

Oral Health Status - 2013 to 2014

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Purpose

The purpose of this report is to provide information about Lambton Public Health (LPH) oral health surveillance findings from its school screening program¹.

Data Collection Period

School years starting September 2011, 2012, and 2013. Data for the 2009 to 2012 school years were previously reported^{2,3}.

Methods

Students in Junior Kindergarten (JK), Senior Kindergarten (SK), Grade 2, and Grade 8 from 47 publicly funded schools were screened. Screening was conducted by two oral health teams each containing one registered dental hygienist.

Grade 2 students are screened first at each school and based on the results the school was categorized into three levels of intensity: Low, Medium, or High. Higher intensity levels require additional grades to be screened.

Eligible children who are absent may be screened on a later screening day.

The need for and urgency of dental care was recorded and parents were advised of the required follow-up. As well, indicators of previous dental caries were recorded.

Definitions

Dental caries prevalence is defined as the percentage of screened children with dental caries experience. Dental caries experience can be decayed teeth, missing teeth due to caries, filled teeth, or a combination of these. Dental caries severity is a count of the number of teeth affected by dental caries.

Limitations

Children whose parents did not consent to participation and children who were absent at the time of screening were excluded from analysis of disease-related findings.

References

¹Ontario Ministry of Health and Long-Term Care. [Oral health assessment and surveillance protocol](#), 2008.

²Lambton Public Health. [Oral Health 2011 Annual Report](#), 2012.

³Lambton Public Health. [Oral Health 2012 Annual Report](#), 2013.

Key Findings

PARTICIPATION

- All publicly funded schools in Lambton County have participated in the mandated screening program since September 2011. Of the 47 schools that participated in the 2013 school year, 12 (25.5%) were high intensity schools, 4 (8.5%) were medium intensity schools, and 31 (66%) were low intensity schools.
- Five additional schools were classified as high intensity compared to the 2012 school year.
- Approximately 90% of eligible students were screened in the 2013 school year (**Table 1**). Students were not screened if they were absent, excluded by parental request, or refused to participate.
- More children were absent in 2013 (7.3%) when compared to 2012 (6.3%), however fewer children were excluded by parental request and student refusal in 2013 (2.7%) than 2012 (3.5%).
- A similar number of eligible children were screened in 2013 (5330) compared to 2012 (5314).

Table 1: Eligible and screened children by school year and grade

	2012 to 2013			2013 to 2014		
	Number of children eligible	Number of children screened	Percentage of children screened	Number of children eligible	Number of children screened	Percentage of children screened
JK	1181	1064	90.1%	1169	1046	89.5%
SK	1171	1051	89.8%	1227	1131	92.2%
Grade 2	1181	1074	90.9%	1214	1111	91.5%
Grade 8	1224	1069	87.3%	1162	1009	86.8%
Other grades	1136	1056	93.0%	1150	1033	89.8%
Combined: JK, SK, Grade 2	3533	3189	90.3%	4772	4297	90.0%
All grades	5893	5314	90.2%	5922	5330	90.0%

PREVALENCE

- About 1 in every 5 children in JK has already experienced dental caries.
- The prevalence of dental caries increases with grade level up to 53% among Grade 2 students in 2013. Prevalence then drops in Grade 8 partly reflecting the replacement of primary teeth with permanent teeth.
- While prevalence has decreased slightly among JK, SK and Grade 2 students for the past two school years, absolute changes over the four year study period are minimal (**Figure 1**).

SEVERITY

- Among JK, SK and Grade 2 students who have experienced dental caries, 7.5% to 10.6% had two or more decayed teeth in the most recent school year. This compares to 2.2% of those in Grade 8 (Figure 2).
- The average number of teeth affected by caries increases with grade level from 3.7 in JK to 4.6 in Grade 2. This average then drops to 2.8 affected teeth among Grade 8 children (Figure 3).

ELIGIBILITY: Children in Need of Treatment (CINOT)

- The percentage of children in JK, SK and Grade 2 with urgent dental needs appeared to have decreased between the 2009 and 2012 school years, but increased in 2013 (Figure 4).
- In 2013, 5% of children in JK, SK, and Grade 2 had urgent needs compared to just over 3% of children in 2012. About 2% of children in Grade 8 had urgent dental needs in 2013 compared to around 1% in 2012.
- This equates to 194 children in 2013 in urgent need of treatment in JK, SK, and Grades 2 and 8 compared to 119 in 2012.

