

Purpose

To provide information about the findings of the Health Unit's school-based screening program from the last school year: September 2012 to June 2013.

Methodology

Publicly-funded elementary schools and three private schools participated in the school-based screening program. Students in Junior Kindergarten, Senior Kindergarten, and Grade 2 at these schools were screened in accordance with the [Oral Health Assessment and Surveillance Protocol](#) of the Ontario Public Health Standards.

Based on the screening results of the Grade 2 students at each school, the school was categorized into the following levels of screening intensity: "Low", "Medium", or "High", as per the Protocol. Increased screening intensity level requires that additional grades be screened.

The parents of the students in these grades who decline to have their children screened advise their school administrators who then pass this information on to Health Unit staff. Children whose parents have consented to screening but who are absent on the day of screening may be screened on a subsequent screening day.

Student level data was collected by five Registered Dental Hygienists employed by the Health Unit. The need for and urgency of dental care was recorded and the parents advised of the required follow-up. As well, indicators of previous dental caries were recorded. Data was collected and stored in accordance with the Oral Health Assessment and Surveillance Protocol, the Health Protection and Promotion Act, the Municipal Freedom of Information and Protection of Privacy Act, and the Personal Health Information Protection Act.

The Ministry of Health and Long-Term Care's Oral Health Information Support System was used to generate summary statistics from the student level data. Historical aggregate data was accessed from archived Health Unit spreadsheets. These data were further analysed using Microsoft Excel. For the geographic information systems (GIS) mapping of schools' percentages of caries-free and "Urgent" students, their locations and screening data for the 2012 to 2013 school year was used. Maps were developed using ArcGIS v10.

ANNUAL ORAL HEALTH REPORT December 2013

Key Findings

Participation. Of the 19,423 students who were offered dental screening at the schools that participated in the school-based dental screening program, 15,751 or 81% were screened (Figure 1). For the 2012-2013 school year, the Health Unit did not have parental consent to screen 2,389 (12%) students and 1,283 (7%) were absent on the day(s) that staff were screening at their schools. The percentage of absent students is lower than the previous year's percentage which was 11%.

Screening intensity. Among the 126 elementary schools with Grade 2 in the Health Units jurisdiction, 103 were categorized as "Low" intensity, 10 as "Medium" intensity, and 13 as "High" intensity as per the Oral Health Assessment and Surveillance Protocol which is described in the sidebar (Figure 2).

Dental caries. The percentages of Junior Kindergarten, Senior Kindergarten, and Grade 2 students screened who were caries-free, (i.e. have never had tooth decay or the removal or filling of a tooth because of caries) were 81%, 72%, and 60%, respectively (Figure 3). The schools with the lowest caries-free rates were concentrated in the counties to the west of London and the City of London Planning Neighbourhoods of Argyle, Carling, East London, Glen Cairn, Hamilton Road, Huron Heights, and White Oaks (Figures 6, 7). Almost 5% of Grade 2 students screened had two or more teeth with tooth decay (Figure 4).

Urgent dental needs. Six hundred and fifteen (615) students or 4% of those screened were found to have Urgent dental needs which makes them clinically eligible to receive Children in Need of Treatment (CINOT) funding for their dental care; (CINOT provides publicly-funded dental treatment for children with urgent needs who cannot afford this treatment) (Figure 5). Schools located in Southwest Middlesex had greater percentages of students found to have urgent needs compared to other areas of Middlesex County (Figure 8). Within London, schools with greater percentages of children with urgent needs were concentrated in the City of London Planning Neighbourhoods of Argyle, Carling, East London, Glen Cairn, Hamilton Road, Huron Heights, and White Oaks (Figure 9).

Next Steps

- Efforts and strategies have been developed to improve the percentage of eligible students screened.
- Further initiatives are in the planning stages to encourage parents to seek dental care for their young children prior to school entry. (These initiatives began as part the [2013 Oral Health Month Activities](#).) Early dental care helps to prevent caries by promoting healthy oral behaviours and delivering preventive services.
- A pilot project to prevent the increasing caries rate as students move from Junior Kindergarten to Grade 2 is under development for two "High" screening intensity schools.

