people that died from opioid use in Oxford County for a rate of 6.2 per 100,000 population.<sup>6</sup> Three were female and four were male and included one person aged 15 to 24 years old, four 25 to 44 year olds and two 45 to 64 year olds. The types of opioids present at death were methadone (four deaths), fentanyl (three deaths) and oxycodone (one death). Some deaths were attributed to multi-drug toxicity, therefore a death can include more than one opioid as a cause. In Oxford County, the rate of opioid-related deaths has increased slightly over time since 2005, as visible by the trend line in Figure 2.

**Figure 2. Opioid-related deaths, Oxford County, 2005-2016**

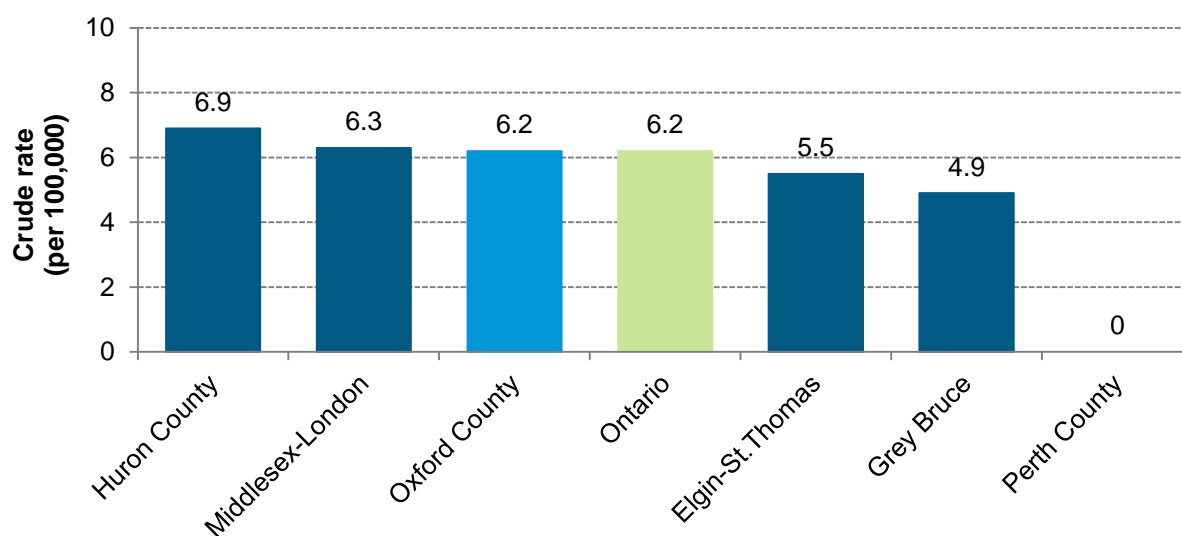


**Note:** 2016 death data should be considered preliminary and is subject to change with future updates as remaining cases are closed by the Office of the Chief Coroner of Ontario.

**Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen’s Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

In 2016, the rate of opioid-related deaths in Oxford County was similar to other public health units in the South West Local Health Integration Network (LHIN) region and to Ontario, with the exception of Perth County which had no reported opioid-related deaths (Figure 3). However, it is important to note that because these comparisons are based on crude rates, the age structure of the population is not taken into consideration. Therefore, for example, if opioid-related deaths are more common in younger adults and one area has a higher proportion of younger adults, then they would have a higher rate.

**Figure 3. Opioid-related deaths (crude rate per 100,000 population), public health units in South West LHIN and Ontario, 2016**

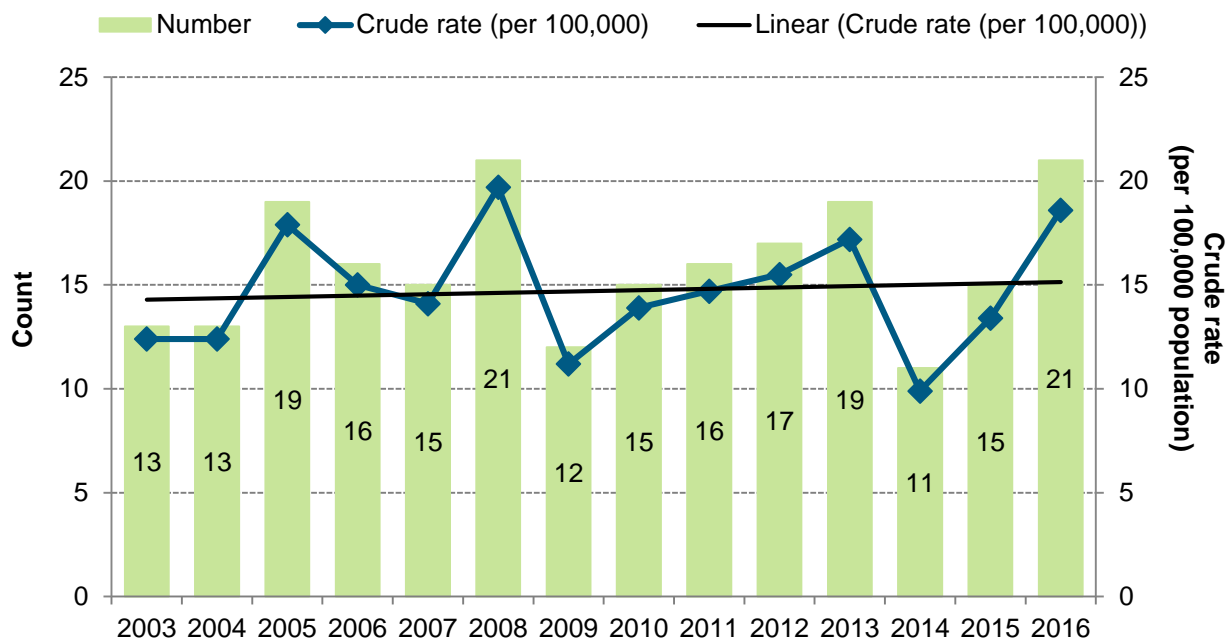


**Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

### Opioid-related hospitalizations

In 2016, there were 21 opioid-related hospitalizations in Oxford County for a rate of 18.6 per 100,000 population.<sup>6</sup> From January 1, 2017 to March 31, 2017, there were an additional two admissions. Overall, the rate of hospitalizations was higher among females than males (26.4 versus 10.7 per 100,000), in particular among 45 to 65 year old females (63.6 per 100,000). This same pattern has been reported elsewhere and may signal the impact on women of the adverse effects of opioid prescriptions in therapeutic use.<sup>7</sup> In Oxford County, the rate of opioid-related hospitalizations has remained fairly consistent since 2003 (Figure 4).

