

HEALTH SURVEILLANCE INDICATORS: YOUTH ORAL HEALTH



Public Health Relevance

Good dental and oral health contribute to physical, mental and social well-being. Tooth decay, especially untreated dental caries, or cavities, can cause pain, infection and difficulty with eating, drinking and speaking. Tooth decay can also lead to further gum, mouth and other systemic health problems including diabetes, respiratory disease and heart disease.

Healthy food choices, regular visits to the dentist and proper oral hygiene, such as brushing and flossing regularly, are essential to ensuring oral health. When positive oral health behaviours are instilled at a young age, it helps to create a foundation for life-long health.

The data used for these indicators are from the Toronto Public Health Student Survey. As 2014 was the first year of data collected and because this survey is unique to Toronto, time trends and regional comparisons are not available.

Highlights

1. Approximately 7% of youth in Toronto had untreated tooth decay.
2. Nearly three quarters of youth in Toronto visited the dentist at least once a year.
3. While most youth in Toronto brushed their teeth at least once a day, the majority did not floss at least once a day.
4. The highest rates of untreated tooth decay in youth in Toronto were found in newcomer youth. Youth with low socioeconomic access were less likely to visit the dentist at least once a year.

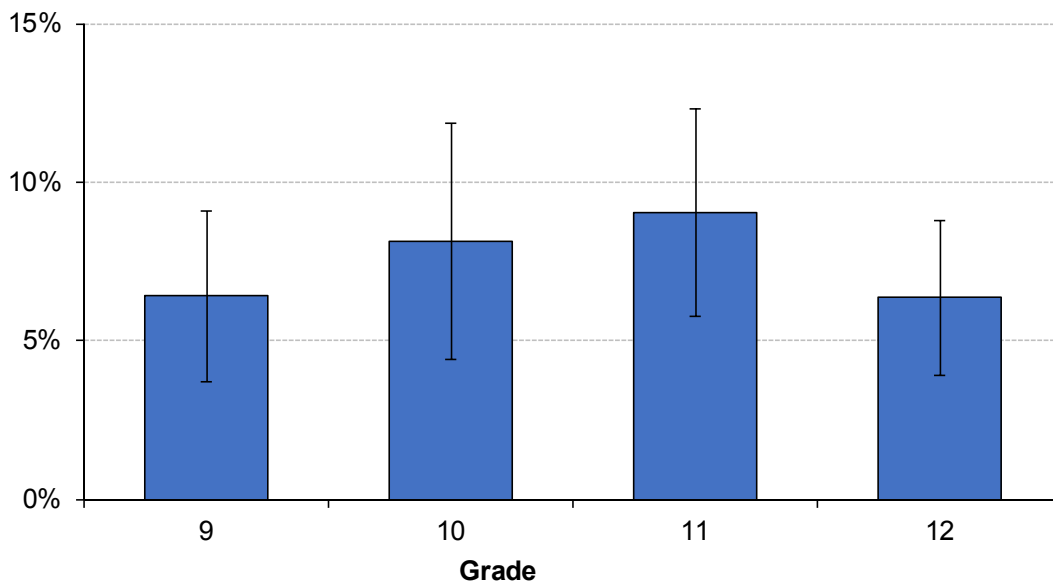
Tooth Decay

7.4% of youth in Toronto had untreated tooth decay.

Figure 1 shows the percent of Toronto youth in grades 9 to 12 with untreated tooth decay. Overall, 7.4% of youth had untreated tooth decay.

The percent of youth with untreated tooth decay did not vary significantly by grade. Approximately 6.4% of youth in grade 9, 8.1% in grade 10, 9.0% in grade 11 and 6.4% in grade 12 had untreated tooth decay.

Figure 1: Percent of Youth with Untreated Tooth Decay, Grades 9 to 12 by Grade, Toronto, 2014



Error bars (I) represent the 95% confidence intervals.

Data Source: TPH Student Survey (Oral Health Assessment), see Data Notes for details.

