



Healthy Smile Happy Child

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What's on the Agenda?

- Early Childhood Caries (ECC) and Risk Factors: what every health care provider should know
- Healthy Smile Happy Child (HSHC) Initiative
- Key Take-Home Messages
- HSHC Resources



Objectives

- Recognize what early childhood caries (ECC) is, looks like, who's affected, and how important early childhood oral health is.
- Understand the impact that severe ECC (S-ECC) can have on childhood health and well-being.
- Recognize the importance of prevention, including early first dental visits.
- Identify what you can do to address the problem of ECC in your role as a health care provider.



How do we define Early Childhood Caries?

- ECC as ≥ 1 primary tooth affected by decay in children < 72 months (6 years) of age
- Severe ECC (S-ECC) is a subtype of ECC

Age (months)	SECC
<12	1 or more smooth dmf surfaces
12-23	1 or more smooth dmf surfaces
24-35	1 or more smooth dmf surfaces
36-47	dmfs score ≥ 4 OR 1 or more smooth dmf surfaces in the primary maxillary anteriors
48-59	dmfs score ≥ 5 OR 1 or more smooth dmf surfaces in the primary maxillary anteriors
60-71	dmfs score ≥ 6 OR 1 or more smooth dmf surfaces in the primary maxillary anteriors



Early Childhood Caries

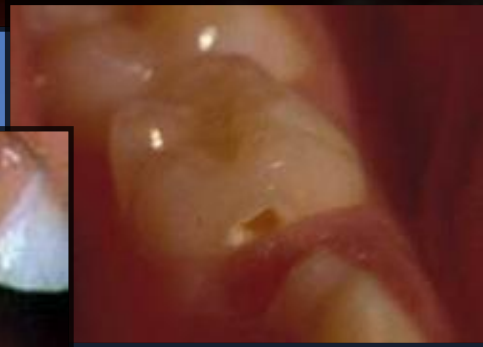


Table I. Previous used terms for ECC among infants and preschoolers.

Baby-bottle tooth decay (35-38)
Baby-bottle syndrome (39)
Labial caries (40)
Circular caries (41)
Nursing-bottle mouth (42)
Milk-bottle caries (43)
Nursing caries (44-46,54)
Nursing-bottle caries (4,39)
Nursing-bottle syndrome (47,48,55)
Bottle-propping caries (49)
Bottle-baby syndrome and bottle-mouth caries (50)
Rampant caries (51)
Melanodontie infantile/"les dents noire de tout-petits" (52,53)
Sucking-cup caries (58)
Sugared-tea caries (56)
Sweet-tea caries (57)
Sugar nursing-bottle syndrome (59)



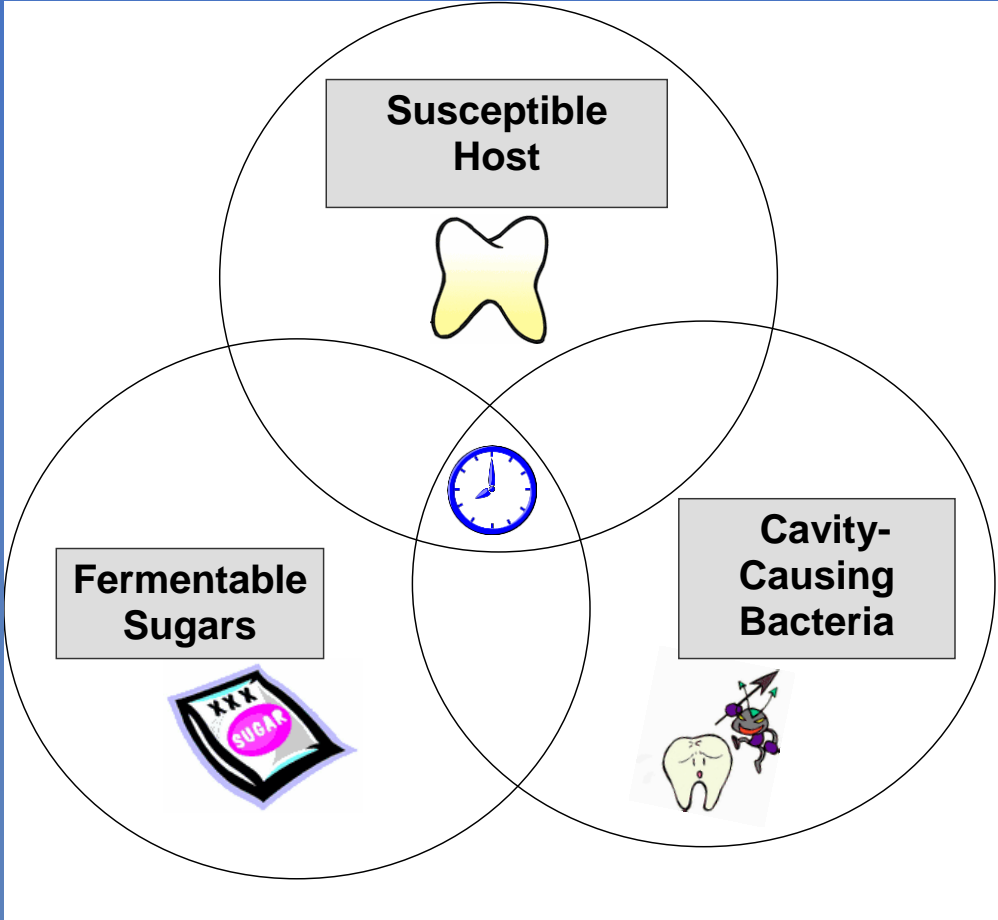
Severe Early Childhood Caries (S-ECC)

Definition

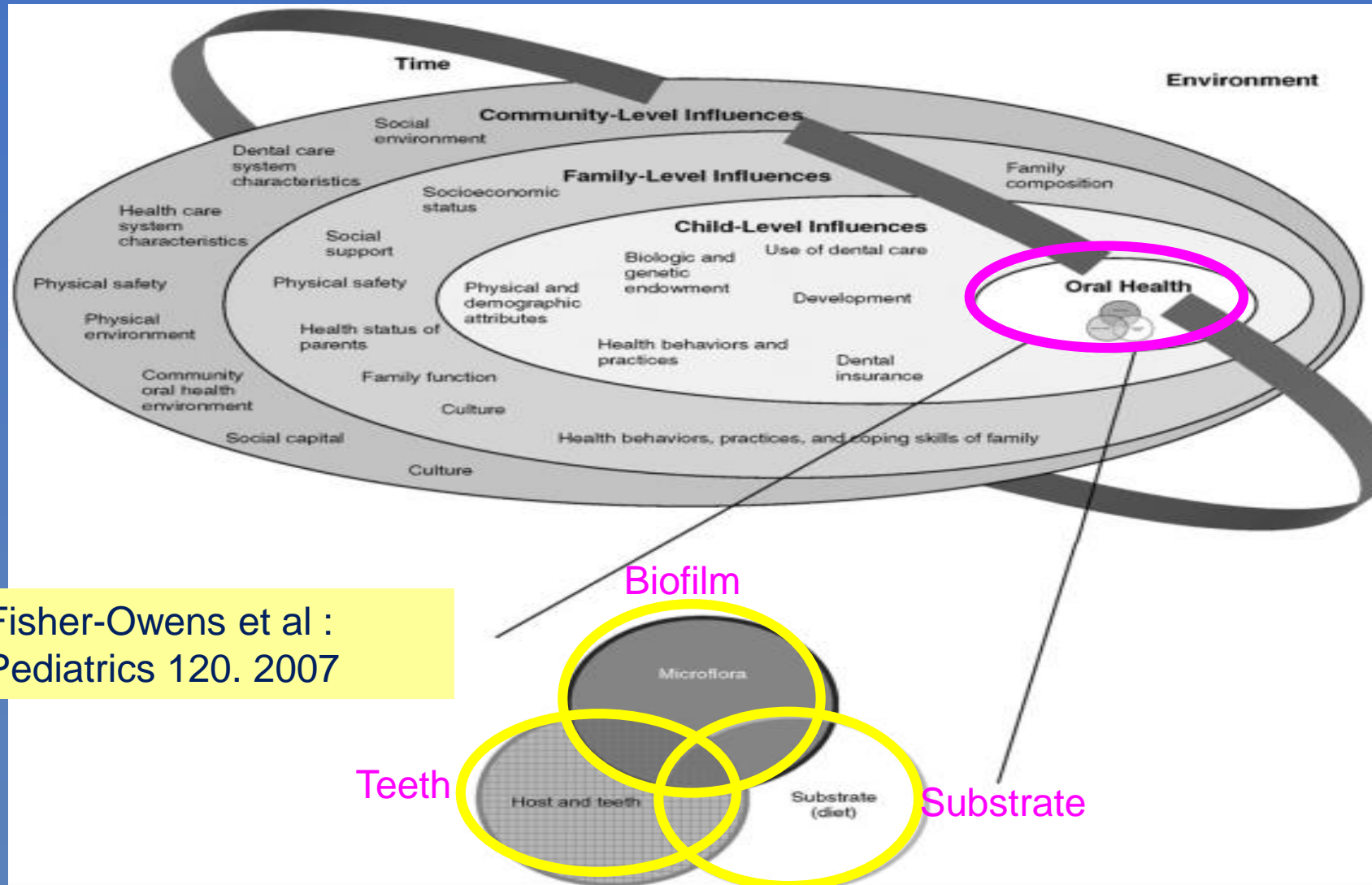
Children who are **< 3 years of age** and present signs of smooth surface caries are considered Severe ECC (S-ECC) (AAPD, 2008)



Cavity Process



Multi-factorial & Multi-level nature of child dental disease & Early Childhood Caries



CDA Position on Early Childhood Caries



- ECC is an infectious, transmissible, diet-dependent disease that may begin soon after dental eruption and that may progress rapidly.
- The Canadian Dental Association (CDA) recognizes that early childhood caries (ECC) is a complex and multifactorial chronic disease that is heavily influenced by:
 - biomedical factors (diet, bacteria and host) and
 - by social determinants of health.
- ECC is defined as 1 or more primary teeth affected by decay in infant and preschool children (those < 72 months of age)
- The advanced form of this disease (severe early childhood caries or **S-ECC**) has raised concerns among health professionals and the public.
- It has a lasting detrimental impact on both primary and permanent teeth.



CDA Position on Early Childhood Caries (cont.)