Results

Figure 1. Percentages of students screened, absent and refused for the 2011-2012 and 2012-2013 school years

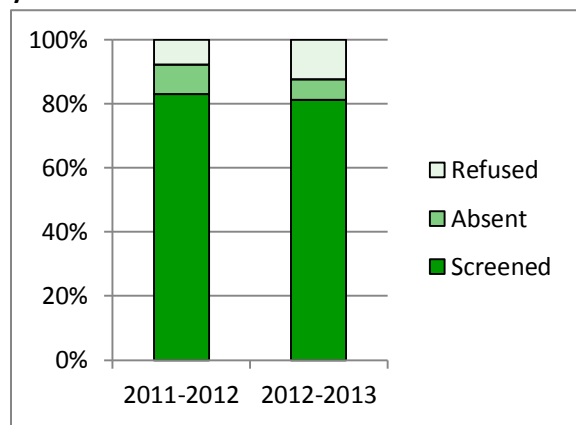


Figure 2. Screening intensity of schools by school year

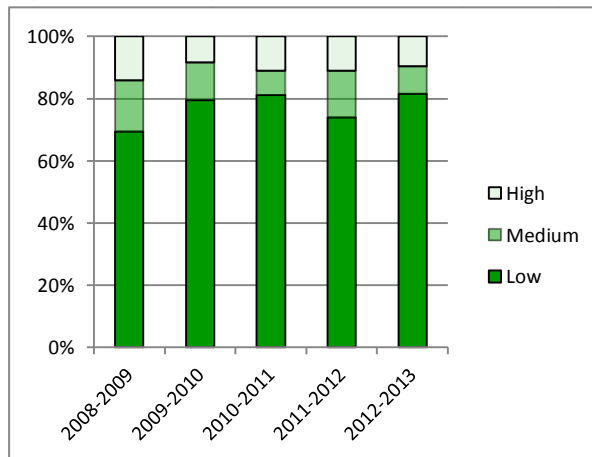


Figure 3. Percentage of students screened who were caries-free by grade for the 2011-2012 and 2012-2013 school years

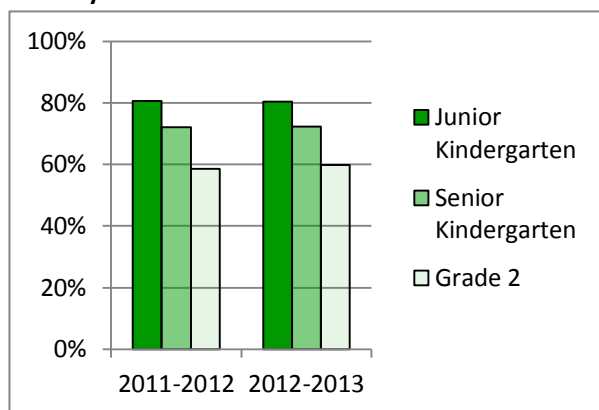


Figure 4. Percentage of Grade 2 students screened with two or more teeth affected by caries (decay, removals, or filling) by school year

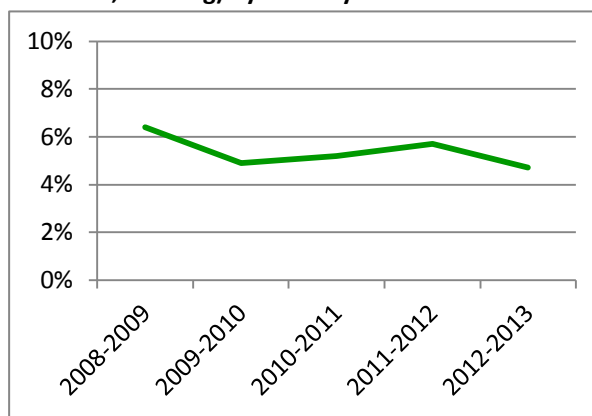


Figure 5. Percentage of students screened with Urgent dental needs by school year