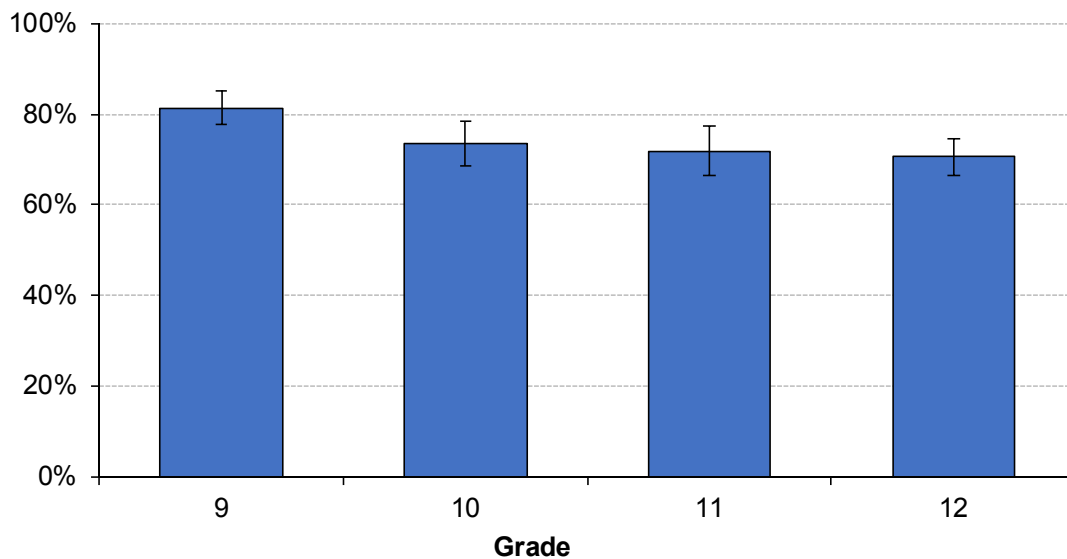
Dental Care

Nearly three quarters of youth in Toronto visited the dentist at least once a year.

Figure 2 shows the percent of Toronto youth in grades 9 to 12 who visited the dentist at least once a year. Overall, nearly three quarters (73.9%) of youth visited the dentist at least once a year.

Eighty-one percent (81.4%) of grade 9 youth reported visiting the dentist at least once a year. This is significantly higher than the percent of youth in grade 11 (71.9%) and grade 12 (70.5%) who reported visiting the dentist. There was no significant difference for youth in grade 10 (73.6%).

Figure 2: Percent of Youth Who Visited the Dentist At Least Once a Year by Grade, Grades 9 to 12, Toronto, 2014



Error bars (I) represent the 95% confidence intervals.

Data Source: TPH Student Survey (Questionnaire), see Data Notes for details.