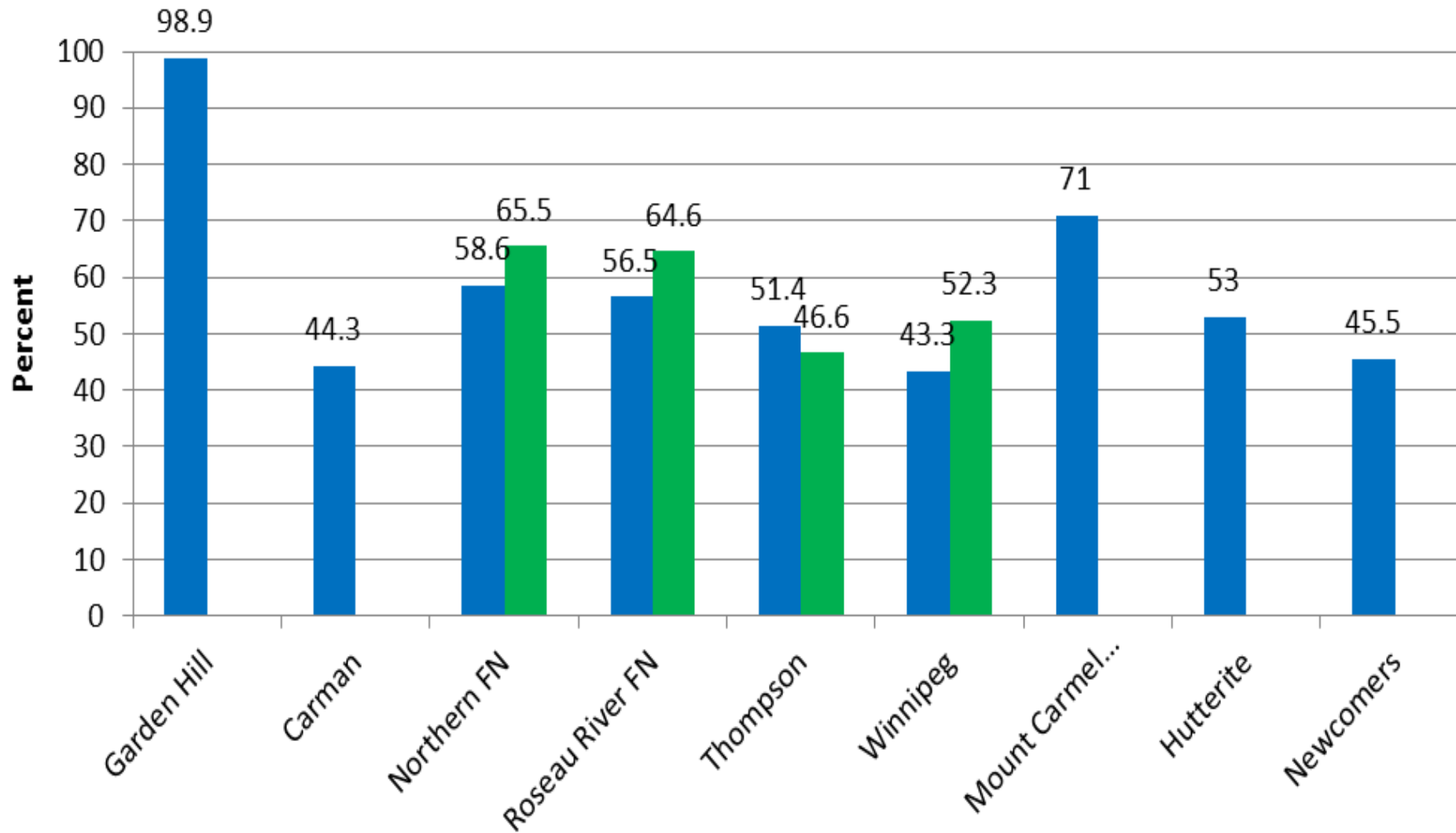
- Some of the potential consequences of ECC are
 - acute and chronic pain;
 - interference with the child's eating, sleeping and proper growth;
 - tooth loss and malocclusion;
 - increased expenses for dental care throughout life;
 - and compromise of general health.

Who's at Risk for ECC?

- ECC is prevalent in children from the following groups:
 - Low income households/poverty
 - Indigenous populations (e.g., First Nations, Inuit, and Metis Canadians)
 - Disadvantaged urban communities
 - Rural and remote areas
 - Newcomers – refugees & immigrants

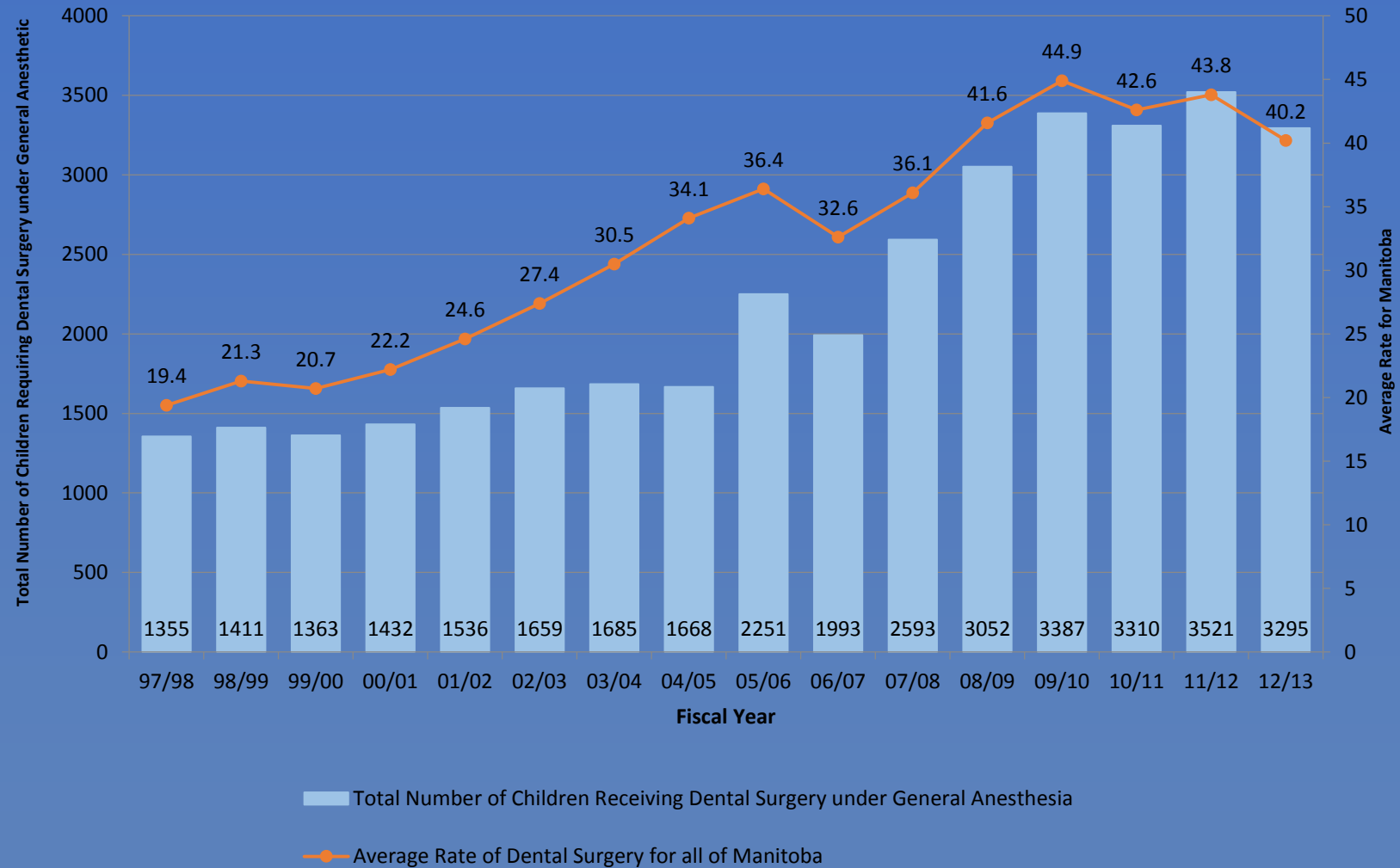


Prevalence of ECC

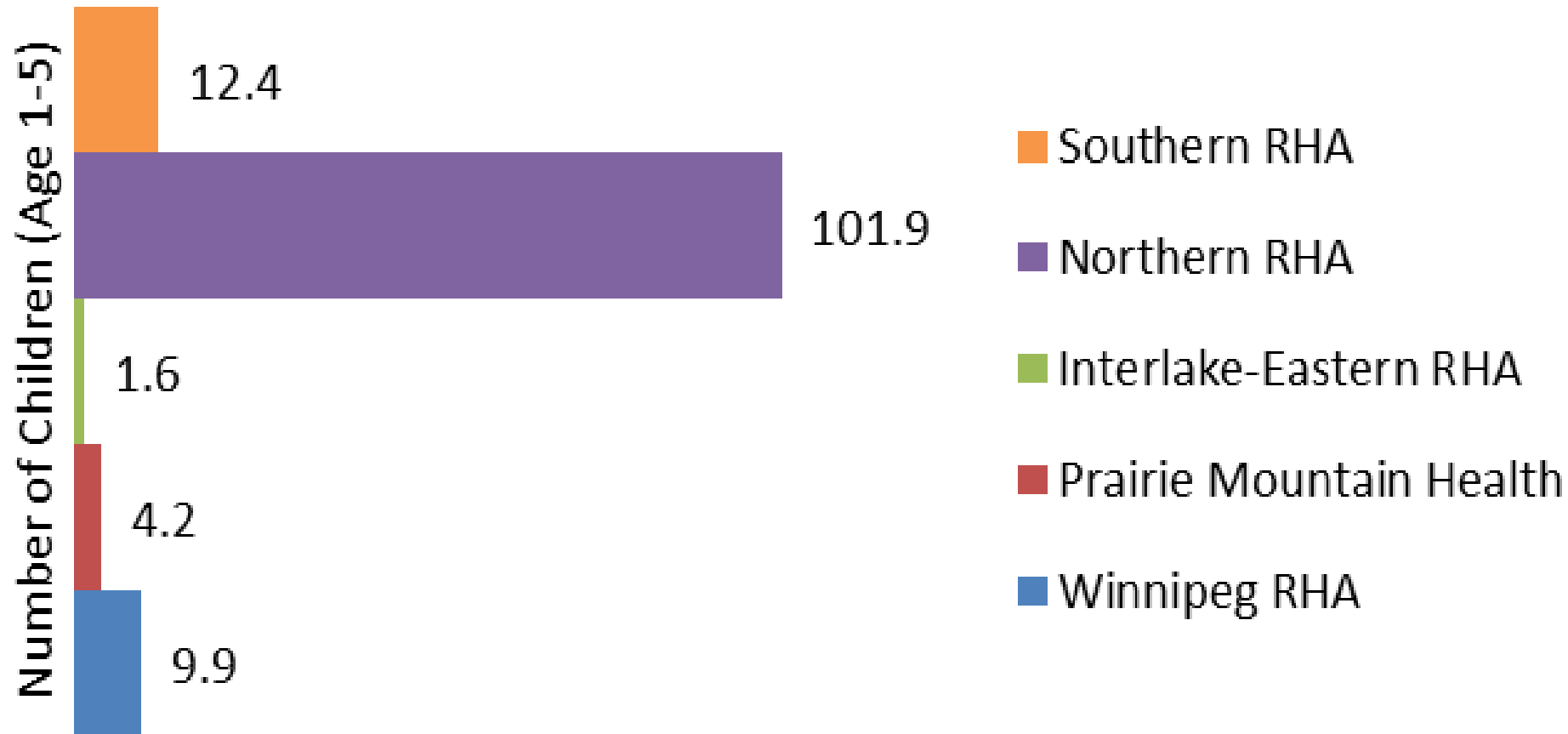


Schroth et al 2005 J Can Dent Assoc; Schroth & Moffatt Pediatr Dent 2005; Schroth, Moore, Brothwell J Can Dent Assoc 2005; Schroth, Cheba. Pediatr Dent 2007, Schroth et al 2010 Rural & Remote Health.

