

**BEST AND PROMISING PRACTICES
FOR THE PREVENTION OF ECC
(*EARLY CHILDHOOD CARIES*)**

Executive Summary

Best and Promising Practices for the Prevention of ECC (Early Childhood Caries): Lessons for Saskatchewan

Report prepared for the

saskatchewan
preventioninstitute
our goal is **healthy** children

March 31, 2011

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Preface

This literature review was conducted by the Saskatchewan Prevention Institute to explore the etiology, causes, spread, and risk factors associated with Early Childhood Caries and the best and promising practices for the prevention of Early Childhood Caries (ECC). This report is to serve as a foundational document for knowledge translation activities by the Prevention Institute in order to make information regarding ECC and its prevention accessible to a variety of professionals and the general public. Key prevention measures aimed at reducing the prevalence of ECC have been highlighted, including measures that can be taken by the Prevention Institute and other community organizations and measures that can be advocated for at the provincial or regional level.

This document reviews the impact of ECC on the well-being of the child and family, implications for the health care system, and potential alternatives to existing treatments. Prevalence rates and trends among school children in the different health regions in Saskatchewan have been highlighted in order to clarify the impact of ECC in Saskatchewan. Finally, information based on best evidence and promising practice aimed at the primary and secondary prevention of the disease is provided and prevention measures that can be undertaken by the Prevention Institute and others are highlighted.

Summary

‘Oral’ refers to ‘mouth’, and includes not only teeth, but also soft, muscular and hard tissues, which collectively form the oral cavity. As the mouth is linked to the body, so is the inseparable linkage between oral health and general health. The mouth is often referred to as the gateway/mirror to the body, as many systemic diseases, disorders or conditions have oral manifestation and may be the earliest predictor or a best indicator of a future occurrence. For example: gingival hyperplasia (excessive growth of gum tissue due to increase in the number of cells) is an early diagnostic indicator for acute monocytic leukemia¹ (Demirer, Özdemir, Şencan, & Marakoglu, 2007). One cannot be healthy without a healthy mouth. Dental health care providers are in a unique position to identify, diagnose and treat some of the life threatening conditions that occur systemically, but have an oral presentation.

Oral health care needs vary but encompass all ages. Poor oral health disproportionately affects people living in low socio-economic status environments, rural communities (e.g., geographical barriers in accessing dental care) and aboriginal populations. Oral health may affect a child’s growth and development, social behaviour, nutrition (e.g., avoiding food due to dental pain), learning and overall well-being. The importance of good oral health among children, including the absence of Early Childhood Caries, cannot be overemphasized.

¹ Leukemia: Disease of blood forming organs of the body, characterized by uncontrolled proliferation of white blood cells and their precursors in the blood or in the bone marrow.

Early Childhood Caries (ECC) is a condition that affects children. ECC may occur as early as the eruption of a child's first tooth and the negative impacts of ECC may affect the second set of teeth (commonly known as adult teeth). ECC is 100% preventable.

This report explores the effects of ECC on the quality of life for a child, the financial burden on the family, implications for the health care system and alternatives to existing strategies. The risk factors associated with the etiology, transmission and management of ECC is also provided. The report provides a comprehensive summary of published literature, highlighting the best available prevention practices that could be applied in Saskatchewan, including primary, secondary and tertiary preventive measures that can be applied at the individual, family and community level.

These include the development of resources to be disseminated for public and professional education, provision of educational opportunities for professionals and advocacy to government and professional groups to expand their existing programs. To support the conclusions and recommendations made, the history of dental health care services in Saskatchewan is discussed and attention is drawn to some of the findings from the provincial oral health status report for Grade 1 and 7 children. Of particular interest is the information regarding the prevalence of ECC among the various health regions and trends over the past two decades in Saskatchewan, including a rise in ECC numbers in recent years, indicating that dental caries in early childhood remains as a neglected epidemic.

Listed below are the Key Prevention Measures that have been highlighted in the report. These have been divided into those measures that could be implemented by the Saskatchewan Prevention Institute and other community organizations, and those that require advocacy to Government.

Key Prevention Measures for Community Organizations:

- Knowledge Transfer to Non-Dental Professionals about Childhood Oral Health
- Develop Dental Health Teaching Aids
- Conduct Conferences, Workshops, Continuing Education Sessions, Family Oral Health Education
- Program Evaluation
- Conduct Dental Health Needs Assessment in Saskatchewan
- Family Oral Health Education
- Establish Dental Home²
- Reduce Levels of Caries-Causing Biological Agent

Key Prevention Measures at the Government Level:

- Support Community Water Fluoridation
- Fluoride Labels on Bottled Drinking Water
- Fluoride Varnish Clinics
- Use of Mass Media Campaigns
- Evaluation

² Refer to definitions section for a detailed explanation.

To assist in determining which of the highlighted prevention measures would be most appropriate at this time for Saskatchewan, the Prevention Institute will be conducting a scan of existing resources and programs, along with a Needs Assessment, throughout the province.

The goal of the Saskatchewan Prevention Institute is to help children be as healthy as they can be. The premise of this report is that good oral health in childhood contributes to good health overall, and that ECC is 100% preventable. This report highlights the importance of eliminating the root causes of ECC, which will in turn help children to be as healthy as they can be.

To obtain a copy of the full report, or to request further information please contact:

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