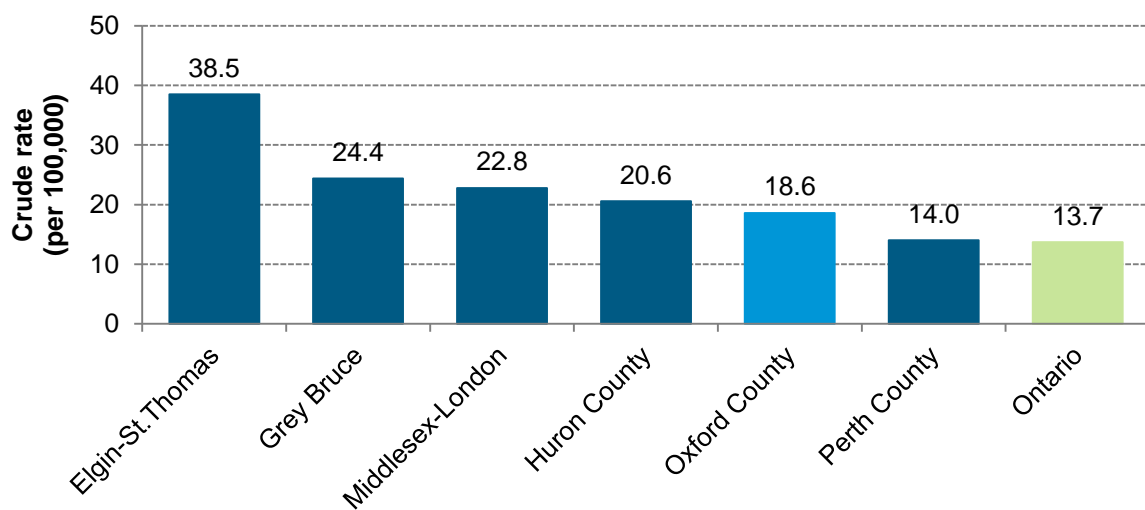
Figure 4. Opioid-related hospitalizations, Oxford County, 2003-2016



Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen’s Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

In 2016, the rate of opioid-related hospitalizations in Oxford County was slightly higher than Ontario (18.6 versus 13.7 per 100,000). However, Oxford County’s rate was lower than other public health units in the South West LHIN, with the exception of Perth County (Figure 5).

Figure 5. Opioid-related hospitalizations (crude rate per 100,000 population), public health units in South West LHIN and Ontario, 2016



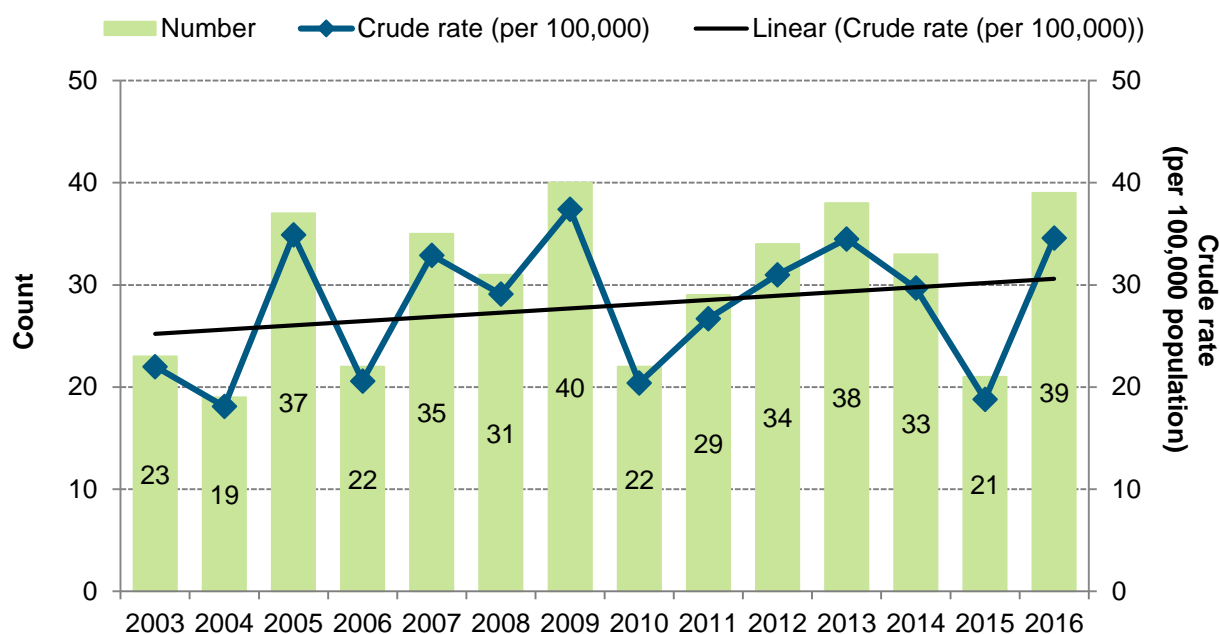
Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen’s Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

### Opioid-related emergency department visits

In 2016, there were 39 opioid-related emergency department (ED) visits in Oxford County for a rate of 34.6 per 100,000 population.<sup>6</sup> In the first quarter of 2017, there were an additional 7 visits and in the second quarter that doubled to an additional 15 visits. However, the second quarter data is based on a weekly reporting initiative by Ontario hospitals and should be considered preliminary and subject to change (please see the data notes for more information).

Overall, the rate of ED visits was higher among females than males (40.5 versus 28.5 per 100,000), in particular among 15 to 24 year old females (98.8 per 100,000). In Oxford County, the rate of opioid-related ED visits has increased slightly over time since 2003, as visible by the trend line in Figure 6.

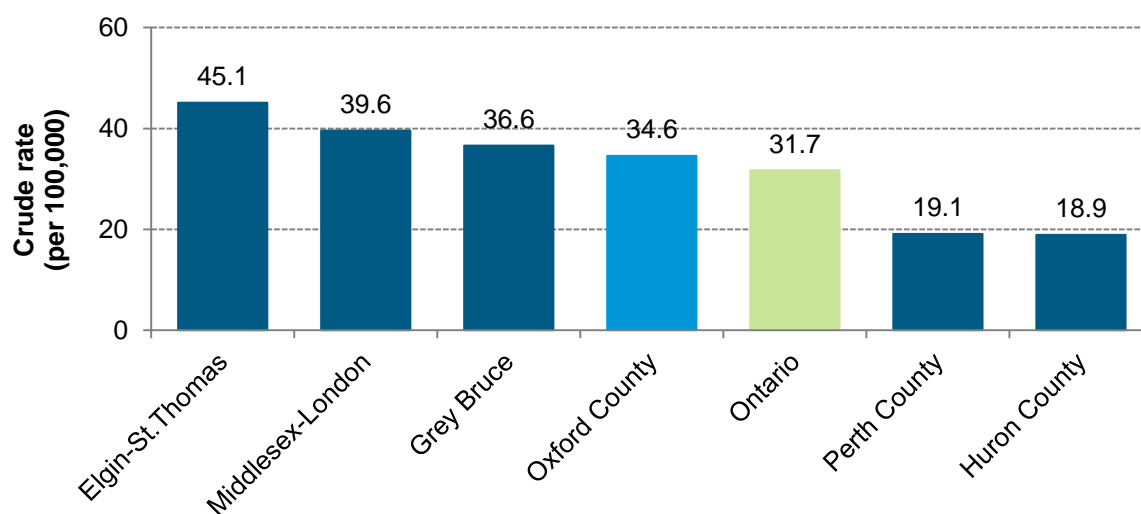
**Figure 6. Opioid-related emergency department visits, Oxford County, 2003-2016**



**Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen’s Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

In 2016, the rate of opioid-related ED visits in Oxford County was slightly higher than Ontario (34.6 versus 31.7 per 100,000). Oxford County's rate was lower than three public health units in the South West LHIN specifically: Elgin-St. Thomas, Middlesex-London and Grey Bruce (Figure 7).