Rates of pediatric dental surgery in MB for 1997/98-2012/13. [Data available from MB Health]



MB Pediatric Dental Surgery Rates by RHA (2013-2014)**



Treatment of Preventable Dental Cavities in Preschoolers: A Focus on Day Surgery Under General Anesthesia

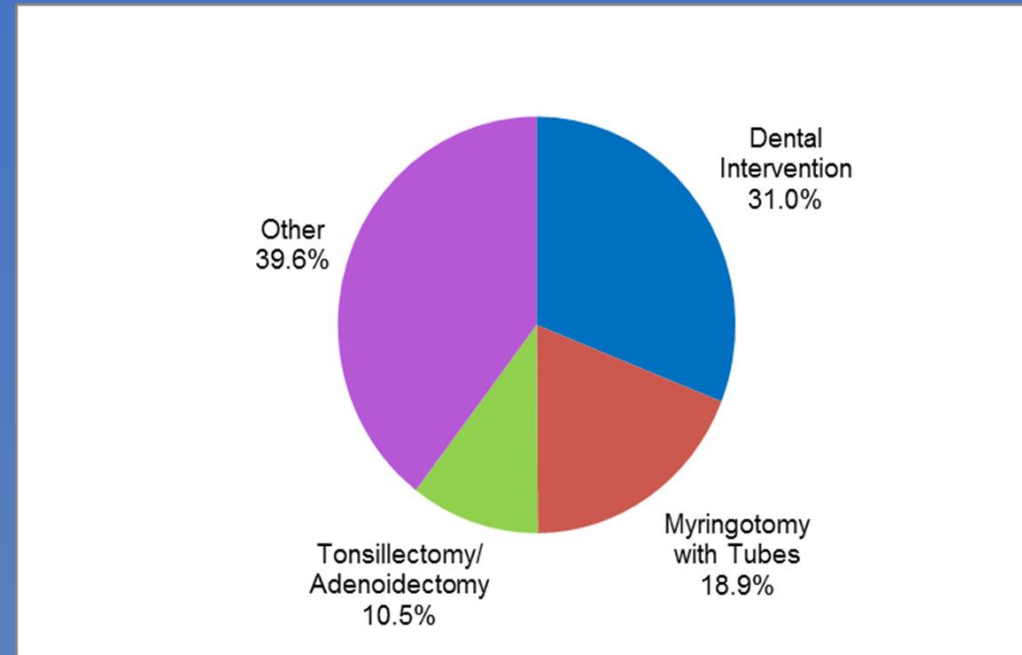
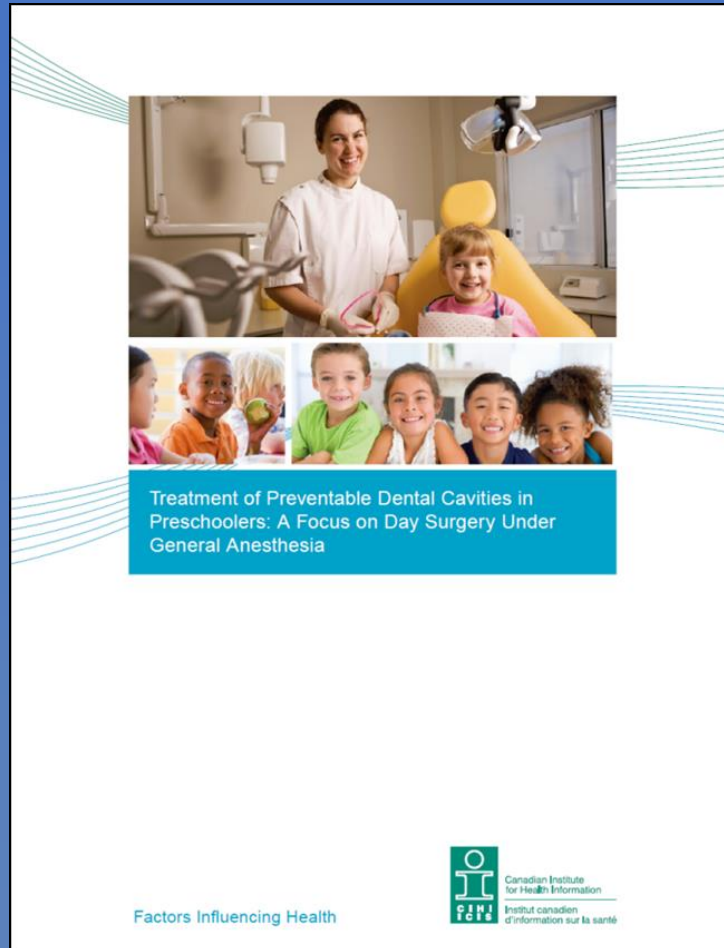


Figure 1 – percentage of day surgery operations by type of procedure. 4-year pooled (2010-2011 to 2013-2014)

Cost of Pediatric Dental Surgery

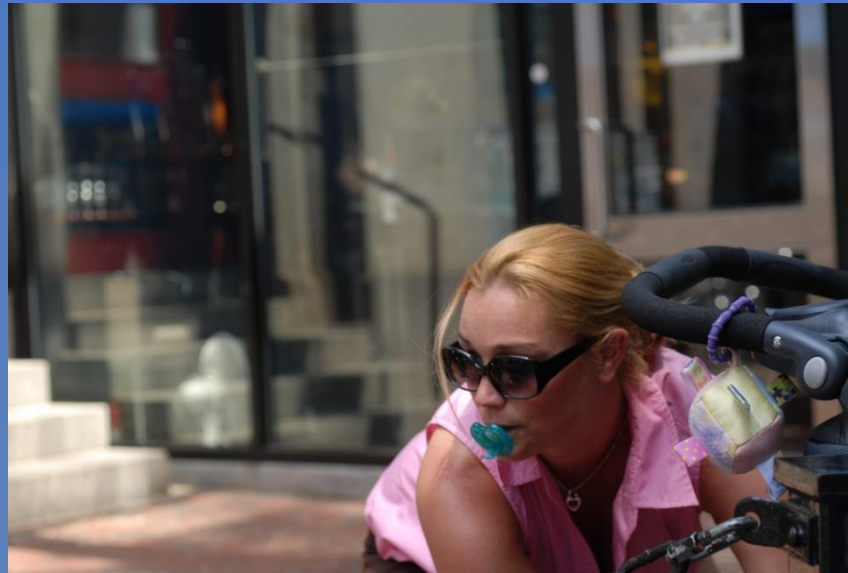
- **\$2.7 million** in hospital costs is spent on pediatric dental surgery every year **in Manitoba** (doesn't include the dental fees or transportation costs)
- Average hospital cost for pediatric dental surgery in **Canada** is **\$21.2 million** per year (excluding Quebec).

Test your knowledge of Children's Oral Health



True or False

- Cavity-causing germs are usually given to children by caregivers kissing them on the mouth, testing food or cleaning a dropped soother using the mouth.



True

- If caregivers have cavities they can pass on the cavity-causing bacteria to their babies by kissing them on the mouth, testing food or cleaning a dropped soother using the mouth.

True or False

It's recommended that you start brushing a baby's teeth when they turn 2 years old.

False

Tooth care and gum care should start **soon after baby is born.**

Use a clean wet face cloth to gently wipe gums after feeding and before bed. Once teeth appear continue using a facecloth or use a baby-sized toothbrush and water only until they turn 1 year old.



True or False

Parents can check their child's teeth for signs of childhood dental decay.

True

As soon as a baby gets his or her first tooth it's a good idea to **check at least once a month for tooth decay.**

Look for white lines along the gums of the front teeth and brown or decayed spots on teeth.



True or False

A child can start brushing their own teeth as soon as they are able to hold a toothbrush.

False

It is important for an adult to brush a child's teeth until they turn around 5 or 6 years old.



Children still need supervision when brushing until they turn around 8 years old.

True or False

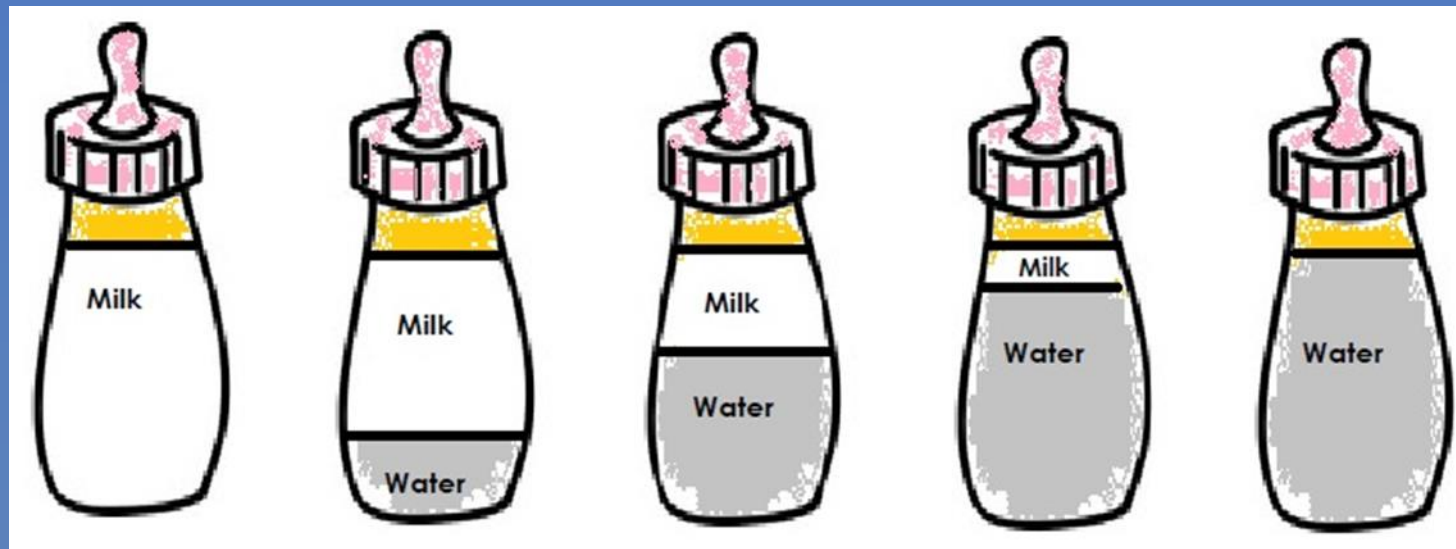
Baby's should be
Weaned off the bottle

Or

Sippy cup at 12 months old.

True

Once a baby turns a year old it is important for their teeth that they are weaned off the bottle or sippy cup onto a regular cup.



True or False

A child should see a dentist by the time he or she turns 3 years old.

False

A child should see a dentist by the time they turn **one year old.**



http://www.wrha.mh.ca/healthinfo/preventill/oral_child.php

Go to a Dentist

Start to take your child when they are 1 year old.

True or False

At the age of 1-2 years old children can use a pea-size amount of toothpaste.



False

A very slight smear on the toothbrush is all a child 1-2 years old should be using.



They shouldn't use a pea-size amount of toothpaste until they turn 6 years old.