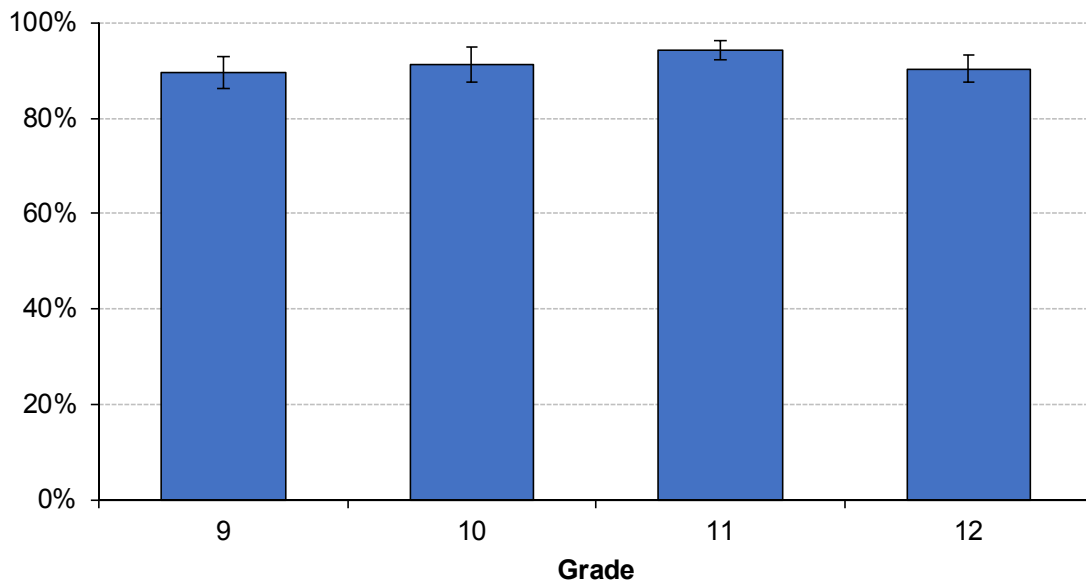
Oral Hygiene

While most youth in Toronto brushed their teeth at least once a day, the majority did not floss at least once a day.

Figure 3 shows the percent of Toronto youth in grades 9 to 12 who brushed their teeth at least once a day. Overall, the majority of youth (91.3%) brushed their teeth.

There were no statistically significant differences by grade. Approximately 89.6% of youth in grade 9, 91.1% in grade 10, 94.3% in grade 11 and 90.4% in grade 12 brushed their teeth at least once a day.

Figure 3: Percent of Youth Who Brushed Their Teeth At Least Once a Day by Grade, Grades 9 to 12, Toronto, 2014



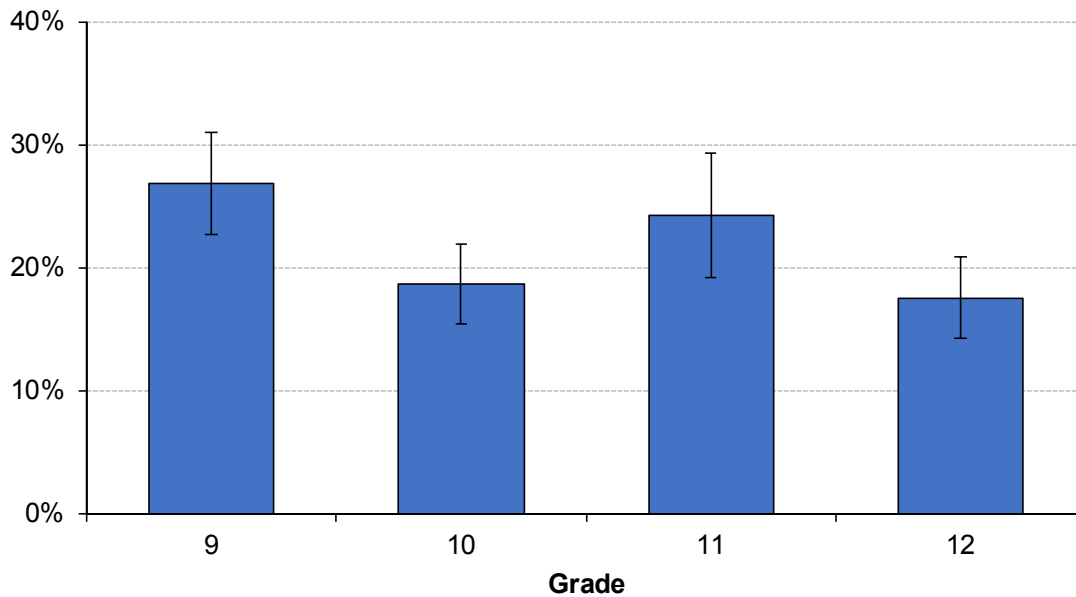
Error bars (\bar{I}) represent the 95% confidence intervals.

Data Source: TPH Student Survey (Questionnaire), see Data Notes for details.

Figure 4 shows the percent of Toronto youth in grades 9 to 12 who flossed at least once a day. Overall, 21.4% of youth flossed at least once a day.

Youth in grade 9 were significantly more likely to floss at least once a day (26.9%), compared to grade 10 (18.7%) and grade 12 (17.6%). There was no significant difference for youth in grade 11 (24.3%).

Figure 4: Percent of Youth Who Flossed At Least Once a Day by Grade, Grades 9 to 12, Toronto, 2014



Error bars (\bar{I}) represent the 95% confidence intervals.

