



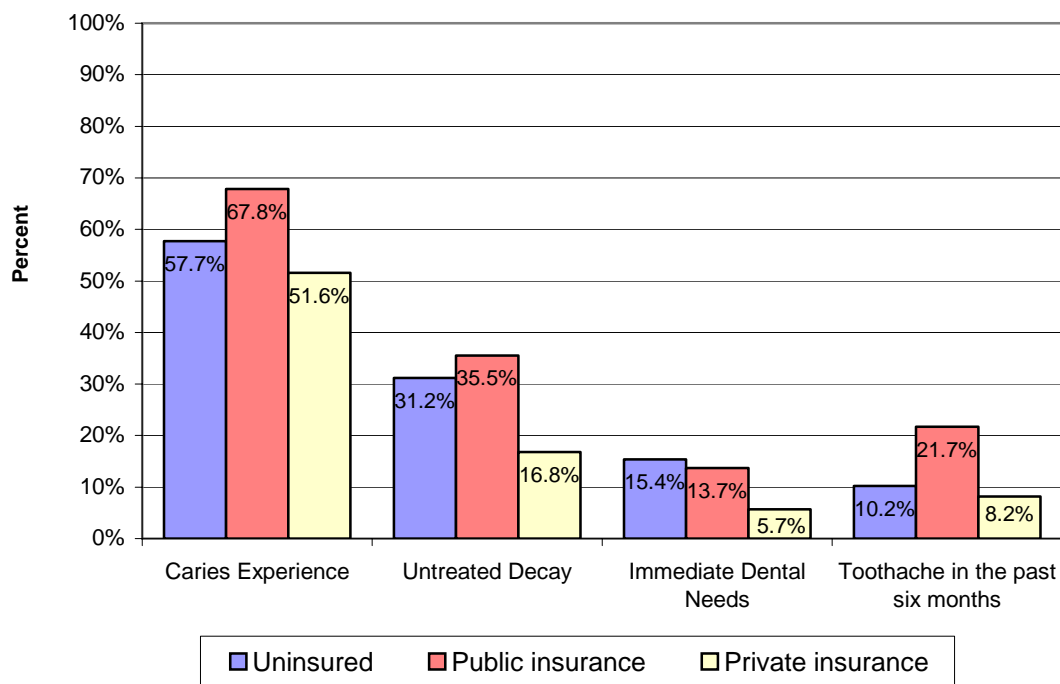
Topic: Oral Health

28. Dental Disease Among Third Grade Children

Dental caries (tooth decay) is the single most common chronic childhood disease. Measures of oral health are based upon Healthy People 2010 objectives and include: the proportion of children who have dental caries in their primary or permanent teeth; the proportion of children who have untreated dental decay; the proportion of children who have received sealants on their molar teeth; the prevalence of preventive dental care during the previous 12 months for low-income children and adolescents; and the prevalence of preventive community water fluoridation.

How are we doing?

**Dental Disease Among Michigan Third Grade Children
By Insurance Coverage, 2005 - 2006**



In Michigan, 28% of children account for 75% of dental disease. Nearly one in ten of third grade children in Michigan has immediate dental care needs, with signs or symptoms of pain, infection or swelling. One in eight parents of third grade children report that their child has had a toothache when biting or chewing in the past six months. One in four Michigan third grade children has untreated dental disease. Michigan is making progress in reducing dental disease in 59 counties with the Healthy Kids Dental Program. A recent study (*Low-Income Children Find Easy Access to Dental Care*) found dental visits were 50% higher for children enrolled in Healthy Kids Dental compared with children enrolled in the traditional Medicaid dental program.