Healthy Smile Happy Child

- Collaborative, multi-agency partnership
- Move from traditional health educator paradigm towards community development approach to health promotion
- Enable communities to address Early Childhood Caries through existing programs and services





HSHC Goals

- To **gain community acceptance** of the importance of early childhood oral health
- To **build on existing programs** which target young children
- To **increase parental knowledge** of ECC prevention
- To **increase the knowledge of existing service providers** (i.e. public health) of the importance of prevention of ECC
- To encourage existing service providers to **incorporate ECC prevention activities into their practice**



Healthy Smile Happy Child the early years



- Began in response to the growing wait list for dental surgery
- Started as a baseline study in 2001
 - 4 pilot communities
 - 2 First Nations communities
- Dental exam
 - 408 children under 6 years of age
- Caregiver questionnaire



Results of Baseline Study


- 54% of all children had ECC
- 74% of children over 2 years had ECC
- 20% reported problems with pain, infections, eating and sleeping
- 30% still using bottle at 2 years
- 63% had never seen a dentist
- No tooth brushing in 1/3 of children

Professional
ISSUES

Prevalence of Early Childhood Caries in 4 Manitoba Communities

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ABSTRACT

Objectives: Early childhood caries (ECC) is a particularly destructive form of tooth decay that afflicts young children. Although few prevalence data have been published for Manitoba, long waiting lists for treatment of ECC in hospital indicate that many children in the province suffer from this condition. The purpose of this investigation was to determine the prevalence of ECC and the oral health status of children under 6 years of age in 4 communities in Manitoba and to identify risk factors associated with ECC.

Methods: The 4 Manitoba communities were selected according to the best available data regarding the number of young children scheduled for dental treatment under general anesthesia. Two of the communities were located in the southern region of the province, and the other 2 were northern communities. In each region, one community represented a disadvantaged population in a large urban centre, whereas the other was a First Nations (on-reserve) community. The parent or guardian (primary caregiver) of each child under 6 years of age was invited to participate. After informed consent had been obtained from the caregiver, each child underwent a dental examination of the deciduous dentition, and the caregiver completed a retrospective questionnaire by interview.

Results: A total of 408 children and their caregivers participated in the study. The overall prevalence of ECC was 53.7%, and the prevalence was similar in all 4 communities, with no statistically significant difference in caries between the high-risk urban communities and the First Nations (on-reserve) communities. The mean number of decayed, extracted or filled teeth \pm standard deviation was 4.2 ± 5.0 . Older children were more likely to have ECC ($p < 0.001$), but the caregiver's level of education was not associated with ECC prevalence ($p > 0.05$). Children with ECC also exhibited more plaque ($p < 0.001$).

Conclusions: The results of this study indicate that ECC is a serious problem in Manitoba. In addition, this investigation establishes a baseline to help evaluate the effectiveness of current and future prevention initiatives in these 4 communities.

MeSH Key Words: child, preschool; dental caries/epidemiology; Manitoba

© J Can Dent Assoc 2005; 71(8):567
This article has been peer reviewed.

Early childhood caries (ECC), also known as early childhood tooth decay, is a particularly destructive form of tooth decay that afflicts young children. It usually involves a distinctive pattern of caries starting in the primary maxillary incisors of infants and very young children¹ and often progresses to include the deciduous molars. ECC is one of the most common diseases in this age group and although it is not life-threatening, it may contribute to suboptimal health and failure to thrive.² The crowns of involved teeth may be completely destroyed, and treatment is both difficult and expensive,³ often necessitating general anesthesia. The most tragic fact about ECC may be that measures that could render the condition entirely preventable have not been implemented.

The older terms "nursing caries" and "baby bottle tooth decay" have largely been replaced with the broader term ECC. This change in terminology has helped to focus attention on

JCDA • www.cda-adc.ca/jcda • September 2005, Vol. 71, No. 8 • 567

Knowledge Transfer

Profiles were compiled for each community



Key risk factors for ECC in the communities were shared with the community at large



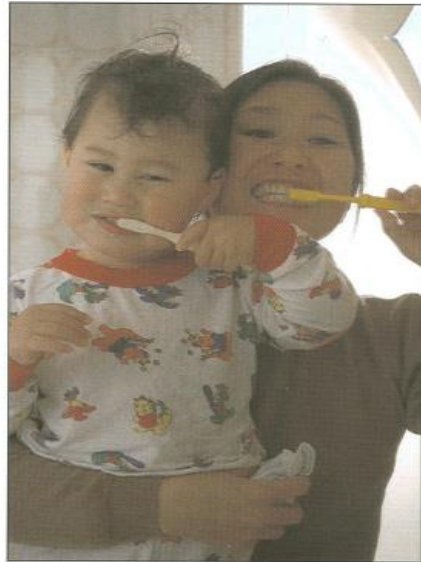
Assisted with community-based oral health promotion strategies and community developed health promotion tools



Resources Developed

Prevent Early Childhood Tooth Decay

Action Plan Workbook and Toolkit



Healthy Smile Happy Child Pilot Project
of the Manitoba Collaborative Project for the Prevention of
Early Childhood Tooth Decay

Workbook and Toolkit

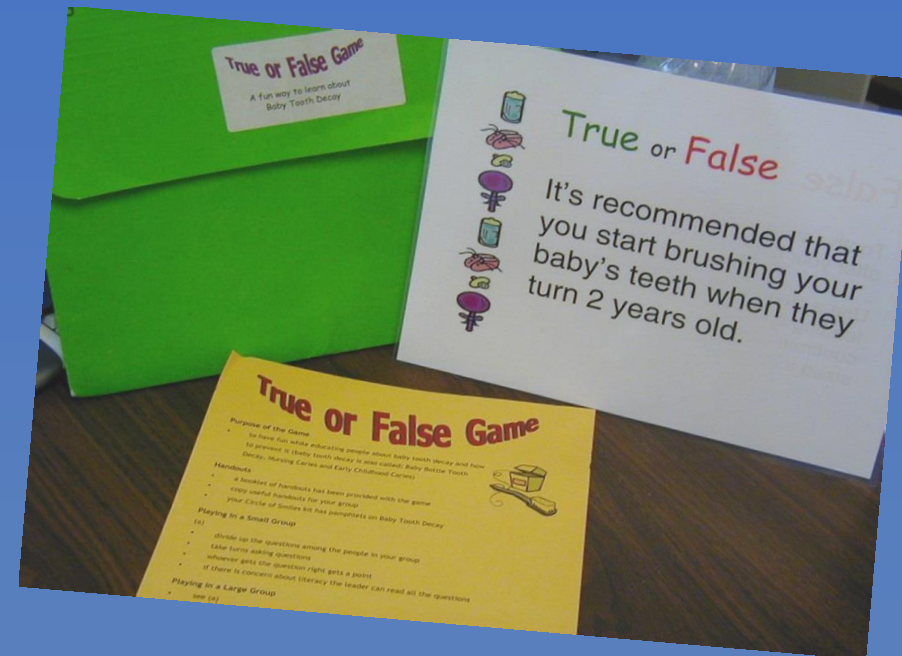


Resources Developed

Games



BINGO



True & False



Resources Developed

Build Strong Baby Teeth!

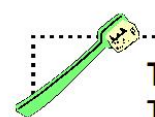
Healthy Baby Teeth Start Here!




Prenatal Information

Healthy Smile Happy Child Project

TOOTHBRUSHING TIPS FOR PARENTS




Positioning You and Your Baby
It's easier and more comfortable to brush when your baby is lying down - you will see better and do a better job!



A Few Ideas To Try:


- Hold your baby in your arms in feeding position
- Lay baby on change table (always with an adult)
- Place baby on couch or bed, with head in your lap
- Lay toddler on the floor with head on a pillow placed between your legs
- Sit in a chair facing another adult helper in the knee-to-knee position:
 - baby lies on adults' legs with head in your (brusher's) lap
 - helper gently holds baby's legs and arms



It is easier to brush with your baby's head in your lap

Brushing Your Child's Teeth

- Use a child-size toothbrush with soft bristles
- Brush using small circles; begin where teeth and gums meet
- Brush:
 - both the cheek and tongue sides of the teeth
 - the flat chewing surfaces
 - the gums and tongue too!
- Gums that bleed need more brushing to make them healthy




Help Your Child Develop Good Brushing Habits

Children will:

- Want to brush their teeth when they see you brushing your own teeth - great!
- Need you to finish brushing for them until they are about 8 years old and able to do a good job on their own
- Be motivated to brush longer with helpers such as an egg timer
- Enjoy getting a small reward once they complete their own toothbrushing chart (see other side) - a good way to encourage good brushing habits!

NE Wiener & CA Yalowchuk
July 2004

 Center for Community Oral Health

Baby Teeth Are Important!

Tooth Care (& Mouth Care) Starts at Birth



Newborn to 6 Years

Prevent Early Childhood Tooth Decay



Follow-Up Study



- Same 4 pilot sites as baseline study
- Cross-sectional design
- Children < 72 months of age & caregiver
- Dental examination following established indices
- Interviewed questionnaire with caregiver
- $p \leq 0.05$ denoted significance





Follow-up Study Results

Compared to the baseline study, caregivers were *more likely to report that:*

- Baby teeth are important (98.8% vs. 91%)
- Problems with baby teeth will affect adult teeth (74.6% vs. 59.3%)
- Babies without teeth need their mouth cleaned (95% vs. 79.8%)
- Breastfeeding is important for healthy teeth (88.4% vs. 74.8%)
- Bottle feeding after 1 year is bad for their teeth (78.1% vs. 62%)
- Children should see the dentist by their first birthday. (82.4% vs. 74.3%)



Follow-up Study Results



- **Prevalence of ECC was 52%**
 - Did not differ from baseline study
- **Significant reduction in the prevalence of S-ECC**
- **In all 4 communities:**
 - More children had visited the dentist
 - More parents reported cleaning their children's teeth
 - Fewer children had untreated tooth decay compared to before



Prevalence of ECC and S-ECC in follow-up study children by community

Community	Prevalence of ECC Follow-up study ^a (%)	Prevalence of ECC Baseline study(19) (%)	Prevalence of S-ECC Follow-up study ^b (%)	Prevalence of S-ECC Baseline study (%)
Anonymous Northern First Nation	51/76 (67.1%)	75/128 (58.6%)	35/76 (46.1%)	58/125 (46.4%)
Anonymous Southern First Nation	34/57 (59.7%)	61/108 (56.5%)	31/57 (54.4%)	53/108 (49.1%)
Thompson	38/99 (38.4%)	54/105 (51.4%)	30/99 (30.3%)	24/104 (23.1%)
Winnipeg (Point Douglas neighbourhood)	43/87 (49.4%)	29/67 (43.3%)	27/87 (31.0%)	45/63 (71.4%)
Total	166/319 (52.0%)*	218/407 (53.6%)	123/319 (38.6%) [†]	180/400 (45.0%)

* Comparison of follow-up study prevalence of ECC to baseline prevalence p=0.68

^aComparison of community follow-up study prevalence of ECC between communities p=0.0012

^bComparison of community follow-up study prevalence of S-ECC between communities p=0.0052

[†]Comparison of follow-up study prevalence of S-ECC to baseline prevalence p=0.08

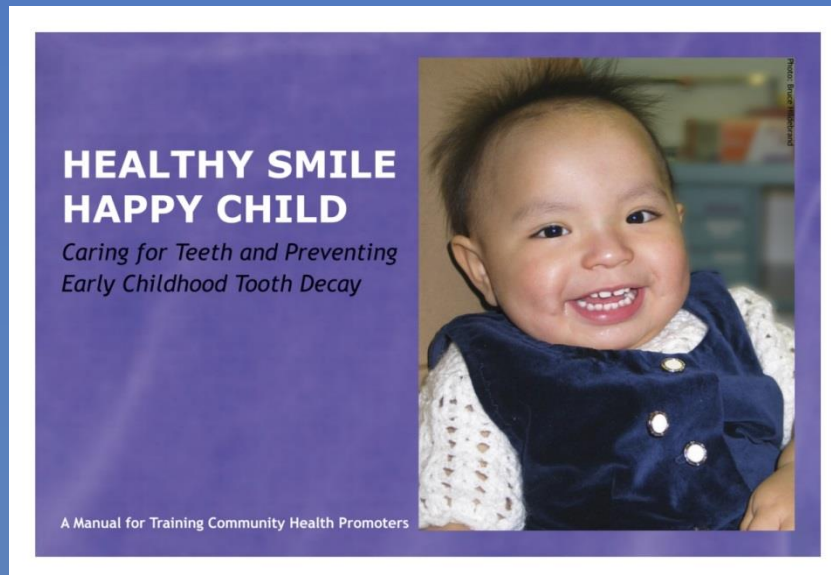
Provincial Roll Out of Initiative



- **Funded by Manitoba Health with additional supplementary funding from grants. Started April 1, 2006**
- **Funds enabled us to expand beyond 4 initial communities**
- **Roll out based on short term (3 year) educational and community engagement approach using the existing community developed tools and working with existing community based programs and services**
- **Ongoing funding exists for 0.5 coordinator to work with Regional Health Authorities (RHA's) and community contacts**

Train the Trainer

Train the trainer study showed that non-dental health professionals can promote oral health in their communities.



