

Peel Public Health (PPH)

“At Peel Public Health, we have used ON-Marg to identify elementary schools in which students are at higher risk for dental caries. This means that in our dental screening program we can use the limited resources to greater effect. As a result, we are finding more children with urgent dental needs and getting them into a treatment program.”

David Mowat, Medical Officer of Health, Peel Region

Peel is a region in the Greater Toronto Area with a population of 1.3 million. It includes the municipalities of Brampton, Caledon and Mississauga. In 2012, [Peel Public Health](#) (PPH) conducted an in-depth exploration of their children’s dental screening program, which screens students within the Peel Public and Catholic School Boards for urgent dental conditions. Children found to have urgent conditions and whose families indicate financial need are then eligible for treatment.

Staff used ON-Marg to compare area rates of dental health to area rates of both ethnic concentration* and material deprivation. They found that both factors were predictors of the need for increased dental screening. To round out area portraits, PPH used previous screening data, consultations with dental hygienists and a deprivation-based index specific to Peel Region.

Research impacts

Using ON-Marg, PPH was able to better identify areas most in need of in-school dental screening. They were also able to identify the need for a ‘very high intensity’ screening category. Schools falling into the very high intensity category will receive additional screening resources.

Why ON-Marg?

ON-Marg includes several dimensions of marginalization, making it more comprehensive than some earlier deprivation-based indexes. In particular, the dimension of ‘ethnic concentration’ is key in regions like Peel, where close to 50 per cent of the population is made up of recent immigrants. PPH staff used ON-Marg to uncover the relationships between ethnic concentration, material deprivation and dental health. With this information, they were able to better determine which communities were in need of in-school dental screening.

Key tips for other users of ON-Marg

- *ON-Marg is most useful for researchers trying to answer a specific question.* For example, PPH wanted to know if ethnic concentration in particular communities was correlated to seniors’ fall rates. Using ON-Marg, they found that ethnic concentration was correlated to *decreased* fall rates. As a result, they were able to focus their falls rate research in other areas.
- *Ensure you have a large enough sample of cases.* PPH found that they had to combine several years of data in order to detect a relationship between seniors’ fall rates and ethnic concentration at the area level.

Future work with ON-Marg

A full evaluation of the dental screening research is planned following the completion of the 2012/2013 school year. PPH will be presenting the results of their dental screening research, ‘Using local data to influence school dental screening data strategy in the region of Peel,’ through a webinar and at the 2013 national conference of the Canadian Dental Hygienists Association. Their presentations will focus on their use of marginalization indices, including ON-Marg, to supplement the dental screening criteria provided by Ontario Public Health Standards.

In future, PPH will be using ON-Marg to help explore predictors of school readiness for senior kindergarten students.

* ON-Marg defines ‘ethnic concentration’ as proportion of the population who are recent immigrants and the proportion of the population who self-identify as visible minority.

Interviews conducted with Julie Stratton, manager of epidemiology for the Office of the Medical Officer of Health, Peel Public Health; Sheila Datta, epidemiologist, Region of Peel Health Department and Debra Gregory, health analyst, Peel Public Health.