

# Oral Health

## KEY MESSAGES:

- Two in every 5 students entering school in Algoma have current or a history of tooth decay, indicating a high prevalence of dental issues among school-aged children in the region<sup>(3)</sup>.
- Only 3 in 10 senior residents in Algoma reported having dental insurance coverage, highlighting a lack of access to dental care for this population<sup>(5)</sup>.
- Three out of the 21 municipalities in Algoma region fluoridate their water supplies, indicating that a majority of the population does not have access to the benefits of community water fluoridation.
- The population-to-dentist ratio in Algoma is approximately 1961 residents to 1 dentist, indicating a low availability of dental services compared to Ontario (1230 people to 1 dentist) and Canada overall<sup>(9)</sup>.
- Many residents in Algoma turn to hospital emergency departments for non-traumatic oral health problems due to inadequate access to affordable dental care, resulting in a significantly higher rate of emergency department visits compared to the provincial average<sup>(11, 12)</sup>.

Oral health is an essential component of general health and well-being. The ability to eat, speak, smile, and express emotions is all impacted by oral health<sup>(1)</sup>. Moreover, a person's attendance and performance at work or school, academic achievement, and sense of self-worth are impacted by their oral health<sup>(2)</sup>.

Although dental problems are generally avoidable, they can affect anybody. In the adult population, tooth loss, untreated dental decay, and moderate to severe gum disease are common and frequently get worse with age.

## Oral health screening and surveillance

Dental screenings are held in all elementary schools in Algoma annually. Children in JK, SK, grades 2, 4, and 7 are screened to meet the [Oral Health Protocol](#), 2021.

The percentage of students in Algoma (2018 - 2019 school year)<sup>i</sup> who were caries-free (no cavities, fillings, or missing teeth) during dental screening, excluding children who were absent or refused screening<sup>(3)</sup>.

**71%**

in Junior  
kindergarden (JK)

**63%**

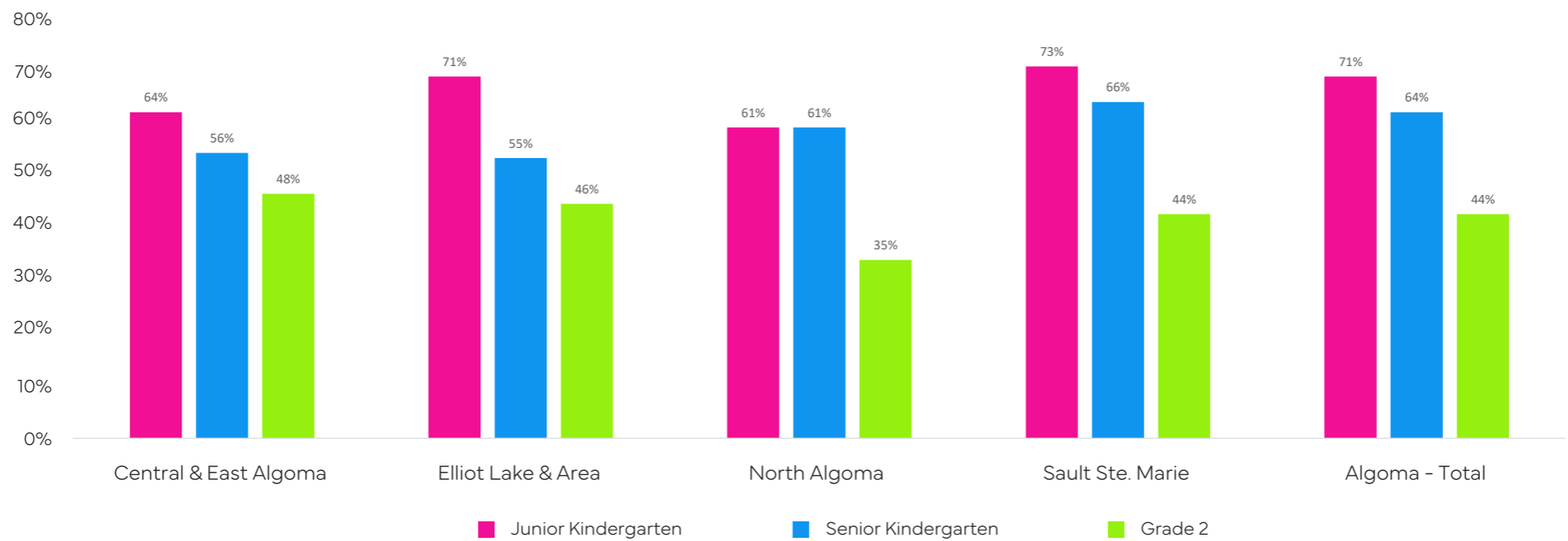
in Senior  
kindergarden (SK)

**44%**

in Grade 2

<sup>i</sup> Screening data for the school year 2019/20, 2020/21 and 2021/22 are not available due to online schooling during the pandemic.

