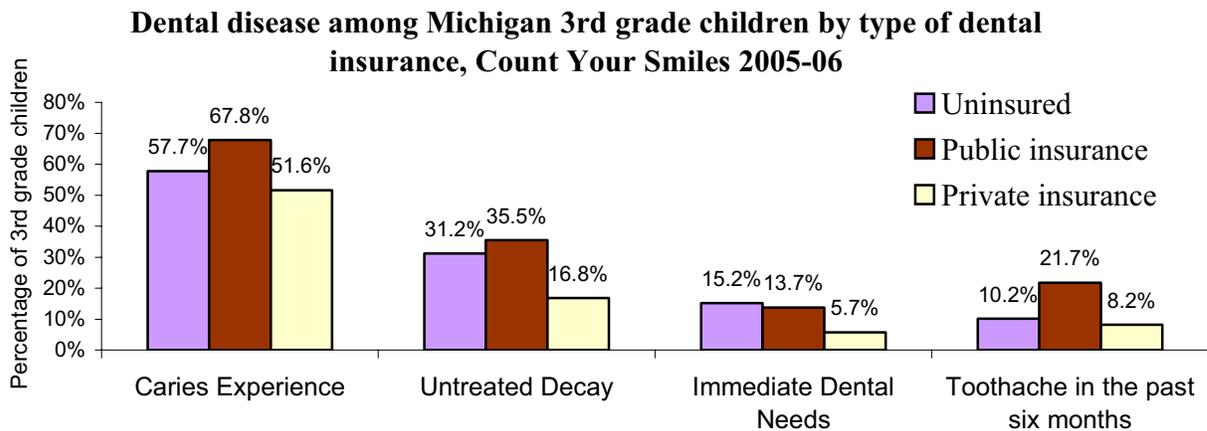




Topic: Oral Health

**28. Improving Oral Health Among Third Grade Children**

Dental caries (tooth decay) is the single most common chronic childhood disease. In Michigan, 28% of children account for 75% of the disease. Nearly one in ten third grade children in Michigan have immediate dental care needs with signs or symptoms of pain, infection or swelling. One in eight parents of 3rd grade children report that their child had a toothache when biting or chewing in the past six months. One in four Michigan 3rd grade children has untreated dental disease.



***How are we doing?***

Early childhood caries (ECC) is rampant caries of the primary dentition of infants and toddlers caused by frequent and prolonged exposure to carbohydrates (sippy cups, putting the baby to bed with a bottle of milk or other liquid other than water). Approximately 38% of children 1-2 years of age and 56% of children 2-3 years of age experience ECC.

Lack of dental insurance poses a significant barrier to obtaining dental care for children. Nearly one in six 3rd grade children (15.1%) lack dental insurance – twice the number of Michigan children who lack medical insurance. Uninsured children have significantly more dental disease and substantially less access to dental services.

***How does Michigan compare with the U.S.?***

In comparison to the United States, Michigan remains close in many measures. In Michigan, 25% of children, ages 6-8 have untreated dental decay while in the U.S. 29% of children do. Michigan has 58% of children with caries experience in their primary or permanent teeth, age 6-8, while the U.S. has 52%. Only 23.3% of 3rd grade children in Michigan had sealants present on first molar teeth, ranking Michigan in the bottom quartile of the nation in lack of a dental sealant program.

Michigan exceeds the U.S in community water fluoridation. While only 67% of the U.S. has water fluoridation, 87% of Michiganders have community water fluoridation.

***How are different populations affected?***

Sealant rates varied geographically with Michigan’s lowest rate of 19.2% occurring in the Southern Lower Peninsula. Sealant rates were similar across racial and ethnic groups except in Hispanic children



whose sealant rate was 14.6%. Uninsured children had significantly lower sealant rates, 16.8% compared to publicly insured, 26.7% or privately insured, 24.3%.

Roughly one in nine Michigan 3rd grade children, 11.2%, encountered problems that prevent them from obtaining dental care in the past year. Increased difficulty in obtaining dental care is common among all racial and ethnic minorities as well as children not covered by private dental insurances. Cost and a lack of dental insurance were the two most frequently cited reasons for failure to obtain dental care.

Low-income children and some racial/ethnic minorities are affected by ECC at higher rates. The social costs of ECC are enormous. In addition to the obvious pain and suffering, the social costs of ECC include: poor eating habits, speech problems, low self-esteem and distraction in learning. Disparities in populations for dental disease exist among geographic regions of the state.

### ***What is Department of Community Health doing to improve this indicator?***

The department is actively working to build a sustainable and effective oral health infrastructure to reduce the prevalence and impact of dental disease on children in Michigan. The following programs are being developed to address dental disease in children.

- The Healthy Kids Dental program is a model program in 59 counties that has greatly increased dental access for 195,000 Michigan children. Expansion of Healthy Kids to all counties in Michigan could significantly reduce dental decay in children. Child utilization of dental services in Healthy Kids counties is 60% compared to 28% for all of Medicaid.
- Dental Sealant Program for 3<sup>rd</sup> grade children in underserved areas
- Fluoride Varnish Program
  - The Michigan Oral Health Program is working with Early Head Start and Head Start facilities to pilot a fluoride varnish program for children 0-3yrs and 3-5 yrs respectively. Fluoride varnish is a protective coating that is painted on the teeth of children.
- Oral Health Intervention Program for High-Risk Pregnant Women and Infants
  - This program will include interventions to reduce the bacteria in the mouths of pregnant women and minimize the spread of bacteria to infants and possibly reduce the risk of premature and low weight births. This program will also include educational information to reduce exposure to sodas, juices, milk and other decay-causing liquids that are given in baby-bottles and sippy cups.
- Improved Utilization of PA 161
  - PA 161 allows hygienists to provide preventive dental hygiene measures (sealants, fluoride varnish) to underserved populations under relaxed dental supervision.
- Community Water Fluoridation
  - Community water fluoridation is a preventable practice that has been recognized as one of the 10 greatest achievements of the 20th century (CDC 1999). Water fluoridation reduces or eliminates disparities in preventing dental caries among different socioeconomic, racial and ethnic groups. Every \$1 invested in community water fluoridation saves \$38 dollars in averted costs.

For more information, please go to the MDCH/Oral Health web page: <http://www.michigan.gov/oralhealth>.

The following documents referenced in this section can be accessed through this hyperlink:

Oral Health Disease Burden Document, 2006

Count Your Smiles 2005-2006 Survey Report (after October 1, 2006)

State Oral Health Plan, 2006 “A Plan of Action for Improving the Oral Health Status of Michigan Residents”

Fact Sheets on Community Water Fluoridation, Fluoride Varnish and Dental Sealants.