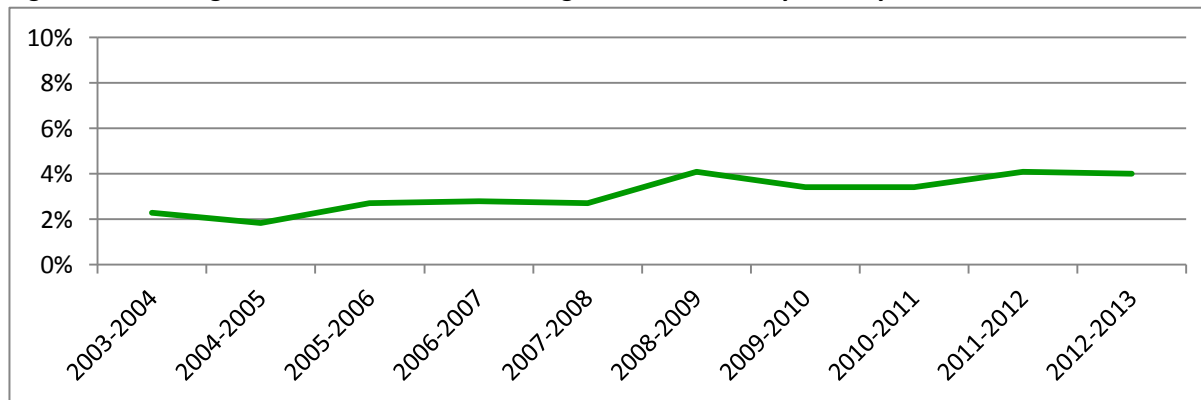


Figure 6. Geographic distribution of Middlesex County schools by percentage of caries-free students for the 2012-2013 school year

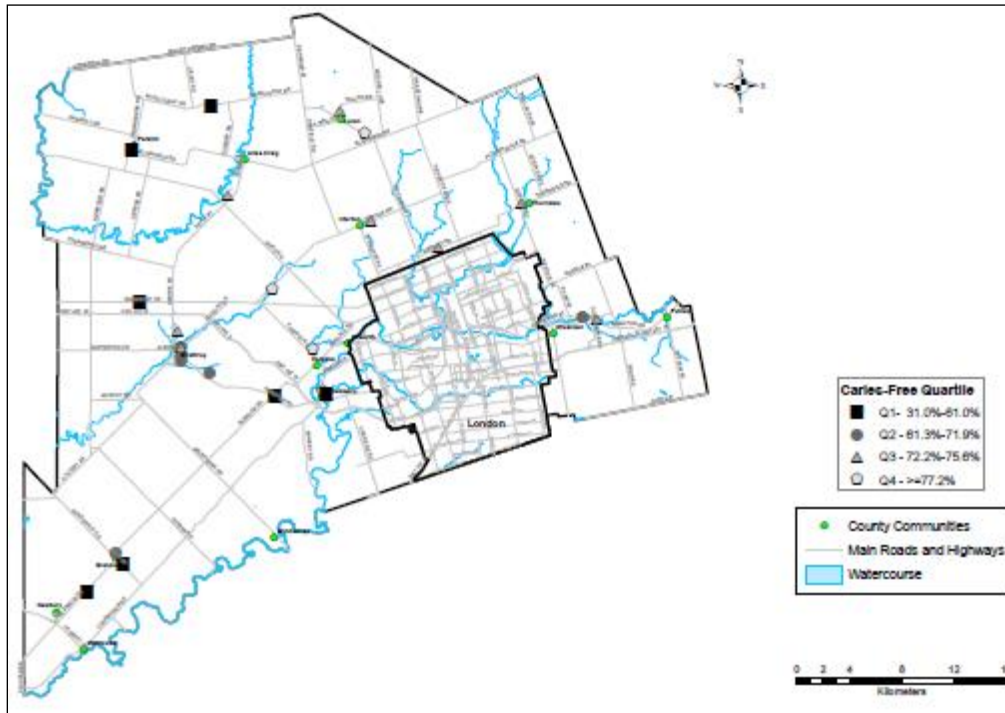


Figure 7. Geographic distribution of London schools by percentage of caries-free students for the 2012-2013 school year