IMPLICATIONS

- Current processes for gaining consent have yielded high participation rates and should be maintained.
- The increase in CINOT eligibility in 2013 may be due to variability between screening hygienists. This suggests that staff should meet with greater frequency to discuss screening findings with the goal of decreasing variability.
- School dental screening should also be maintained to support early detection and the promotion of good oral health habits.

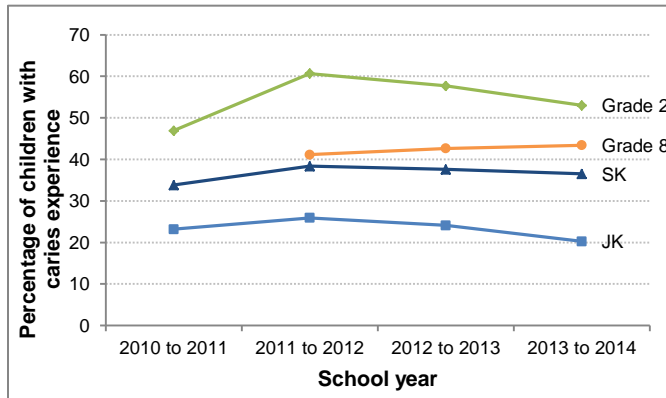


Figure 1: Percentage of children who have had caries (tooth decay, removal, or fillings) by grade, 2010 to 2013 school years.

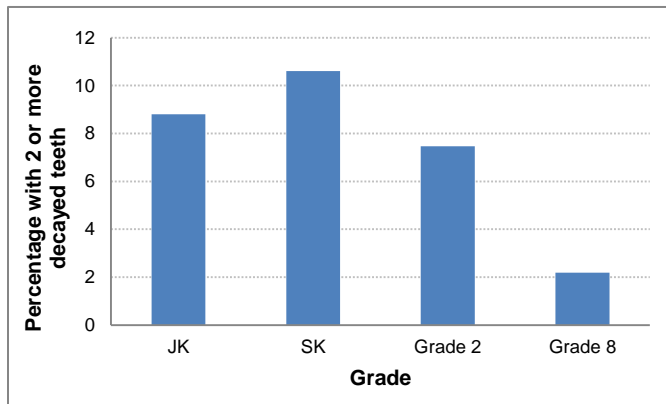


Figure 2: Percentage of children with two or more decayed teeth, 2013 school year.

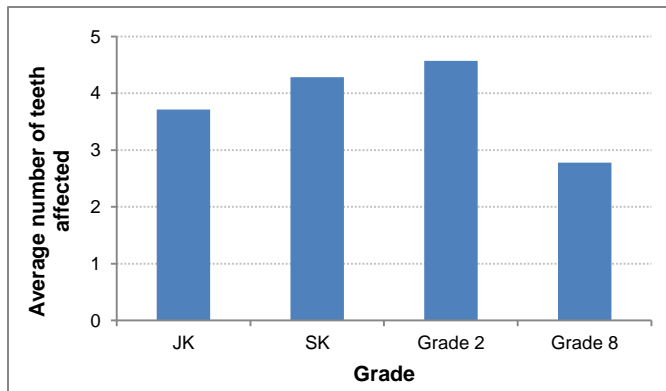


Figure 3: Average number of affected teeth for children with caries, 2013 school year.

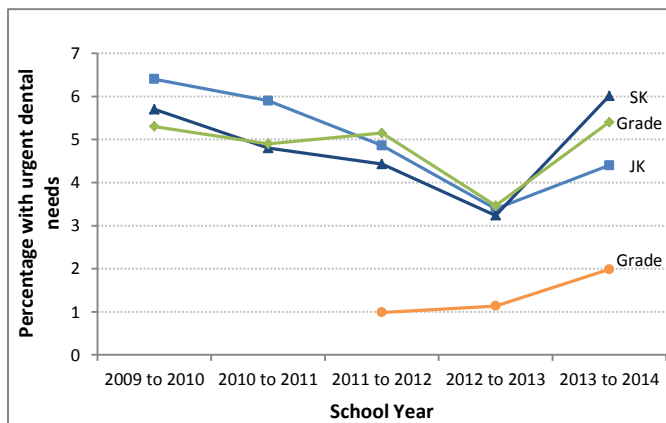


Figure 4: Percentage of children with urgent dental needs by grade, 2009 to 2013 school years.