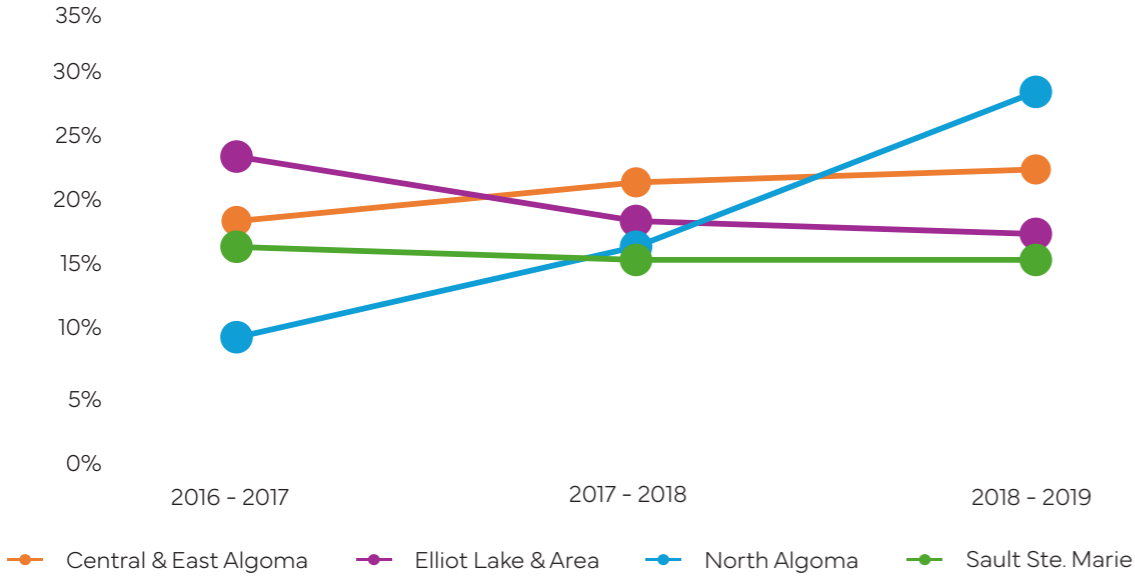
# Percentage of students in 2018 - 2019 school year with 0 cavities, fillings, or missing teeth



An overall total of 60% of students screened in JK, SK and grade 2 were caries-free<sup>(3)</sup>. Reduced access to dental care, along with other impacts of the pandemic might have negatively affected the oral health of children in Algoma.

In Algoma, 18% of 3-4-year-old students entering school (JK) had untreated decayed teeth. In Algoma, 3.4% of children screened at school during the 2018 - 2019 school year were in need of urgent dental care<sup>(3)</sup>.

## Percentage of JK students (3 - 4 year olds) with untreated decayed teeth<sup>(3)</sup>



### When should a child first visit a dentist?

Health Canada, the Canadian Dental Association, and the Canadian Pediatric Society recommend children be seen by a dental professional six months after the eruption of their first tooth or by the time they are 12 months old. A visit to a dental health professional can go a long way toward preventing decay.

Proper care of baby teeth is very important. Baby teeth help a baby chew food for nutrition, help with learning speech, and make space for the permanent teeth.

## Pregnancy and oral health

Oral Health is an important part of prenatal care. Pregnancy changes like lifestyle, habits and hormones can affect your oral health. Mother and baby benefit from proper tooth and gum care.

### What you can do:



Brush every morning and night with fluoridated toothpaste for 2 minutes. This helps keep your gums healthy and prevent gum disease.



Regular dental cleanings are safe and healthy for your pregnancy.



Rinse your mouth if you throw up (vomit) and wait 30 minutes before you brush.