**Figure 7. Opioid-related ED visits (crude rate per 100,000 population), public health units in South West LHIN and Ontario, 2016**



**Source:** Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2017. Available from:

<http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>

### Prescription opioid use

In 2015, there were 6,002 people who used prescription opioids in Oxford County, for a rate of 2,080 per 10,000 Ontario Drug Benefit (ODB) eligible people.<sup>8,1</sup> People who use prescription opioid may be at risk of opioid misuse or dependence. The age groups that were the highest users of prescription opioids were those 65 years and older and those 45 to 64 years, respectively. Overall, Oxford County ranked 30 out of 49 counties and Oxford County's rate was slightly higher than Ontario's (2,054 per 10,000 ODB eligible people).<sup>2</sup>

One use of prescription opioids is for opioid maintenance therapy, which includes opioids used to treat opioid use disorder (previously known as addiction) (i.e., methadone and suboxone). In 2015, there were 394 people who used opioid maintenance therapy in Oxford County for a rate of 137 per 10,000 ODB eligible people.<sup>8</sup> The age group with the highest use of opioid

<sup>1</sup> ODB eligible persons include people in Ontario who are 65 years and older, persons of all ages who qualify due to low income or have high drug costs relative to income, receive disability support or home care or who live in long-term care.

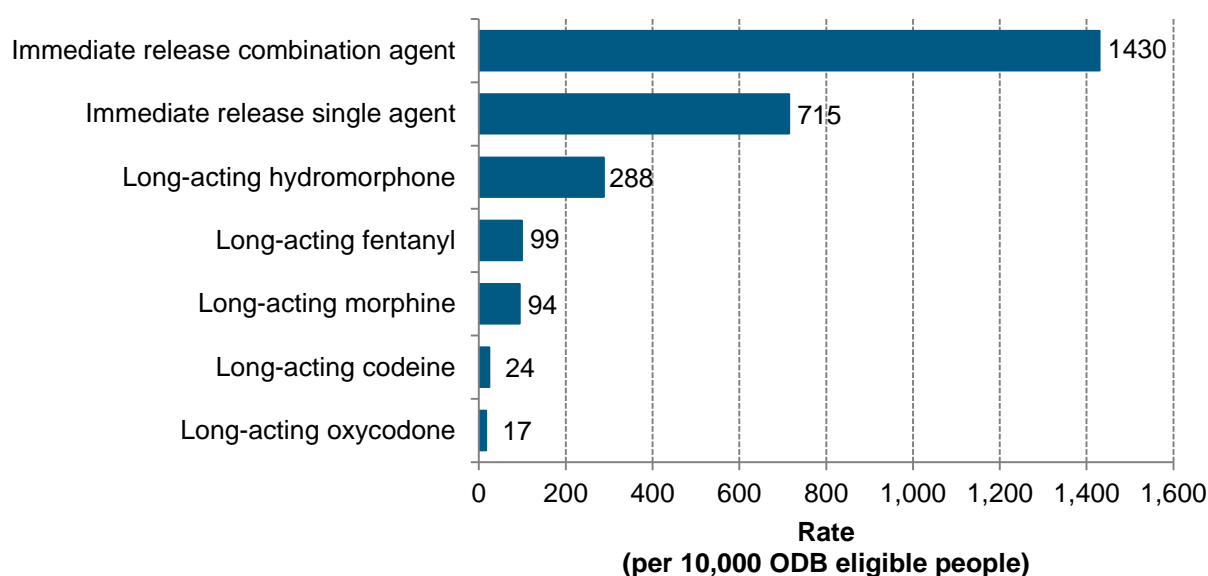
<sup>2</sup> A rank of 1 is the highest rate in Ontario and a rank of 49 is the lowest rate in Ontario.

maintenance therapy was 25 to 44 year olds. Overall, Oxford County ranked 19 out of 49 counties and had a higher rate than Ontario (103 per 10,000 ODB eligible people).

During the same time period, there were 182 high strength opioid users in Oxford County, meaning that 2.9% of ODB eligible people were high strength opioid users.<sup>8,3</sup> Oxford County ranked 7 out of 49 counties and had more high strength opioid users than most other counties and Ontario overall (1.8% of ODB eligible people). However, all of the prescription opioid use comparisons are based on crude rates which can be affected by the age structure of the population. For example, Oxford County has a higher proportion of seniors (65 years and older) than Ontario (18.7% versus 16.7%, respectively),<sup>9</sup> which could explain the higher proportion of ODB eligible people using prescription opioids and using high strength opioids.

In terms of the formulation of opioids, most Oxford County ODB eligible opioid users were on immediate release combination drugs (e.g., Percocet, Tylenol 3) or immediate release single agent drugs (e.g., hydromorphone, morphine and oxycodone) in 2015 (Figure 8).<sup>8</sup>

**Figure 8. Formulation of opioids prescribed, ODB eligible Oxford County residents, 2015**



In 2016, 14.5% of Oxford County residents were dispensed opioids for pain, 0.9% were dispensed opioids for cough and 0.7% were dispensed opioids for opioid use disorder, most of those being dispensed methadone (0.6%) followed by buprenorphine/naloxone (0.2%).<sup>2</sup> However, these indication and formulation groups are not mutually exclusive. An individual can be placed in more than one group depending on their prescription.

<sup>3</sup> High strength opioids include an opioid formulation where the strength of the tablet or patch is particularly high and would result in daily dose exceeding 200 mg morphine or equivalent if taken 1-2 times daily. Specifically, these include: fentanyl 75 mcg/hour and 100 mcg/hour, hydromorphone 24 mg and 30 mg, and morphine 200 mg.