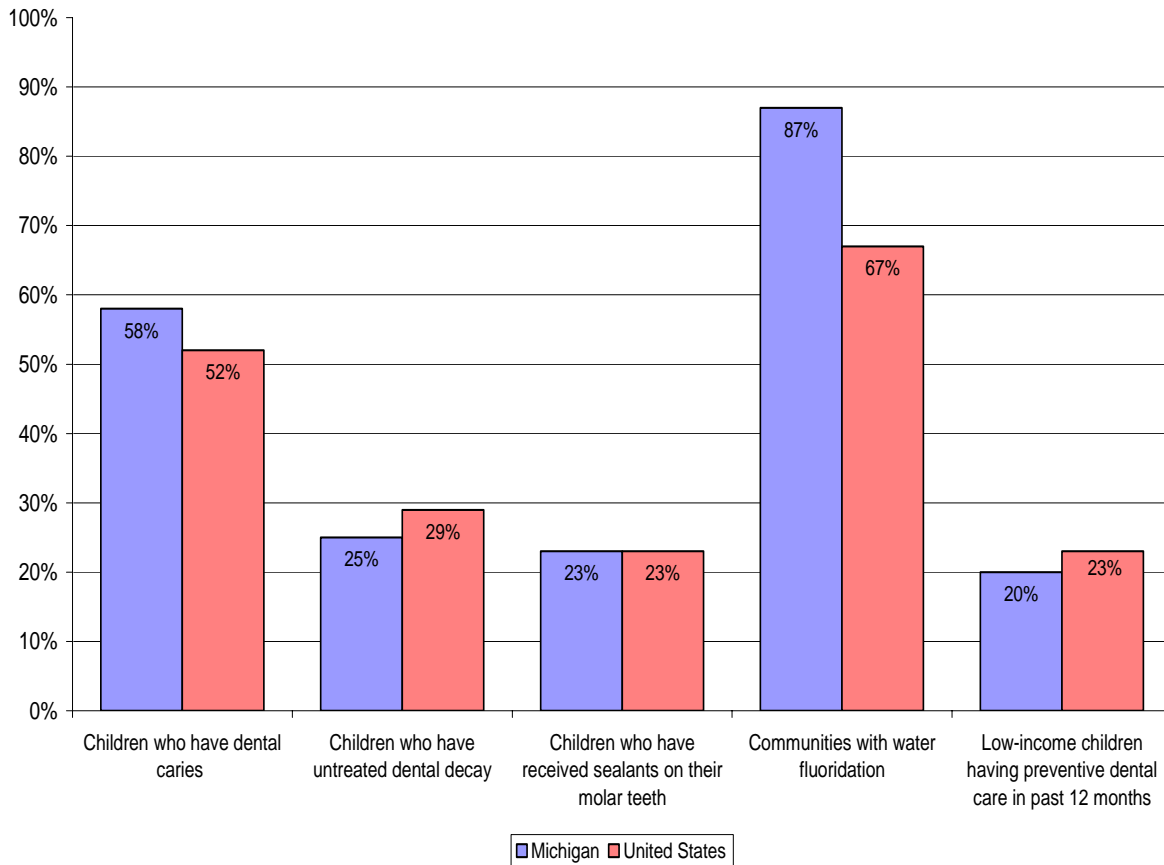
How does Michigan compare with the U.S.?

Michigan falls behind the United States average in the percentage of children with dental caries and preventative dental care. With 23% of Michigan third grade children having at least one dental sealant on a first molar, Michigan trails the Healthy People 2010 objective of 50%. Beginning in October 2007, the



MDCH Oral Health Program will launch a statewide school-based, school-linked dental sealant program targeting third grade children in schools with at least 50% participation in the free and reduced lunch program. Michigan exceeds the Healthy People 2010 objective for community water fluoridation; however, many rural areas and small community water systems do not have the decay-reducing benefit of fluoridation. Expansion of community water fluoridation could significantly reduce the number of teeth affected by dental caries.

Michigan and United States Attainment of HP2010 Objectives 2006



How are different populations affected?

Roughly one in nine Michigan third grade children, 11.2%, encountered problems that prevented 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 insurance. 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 early childhood caries (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.



Critical Health Indicators

Disparities in populations for dental disease exist among geographic regions of the state:

- Upper Peninsula and Northern Lower Peninsula children had the highest rates of caries experience and untreated decay. However, evidence suggests that expansion of community water fluoridation could significantly reduce the number of teeth that have been affected by caries in the region.
- The rural Southern Lower Peninsula had the lowest rates of sealant placement and the highest proportion of children without dental insurance. In addition, children in a free or reduced cost lunch program encountered significantly more dental disease.
- The urban Southern Lower Peninsula had the highest rates of immediate dental needs with 17.4% of children showing signs or symptoms of pain, swelling, or infection. The disease burden was substantially higher for African-American and Hispanic children in this region.
- Children who attend school in Wayne County experience dental disease at higher rates compared to children who attend school in either Macomb or Oakland County. Significant social and racial disparities exist in both dental disease and access all across the Detroit Metropolitan area.

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

The MDCH is working to build a sustainable and effective oral health infrastructure. Programs that are being developed to address dental disease in children include: Dental Sealant Program, Fluoride Varnish Program, Oral Health Intervention Program for High Risk Pregnant Women and Infants, and provision of preventive dental hygiene measures (sealants, fluoride varnish) to underserved children by dental hygienists.