Early treatment of gum disease during pregnancy may reduce the risk of premature birth and low birth weight<sup>(4)</sup>.

## Oral health routine

In Algoma, the percentage of youth (aged 12 - 19) reported brushing their teeth at least twice a day<sup>(5)</sup>

**87.0%**

In Algoma, a higher percentage of children and youth (aged 1 - 17) visited a dentist for preventive care such as a checkup or cleaning<sup>(6)</sup>

**96.8%** in Algoma  
Ontario: **92.4%**

In Algoma, the percentage of children and youth (aged 18 and older) that visited a dentist is similar to Ontario<sup>(5)</sup>

**73.3%** in Algoma  
Ontario: **76.5%**

In Algoma, a significantly lower percentage of seniors (aged 65 and older) visited a dentist<sup>(5)</sup>

**61.9%** in Algoma  
Ontario: **74.0%**

### Dental insurance coverage

Between 2017 - 2018<sup>ii</sup>, **over 6 in 10 (63.1%)** Algoma residents aged 18 and over reported having insurance or government program coverage for all or part of their dental expenses. Only **3 in 10 (29.3%)** senior (65 and older) individuals have insurance or government program coverage for all or part of their dental expenses. This is significantly lower than 42.7% of Ontario seniors and the lowest in comparison to all other health units<sup>(5)</sup>.

In 2019, almost **9 in 10 (88%)** children aged 1 to 17 in Algoma had insurance or government program coverage for all or part of their dental expenses. This is higher than 80% of children in Ontario and 87.2% in NE PHUs<sup>(6)</sup>.

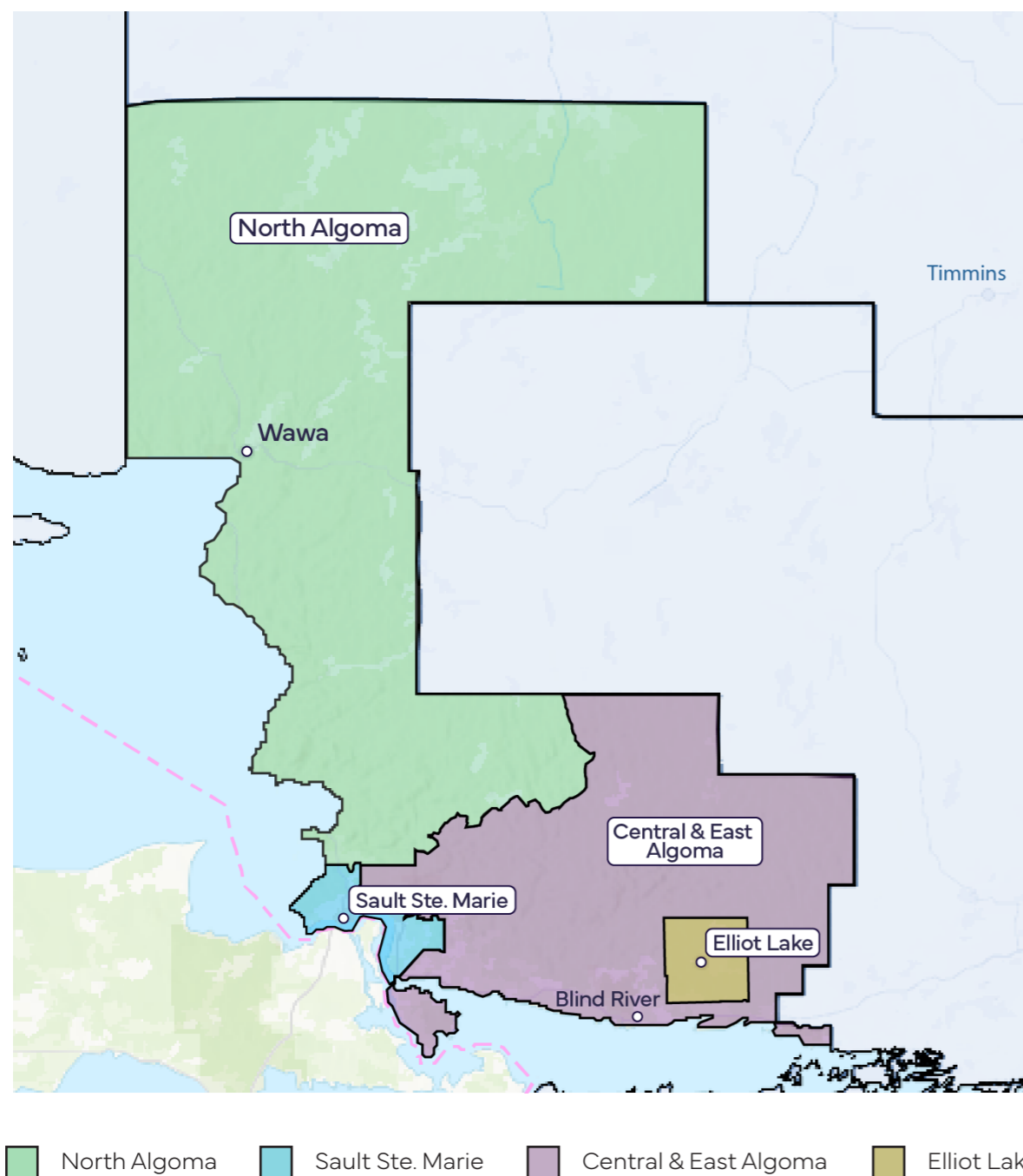
**Healthy Smiles Ontario** is a no-cost dental program for eligible children (17 and under) that provides check-ups, preventive care, and treatment. Good oral health is important to a child's overall health.