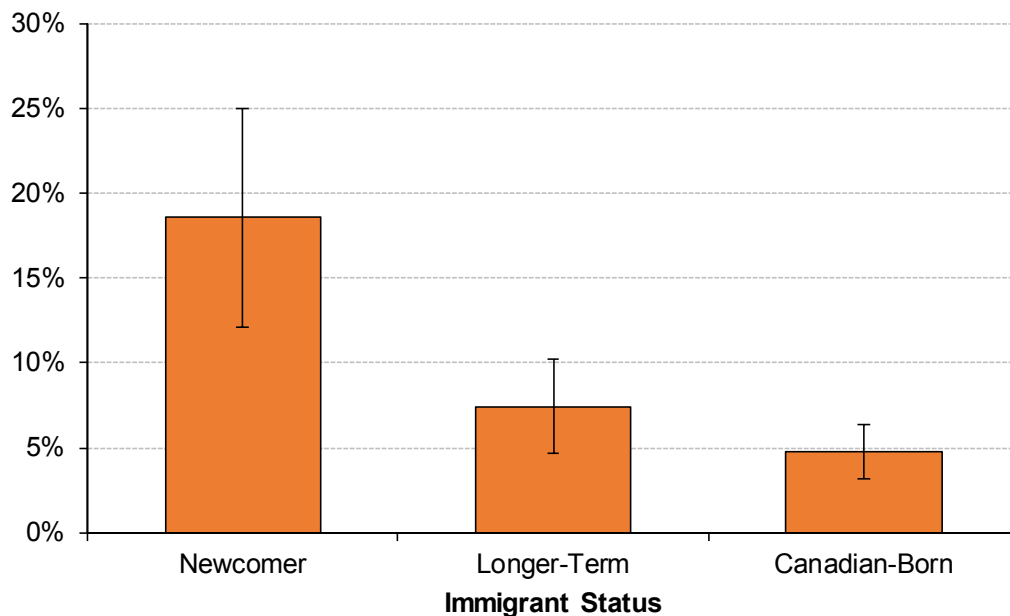
Data Source: TPH Student Survey (Questionnaire), see Data Notes for details.

Socio-demographics

The highest rates of untreated tooth decay in Youth in Toronto were found in newcomer youth. Youth with low socioeconomic access were less likely to visit the dentist at least once a year.

Figure 5 shows the percent of Toronto youth in grades 9 to 12 with untreated tooth decay by immigrant status. Newcomer youth were most likely to have untreated tooth decay (18.6%) and were more than four times as likely as Canadian-born youth (4.8%) to have untreated tooth decay. Longer-term immigrant youth were also significantly more likely to have untreated tooth decay (7.5%), compared to Canadian-born youth.

Figure 5: Percent of Youth with Untreated Tooth Decay by Immigrant Status, Grades 9 to 12, Toronto, 2014



