

Children live in social and physical environments that affect their health and development. Over time, multiple influences determine whether children will reach their full potential as physically and emotionally healthy adults. This paper is one in a series on children's health produced by SCAA to explore programs and policy interventions that can support the development of healthy children in New York State.



Introduction

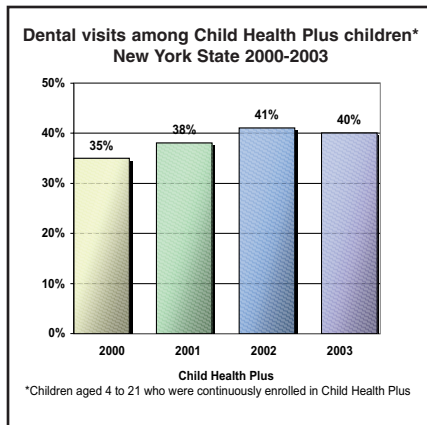
Today, millions of children are needlessly afflicted with dental disease because they cannot obtain timely preventive, educational or treatment services. Our society has not valued oral health, and the consequences for children are harsh—chronic pain, educational failure due to missed school days and poor nutrition, and poor self-esteem. Untreated dental disease can turn a child's bright future into a minimum-wage blind alley.

Yet such outcomes are unnecessary. Dental diseases are generally preventable with timely oral care, supplemented by screening, education and a few inexpensive public health measures. Most important is to educate people that the mouth is no less important to our health than any other organ of the body.

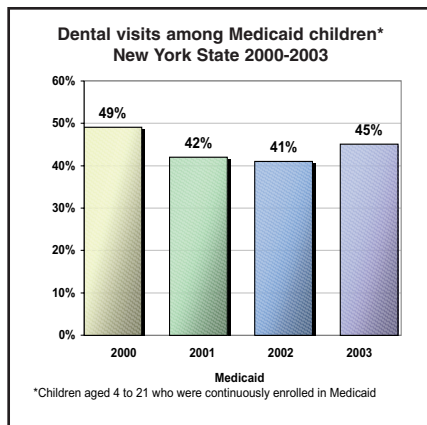
Poor oral health in children can affect growth and school attendance; can lead to medical complications of untreated disease, and result in poor social outcomes. This is particularly true for children who suffer from the acute pain of untreated oral disease as well as its concomitant psychological, emotional and learning problems.

Scope of the Problem

- Dental caries (tooth decay) is the single most prevalent chronic childhood disease—five times more common than asthma and seven times more common than hay fever.
- In the United States, 30% of all children's health expenditures are devoted to dental care.
- In New York, approximately 2,900 children younger than 6 years of age receive dental care in a hospital operating room annually.
- Fluoride is a proven way of strengthening and protecting children's teeth. New York City children receive fluoride from water. In upstate New York, fluoridation reaches only 46% of the population. Only 17.7% of the low-income children reported the use of fluoride tablets on a regular basis compared with 30.5% of high-income children.
- Dental sealants are protective coatings applied on the chewing surfaces of teeth to prevent caries. The presence of sealants is an indicator of access to preventive services in children. In New York, 17.8% and 41.1% of the low and high-income groups respectively have dental sealants on a permanent molar.
- Low-income children visit dentists less frequently. Dental visits among children enrolled in Medicaid and Child Health Plus fell short of the Healthy People 2010 goal of 56%.

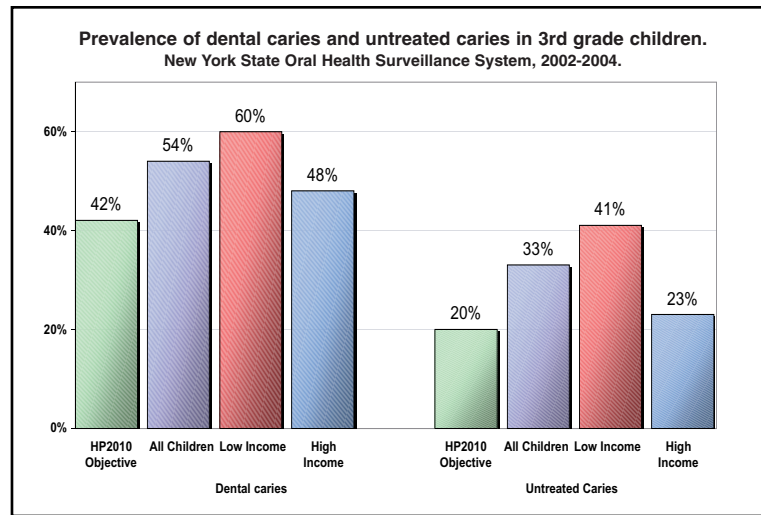


NYS Department of Health



NYS Department of Health

- According to a survey of 3rd grade children conducted by the NYS Department of Health between 2002-2004, the prevalence of dental caries was 54.1%. The estimated percent of children with untreated caries was 33.1%. Both caries experience and untreated caries were more prevalent in the low-income group.



NYS Department of Health

The Burden of Poverty

There are significant disparities in oral diseases by race and income, as well as individuals with disabilities, the homeless, migrant families and the uninsured.