The new [Canadian Dental Care Plan \(CDCP\)](#) will help ease financial barriers to accessing oral health care for eligible Canadian residents including seniors.

<sup>ii</sup> 2017 - 2018 cycle is the most recent Canadian Community Health Survey with data on oral health.

## Access to oral health

The map below illustrates that the distribution of **dentists** and **dental hygienists** varies widely across Algoma:



### Dentist

The population-to-dentist ratio in Algoma stands at approximately 1961.4, meaning that for every **dentist** in Algoma, there are approximately 1961 people<sup>(7,8)</sup>. Dental services for Algoma residents are in low availability as compared to the province (1:1230) and Canada overall (1:1530)<sup>(9)</sup>.

- ▶ 3390 in North Algoma
- ▶ 1637.4 in Sault Ste. Marie
- ▶ 6488 in Central & East Algoma
- ▶ 2274.4 in Elliot Lake

### Dental hygienist

The population-to-dental hygienists ratio in Algoma stood at approximately 930, meaning that for every **dental hygienist** in Algoma, there are 930 people<sup>(10)</sup>. The availability of dental hygiene services in Algoma is slightly better than in Northern Ontario (1:996) and Ontario overall (1:1028)<sup>(10)</sup>.

- ▶ 2543 in North Algoma
- ▶ 753 in Sault Ste. Marie
- ▶ 1854 in Central & East Algoma
- ▶ 1625 in Elliot Lake

## Direct impacts on the health care system

### Increase in emergency department visits

One consequence of inadequate oral health care access is that many are turning to hospital emergency departments (EDs) because they are in pain and cannot access or afford to see a dentist in a traditional oral healthcare environment. On average there are **1558 ED visits** annually for non-traumatic oral health problems.

Pre-pandemic (2015 - 2019)  
The average annual rate<sup>iii</sup> of non-traumatic ED visits in Algoma was significantly higher than the provincial average rate<sup>(11)</sup>.

**1459.3 per 100,000** in Algoma  
Ontario: **486.5 per 100,000**

Pandemic (2020 - 2022)  
The average annual rate of non-traumatic ED visits in Algoma dropped while still being significantly higher than the provincial average rate<sup>(12)</sup>.

**1158.2 per 100,000** in Algoma  
Ontario: **382.1 per 100,000**

### What does this mean?

- ▶ Residents of Algoma who face high residential instability<sup>iv</sup> or dependency<sup>v</sup>, are more than twice as likely to visit the ED for non-traumatic oral health conditions<sup>(13)</sup>.
- ▶ Residents of Algoma who face high material deprivation<sup>vi</sup> are almost three times more likely to visit the ED for non-traumatic oral health conditions<sup>(13)</sup>.

