Partnering to Reverse the Trend: Early Childhood Caries Conference Report
September 28–29, 2007, Calgary, Alberta

More than 250 allied professionals and community stakeholders gathered in Calgary to learn about the latest research on early childhood caries and explore how they can work together in new ways to reduce the rates of this increasingly common disease.

Early childhood caries has become one of the most prevalent childhood diseases worldwide. After decades of decline, it has begun to increase in children. This preventable disease profoundly affects the quality of life for thousands of Canadian children and their families, and increases the burden on the health care system.

Calgary’s oral health programs and pediatric dentists formed the Early Childhood Caries Taskforce to address the issue, which led to this seminal conference. The aim was to provide the dental community and non-dental stakeholders with an opportunity to focus on the current science behind early childhood caries, the roles of family and community, and to explore collaborative new pathways to prevent the disease.

Forum for Active Participation

Partnering to Reverse the Trend: Early Childhood Caries Conference was hosted by the Calgary Health Region and the Canadian Academy of Pediatric Dentistry. The conference provided a forum for participation by a wide range of delegates, including dental professionals from private practice and public health, academics, pediatricians, child development professionals and representatives of dental professional bodies, government and community organizations serving families with young children and disadvantaged populations.

The models for early childhood caries prevention that have been used in the past seem inadequate, and initiatives need to expand beyond dentistry to involve other professions and community interests. This diverse group of delegates learned that some segments of the population are experiencing the worst level of childhood caries ever. They were challenged to look at the problem from their perspectives and bring that view to a new understanding of the disease. As the conference closed, everyone was encouraged to make a personal commitment to taking action.

In particular, the conference sought to:
- Explore the knowledge base of early childhood caries with a focus on new research.
- Review early childhood caries risk factors and behaviours and include the perspectives of caregivers and interdisciplinary professionals.
- Review, discuss and generate interdisciplinary strategies to minimize early childhood caries (biological, psychosocial, public health, prevention, policy change and access to care).
- Collect information for presentation in formal documentation.

The inclusion of two dozen community stakeholders who work with young children...
and at risk families brought an exciting and motivational flavour to the event. The stakeholders represented various health and social concerns:
- Aboriginal health
- community health
- education
- government health benefits
- immigrant and refugee health
- nutrition
- pediatrics
- poverty reduction
- primary health care
- social work

Different Perspectives

The first half of the conference focused on joint discovery and discussion. Delegates heard presentations from these speakers:

**Overview of early childhood caries as viewed by a pediatric dentist**
Dr. Ross Anderson, head, division of pediatric dentistry, Faculty of Dentistry, Dalhousie University, and chief of dentistry, IWK Health Centre, Halifax, Nova Scotia

**Local, provincial and national data about the extent of early childhood caries, cost of care, issues around access**
Dr. Luke Shwart, manager for community oral health services for the Calgary Health Region and Dr. Peter Cooney, chief dental officer for Health Canada

**The medical perspective of early childhood caries: contributing factors and consequences**
Dr. Glenn Berall, gastroenterologist and nutrition specialist, chief of pediatrics at North York General Hospital and assistant professor, department of pediatrics, University of Toronto

**The scientific background of early childhood caries prevention: what works and what doesn’t**
Dr. Jacques Véronneau, assistant professor in the faculty of dentistry at McGill University and a specialist in dental public health for the Cree Nation, James Bay, Quebec

**The broader context of early childhood caries: impact on the family and diverse communities, the social determinants of health, upstream and downstream strategies**
Dr. Rosamund Harrison, professor and chair of pediatric dentistry, University of British Columbia

Stimulating discussion followed the presentations and included dialogue about infectivity of dental caries, fluoridation, use of products to reduce caries risk, infant feeding practices, healthy school guidelines, impact of stress, genetic component, high-risk populations, parental responsibility, public policy, cross-disciplinary action and leadership.

Collaborative Strategies

The second half of the conference focused on collaborative brainstorming and action planning. To begin, the 6 presenters were asked: “If you had a question, the answer to which would make the most difference in reversing early childhood caries, what would that question be?” The questions proposed by the presenters were:

1. How can we create a national awareness of early childhood caries as a health issue for politicians, caregivers and families?
2. What is the most effective way to change the determinants of early childhood caries in Canada?
3. How can we work together to decrease the number of families living in poverty in Canada?
4. How can we get the public to understand that oral disease in general among kids is the number one chronic disease in Canada. How then do we impart the idea that there are the same risk factors related to oral health as there are for other chronic diseases?
5. When will we have a vaccine against tooth decay?
6. How can we open the medical model to a community model to reach caregivers and make everyone responsible for those children to take it on?