## Naloxone

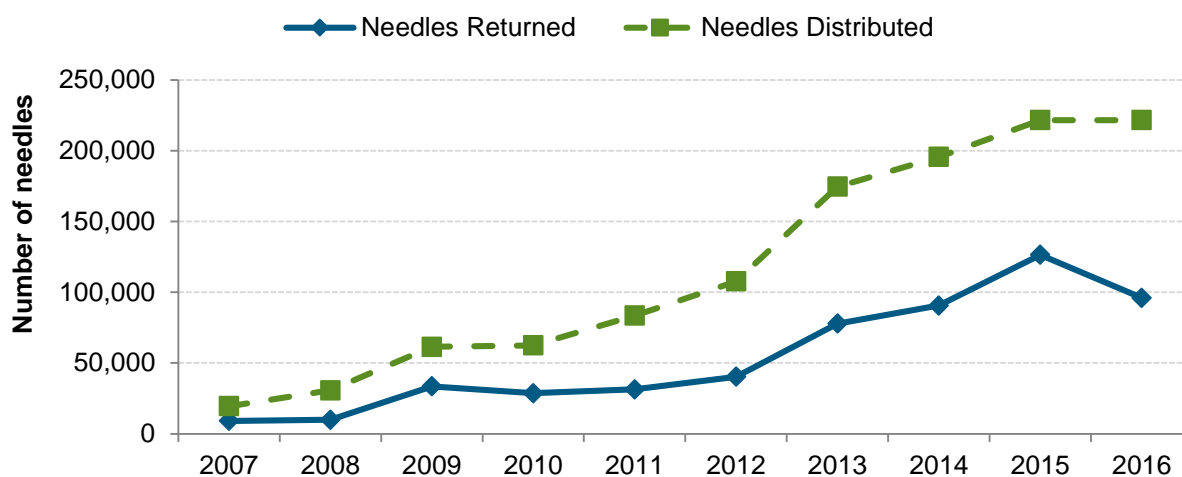
Naloxone is a medication used to block the effects of opioids and can be used to reverse an overdose. In March 2014, Oxford County Public Health began direct distribution of naloxone with training on how to use the kits to people who use opioids. In 2016, they distributed 6 naloxone kits to new clients, replaced four kits, and had two reports of clients administering naloxone and one report of a client receiving one dose of naloxone.<sup>10</sup> From January to September 2017, this increased to 10 kits distributed to new clients and 35 kits replaced (initial kits could also be obtained from participating pharmacies beginning in June 2016).<sup>11</sup> There were 30 clients that reported administering naloxone with a total of 54 doses administered (47 of those doses from July to September 2017 alone).<sup>11</sup> However, it is possible that the same incident was reported by more than one client to Public Health and that the naloxone used was not obtained from Public Health. Currently, naloxone is also distributed through 10 participating pharmacies in Oxford County. From June 1, 2016 to July 31, 2017, 230 naloxone kits were distributed.<sup>12</sup>

Based on client reports, 911 was called 10 times between January and September 2017 compared to never being called in 2016.<sup>10,11</sup> It is possible that the number of times 911 has been called could be increasing in part due to the introduction of the Good Samaritan Drug Overdose Act.<sup>13</sup> This new law, in effect on May 4, 2017, provides immunity from simple possession charges for those who call 911 in the case of an overdose.<sup>13</sup>

## Injection drug use and HIV

It is estimated that approximately 356 people 16 years and older in Oxford County injected drugs in 2015.<sup>14,15</sup> This is based on the estimate that roughly 1 in 250 (or 0.39%) of Canadians 15 years and older injected drugs in 2011.<sup>9</sup> Oxford County Public Health has a Needle Exchange Program (NEP) that provides people who inject drugs with clean needles and accepts used needles for proper disposal. In 2016, there were 2,036 individual visits to the NEP.<sup>16</sup> Almost three quarters (73%) of these visits were from males and the average age was 35 years. In 2016, 43 of these visits were from new clients. In total, there were an estimated 221,610 needles distributed and 96,000 returned for a needle return rate of 43%. The number of needles distributed and returned through the NEP has increased over the last 10 years (Figure 9). This increase has been observed across most public health units and is thought to be a result of increased awareness of services, increased access to services, increases in the number of people who inject drugs, more collaboration with community partners and increased awareness of the risks associated with sharing equipment.<sup>17</sup>

**Figure 9. Estimated number of needles returned and distributed through Oxford County's needle exchange program, 2007-2016**



**Source:** Oxford County Public Health. Needle Exchange Program (2007-2016), Date Extracted: October 11, 2017.

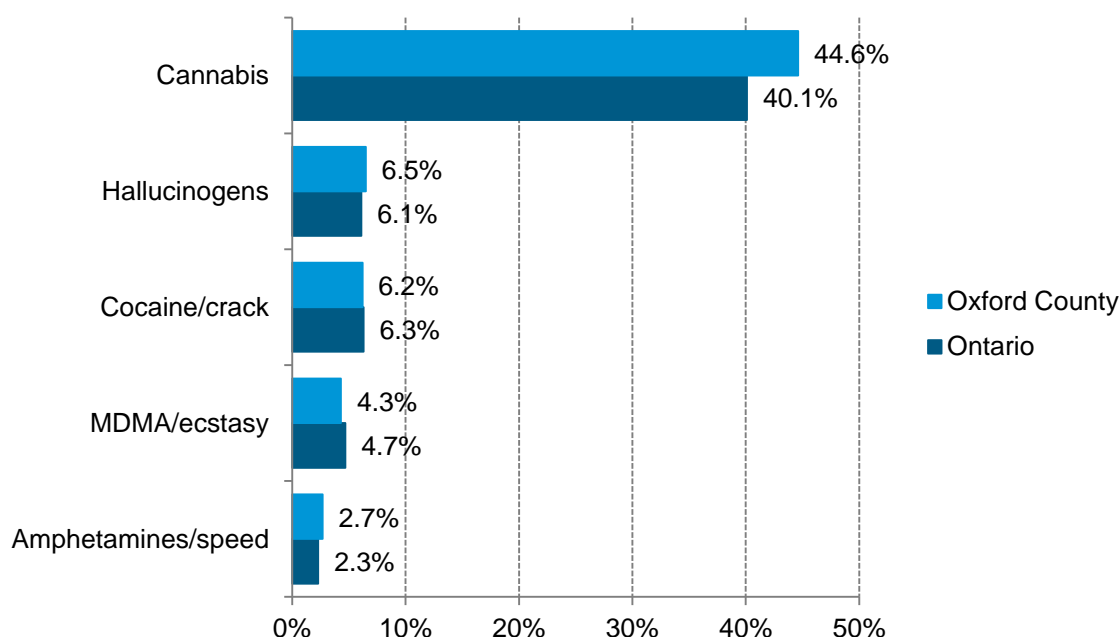
Although the NEP may reach people that inject drugs other than or in addition to opioids, the top three drugs of choice reported to Public Health from clients using the NEP in 2016 were: hydromorphone, morphine and opiates in general.<sup>16</sup> These have consistently been reported as the drug of choice for the last five years.