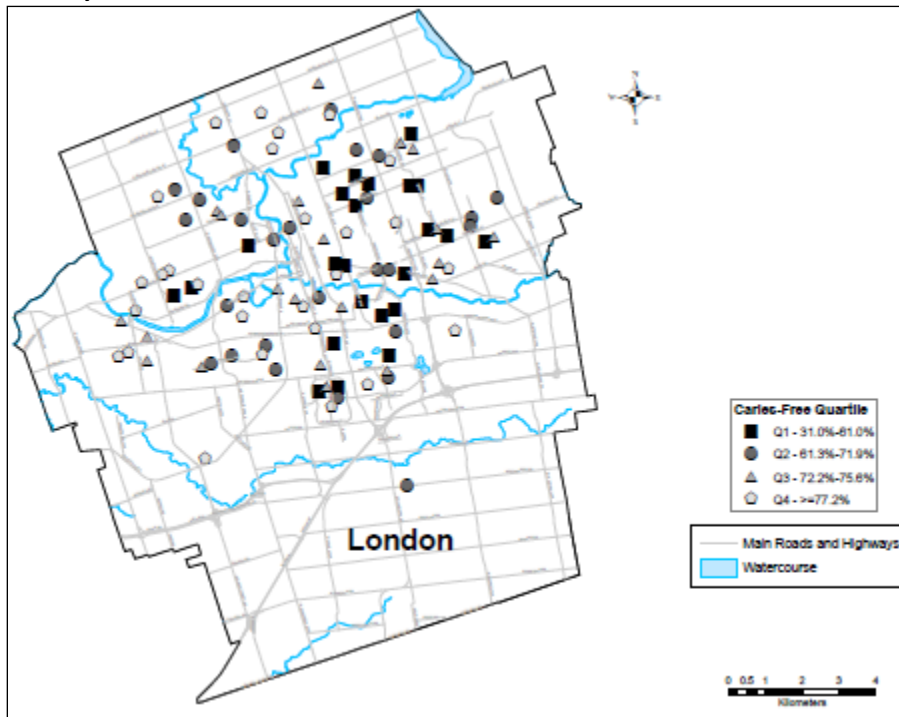


Figure 8. Geographic distribution of Middlesex County schools by percentage of students with “Urgent” needs for the 2012-2013 school year

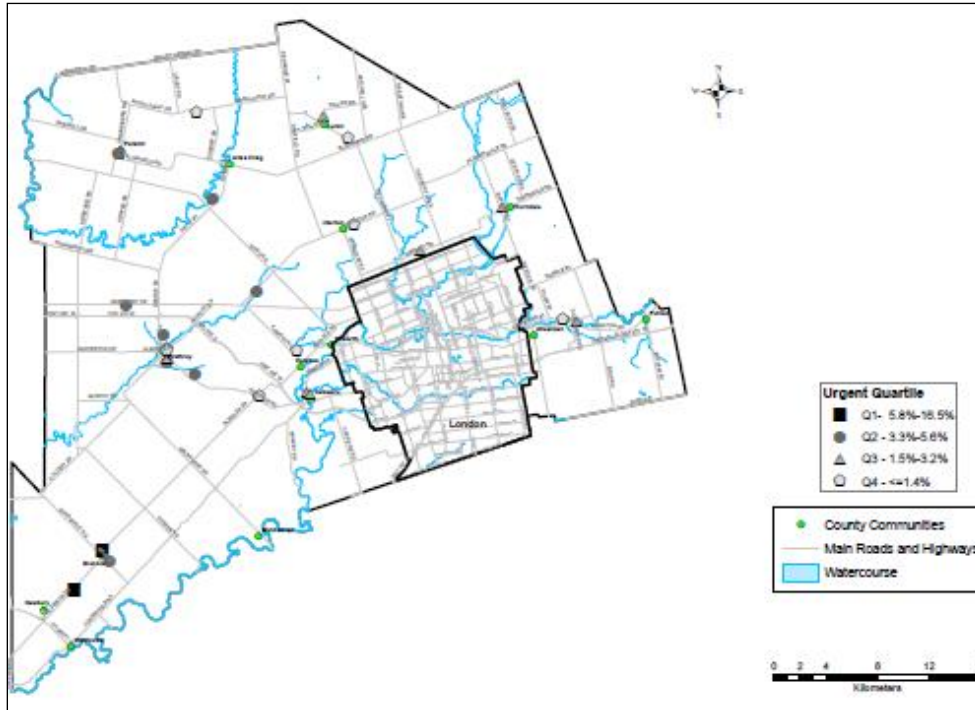


Figure 9. Geographic distribution of London schools by percentage of children with “Urgent” needs for the 2012-2013 school year