Thought-provoking discussion included challenges in the Aboriginal population; health promotion messages and risk behaviours; opportunities for collaboration; understanding of disease transmission and screening; payment for anticipatory guidance; terminology; coordinated prenatal screening and early childhood screening; educating other health professionals; reporting early childhood caries; dental neglect and ensuring equal access to dental care; coping with increased demand on the dental profession; and enlisting corporate support to cover costs of screening.

The conference facilitator led delegates through a brainstorming process using the 5 key methodologies found in the Ottawa Charter for Health Promotion. Discussion and a voting process selected these 5 key strategies as a place to start.

Creating supportive environments (establishing policies that support healthy physical, social and economic environments)

Strategy: Use agency structures and existing tools to encourage a healthy environment for children’s oral and general health, e.g., Canada’s Food Guide, multidisciplinary workforce, well-baby clinics, health care professional curricula and dental coverage for children under 4 years of age.

Reorienting health services (identifying opportunities in health care for addressing the determinants of health, counteracting inequalities from how health services are organized)

Strategy: National policy with joint responsibility of health care system and caregivers (medical assessments in infancy, consistent messaging among dentists, allied health groups and child care professionals) to take action on early childhood caries to promote health care, address “damage control,” prevent dental neglect and ensure availability of prevention and treatment dollars.

Building healthy public policy (developing health-enhancing policies, supporting healthy choices and promoting healthy living and working conditions)

Strategy: Ensure governments include oral health in overall health programs, with the goal of improving childhood health for Canadian children. Policies need to address the barriers to good oral health from the perspective of communities and include the clients and providers.

Developing personal skills (improving an individual’s behaviour that will enable that individual to deal effectively with the demands and challenges of everyday life)

Strategy: Piggyback skill development, relationship building and follow-up with other community health/health promotion programs, e.g., link to well-baby clinics and other places where child is seen on a regular basis.

Strengthening community action (collective efforts by a community to increase control over the factors that influence health)

Strategy: Social marketing targeted at public and health professionals.

Some presenters and delegates noted that, if new strategies are undertaken, the group must ensure there is evidence before selecting initiatives, build on learnings from other health issues, not overlook the determinants of health, involve other health disciplines, coordinate local and national efforts, measure the effectiveness of initiatives that are undertaken and be prepared to address access to care issues if more families seek dental care for their children before they reach age 1.

Many disciplines can play important roles in the effort to reduce early childhood caries. These common themes emerged:

- Terminology should change to ‘early childhood dental disease’ (instead of early childhood caries) to more accurately reflect the seriousness of the situation (see Debate article on p. 929).
Observations

The planning committee was struck by the delegates’ passionate concern for the topic and for the children affected. One presenter remarked, “Before coming here I thought I was alone. And now I see another 250 of you who care.” Delegates engaged vigorously in the strategizing process. Some ideas targeted all socioeconomic groups and others focused more directly on those living in poverty. The common understanding is that early childhood caries is a general health issue, not just a dental issue.

It is time for multidisciplinary groups to work collaboratively on a national level to combat early childhood caries. The next step is to explore leadership possibilities for such collaboration. Funding must be secured to support communication between groups and to develop initiatives. In the meantime, delegates are starting to follow through on the personal commitments they made at the conference.

Conclusion

Early childhood caries is a complex and common disease. Although it affects families from all facets of society, it stalks the disadvantaged, and despite treatment, recurs too often. Evidence-informed strategies for preventing and minimizing the disease exist, but require more research and action at a young age before most children ever see a dental professional. Dental professionals should spearhead efforts to involve health and allied professionals working with young families to help prevent the disease.

The conference planning committee expresses its appreciation to the Calgary Health Region and the Canadian Academy of Pediatric Dentistry for hosting the conference, and to the Alberta Dental Association and College, Health Canada, GC America Inc., RBC Royal Bank, Henry Schein Ash Arcona, Patterson Dental, Oral B, Sunstar, Calgary and District Dental Society and the College of Registered Dental Hygienists of Alberta for their generous sponsorship.

Early Childhood Caries Conference Planning Committee
Dr. Allan Narvey (co-chair), Dr. Luke Shwart (co-chair), Vickie McKinnon, Linda Lathrop (facilitator), Dr. Krista Baier, Dr. Robert Barsky, Andrea Blakie, Dr. Warren Loepky and Pauline White.

The speakers’ presentations and other strategies identified by conference delegates can be viewed on the conference website: www.ecc-calgary.ca.