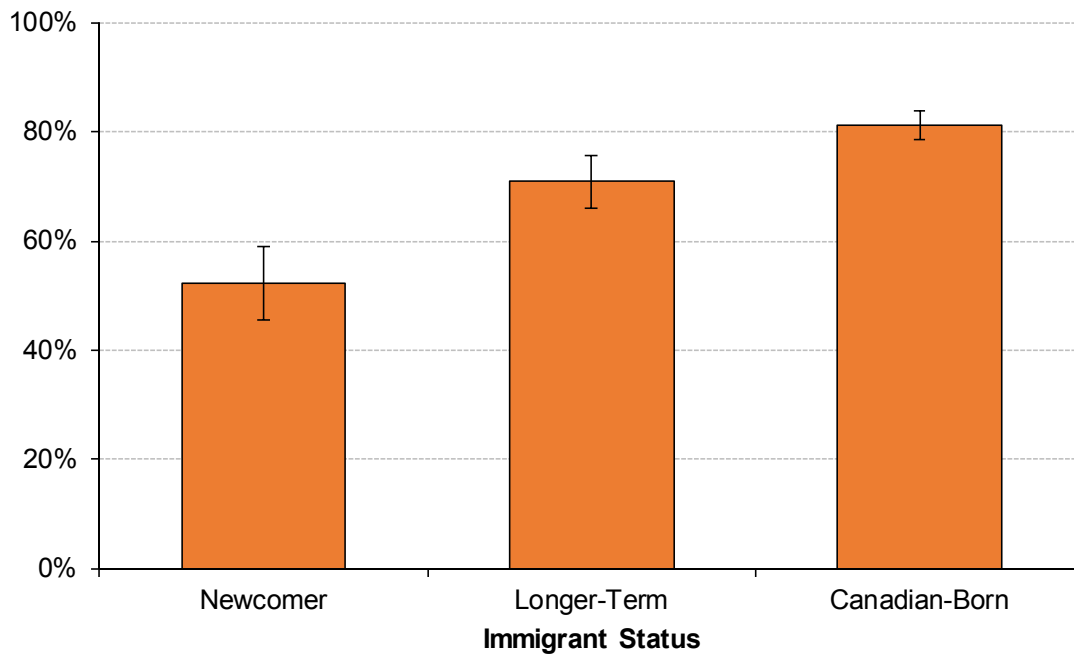
Error bars (I) represent the 95% confidence intervals.

Data Source: TPH Student Survey (Oral Health Assessment & Questionnaire), see Data Notes for details.

Figure 6 shows the percent of Toronto youth in grades 9 to 12 who visited the dentist at least once a year by immigrant status.

Canadian-born youth were significantly more likely to visit the dentist (81.2%), compared to newcomer youth (52.3%) and longer-term immigrant youth (70.9%). Longer-term immigrant youth were also significantly more likely to visit the dentist at least once a year, compared to newcomer youth.

Figure 6: Percent of Youth Who Visited the Dentist At Least Once a Year by Immigrant Status, Grades 9 to 12, Toronto, 2014



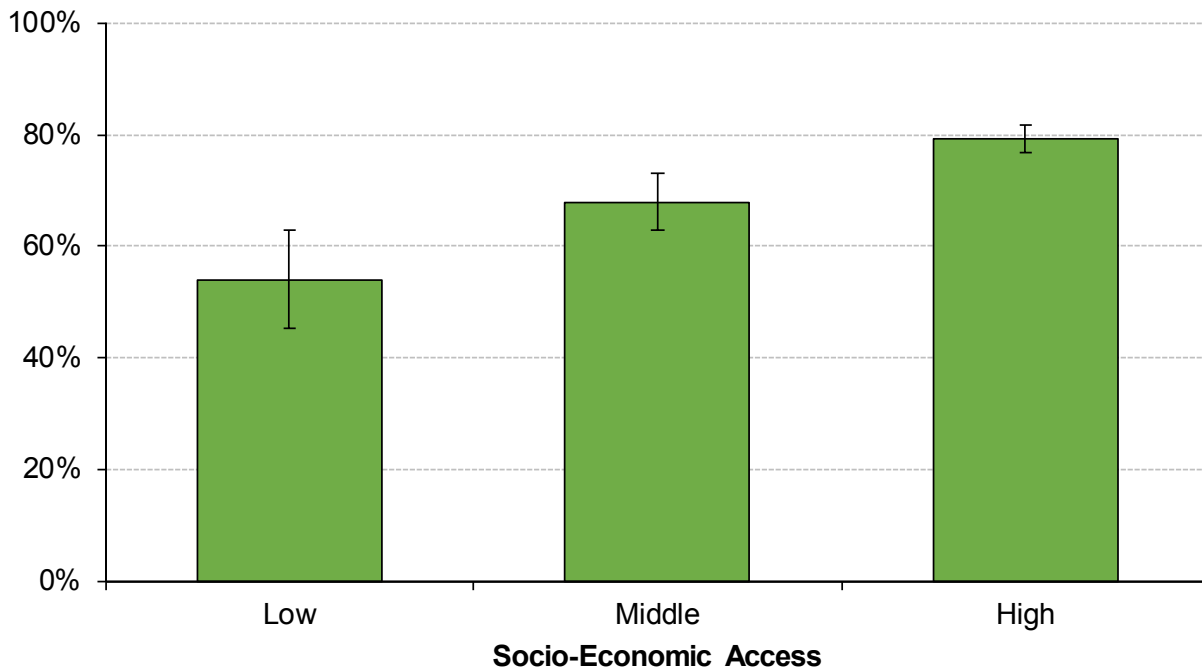
Error bars (I) represent the 95% confidence intervals.