### Increase in day-surgeries

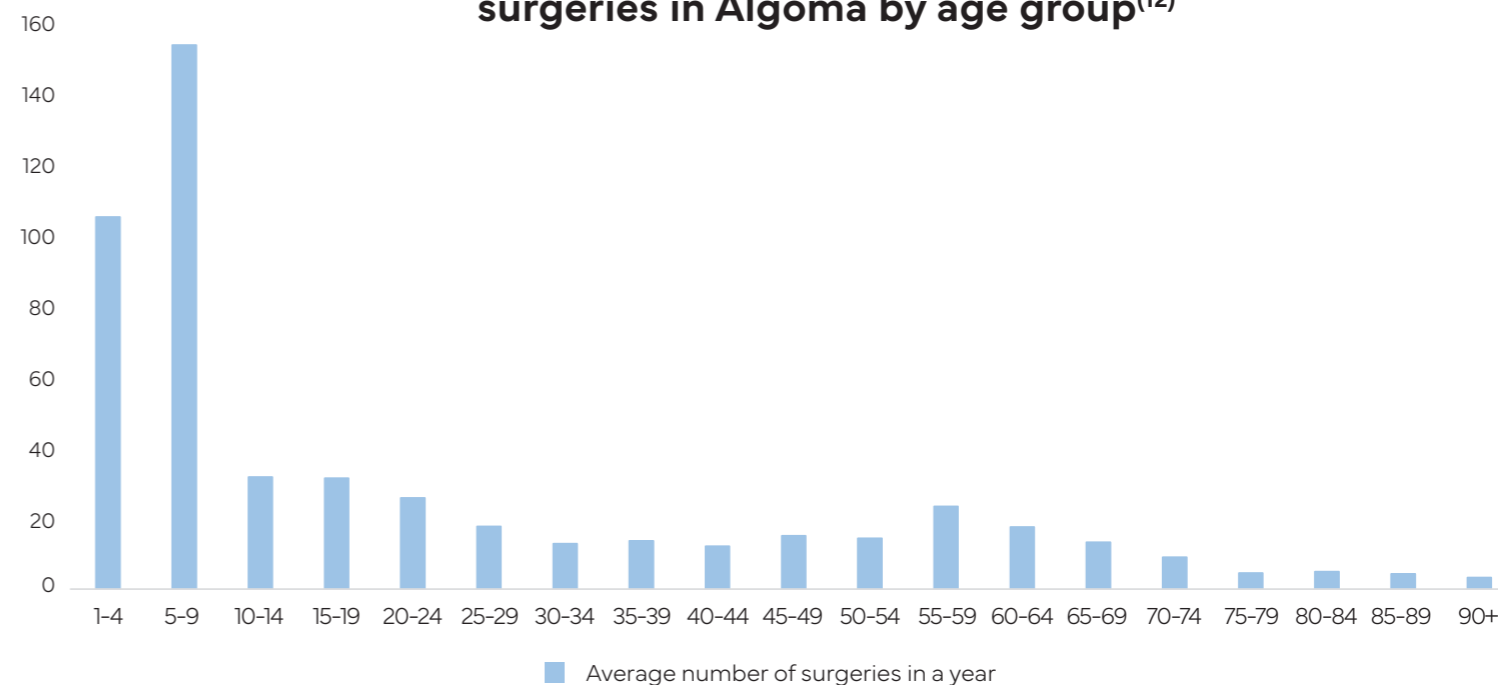
It is common for surgery that can't be performed in a regular dental office (extensive decay requiring general anesthesia) to be done in the hospital day surgery or operating room (OR).

From 2015 to 2021, there was an annual average of 520 day-surgeries performed for non-traumatic oral health problems, an average annual rate<sup>iii</sup> of **497 day-surgeries per 100,000** people in Algoma<sup>(12)</sup>. This is significantly higher than the provincial average of 194 day-surgeries per 100,000 people in Ontario<sup>(12)</sup>.

Children 1 to 10 years had the highest rate of day surgeries<sup>(12)</sup>.

Over 60% of day surgeries in children and adults were for unspecified caries-related (cavities) concerns<sup>(12)</sup>.

### Average number of non-traumatic oral health surgeries in Algoma by age group<sup>(12)</sup>



<sup>iii</sup> Age-standardized rate

<sup>iv</sup> Includes indicators that measure types and density of residential accommodations, and certain family structure characteristics, such as % living alone and % dwellings not owned.

<sup>v</sup> Includes indicators to describe % seniors (65+), the dependency ratio (the ratio of seniors and children to the population 15 - 64) and % not participating in the labour force.