One of the risks of injection drug use is transmitting and acquiring blood-borne infections such as hepatitis C and human immunodeficiency virus (HIV). From 2013-2015, the three-year average age-standardized incidence rate of hepatitis C was higher in Oxford County than Ontario (44.7 versus 31.1 per 100,000 population).<sup>18</sup> From 2012-2016 in Oxford County, there were normally zero to three new cases of HIV reported each year.<sup>19</sup> Typically the risk factors among newly reported cases of HIV in Oxford County involve sexual contact or being from a country where HIV is widespread (i.e., endemic). However, in 2017 there has already been six new cases of HIV reported among Oxford County residents (as of September 27, 2017). Three cases were related to each other through injection drug use, shared needles and other drug equipment. These three individuals all reported using opioids. Notably, Middlesex-London Health Unit declared a health emergency in June 2016 because of a rise in HIV and hepatitis C cases, with injection drug use indicated as a major cause.<sup>20</sup> As a result, Oxford County Public Health has been doing an investigation and is continuing to monitor the situation, in addition to promoting HIV testing among NEP clients and others who inject drugs. This investigation will continue for some time due to the window period of HIV (i.e., the time following exposure to HIV when an HIV test may not detect infection) which is approximately 3 months.<sup>21</sup> Therefore, it is possible that as time goes on and testing is increased that more cases will be reported.

## Self-reported illicit drug use

From 2009-2012, 45.2% of Oxford County residents aged 12 years and older reported that they had used an illicit drug at some time in their lives, which was higher than Ontario (40.6%).<sup>22</sup> The most common illicit drug ever used was cannabis, followed by hallucinogens (Figure 10). This was similar to Ontario. When asked about illicit drug use in the past year, 11.8% of Oxford County residents reported using any illicit drug and 11.7% reported using cannabis. This was also similar to Ontario at 13.0% and 12.7%, respectively.

**Figure 10. Self-reported lifetime illicit drug use, residents 12 years and older, Oxford County and Ontario, 2009-2012 (combined)**



**Source:** Public Health Ontario. Snapshots: Oxford County Public Health & Emergency Services: Self-reported proportion of the population who have ever used an illicit drug – age standardized rate (both sexes combined) 2009-2012. Toronto, ON: Ontario Agency for Health Protection and Promotion; 2013 Nov 20 [cited 2017 Sept 29]. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Snapshots/Pages/Illicit-Drug-Use.aspx>

## Self-reported alcohol use

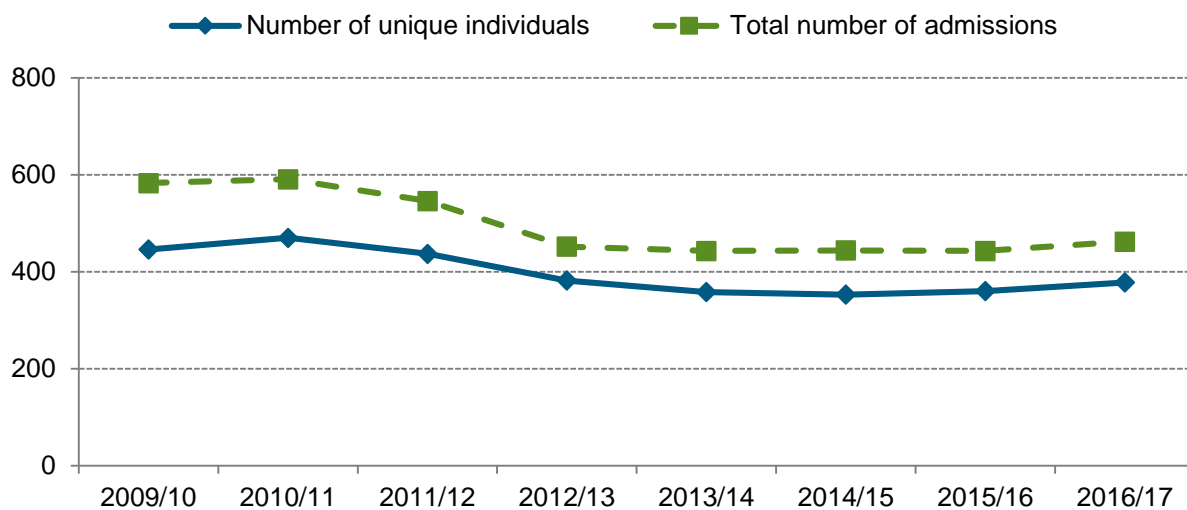
In Canada, there are low-risk alcohol drinking guidelines (LRADG) aimed to reduce the chronic and acute risks of alcohol use.<sup>23</sup> The first guideline addresses a person’s long-term risk of alcohol use (e.g., heart disease, liver disease, digestive problems, cancer).<sup>24</sup> It provides sex-specific daily and weekly limits for alcohol consumption and recommends at least two non-drinking days every week. From 2013-2014, 30.7% of Oxford County residents aged 12 years and older exceeded this guideline.<sup>25</sup> This was higher than Ontario at 21.0%. The second guideline provides sex-specific limits for alcohol consumption on special occasions and addresses a person’s short-term risk of alcohol use (e.g., injuries, alcohol poisoning and

violence).<sup>24</sup> From 2013-2014, 49.4% of Oxford County residents aged 12 years and older exceeded this guideline, which was higher than Ontario at 42.7%.<sup>25</sup> Oxford County also had a higher percentage of residents that exceeded either of these LRADGs (55.0% versus 45.3% in Ontario) and more residents were considered heavy drinkers, meaning that they had 5 or more drinks on at least one occasion per month in the past 12 months (24.1% versus 17.9% in Ontario).<sup>25</sup> The per cent of residents in Oxford County who consumed alcohol when they were underage (i.e., under 19 years) was 42.1%.<sup>25</sup> It is important to recognize that combining alcohol use with opioid use can increase the risk of overdose.<sup>26</sup>

### Substance use services

Between October 1, 2016 and September 30, 2017 in Oxford County, there were 378 unique clients with at least one admission to a MOHLTC-funded substance use service.<sup>27</sup> This could include a variety of types of services, such as initial assessment and treatment planning, case management, community treatment services, residential treatment services and withdrawal management services. The number of unique individuals accessing these services and the total number of admissions to these services decreased slightly from previous years (Figure 11). The total number of admissions is consistently higher than the number of unique individuals because during the fiscal year, a client could be admitted to a service more than once.