**HEALTHY SMILE
HAPPY CHILD**

*Caring for Teeth and Preventing
Early Childhood Tooth Decay*

A Manual for Training Community Health Promoters

Scientific Article



The Impact of Community Workshops on Improving Early Childhood Oral Health Knowledge

Andrea C. MacIntosh, BSc, BA¹ • Robert J. Schroth, DMD, MSc² • Jeanette Edwards, BOT, MHA¹ • Lavonne Harms, BHEC, RD, MEd¹ • Bernadette Mellon, DMD³ Michael Moffatt, MD, MSc, FRCPC⁴

Abstract: **Purpose:** The purpose of this study was to evaluate the effectiveness of community workshops designed to equip participants with early childhood oral health (ECHO) knowledge and early childhood caries (ECC) prevention. **Methods:** Convenience sample of individuals working with infants and preschool children attending an ECHO training workshop completed a questionnaire before the workshop. One month later, participants completed a follow-up questionnaire. A P-value $\leq .05$ denoted significance. **Results:** One hundred eight participants from southern Manitoba, Canada, completed the initial survey, while 67% completed the postworkshop questionnaire. Initially, many were unfamiliar with the recommended age of a first dental visit, assessing caries-risk, and identifying early stages of decay. Following the workshop, there was a 16% increase in the proportion of correct answers and a significant improvement in the number of correct choices (P<.01). Some questions showing considerable improvement included: when children should first visit the dentist (P<.001); mother having active decay placing their infant at high risk for caries (P<.001); and age until caregivers should supervise tooth-brushing (P<.001). Self-reported data suggests participants changed behaviors as a result of what they learned. **Conclusions:** Capacity-building workshops increased oral health knowledge and self-reported behaviors. This provides support that nondenial professionals can effectively provide oral health education. (Pediatr Dent 2010;32:110-7) Received September 18, 2008 | Last Revision January 14, 2009 | Revision Accepted January 23, 2009

KEYWORDS: HEALTH PROMOTION, HEALTH SERVICES, ACCESS TO CARE, INFANT ORAL HEALTH, EARLY CHILDHOOD CARIES, PUBLIC HEALTH/EPIDEMIOLOGY

Early childhood oral health (ECHO) is a part of overall well-being that is often neglected, yet it plays a significant role in a child's quality of life¹⁻³ and ability to thrive.⁴ Possible reasons why little attention may be given to the preschool dentition include: a lack of public and provider knowledge about the recommended age of first dental visit^{5,6}; lack of access to dental care; the limited cooperation between dentistry and medicine⁷; and beliefs and myths that baby teeth are not important as they eventually exfoliate. Unfortunately, few recognize that caries experienced during early life can increase the risk for future caries along the continuum of childhood.⁸

Early childhood caries (ECC), defined as the presence of caries in 1 or more primary teeth in 0- to 71-month-old children,⁹ is the most common chronic disease among young

children in North America.¹⁰ In the province of Manitoba, Canada, 2,000 dental surgeries are performed every year, which accounts for a considerable proportion of pediatric surgery in the province.¹¹ On a national scale, pediatric dental surgery continues to be the most common pediatric day surgical procedure performed in Canadian hospitals.¹² These facts, combined with recent published caries prevalence rates in Manitoba,¹³⁻¹⁶ clearly suggest that ECC is a serious health issue in Manitoba and Canada. While ECC often afflicts disadvantaged populations, it also crosses ethnic and cultural boundaries⁷ and is an equally pressing social issue. Like numerous other chronic diseases, ECC is heavily influenced by the determinants of health.

In response to the need for effective prevention and sustainable oral health promotion strategies at the community level, a multiagency collaborative partnership called Healthy Smile Happy Child (HSHC) was formed. The HSHC's goal is to develop sustainable oral health promotion that can be used throughout Manitoba. HSHC's 3 underlying pillars include: (1) community identification and relationship building; (2) oral health promotion; and (3) research and evaluation. The community development philosophy used by this project centers on the principle that a community identifies the issues it faces, including diseases. Once an issue is understood, community members proceed to gain the skills and capacity needed to develop and undertake action to foster change.^{17,18} In this initiative, such activities include training

¹Ms. MacIntosh is research assistant, Manitoba Institute of Child Health, and is research assistant, Centre for Community Oral Health, University of Manitoba; ²Dr. Schroth is research scientist, Manitoba Institute of Child Health, and is assistant professor, Preventive Dental Science and Pediatrics & Child Health, University of Manitoba; ³Ms. Edwards is regional director, Primary Health Care and Chronic Disease, Winnipeg Regional Health Authority, and is special advisor to the Deputy Minister on Primary Care, Manitoba Health; ⁴Ms. Harms is project coordinator, Centre for Community Oral Health, University of Manitoba; ⁵Dr. Mellon is provincial dental consultant, Manitoba Health; and ⁶Dr. Moffatt is professor, Community Health Sciences and Pediatrics & Child Health, University of Manitoba, and is Executive Director of Research & Applied Learning, Winnipeg Regional Health Authority, all in Winnipeg, Manitoba, Canada. Correspond with Dr. Schroth at umschroth@cc.umanitoba.ca

What can I do to address ECC in my role?

1. Learn More about Preschool Oral Health

Reducing dental caries in preschool children: a primer for non-dental health care professionals - Main

Home | My Profile | Program History | Logout



Reducing dental caries in preschool children: a primer for non-dental health care professionals



Main

Main



Pre-Course Survey

Pre-Test

Introduction

Case Study #1

Case Study #1 continued

Key Learning Points

Test your knowledge

Case Study #2

Learning Summary

Discussion Forum

Tools and Resources

References

Post-Test

Planning Committee:

[Robert Schroth](#), DMD, MSc, PhD

[Anne Rowan-Legg](#), MD

[Lydia Hatcher](#), BSc, MD, CCFP, FCFP

[Bruce Wheeler](#), MD, CCFP

[James Irvine](#), MD, FRCPC

Learning Objectives

1. Describe common pediatric dental health problems, including dental caries
2. Provide anticipatory guidance to families related to dental health issues including early childhood caries (ECC) prevention strategies
3. Discuss the role of fluoride in preventing dental caries including the evidence for efficacy and safety
4. Assess dental caries risk in pediatric patients and make appropriate referrals to accessible dental practitioners
5. Understand the impacts of the disparity of oral health resources in Canada's Aboriginal and rural children.
6. Perform a pediatric oral health exam and identify early signs of dental decay

As an accredited MOC provider, the CPS designates this continuing medical education activity for a maximum of 1 Credit under Accredited Group Learning Activities (Section 1), as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada.



This program meets the accreditation criteria of The College of Family Physicians of Canada and has been accredited for up to 1 Mainpro-M1 Credit.

Physicians in all provinces, including Quebec, may claim credit for completing this program. In accordance with the requirements outlined in the College of Family Physicians of Canada's Mainpro® – [Accreditation of other CME formats](#), this online learning activity must be completed within a 4-week time frame.

This program has been reviewed and co-developed by the Canadian Paediatric Society.

While this educational activity is not officially endorsed by the Canadian Nurses Association (CNA), nurses may claim it as a continuous learning (CL) activity toward renewal of the CNA certification credential if it is related to their nursing specialty. Pre-authorization from the CNA Certification Program is not required. Participants are encouraged to retain a confirmation of attendance.

[Case Development Process](#)

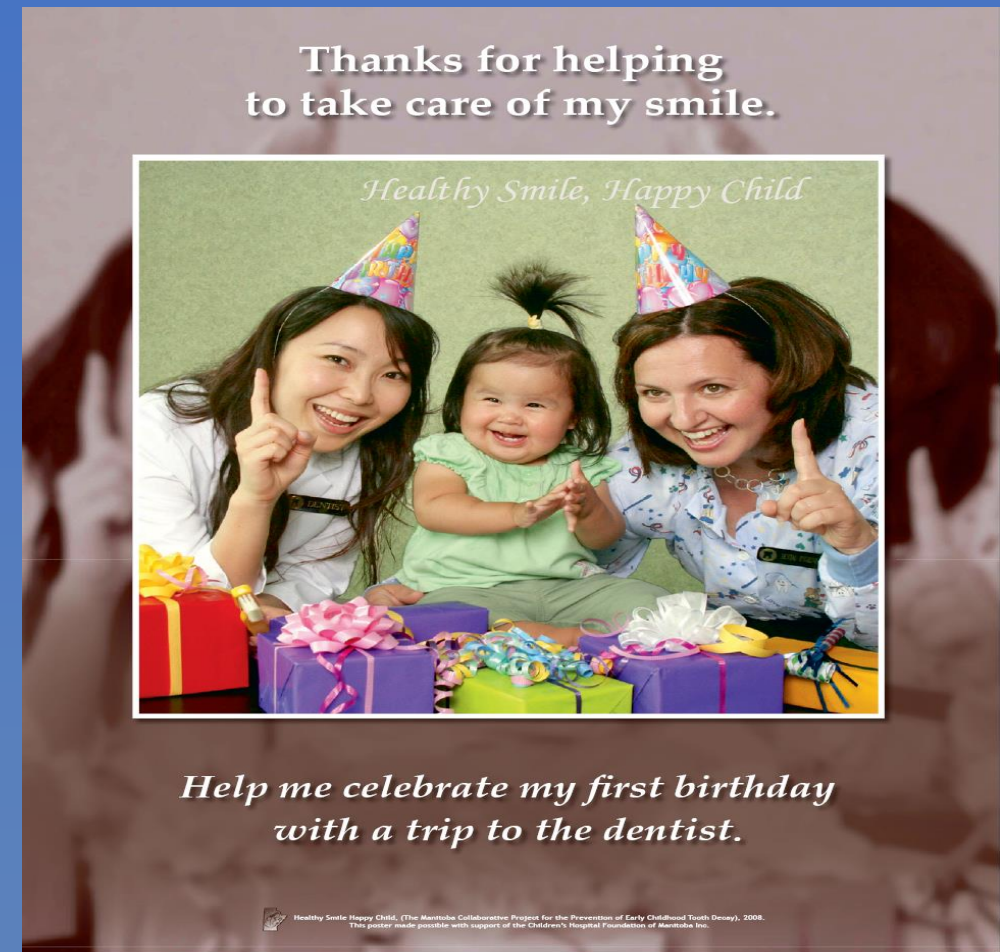
Program available online until: January 4, 2016