- In the United States, 25% of children and adolescents—typically the most vulnerable—experience 80% of all dental decay occurring in permanent teeth.(6)
- Children from low-income families have a higher prevalence of dental caries, higher frequency of untreated disease and lower utilization of preventive services.(4)
- Early childhood caries affects as many as 11% of Head Start children and it costs more than \$3,000 to treat each child.(3)
- Children from families with low incomes have nearly 12 times the restricted-activity days (e.g. days for missed school) because of dental problems, as children from families with higher incomes.(7)

The Impact of Poor Oral Health on Children

Oral health in children encompasses a broad range of dental and oral disorders. In addition to caries and gingival disease, children can also suffer from malocclusion (poor bite) and from birth defects such as cleft lip/palate. More than 65% of all cases of child abuse involve trauma to the face, head and mouth but children also sustain facial injuries in sports and play.(7) Children with special health care needs are at high risk of oral disease because of complications of their conditions, medications, diets and problems performing proper oral hygiene.

Early tooth loss can result in failure to thrive, impaired speech development, absence from and inability to concentrate in school and reduced self-esteem. Poor oral health has also been related to poor social relationships and

permanent disabilities that affect the ability to learn and grow. Children with chronic dental pain might also have to limit their food choices because of chewing problems. Inadequate childhood nutrition can affect school readiness, school performance and behavior.(5)



Getting to the Root of the Problem

Causes of Oral Disease – Many risk factors for oral diseases are known. Frequent feeding of sugary drinks and foods to young children and the transmission of caries-causing bacteria from mothers to children through common practices, such as tasting infant's food before feeding, are associated with early childhood caries. Lack of fluoride, frequent snacking and inadequate home care, such as lack of tooth brushing, increase the risk of dental caries in older children.

Access to Care – Dental diseases and unmet needs for dental care are more prevalent in populations whose access to oral health services is compromised by the inability to pay for services, lack of adequate insurance coverage, lack of availability of providers and services, transportation barriers, language barriers and complexity of oral and medical conditions. Low-income populations are also hampered by unfamiliarity with the dental health care delivery system, the lack of providers willing to participate in publicly financed programs and office hours that often do not accommodate working parents. Many children in rural and inner city areas also have limited access to dental providers because of the geographic distribution of providers in New York State.

Lack of Insurance – Inability to pay is the main barrier to visiting a dentist. Individuals with the greatest need for services are also the least likely to have dental coverage or to have the personal resources to purchase dental care.(4) Children from families without dental insurance are 3 times more likely to have dental needs than children with either public or private insurance. Children are 2.5 times more likely to lack dental insurance than lack health insurance.(6)

Oral Health and Pregnancy – Evidence is emerging to show that poor oral health may be associated with adverse pregnancy outcomes, including an increased risk for pre-term labor and low birth weight babies. Many women of childbearing age do not seek dental care in a timely manner, so opportunities for preventing dental problems in women and their children are missed.

Interventions are Available but Underutilized

Programs such as water fluoridation, fluoride supplementation, school-based or linked dental sealant programs, screening and referral, and tobacco control have all been shown to reduce the burden of oral diseases. However, both community and individual level interventions are underutilized. Inadequate funding, administrative barriers and lack of consumer and provider awareness all contribute to the insufficient utilization of proven interventions.

Recommendations:

- Create and promote regional oral health networks and a statewide Oral Health coalition to promote oral health. Head Start and school-based health clinics must be included in coalitions.
- Encourage Article 28 facilities to establish school-based dental health programs in schools and Head Start centers to promote preventive dental services in high need areas.

Bleeding gums, impacted teeth and rotting teeth are routine matters for the children I have interviewed in the South Bronx. Children get used to feeling constant pain. Children live for months with pain that grown-ups would find unendurable. The gradual attrition of accepted pain erodes their energy and aspirations.

Jonathan Kozol,

Savage Inequalities: Children in America's Schools, 1991.

Unless otherwise noted, statistics are from the report, *Oral Health Plan for New York State*, New York State Department of Health, 2005 www.health.state.ny.us.

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- Increase the number of safety net dental clinics in local health departments, community health centers, migrant health centers and their capacity to provide care with increased funding and reduced administrative barriers.
- Establish more innovative service sites, such as mobile vans, expanded hours, school-linked services and case management programs.
- Promote dental sealants by providing sealant equipment and funding to selected providers in targeted areas where utilization is low.
- Educate medical providers to include oral screening with every physical exam.
- Integrate oral health into health literacy programs. Develop and disseminate educational materials focusing attention on topics such as caries in young children, maternal oral health, oral cancer, fluoride, dental sealants and the importance of good dietary habits.
- Disseminate existing guidelines, recommendations and best practices regarding childhood caries and maternal oral health to the dental health work force, physicians, nurse practitioners, counselors and other appropriate health care workers.
- Educate communities on oral health topics such as fluoridation, early childhood caries prevention, maternal oral health and injury prevention.
- In communities where fluoridation is not available, continue the supplemental fluoride program. Identify and remove barriers for implementing new fluoride supplement programs.
- Require oral health screening as part of the school physical examination in appropriate grade levels.
- Use the data collected through the Children with Special Health Care Needs (CSHCN) National Survey to determine if there is sufficient capacity to serve their oral health care needs.

Conclusion

The recommendations in this report are designed to provide policy-makers, government and advocates with a starting point for discussion on improving the oral health of children. Ensuring that all children receive good oral care is one of the necessary steps for children to be completely healthy and ready to learn.