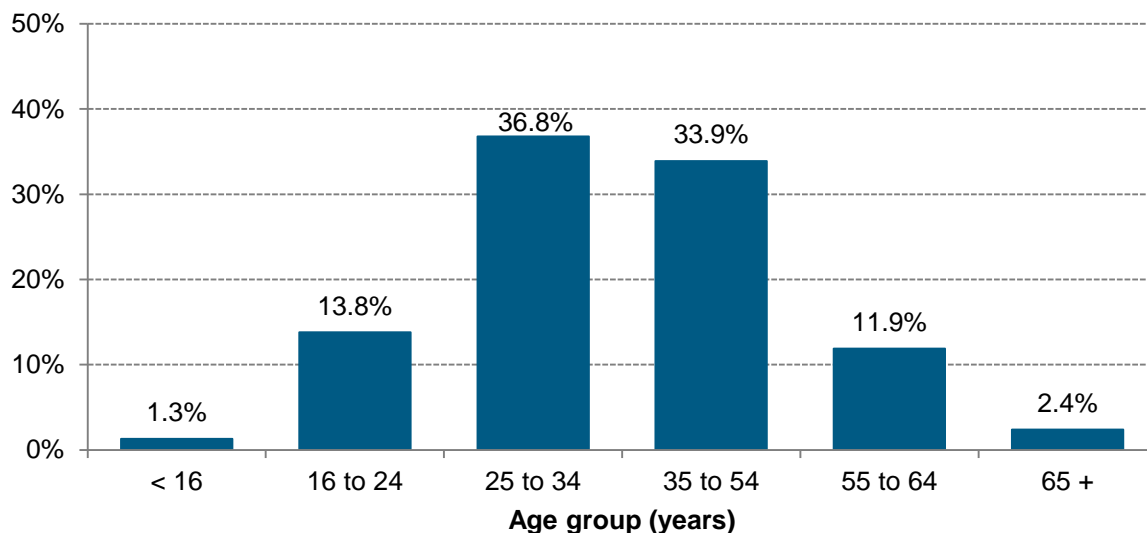
**Figure 11. Unique clients and admissions to a MOHLTC-funded substance use service, Oxford County, FY2009/10-FY2016/17**



**Source:** Drug and Alcohol Treatment Information System (DATIS) Central Database (FY2009/10-FY2016/17), DATIS, Date Extracted: October 1, 2017.

Between October 1, 2016 and September 30, 2017, nearly two-thirds (65%) of clients were male and over two-thirds (71%) were 25 to 54 years old (Figure 12).

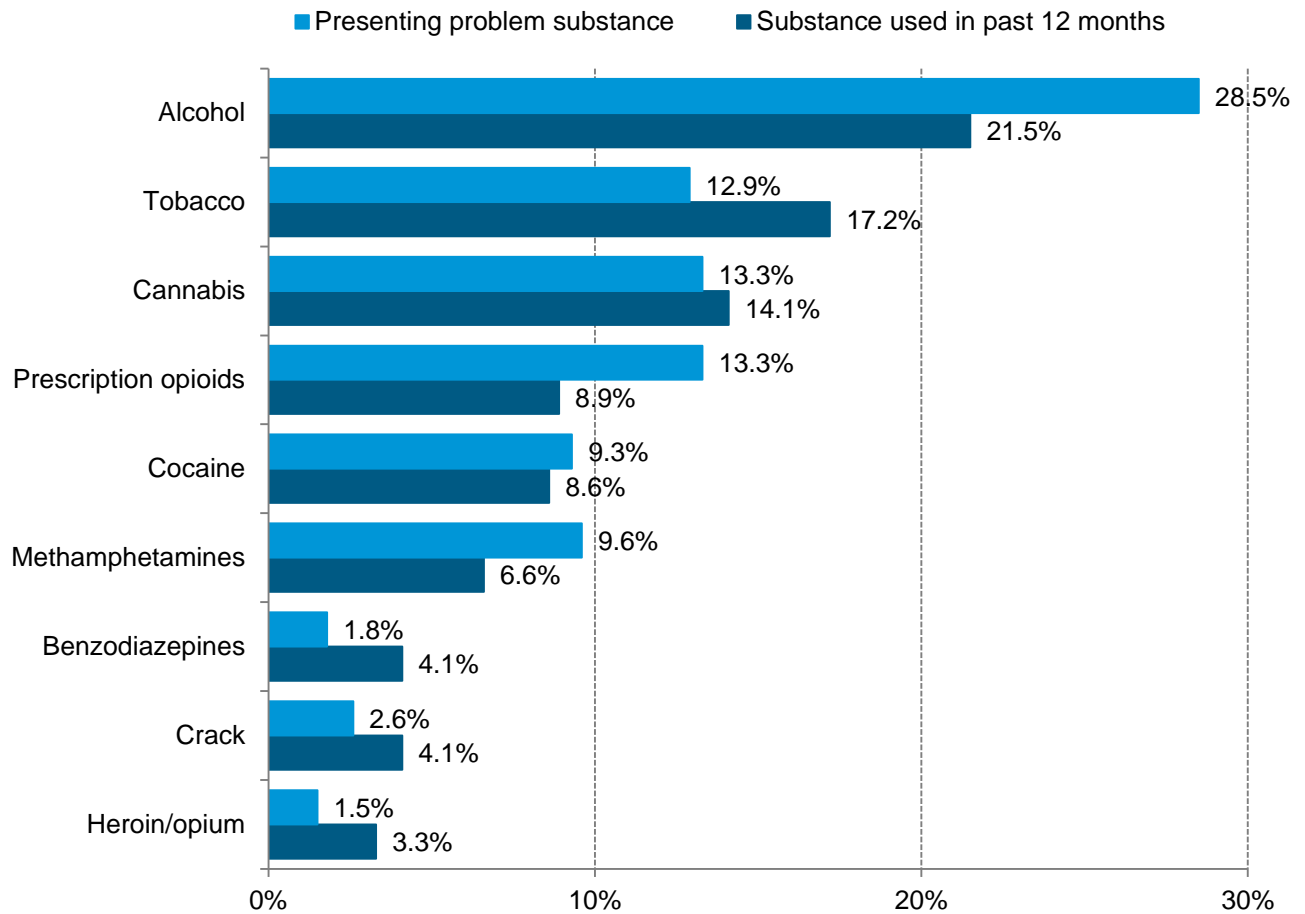
**Figure 12. Unique clients with at least one admission to a MOHLTC-funded substance use service by age group, Oxford County, FY2016/17**



**Source:** Drug and Alcohol Treatment Information System (DATIS) Central Database (FY2016/17), DATIS, Date Extracted: October 1, 2017.

Of all the new admissions during 2016/17 (n=462), which could include the same client more than once, clients were asked what their presenting problem substances were and what substances they used in the past 12 months. Clients could indicate more than one substance. The most commonly reported problem substance was alcohol, followed by cannabis and prescription opioids (Figure 13). In terms of intravenous drug use, 19% reported injecting a drug in the past 12 months and 7% reported injecting prior to one year ago.<sup>27</sup>

**Figure 13. Presenting problem substances and substances used in the past 12 months, clients with admission(s) to a MOHLTC-funded substance use service, Oxford County, FY2016/17**



**Source:** Drug and Alcohol Treatment Information System (DATIS) Central Database (FY2016/17), DATIS, Date Extracted: October 1, 2017.