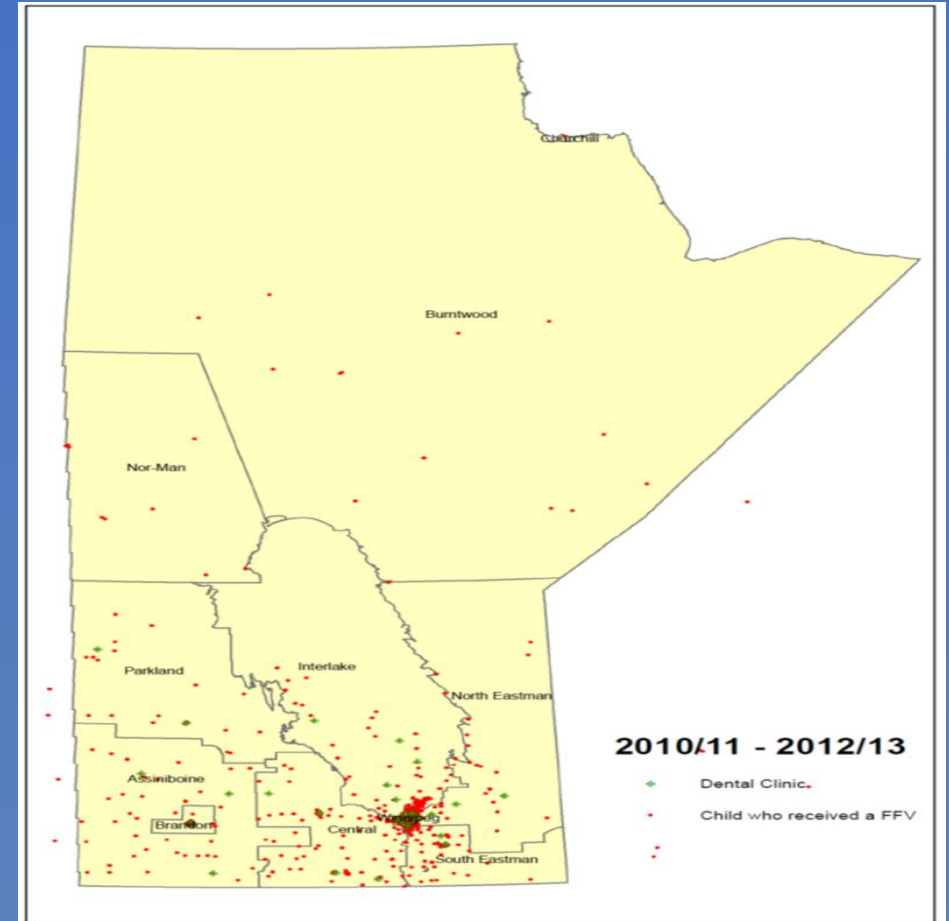
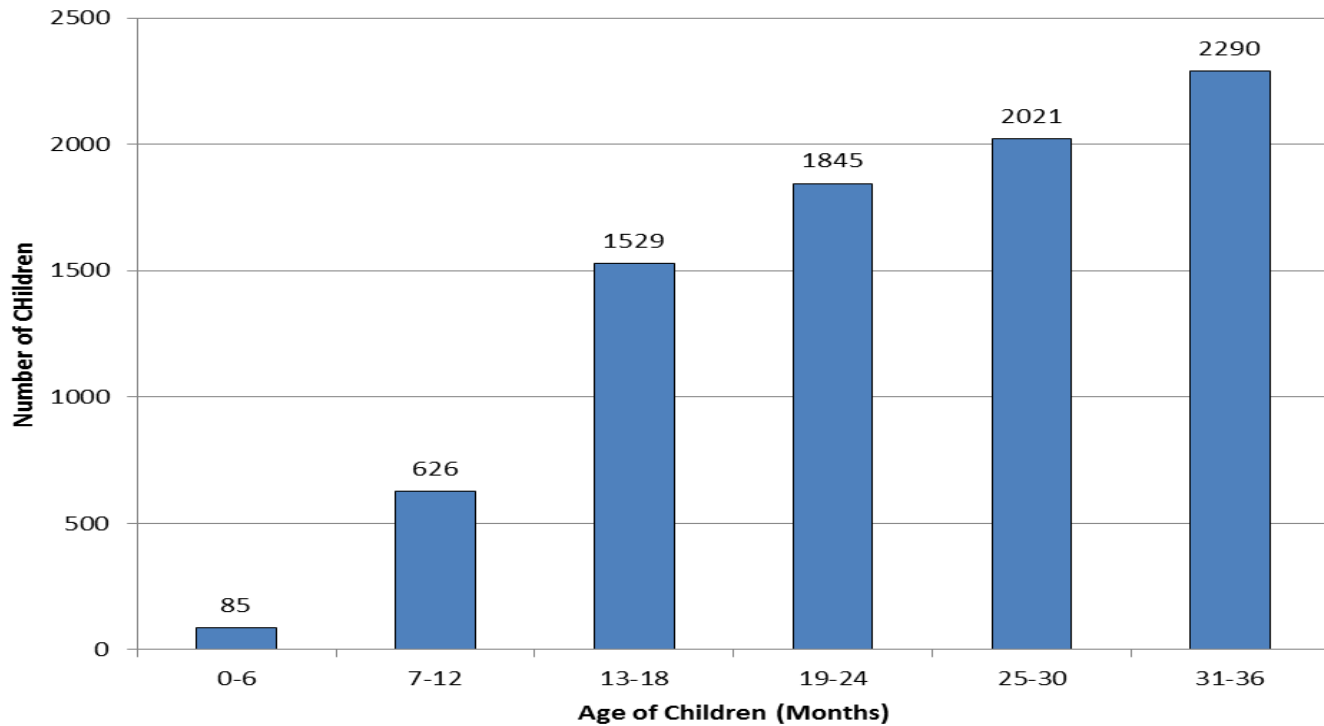
[PDF version of the course content](#)

2. Promote Early Visits to the Dentist

- The Canadian Dental Association encourages dental assessments of infants **within 6 months of the eruption of the first tooth or by one year (12 months) of age**
- At the first dental visit, the infant's risk of caries should be assessed and discussed with a parent or caregiver
- The goal is to have children visit the dentist before there is a problem
- Establishment of a dental home



Manitoba Dental Association's Free First Visit Program



FREE FIRST VISIT IT'S FREE IF YOU'RE **UNDER THREE!** [find out more](#)

3. Provide Information on Diet & Nutrition

- Caring for baby teeth begins before baby arrives.
- Vitamin D and calcium are essential building blocks for strong teeth.
- Give your child dental friendly snacks like fruit, vegetables, and cheese. Vitamin D rich foods and supplements may also help prevent cavities.

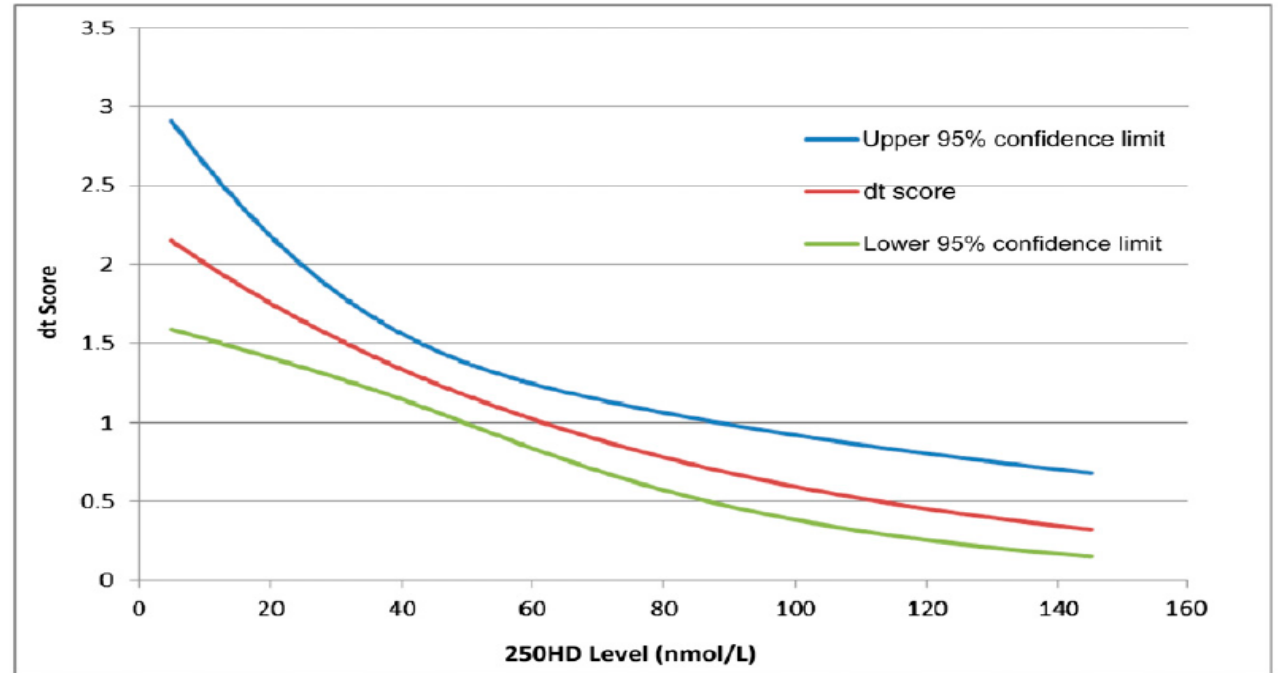


FIGURE 1

Predicted number of decayed primary teeth (dt score) according to 250HD level.