Data Source: TPH Student Survey (Questionnaire), see Data Notes for details.

Figure 7 shows the percent of Toronto youth in grades 9 to 12 who visited the dentist at least once a year by 'socio-economic access'.

Youth with low socio-economic access were significantly less likely to visit the dentist at least once a year (54.0%), compared to those of middle (67.9%) or high socioeconomic access (79.3%). Youth with middle socio-economic access were also significantly less likely than those with high socio-economic access to visit the dentist at least once a year.

Figure 7: Percent of Youth Who Visited the Dentist At Least Once a Year by 'Socio-Economic Access', Grades 9 to 12, Toronto, 2014



Error bars (I) represent the 95% confidence intervals.

Data Source: TPH Student Survey (Questionnaire), see Data Notes for details.

Data Notes

Notes

- The indicators in this report refer to Toronto youth grades 9 to 12. For more information on younger children in kindergarten to grade 8, refer to the Child Oral Health indicator page.
- Significant differences were estimated using overlapping confidence intervals. Although this method is conservative ($\alpha \sim < 0.01$) and most appropriate when comparing mutually exclusive groups, it was chosen as an objective means of making conclusions on population-based data. Multiple comparisons performed in the analysis were not taken into consideration when choosing the level of significance to test.
- Data on untreated tooth decay is based on an oral health assessment, completed by a trained dental hygienist. Data on dental health habits and behaviours is based on a self-reported questionnaire. For more information, see Data Sources.
- For more information on the methodology used in the Toronto Public Health Student Survey, please refer to the methods document.
- For more information on the interpretation and reporting of survey data, please refer to the Survey Data Interpretation Guide.

Definitions

95% Confidence Interval is the range within which the true value lies, 19 times out of 20.

Immigrant Status refers to self-reported immigrant status. Youth were asked to report where they were born and how old they were when arriving in Canada (if applicable). Age of respondent was then used to classify immigrant status.

Longer-term immigrants refers to youth who arrived in Canada more than 10 years from the date they completed the survey.

Newcomers refers to youth who arrived in Canada within the past 10 years from the date they completed the survey.

Socio-Economic Access is assessed by asking youth to rank their family's access to goods and services on a scale from one to ten. A family's ability to access goods and services is a reflection of a family's income level. At the highest point on the scale are the youth who perceive their families as having the easiest access to housing, clothes, food, activities, and other possessions. At the lowest point on the scale are the youth with the most difficult access. 'Low access' represents those youth who ranked their families' access as five or less; 'Middle access' is six or seven; and 'High Access' is eight, nine, or ten.

Untreated tooth decay occurs when bacteria produce acid that destroys the tooth's enamel and the underlying layer, the dentin. Tooth decay is also known as dental caries or cavities. When left untreated, tooth decay can cause pain, infection and difficulty with eating, drinking and speaking. Untreated tooth decay can also lead to further gum, mouth and systemic health problems.

Youth refers to students in grades 9 to 12. This population ranges from 14 to 19 years of age.

Sources

TPH Student Survey (Oral Health Assessment): Toronto Public Health, 2014. Student Survey Oral Health Assessment. Used in:

- Figures 1 and 5

TPH Student Survey (Questionnaire): Toronto Public Health, 2014. Student Survey Questionnaire. Used in:

- Figures 2, 3, 4, 5, 6 and 7

Health Surveillance Indicator: Youth Oral Health

Category: Child Health

Prepared: December, 2016

This indicator report is part of a series that informs the ongoing assessment of Toronto's health status. For a full list of indicators, please go to: www.toronto.ca/health