## Considerations

These findings suggest that the rate of opioid-related deaths and ED visits has increased over time in Oxford County, although not to the same extent as seen in Ontario. However, past rates of opioid-related deaths and ED visits have traditionally been higher than Ontario. It may be promising that we have not yet seen a rapid increase in rates of opioid-related deaths, hospitalizations and ED visits as it suggests that Oxford County may now proactively work towards reducing substance misuse and mitigating harms related to opioid misuse before the effects of potent opioids, such as fentanyl and carfentanil, reach epidemic proportions in the County.

Recent data also suggests that Oxford County residents may experience more long-term and short-term risks of alcohol use than experienced provincially. Alcohol was the number one presenting problem substance among residents seeking substance use services during the last fiscal year.

This information helps us begin to understand the picture of opioid and other substance use in Oxford County, while identifying potential areas to further enhance our surveillance and monitoring efforts to better understand and take action related to the full effects of opioid and substance misuse in Oxford County. For example, few resources are currently available that systematically summarizes information on those who call 911 for opioid or other substance misuse and how many of these individuals go to the hospital. While some information is available on specific substances used, rapid information on the changing patterns of use and drugs of choice is warranted. Little is documented about existing drug use networks, for example, how individuals are travelling between Oxford County and other jurisdictions and how that is affecting the local situation. Further, although we have access to a great deal of information, there is currently no system to rapidly share information between community partners in an ongoing fashion and collectively interpret the current drug use situation.

## Data Notes

This report summarizes information from a variety of data sources available to Public Health that contain information about opioids and other substance use in Oxford County. The methods used depends on the data source. More detail about each data source (in the order it is presented in the report) can be found below.

**Public Health Ontario (PHO)'s Interactive Opioid Tool** is a publicly available resource that contains data about opioid-related emergency department (ED) visits, hospitalizations and deaths. This tool uses International Statistical Classification of Diseases and Related Health Problems (ICD-10-CA) codes to capture overdoses (Table 1), which excludes suspected overdoses. This data is updated quarterly for ED visits and hospitalizations and less regularly for deaths. However, this tool contains the most recent opioid-related death data available.

**Table 1. ICD-10-CA codes capturing opioid overdoses**

ICD-10-CA codes	Description
T40.0	Poisoning by opium
T40.1	Poisoning by heroin
T40.2	Poisoning by other opioids
T40.3	Poisoning by methadone
T40.4	Poisoning by other synthetic narcotics
T40.6	Poisoning by other and unspecified narcotics

**Ontario Drug Policy Research Network (ODPRN)** recently released two reports that contain information about prescription opioid use at the health unit level. The first report used data from the Ontario Drug Benefit (ODB) claims database to capture prescription opioid use among ODB eligible people (i.e., publicly-funded prescriptions).<sup>8</sup> The second report used data from the Narcotics Monitoring System (NMS), which captures opioid prescriptions regardless of payment method (e.g., private insurance, public insurance, out-of-pocket).<sup>2</sup>

**Naloxone** data is currently maintained by Public Health in an Excel database, which includes reports that someone administered naloxone (obtained from any provider) and the number of doses, the number of kits distributed and if 911 is called. If the same incident is reported to Public Health by different individuals, it is possible that it may be recorded more than once. Through requests to the MOHLTC, the number of naloxone kits distributed through the Ontario Naloxone Program for Pharmacies (ONPP) is also available.



**Needle Exchange Program (NEP)** data is maintained by Public Health in an Access database, which includes the estimated number of needles distributed and returned and the substances used (if reported by the client).

**Canadian Community Health Survey (CCHS)** is a national survey conducted by telephone and in-person interviews among individuals 12 years and older. The CCHS included questions about self-reported illicit drug use in Ontario in the 2009-2010 and 2011-2012 cycles. The CCHS also regularly asks about self-reported alcohol use which is used to calculate exceedance of the low-risk alcohol drinking guidelines (LRADG). The CCHS excludes individuals living on reserves, in institutions, full-time members of the Canadian Armed Forces and residents of remote regions in the country.

**Drug and Alcohol Treatment Information System (DATIS)** contains client-level records on substance use services that are funded by the MOHLTC. This includes the types of services accessed, substances used in the past 12 months and presenting problem substances. Data is maintained and requested through the Centre for Addiction and Mental Health (CAMH).

The following data sources were not used in this report, but contain important information for surveillance purposes.

**Acute Care Enhanced Surveillance System (ACES)** is a real-time data source for ED visits and hospitalizations from March 6, 2017 onwards. ACES monitors 84 different syndromes; the OPI and TOX syndromes capture potential opioid-related visits/admissions and may capture suspected overdoses that other data sources exclude. The reason for visit is based on the chief complaint or admission diagnosis entered into the client's record at the hospital. Opioid-related overdoses are likely undercounted in this system because the triage nurses may not be able to identify the substance at that time.

**MOHLTC Weekly Opioid Overdose Reports** include opioid-related ED visits from April 1, 2017 onwards. This data is included in an aggregate form as a preliminary tab in PHO's Interactive Opioid Tool and uses the same ICD-10-CA codes. This weekly report includes the count of visits and unique patients and whether the overdose was accidental, intentional, therapeutic or unknown. This data is subject to change from week-to-week as the data is validated.