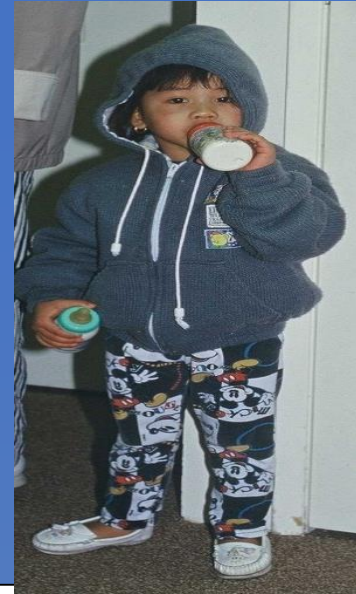
Prenatal Vitamin D and Dental Caries in Infants

Robert J. Schroth, Christopher Lavelle, Robert Tate, Sharon Bruce, Ronald J. Billings
and Michael E.K. Moffatt

Pediatrics; originally published online April 21, 2014;
DOI: 10.1542/peds.2013-2215

4. Talk about Weaning & Good Infant Feeding Choices

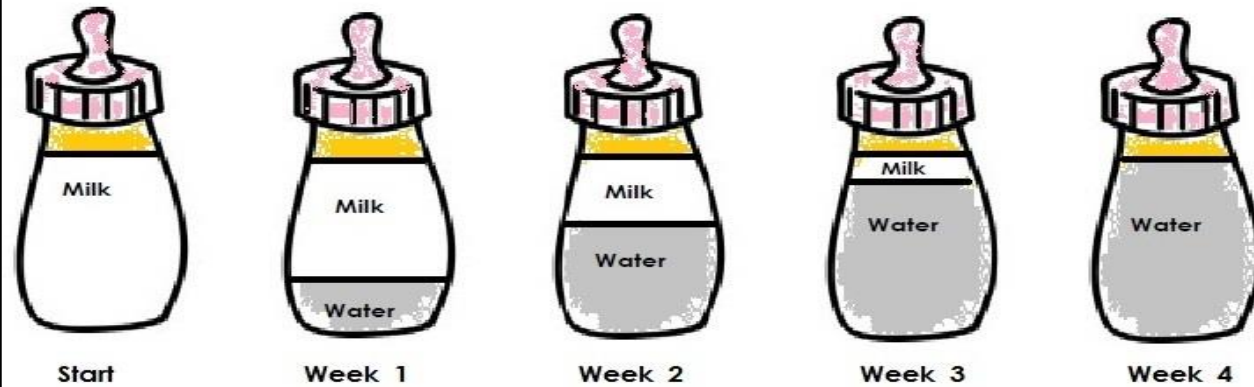
- Breast-feed. Not only is it natural, but it is also lowers the risk for decay.
- For those choosing to bottle-feed, limit bottles to feeding times only and wean your child from the bottle by 14-18 months.
- Avoid bottles at bedtime. While milk and juice appear healthy they contain sugars, which can lead to cavities. Only plain water is safe in the bedtime bottle.



Those having trouble weaning a child off of a bottle by age 1, or if the child is used to falling asleep with a bottle of milk can try gradually introducing water into the bottle.

Increase the amount of water slightly each week for a 4-6 week period.

By week 4-6, the child will either continue to take the water bottle or avoid the bottle entirely reducing the risk for early childhood tooth decay.



5. Talk about Limiting Sugar

Think About Your Baby's Teeth

prevent early childhood tooth decay
sweet drinks are not meant for sippy cups and bottles

Powdered Drink Mixes
13 Sugar Cubes**

Unsweetened Apple Juice
12 Sugar Cubes**

Cola Drink
12 Sugar Cubes**

Plain Water
0 Sugar Cubes**

You Can Prevent Early Childhood Tooth Decay

- Breastfeed
- Brush baby teeth whether breastfeeding or bottle-feeding
- Wipe gums daily from birth and then brush teeth twice daily
- Plain water only in bedtime bottle or sippy cup
- Avoid constant sipping of sweet drinks between meals*
- Stop using bottle and sippy cup by 14 months
- Take special care of your teeth during pregnancy
- Severe early childhood tooth decay can affect your baby's health

* Every sip of a sweet drink causes teeth to be attacked by cavity-causing bacteria for 20 minutes.
** Sugar content in 1 cup (8 ounces)

Brush Baby Teeth

Healthy Smile Happy Child Project 2004 (The Manitoba Collaborative Project for the Prevention of Early Childhood Tooth Decay)
Special thanks to Roseau River First Nation Community for their contribution

For more information about early childhood tooth decay contact your local dentist, dental therapist, physician, nurse or the Manitoba Dental Association.
Photo Source: Health Canada website and Media Photo Gallery, Health Canada, <http://www.hc-sc.gc.ca> Reproduced with the permission of the Minister of Public Works and Government Services Canada, 2004.

- Limit the number of between meal snacks and drinks containing sugar.

✓ Good for teeth

✗ Not good for teeth

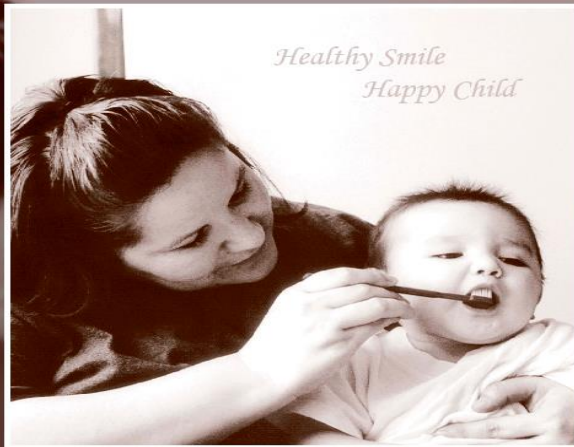
Eat food that is good for your teeth

http://www.mhba.mb.ca/healthinfo/prevention/oral_child.php

6. Oral Hygiene with the First Tooth



Thanks for taking care
of my first tooth.



*I need you to show me how to brush
my teeth until I am 8 years old.*

Healthy Smiles Happy Child, The Memphis Collaborative Project for the Promotion of Early Childhood Tooth Decay, 2008.
The poster was provided with support of the Children's Hospital Foundation of Memphis Inc.

- Begin cleaning your child's mouth with a soft cloth before teeth arrive.
- Once teeth erupt begin with a smear of toothpaste the size of a grain of rice.
- Once your child turns 3 years old use a green pea size of toothpaste.
- Most children need assistance with brushing until age 8.



7. Promote Fluoride – Toothpaste & Varnishes



BRUSH BABY TEETH!



Start brushing with fluoride toothpaste when the first tooth comes in
Adults should put toothpaste on toothbrush for young children
Fluoride protects your child's teeth from decay
Encourage and help your child brush 2 times a day: morning and night



Age 0-3 Years

Use a rice-grain sized amount of toothpaste with fluoride - if child is at risk for tooth decay*



Age 3-6 Years

Use a green pea sized amount of toothpaste with fluoride

- After brushing put toothpaste in a place where children can't reach
- Make brushing time family time
- Help your child brush their teeth until 8 years old
- Choose healthy foods from the 4 food groups for meals and snacks

*Some risk factors of early childhood tooth decay include if the child: is living in an area with non-fluoridated water, has visible plaque, has white chalky areas or cavities on teeth, has many sugary snacks/drinks between meals, teeth are not brushed daily, caregiver has tooth decay.



For more information visit Healthy Smile Happy Child at: http://www.wrha.mb.ca/healthinfo/preventill/oral_child.php
Last Revised: December 2014

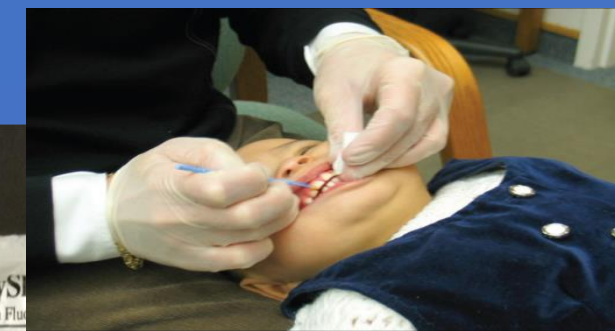
- Children at high-risk for caries needing toothpaste at early ages include:
 - living in a community with non-fluoridated water supply or low natural fluoride levels (< 0.3 ppm),
 - enamel defects, incipient caries (i.e. white chalky spots), or cavities,
 - frequent intake of sugary snacks/drinks between meals (including bottle or sippy cup containing liquids other than water and sweetened medications),
 - special health care needs that limit cooperation with brushing and oral hygiene,
 - teeth are not brushed daily,
 - premature birth and low birth weight,
 - parent or caregiver has tooth decay,
 - visible plaque on teeth.



Fluoride Varnish

CHANGE IN PRACTICE:

- Fluoride varnish recommended at least every 3 to 6 months for children < 6 years of age (American Dental Association 2013)



Smiles for Life: A National Oral Health Curriculum

Smiles for Life
A national oral health curriculum

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CME and CNE | Oral to Systemic | Children | Adult | Acute Dental Problems | Pregnant Patients | **Fluoride Varnish** | The Oral Exam | Geriatric | Resources

Module 6: Fluoride Varnish

Description

This module focuses on caries prevention. It offers a brief review of Early Childhood Caries (ECC) and address how the use of fluoride is part of a comprehensive approach to a child's oral health. Specifically, clinicians will learn the benefits, appropriate safety precautions, and dosing for fluoride, as well as how to apply fluoride varnish and provide adequate follow-up care.

[Register to Download](#)

Module 6: Fluoride Varnish

Last Modified: October , 2011

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A Product of: **STFM** SOCIETY OF TEACHERS OF FAMILY MEDICINE | Endorsed by: **GAPNA** Gerontological Advanced Practice Nurses Association | **ADA** American Dental Association® America's leading advocate for oral health | **Pediatric Nurse Practitioners**



8. Learn to do Caries-Risk Assessment

Table 1. Caries-risk Assessment Form for 0-3 Year Olds^{59,60}
(For Physicians and Other Non-Dental Health Care Providers)

Factors	High Risk	Low Risk
Biological Mother/primary caregiver has active cavities Parent/caregiver has low socioeconomic status Child has >3 between meal sugar-containing snacks or beverages per day Child is put to bed with a bottle containing natural or added sugar Child has special health care needs Child is a recent immigrant	 Yes Yes Yes Yes Yes Yes	
Protective Child receives optimally-fluoridated drinking water or fluoride supplements Child has teeth brushed daily with fluoridated toothpaste Child receives topical fluoride from health professional Child has dental home/regular dental care		 Yes Yes Yes Yes
Clinical Findings Child has white spot lesions or enamel defects Child has visible cavities or fillings Child has plaque on teeth	 Yes Yes Yes	

Circling those conditions that apply to a specific patient helps the health care worker and parent understand the factors that contribute to or protect from caries. Risk assessment categorization of low or high is based on preponderance of factors for the individual. However, clinical judgment may justify the use of one factor (eg, frequent exposure to sugar containing snacks or beverages, visible cavities) in determining overall risk.



Overall assessment of the child's dental caries risk: High Low





Oral Health Risk Assessment Tool

The American Academy of Pediatrics (AAP) has developed this tool to aid in the implementation of oral health risk assessment during health supervision visits. This tool has been subsequently reviewed and endorsed by the National Interprofessional Initiative on Oral Health.

Instructions for Use

This tool is intended for documenting caries risk of the child, however, two risk factors are based on the mother or primary caregiver's oral health. All other factors and findings should be documented based on the child.

The child is at an absolute high risk for caries if any risk factors or clinical findings, marked with a  sign, are documented yes. In the absence of  risk factors or clinical findings, the clinician may determine the child is at high risk of caries based on one or more positive responses to other risk factors or clinical findings. Answering yes to protective factors should be taken into account with risk factors/clinical findings in determining low versus high risk.

