



TO: Chair and Members of the Board of Health

FROM: Dr. Alexander Summers, Medical Officer of Health

DATE: 2022 April 21

UPDATE OF URBAN AND RURAL HEALTH INDICATORS WITHIN THE MIDDLESEX-LONDON REGION

Recommendation

It is recommended that the Board of Health:

- 1) Receive Report No. 23-22, re: “Update of Urban and Rural Health Indicators within the Middlesex-London Region” for information; and*
- 2) Direct staff to provide a summary of this report to Middlesex County Council.*

Key Points

- Urban and rural comparisons within the Middlesex-London region for some key indicators were previously presented to Middlesex County Council in February 2020.
- Data drawn from 2020 emergency department visit data is currently the most up-to-date complete year of data available. There was no new mortality (death) data or behavioural risk factor data available since the last update.
- The COVID-19 pandemic was declared in March 2020 and has many yet-to-be-seen impacts on people’s behaviour patterns and health outcomes. The trends seen in non-COVID-19 population health indicators over the course of the pandemic may or may not be sustained in the years to come.
- In the Middlesex-London region, it is critical to understand the health status of neighbourhoods and communities within the region, including the health status of rural and County residents, as this helps to inform the need for unique interventions across the region. The Health Unit will continue to monitor, assess, and report relevant public health indicators moving forward.

Background

This brief report provides an update of the urban and rural population comparisons within the Middlesex-London region for some key indicators previously presented to Middlesex County Council in February 2020. The data is drawn from 2020 emergency department visit data which is currently the most up-to-date complete year of data available. There was no new mortality (death) data or behavioural risk factor data available since the last update; this may be due to data collection and processing delays associated with the COVID-19 pandemic.

The most recent full year of emergency department visit (EDV) data is for 2020. For this review, the most recent year of available data is presented as well as the rates over the past six years to see if there were any notable changes over time. The urban and rural classifications were based on postal codes linked to Statistics Canada 2016 Census geography.

Overview of Available Indicators

Falls and Motor Vehicle Collisions

The six-year trend for fall-related injuries EDVs rates showed a statistically significant increase between 2015 and 2019, except for a temporary ‘flattening’ between the years 2016 and 2017, for both urban and rural populations. Across all five years, the rate among rural populations was significantly higher than the urban rate, with the rural rate being 40% to 46% higher than the urban rate, depending on the year. In 2020, fall-related injuries EDVs dramatically decreased compared to 2019 data (statistically significant difference) for both urban and rural populations. This decrease is likely due to decreased activities and mobility in the population because of the COVID-19 pandemic and related public health measures that were introduced. However, the 2020 rural rate continued to be about one-third (33.4%) higher than the urban rate (statistically significant) ([Appendix A](#), Figure 1).

From 2015 and 2019, rates of motor vehicle collision injury EDVs increased for both rural and urban populations, however, the increase was statistically significant only for urban populations. However, in all years, the rate among rural populations was 44% to 73% higher than among urban populations, depending on the year. Like falls injury EDVs, motor vehicle collisions EDVs also dramatically decreased in 2020 compared to 2019 data (statistically significant) for both rural and urban populations. The marked decrease is likely related to the decreased mobility of the population in response to the COVID-19 pandemic. However, the 2020 rural rate continue to be 51% higher compared to the urban rate (statistically significant) ([Appendix A](#), Figure 2).

Opioid-related Poisoning

The six-year trend for opioid-related poisoning EDVs shows that rates have significantly increased for both urban and rural populations since 2015. Compared to rural rates, urban rates were statistically significantly higher in every year except 2018. Unfortunately, unlike the decreases in other EDVs observed with the start of the COVID-19 pandemic, the 2020 data for opioid-related EDVs showed increases over the 2019 rates for both the urban and rural populations in the Middlesex-London region (difference not statistically significant). The 2020 rates of opioid-related EDVs among rural populations increased by 90% compared to 2019, whereas the 2020 urban rate increased by 15%. However, the 2020 urban rate was still 62% higher than the rural rate ([Appendix A](#), Figure 3).

Summary and Next Steps

Population health indicators are influenced by many different things, including public health interventions and services. These indicators often do not shift quickly, and therefore ongoing, longitudinal assessment is necessary to understand community health trends.

The COVID-19 pandemic was declared in March 2020 and has many yet-to-be-seen impacts on people’s behaviour patterns and health outcomes. The trends seen in non-COVID-19 population health indicators over the course of the pandemic may or may not be sustained in the years to come. Further assessment will be required.

Population health assessment is a foundational component of the work of public health as it can inform the work of public health agencies, other community organizations, and decision-makers. In the Middlesex-London region, it is critical to understand the health status of neighbourhoods and communities within the region, including the health status of rural and County residents, as this helps to inform the need for unique interventions across the region. The Health Unit will continue to monitor, assess, and report relevant public health indicators moving forward.

This report was prepared by the Population Health Assessment and Surveillance Team, Office of the Medical Officer of Health division.

A handwritten signature in black ink that reads "Alexander T. Summers". The signature is written in a cursive style with a long horizontal flourish at the end.

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Medical Officer of Health