## References

1. House of Commons Canada. Reports and recommendations on the opioid crisis in Canada. Ottawa, ON: Parliament of Canada; 2016.
2. Gomes T, Pasricha S, Martins D, Greaves S, et al. Behind the prescriptions: a snapshot of opioid use across all Ontarians [Internet]. Toronto, ON: Ontario Drug Policy Research Network; 2017 [cited 2017 Sept 25]. Available from: [http://odprn.ca/wp-content/uploads/2017/08/ODPRN-Report\\_Behind-the-Prescriptions.pdf](http://odprn.ca/wp-content/uploads/2017/08/ODPRN-Report_Behind-the-Prescriptions.pdf)
3. Ministry of Health and Long-Term Care. Strategy to prevent opioid addiction and overdose [Internet]. 2016 [cited 2017 Oct 16]. Available from: <https://news.ontario.ca/mohltc/en/2016/10/strategy-to-prevent-opioid-addiction-and-overdose.html>
4. Ministry of Health and Long-Term Care. Ontario creating opioid Emergency Task Force [Internet]. 2017 [cited 2017 Oct 17]. Available from: <https://news.ontario.ca/mohltc/en/2017/10/ontario-creating-opioid-emergency-task-force.html>
5. Ministry of Health and Long-Term Care. Harm reduction program enhancement: public health unit webinar update. 2017.
6. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2017. Available from: <http://www.publichealthontario.ca/en/DataAndAnalytics/Opioids/Opioids.aspx>.
7. Anderson P. Dramatic rise in opioid hospitalizations among women [Internet]. Medscape Medical News. 2017 [cited 2017 Oct 17]. Available from: [https://www.medscape.com/viewarticle/881881#vp\\_1](https://www.medscape.com/viewarticle/881881#vp_1)
8. Gomes T, et al. Opioid use and related adverse events in Ontario, November 2016 [Internet]. Toronto, ON: Ontario Drug Policy Research Network; 2016 [cited 2017 Sept 25]. Available from: <http://odprn.ca/wp-content/uploads/2016/11/ODPRN-Opioid-Use-and-Related-Adverse-Events-Nov-2016.pdf>
9. Statistics Canada. 2017. Oxford, CTY [Census division], Ontario and Ontario [Province] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released September 13, 2017. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed: September 22, 2017).
10. Oxford County Public Health. Overdose Prevention Stats 2016 (2016), Date Extracted: October 4, 2017.
11. Oxford County Public Health. Overdose Prevention Stats 2017 (2017), Date Extracted: October 4, 2017.
12. Personal communication with the Ontario Opioid Strategy Team, Ministry of Health and Long-Term Care on August 22, 2017.
13. Health Canada. Good Samaritan Drug Overdose Act Becomes Law in Canada [Internet]. 2017 [cited 2017 Oct 11]. Available from: [https://www.canada.ca/en/health-canada/news/2017/05/good\\_samaritan\\_drugoverdoseactbecomeslawincanada.html](https://www.canada.ca/en/health-canada/news/2017/05/good_samaritan_drugoverdoseactbecomeslawincanada.html)
14. Public Health Agency of Canada. HIV / AIDS Epi Updates. Chapter 1: National HIV Prevalence and Incidence Estimates for 2011 [Internet]. Ottawa, ON; 2014. Available from: [http://www.phac-aspc.gc.ca/aids-sida/publication/epi/2010/pdf/EN\\_Intro\\_Web.pdf](http://www.phac-aspc.gc.ca/aids-sida/publication/epi/2010/pdf/EN_Intro_Web.pdf).
15. Statistics Canada. CANSIM (Internet). Ottawa, ON: Statistics Canada; 2016 (updated 2016 Mar 15; cited 2016 Nov 25). Table 109-5355 estimates of population (2011 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health region [Internet]. Available from: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1095355>

16. Oxford County Public Health. Needle/syringe exchange program activity report 2016. Woodstock, ON: Oxford County; 2017.
17. Ministry of Health and Long-Term Care. Needle Exchange Program (NEP) syringe distribution, 2005 to 2010. 2013.
18. Oxford County Public Health. Healthy sexuality, sexually transmitted infections and blood-borne infections: a population health assessment report. Woodstock, ON: Oxford County; 2017.
19. Public Health Ontario. ID Query (iPHIS): Oxford County Public Health & Emergency Services: Case counts and crude rates of reportable diseases by health unit and year. Toronto, ON: Ontario Agency for Health Protection and Promotion; 2017 Sept 27 [cited 2017 Oct 2]. Available from:  
<https://secure.publichealthontario.ca/en/DataAndAnalytics/Query/Pages/default.aspx>
20. CBC News. London declares “health emergency” over rise in HIV and hepatitis C [Internet]. 2016 [cited 2017 Oct 11]. Available from:  
<http://www.cbc.ca/news/canada/windsor/london-health-emergency-hiv-hepatitis-1.3634849>
21. Canadian AIDS Treatment Information Exchange (CATIE). HIV in Canada: a primer for service providers [Internet]. [cited 2017 Oct 12]. Available from:  
<http://www.catie.ca/en/hiv-canada/5>
22. Public Health Ontario. Snapshots: Oxford County Public Health & Emergency Services: Self-reported proportion of the population who have ever used an illicit drug – age standardized rate (both sexes combined) 2009-2012. Toronto, ON: Ontario Agency for Health Protection and Promotion; 2013 Nov 20 [cited 2017 Sept 29]. Available from:  
<http://www.publichealthontario.ca/en/DataAndAnalytics/Snapshots/Pages/Illicit-Drug-Use.aspx>
23. Butt P, Beirness D, Cesa F, Gliksman L, Paradis C, Stockwell T. Alcohol and health in Canada: a summary of evidence and guidelines for low-risk drinking. Ottawa, ON; 2011.
24. World Health Organization. Global status report on alcohol and health - 2014. Geneva, Switzerland; 2014.
25. Public Health Ontario. Snapshots: Oxford County Public Health & Emergency Services: Self-reported rate of exceeding the low-risk alcohol drinking guideline (both sexes) 2013-14. Toronto, ON: Ontario Agency for Health Protection and Promotion; 2016 Feb 1 [cited 2017 Oct 2]. Available from:  
<https://www.publichealthontario.ca/en/DataAndAnalytics/Snapshots/Pages/Health-Behaviours---Alcohol-Use.aspx>
26. World Health Organization. Information sheet on opioid overdose [Internet]. 2014 [cited 2017 Oct 17]. Available from: [http://www.who.int/substance\\_abuse/information-sheet/en/](http://www.who.int/substance_abuse/information-sheet/en/)
27. Drug and Alcohol Treatment Information System (DATIS) Central Database (FY2016/17), DATIS, Date Extracted: October 1, 2017.



**OXFORD COUNTY PUBLIC HEALTH**

410 BULLER St.  
Woodstock, ON, N4S 4N2  
519.539.9800 | 1.800.755.0394  
[www.oxfordcounty.ca/health](http://www.oxfordcounty.ca/health)

Email: [healthevidence@oxfordcounty.ca](mailto:healthevidence@oxfordcounty.ca)

**Reviewers**

**Mary Van Den Neucker, MN, RN-EC**  
Primary Health Care Nurse Practitioner  
Foundational Standards  
Oxford County Public Health

**Lisa Gillespie, B.Sc.N., RN**  
Public Health Nurse  
Health Protection  
Oxford County Public Health

**Jacqueline Deroo, B.Sc.N., RN**  
Public Health Nurse  
Health Promotion  
Oxford County Public Health

**Devon Tamasi, B.Sc.N., RN**  
Public Health Nurse  
Health Promotion  
Oxford County Public Health

**Author**

**Melissa MacLeod, B.H.Sc. (Hon), M.Sc.**  
Epidemiologist  
Foundational Standards  
Oxford County Public Health

**Ruth Sanderson, M.Sc.**  
Manager  
Foundational Standards  
Oxford County Public Health

**Joanne Andrews, B.Sc.N., RN, CCHN(C)**  
Supervisor  
Health Protection  
Oxford County Public Health

**Peter Heywood, B.A.Sc., MPA, CPHI(C)**  
Manager  
Health Protection  
Oxford County Public Health

**Lynn Beath, B.Sc.N., RN, MPA**  
Director/CEO/CNO  
Oxford County Public Health & Emergency  
Services