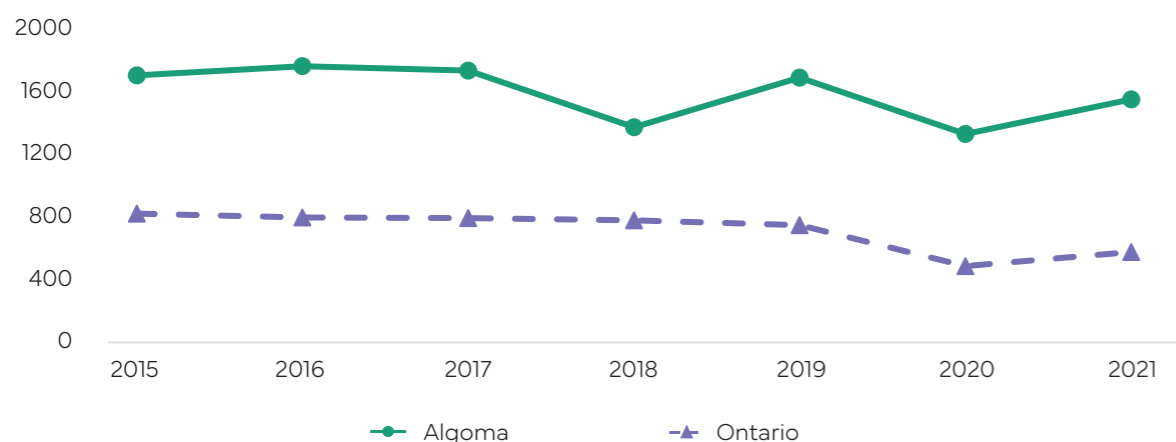
<sup>vi</sup> Includes indicators that measure access to and attainment of basic material needs, such as % unemployment and % without a high school degree.

## Direct impacts on the health care system

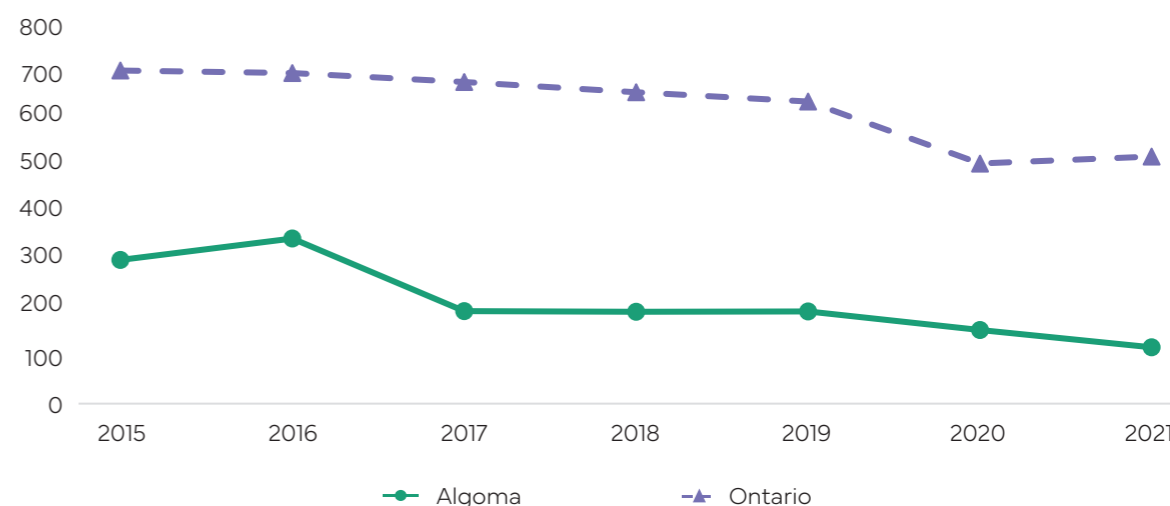
### Increase in day surgeries

The annual average number of day surgeries and rate were higher in children (0 to 17) than adults. There were 320 surgeries per year on average in children (annual average rate of 1590 day-surgeries per 100,000 population) compared to 207 surgeries per year on average in adults (annual average rate of 213 day-surgeries per 100,000 population)<sup>(12)</sup>.

