



# Treatment of Preventable Dental Cavities in Preschoolers, 2010–2011 to 2011–2012

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At the heart of data

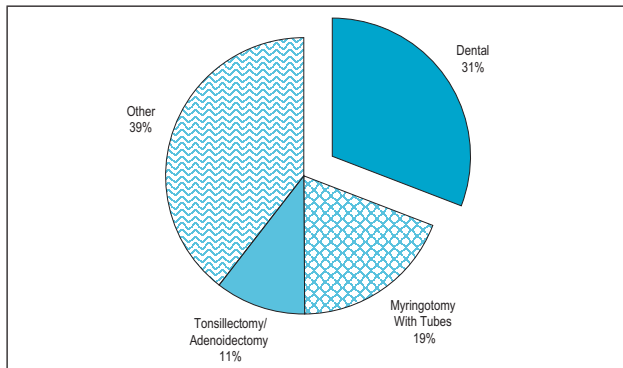


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## Results

Treating cavities is the leading indication for day surgery among children age 1 to younger than 5, making up 31% of all day surgery operations for children this age.

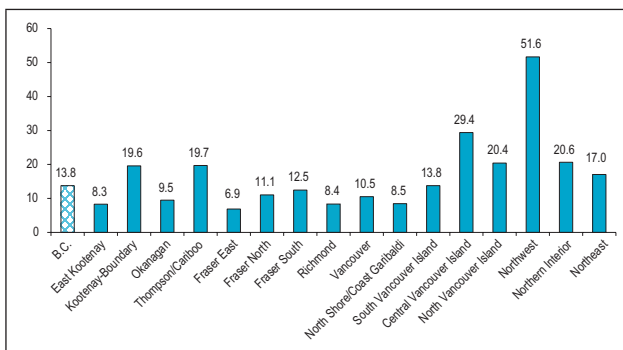
Figure 1: Percentage of Day Surgery Operations by Type of Procedure, Selected Provinces/Territories, Children Age 1 to Younger Than 5, Two-Year Pooled (2010–2011 to 2011–2012)



**Notes**  
Quebec elected to not participate in this study.  
Based on 2013 CACS grouper.  
**Sources**  
Discharge Abstract Database and National Ambulatory Care Reporting System, 2010–2011 and 2011–2012, Canadian Institute for Health Information.

Each year in B.C., there were about 2,500 day surgery operations for ECC for children age 1 to younger than 5.

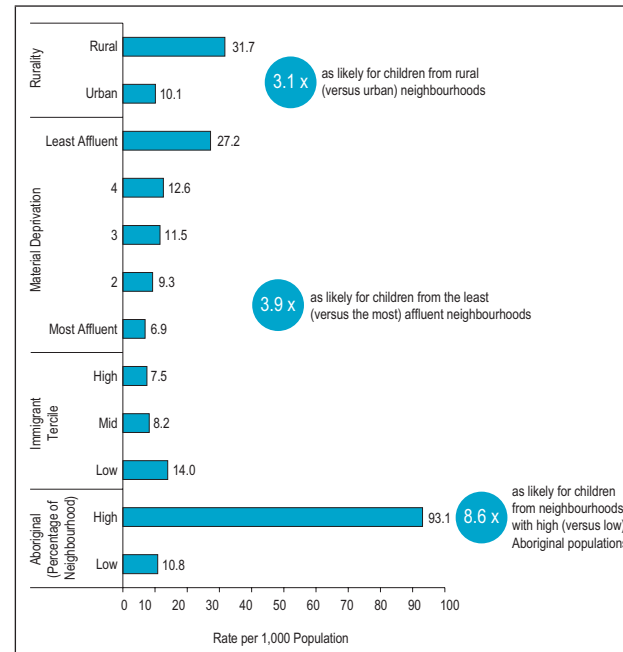
Figure 2: Rate of Day Surgery for ECC, by Health Service Delivery Area, B.C.



**Sources**  
Discharge Abstract Database and National Ambulatory Care Reporting System, 2010–2011 and 2011–2012, Canadian Institute for Health Information.

Rates were much higher for children from neighbourhoods with high Aboriginal populations, low affluence and rural status.

Figure 3: Rate of Day Surgery for ECC by Socio-Demographic Factors, Selected Provinces/Territories, Children Age 1 to Younger Than 5, Two-Year Pooled (2010–2011 to 2011–2012)



**Sources**  
Discharge Abstract Database and National Ambulatory Care Reporting System, 2010–2011 and 2011–2012, Canadian Institute for Health Information.

The cost associated with day surgery for ECC is considerable: \$3.5 million per year in B.C. for hospitalization alone. The average hospital cost for B.C. was \$1,515 per day surgery. Additional non-hospital costs are associated with each surgery, such as the cost of the anesthesia provider (an average of \$267 in B.C.), the cost of the dental surgeon and any travel costs incurred by families to get to the hospital.

## Objective

This report profiles the extent of day surgery procedures for serious cases of tooth decay being provided by hospitals and health authorities, and provides details on the following aspects of such care among young children:

- The magnitude of the problem: numbers and rates by province (excluding Quebec), territory and health region;
- Populations at higher risk; and
- Costs associated with care.

## Background

The development of cavities in the primary teeth of children due to early childhood caries (ECC) represents a significant burden in both human and financial terms. Dental caries is a preventable infectious disease and is the most common chronic disease of childhood. This report focuses on dental caries among young children that have progressed to such an extent that their dental care occurs as a day surgery procedure, almost exclusively under general anesthesia. These dental procedures represent the tip of the iceberg in terms of the magnitude of the problem, because left uncounted are the many children who are treated for serious tooth decay in dentists' offices or community clinics.

## Methods

A retrospective cohort study was conducted using the Canadian Institute for Health Information's administrative databases and Statistics Canada's census data. Descriptive analyses were used to profile rates of surgery, identify populations at higher risk, derive costs and describe travel times associated with receiving care.

## Our Vision

Better data. Better decisions. Healthier Canadians.

## Our Mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

## Our Values

Respect, Integrity, Collaboration, Excellence, Innovation

## Conclusion

Programs and coordinated approaches to address and promote good dental health, such as the Canadian Oral Health Strategy, can help focus efforts on reducing the number of dental surgery operations for young children across Canada. The magnitude of the problem of ECC requiring day surgery in Canada as described in this report provides further impetus to act and prevent pain and suffering among young children. Such efforts will also realize opportunities for cost savings and improved health system efficiency.

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