Patient Name: _____ Date of Birth: _____ Date: _____		
Visit: <input type="checkbox"/> 6 month <input type="checkbox"/> 9 month <input type="checkbox"/> 12 month <input type="checkbox"/> 15 month <input type="checkbox"/> 18 month <input type="checkbox"/> 24 month <input type="checkbox"/> 30 month <input type="checkbox"/> 3 years <input type="checkbox"/> 4 years <input type="checkbox"/> 5 years <input type="checkbox"/> 6 years <input type="checkbox"/> Other _____		
RISK FACTORS	PROTECTIVE FACTORS	CLINICAL FINDINGS
<ul style="list-style-type: none">  Mother or primary caregiver had active decay in the past 12 months <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Mother or primary caregiver does not have a dentist <input type="checkbox"/> Yes <input type="checkbox"/> No 	<ul style="list-style-type: none"> <input type="checkbox"/> Existing dental home <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Drinks fluoridated water or takes fluoride supplements <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Fluoride varnish in the last 6 months <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Has teeth brushed twice daily <input type="checkbox"/> Yes <input type="checkbox"/> No 	<ul style="list-style-type: none">  White spots or visible decalcifications in the past 12 months <input type="checkbox"/> Yes <input type="checkbox"/> No  Obvious decay <input type="checkbox"/> Yes <input type="checkbox"/> No  Restorations (fillings) present <input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> <input type="checkbox"/> Continual bottle/sippy cup use with fluid other than water <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Frequent snacking <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Special health care needs <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Medicaid eligible <input type="checkbox"/> Yes <input type="checkbox"/> No 		<ul style="list-style-type: none"> <input type="checkbox"/> Visible plaque accumulation <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gingivitis (swollen/bleeding gums) <input type="checkbox"/> Yes <input type="checkbox"/> No
		<ul style="list-style-type: none"> <input type="checkbox"/> Teeth present <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Healthy teeth <input type="checkbox"/> Yes <input type="checkbox"/> No
ASSESSMENT/PLAN		
Caries Risk: <input type="checkbox"/> Low <input type="checkbox"/> High Completed: <input type="checkbox"/> Anticipatory Guidance <input type="checkbox"/> Fluoride Varnish <input type="checkbox"/> Dental Referral	Self Management Goals: <input type="checkbox"/> Regular dental visits <input type="checkbox"/> Dental treatment for parents <input type="checkbox"/> Brush twice daily <input type="checkbox"/> Use fluoride toothpaste <input type="checkbox"/> Wean off bottle <input type="checkbox"/> Less/No juice <input type="checkbox"/> Only water in sippy cup <input type="checkbox"/> Drink tap water <input type="checkbox"/> Healthy snacks <input type="checkbox"/> Less/No junk food or candy <input type="checkbox"/> No soda <input type="checkbox"/> Xylitol	

Treatment of High Risk Children

If appropriate, high-risk children should receive professionally applied fluoride varnish and have their teeth brushed twice daily with an age-appropriate amount of fluoridated toothpaste. Referral to a pediatric dentist or a dentist comfortable caring for children should be made with follow-up to ensure that the child is being cared for in the dental home.

Adapted from Ramos-Gomez FJ, Crystal YO, Ng MW, Crall JJ, Featherstone JD. Pediatric dental care: prevention and management protocols based on caries risk assessment. *J Calif Dent Assoc.* 2010;38(10):746-761; American Academy of Pediatrics Section on Pediatric Dentistry and Oral Health. Preventive oral health intervention for pediatricians. *Pediatrics.* 2003; 122(6):1387-1394; and American Academy of Pediatrics Section of Pediatric Dentistry. Oral health risk assessment timing and establishment of the dental home. *Pediatrics.* 2003;111(5):1113-1116.

The recommendations in this publication do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate. Copyright © 2011 American Academy of Pediatrics. All Rights Reserved. The American Academy of Pediatrics does not review or endorse any modifications made to this document and in no event shall the AAP be liable for any such changes.

Key Messages



Breastfeeding and Baby's Teeth

- ☐ Breastmilk is the most natural and nutritious food for an infant.
- ☐ Health Canada recommends exclusive breastfeeding for the first 6 months.
- ☐ Breastfeeding helps baby develop a strong jaw and healthy teeth.
- ☐ Breastfed infants are at a lower risk of developing early childhood tooth decay but they are not free from developing decay.



Did You Know...

Breastfed babies need Vitamin D drops to help develop healthy teeth.



- ☐ Tooth decay happens when teeth are exposed to liquids and solids containing sugars for long periods of time.
- ☐ All milk, even your breastmilk, contains sugar (lactose).
- ☐ Breastmilk alone has a low chance for causing decay, but once other foods and drinks high in sugar are added to the diet the chance for decay is much greater.¹
- ☐ Baby teeth have thinner enamel which puts them at more risk for decay.

Taking Care of Baby's Teeth

- ☐ Use a clean damp cloth to wipe baby's gums daily.
- ☐ Brush baby's first tooth with a soft toothbrush and water.
- ☐ **Children from birth to 3 years of age:** ask your dental professional if your child is at risk for tooth decay*

→ *If child is at risk*, use a small amount (the size of a grain of rice) of fluoride toothpaste.



Photos derived from: http://www.cdc.gov/flu/pastorize_images/fluoride-English-2010-06

* A child may be at risk of early childhood tooth decay if the child: is living in an area with non-fluoridated water, has white chalky areas or cavities, has lots of sugary snacks/drinks between meals, teeth are not brushed daily, or caregiver has tooth decay.

- ☐ Child's first dental visit should be by their first birthday.
- ☐ "Lift the lip" at least once a month to check for decay. Chalky white lines along the gum line could mean the beginning of tooth decay.

References:

1. Erickson, PR., Mazhari, E. Investigation of the role of human breast milk in caries development, *Pediatr Dent* 1999; 21(2): 86-90.

For more tips on how to prevent early childhood tooth decay, talk to your public health nurse, doctor, or your dental professional.

- Daily oral health care routines for mom during pregnancy is important.
- Breastfeeding is promoted.
- Clean infant's mouth with clean washcloth after each feeding.

Did You Know...

Fruit drinks (punch, crystals, juice) and pop have the same amount of sugar!

1 cup fruit drink = 7 teaspoons sugar



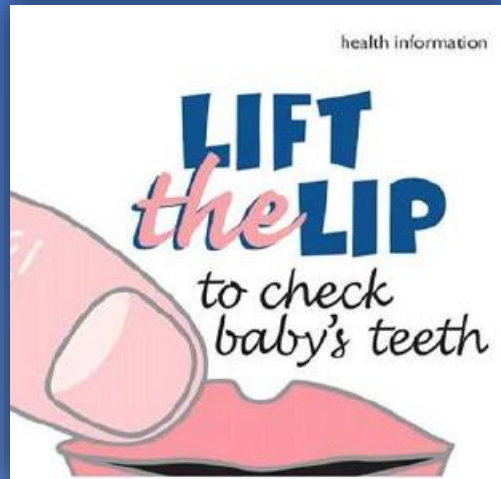
1 cup pop = 7 teaspoons sugar



This is too much sugar for baby! Instead offer small amounts of water after 6 months.



Key Messages



Stages of Early Childhood Tooth Decay

Check your child's teeth once a month for the first signs of tooth decay.

- Healthy Teeth**
Continue daily brushing and flossing. Visit dental office by first birthday.
- Whitish lines** along the gum line could be tooth decay starting. Visit dental office as soon as possible.
- Brown areas** or decayed spots (cavities) along gum line. Visit dentist right away.
- Severe Decay** or broken tooth enamel. Visit dentist right away.

606134 © Alberta Health Services, (2009/01)

Healthy Smile Happy Child
Alberta Health Services

➤ **Lift the lip once a month to check for tooth decay.**



Key Messages

Think About Your Baby's Teeth

prevent early childhood tooth decay
sweet drinks are not meant for sippy cups and bottles

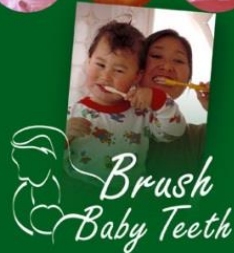


➤ Only put water in bottle at night

You Can Prevent Early Childhood Tooth Decay

- Breastfeed
- Brush baby teeth whether breastfeeding or bottle-feeding
- Wipe gums daily from birth and then brush teeth twice daily
- Plain water only in bedtime bottle or sippy cup
- Avoid constant sipping of sweet drinks between meals *
- Stop using bottle and sippy cup by 14 months
- Take special care of your teeth during pregnancy
- Severe early childhood tooth decay can affect your baby's health

* Every sip of a sweet drink causes teeth to be attacked by cavity-causing bacteria for 20 minutes.
** Sugar content in 1 cup (8 ounces)




Healthy Smile Happy Child Project 2004 (The Manitoba Collaborative Project for the Prevention of Early Childhood Tooth Decay)
Special thanks to Roseau River First Nation Community for their contribution

For more information about early childhood tooth decay contact your local dentist, dental therapist/hygienist, physician, nurse or the Manitoba Dental Association. The Healthy Smile Happy Child Action Plan and Toolkit manual is available at www.whc.mb.ca
Photo Source: Health Canada website and Media Photo: Gallery, Health Canada, <http://www.hc-sc.gc.ca> © Reproduced with the permission of the Minister of Public Works and Government Services Canada, 2004.




Key Messages

after a year,
it's time to use those bottles
for something else



Extended
bottlefeeding
can damage
your child's
smile.

 Healthy Smiles
Happy Child

Reprinted with permission of the Massachusetts WIC Nutrition Program

- Wean the bottle/sippy cup by 12-14 months



Key Messages

Only give me drinks that are healthy for my teeth.

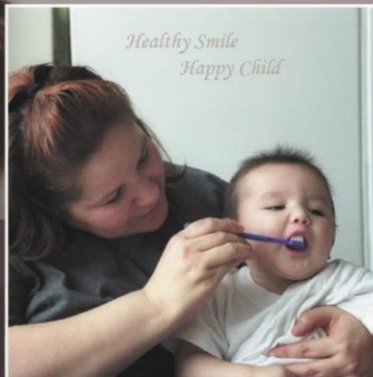


*Healthy Smile
Happy Child*

Juice, drink crystals, and pop have too much sugar and can damage my smile.

Healthy Smile Happy Child. The National Collaborative Program for the Prevention of Baby Tooth Decay. 2008. The parent and provider who support the prevention of childhood tooth decay.

Thanks for taking care of my first tooth.




*Healthy Smile
Happy Child*

I need you to show me how to brush my teeth until I am 8 years old.

Healthy Smile Happy Child. The National Collaborative Program for the Prevention of Baby Tooth Decay. 2008. The parent and provider who support the prevention of childhood tooth decay.

Thanks for helping me brush my teeth everyday.



*Healthy Smile
Happy Child*

My baby teeth are important for me to learn how to eat, speak and be healthy.

Healthy Smile Happy Child. The National Collaborative Program for the Prevention of Baby Tooth Decay. 2008. The parent and provider who support the prevention of childhood tooth decay.

Thanks for helping to take care of my smile.



Healthy Smile, Happy Child

Help me celebrate my first birthday with a trip to the dentist.

Healthy Smile Happy Child. The National Collaborative Program for the Prevention of Baby Tooth Decay. 2008. The parent and provider who support the prevention of childhood tooth decay.

➤ Avoid prolonged use of sippy cup

➤ Child's first visit to dentist by 1st birthday.

➤ Help child brush their teeth until they are 8 years old

➤ Brush child's teeth two times everyday



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EARLY CHILDHOOD TOOTH DECAY

Healthy Smile Happy Child Pamphlets

Healthy Smile Happy Child: Prenatal Information

 English	 French
 Cree	

Healthy Smile Happy Child: Newborn to 6 Years

 English	 French
 Cree	

Mouth Care for Your Baby: Newborn

 English	 French
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Healthy Smile Happy Child: 2 Months

 English	 French
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- [Outbreak of Infectious Syphilis](#)
- [Tobacco Reduction](#)
- [Early Childhood Tooth Decay](#)
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Lets Work Together!



**We can make
a difference in
the lives of
Manitoba
children!**





QUESTIONS

???