Rate (per 100,000) of non-traumatic oral surgeries in children (1 to 17 years olds)<sup>(12)</sup>



Rate (per 100,000) of non-traumatic oral surgeries in adults (18+ years old)<sup>(12)</sup>



## Community water fluoridation

Community water fluoridation (CWF) is the process of monitoring and adjusting the fluoride level in drinking water to the optimal level for caries prevention. It contributes to oral health equity by overcoming common social determinants of health including age, education, income, and access to professional dental care<sup>(14)</sup>. Fluoridation of community water supplies is the single most effective public health measure to prevent tooth decay<sup>(15)</sup>.

As of 2024, in Algoma, the communities of Wawa, Blind River and Elliot Lake (**15.3%** of Algoma residents<sup>(8)</sup>) have access to community water fluoridation. As of 2022, 73.2% of Ontarians benefit from fluoridated water<sup>(14)</sup>.

## References

1. Centres for Disease Control, United States Department of Health and Human Services. Basics of oral health: 2023. Available from: [https://www.cdc.gov/oral-health/about/?CDC\\_AAref\\_Val=https://www.cdc.gov/oralhealth/basics/index.html](https://www.cdc.gov/oral-health/about/?CDC_AAref_Val=https://www.cdc.gov/oralhealth/basics/index.html)
2. McCloskey JK, Ellis JL, Uratsu CS, Drace ML, Ralston JD, Bayliss EA, et al. Accounting for a social risk does not eliminate race/ethnic disparities in COVID-19 infection among insured adults: A cohort study. *Journal of General Internal Medicine*. 2022. 37(5): 1183-90.
3. Algoma Public Health. Oral Health Information Support System (OHISS) [2016-17 to 2018-19 school years]. Ontario Ministry of Health. [Date extracted April 2024]. Algoma Public Health.
4. Centers for Disease Control and Prevention. Pregnancy and oral health: 2022. Available from: [https://www.cdc.gov/oral-health/hcp/conversation-tips/talking-to-pregnant-women-about-oral-health.html?CDC\\_AAref\\_Val=https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html](https://www.cdc.gov/oral-health/hcp/conversation-tips/talking-to-pregnant-women-about-oral-health.html?CDC_AAref_Val=https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html)
5. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: oral health. Toronto, ON: King's Printer for Ontario; c2023 [modified 2023 May 12; cited 2023 December 12]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Health-Behaviours/Oral-Health>
6. Statistics Canada. Canadian Health Survey on Children and Youth (CHSCY) Ontario Share File 2019 [data file]. Ottawa, ON: Government of Canada [producer]; Toronto, ON: Ontario Ministry of Health [distributor]. Available from: <https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=1215270>
7. Royal College of Dental Surgeons of Ontario. Dental Registry. [Date extracted April 2024]. Available from: <https://www.rcdso.org/>
8. Population (estimates 2011-2021 and projections 2022 onwards). Ontario Ministry of Health. IntelliHealth Ontario. [Date extracted July 2023].
9. Canadian Dental Association. CDA reacts to federal government's phased rollout of Canadian Dental Care Plan beginning with eligible seniors: 2023. Available from: [https://www.cda-adc.ca/en/about/media\\_room/news\\_releases/2023/12-11\\_government\\_phased\\_rollout\\_dental\\_care\\_plan.asp](https://www.cda-adc.ca/en/about/media_room/news_releases/2023/12-11_government_phased_rollout_dental_care_plan.asp)
10. College of Dental Hygienists of Ontario. Special data request: 2024.
11. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: emergency department visits for oral health conditions. Toronto, ON: King's Printer for Ontario; c2023 [modified 2023 May 12; cited 2023 December 12]. Available from: <https://www.publichealthontario.ca/en/data-and-analysis/health-behaviours/oral-health-ed>
12. National Ambulatory Care Reporting System (NACRS) [2013-2023]. Ontario Ministry of Health. IntelliHealth Ontario [Date extracted: December 12, 2023].
13. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Oral health emergency department visits health equity >>relative risk. Toronto, ON: King's Printer for Ontario; c2023 [modified 2023 May 12; cited 2023 December 12]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Health-Equity/Oral-Health-ED-Visits-Inequities>
14. Public Health Association of Canada. The state of community water fluoridation across Canada. 2022. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/community-water-fluoridation-across-canada.html>
15. Association AD. Fluoridation facts: American Dental Association. 2019. Available from: <https://www.ada.org/en/resources/community-initiatives/fluoride-in-water/fluoridation-facts>